Managing Break Even Time

Numeric Modeling Competence that Makes or Breaks a Startup Business

Kee, Chi Hing & Cheng, Yiu Tung

Managing Break Even Time

Numeric Modeling Competence that Makes or Breaks a Startup Business

Authors   : Kee Chi Hing and Cheng Yiu Tung
Designer : Ho Hei Ching Queenie

Dr. KEE, Chi Hing, JP

Chairman, Fullness Social Enterprises Society

Member, Social Innovation and Entrepreneurship Development Fund,
Task Force of Commission on Poverty

Member, Community Investment and Inclusion Fund of Labor and Welfare Bureau

Adjunct Professor Bethel Bible Seminary

Adjunct Associate Professor Hong Kong Baptist University

Former Corporate Vice President and Hong Kong Managing Director,Hewlett-Packard

Mr.Cheng, Yiu Tung, Dodo

Founder of Sharing Kitchen HK

Chairperson of Community Development Enhancement Fund Limited

Executive Director of Community Development Alliance

Director of Hong Kong Social Workers' General Union

Member, representing the social welfare subsector on the
Election Committee for Chief Executive

Contents

INTRODUCTION
Enterprises and Entrepreneurship

The word *enterprise* can be divided into 'enter' and 'prise', the former meaning 'transition from one place to another' and the latter, 'to take up'(Barringer et al. 2010:6). Hence, 'enterprise' means undertaking a venture into an unknown place.

In the 19th century, French economist Jean Baptiste Say (cited by Drucker 1985:21) defined an entrepreneur as someone who 'shifts economic resources out of an area of lower and into an area of higher productivity and greater yield'. Joseph Schumpeter (1939:100) emphasised the innovation part of entrepreneurship. Howard Stevenson highlighted the resourcefulness of entrepreneurs. Drucker himself explained that 'the entrepreneur always searches for change, responds to it, and exploits it as an opportunity' (1985:28).

As of March 2017, Hong Kong had approximately 326,000 enterprises, of which 1,746 were listed companies[1], approximately 4,000 were large enterprises, and 320,000 were small and medium enterprises(SMEs)[2]. The population-to-business-unit ratio was 23:1. By comparison, the United Kingdom has 5.5 million enterprises[3] and a population of 65.6 million; its population-to-business-unit ratio is 12:1. The density of enterprises relative to the population in Hong Kong is significantly lower than that in the United Kingdom. Recently, however, the entrepreneurial culture in Hong Kong has shown rapid growth, as indicated by the data in the following table.

FIGURE 1	Hong Kong			Shenzhen as Benchmark		
	2009	Change	2016	2009	Change	2017
Perceived capabilities	18.9%	+13.5%	32.4%	28.2%	+7.6%	35.8%
Perceived opportunities	14.4%	+42.4%	56.8%	31.2%	+46.4%	77.6%
Fear of failure rate	36.7%	+3.5%	40.2%	29.4%	+8.5%	37.9%
Entrepreneurial intention	7.3%	+12.4%	19.7%	17.6%	+18.4%	36.0%
Early-stage entrepreneurship	3.6%	+5.8%	9.4%	4.8%	+11.6%	16.4%
Average investment	HK$550,000			HK$590,000		

Data extracted from 2017 Hong Kong & Shenzhen Report of Global Entrepreneurship Monitor.

[1] Hong Kong Stock Exchange: http://www.sfc.hk/web/EN/files/SOM/MarketStatistics/b01.pdf
[2] Trade and Industry Department: https://www.success.tid.gov.hk/english/aboutus/sme/servicedetail6863.html
[3] The Telegraph: http://www.telegraph.co.uk/business/2016/10/13/the–number–of–businesses–in–the–uk–has–hit–a–record–55m–up–almos/

SOCIAL ENTREPRENEURS AND SOCIAL ENTREPRENEURSHIP

J. A. Banks, in his book *The Sociology of Social Movements* (1972:53), first coined the term social entrepreneur, defining it as someone 'who [sees] the possibility of using managerial skills directly for socially constructive purposes'. The desired end is societal betterment, and the means to achieve that end is managerial skills. A social enterprise (SE), therefore, is a hybrid of social services from the social sector and management skills from the business sector.

Taking an approach based on value creation and value capture, Santos (2012) has sought to provide a more precise definition of the term 'social entrepreneur'. In his view, social entrepreneurs

- address neglected social problems
- through a sustainable solution
- with the logic of empowerment
- generating positive externalities that benefit the powerless segments of the society

Their emphasis on these positive externalities—that is, the benefits for the powerless—distinguishes social enterprises from commercial enterprises. The latter also create social value, but their owners capture all the value created by pricing it as high as possible to realise the goal of profit maximisation instead of social impact maximisation.

The term *social work entrepreneurship* (Bent-Goodley 2002) describes fee-based social welfare services operated as self-funded programs by non-profit organisations or for-profit organisations.Usually these programs are founded and operated by social workers. In contrast, social enterprises—especially those in Hong Kong—operate traditional businesses such as restaurants or retail shops instead of marketing human services products.

SOCIAL ENTREPRENEURS
AND
SOCIAL INNOVATION

Social entrepreneurship is used as an umbrella term, with social enterprise and social innovation as its two subsets. This usage is in keeping with Dees and Anderson's (2006:40) conceptualisation. Social innovations are ventures that adopt innovative solutions for societal betterment; they may not have a significant business income. Innovation is about helping people to achieve more with less, or to solve problems that are otherwise unsolvable. In contrast, social enterprises are business ventures that are set up to advance social missions. The hybrid nature of social enterprises provides room for innovation, as the addition of social value creation transforms the ordinary commercial activities into meaningful activities due to the blended values delivered.

The input side of a social service involves soliciting funding; the output side deals with the creation of social value. Social innovation largely focuses on greatly increasing the cost-effectiveness on the output side by applying entrepreneurial skills.

Both social innovations and social enterprises aim more at enhancing social value than increasing personal wealth of the shareholders. Their emphasis on creating something new implies that such ventures carry risks. Social innovation reflects the social aspect of social entrepreneurship, whereas social enterprise emphasises the entrepreneurship aspect. Nicholls (2006) defines social entrepreneurship as 'innovative, social value creating activities that occur within or across the non-profit, business, or government sectors'.
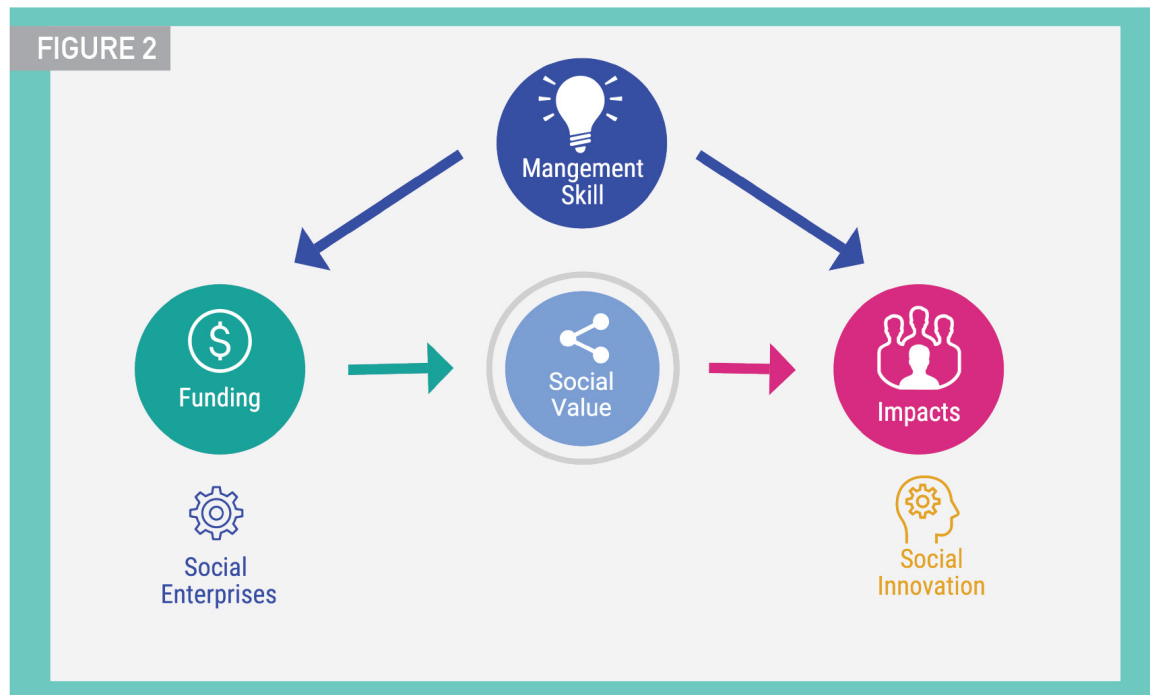
In research on break-even time, it was found that a social enterprise takes, on average, three years to reach the break-even point in its operations (Kee 2016:171). Factors affecting the ability to break even from a financial standpoint include willingness to dismiss non-performing employee (0.51 correlation, 99% level of confidence), support for investing in public relations (0.42 correlation, 95% confidence level), and leadership skills (0.41 correlation, 95% confidence level).

FIGURE 3 Number of Social Enterprises in Hong Kong

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of SEs	187	222	269	320	329	379	404	457	527	574	610
Growth		18.7%	21.2%	19.0%	2.8%	15.2%	6.6%	13.1%	15.3%	8.9%	6.3%

FIGURE 2

Mangement Skill

Funding

Social Value

Impacts

Social Enterprises

Social Innovation

NUMERIC MODELLING
OF
THE BUSINESS PLAN

1

We need systems and theories to focus our thinking and our acting if we were to understand our world and respond to the challenges of the day with understanding and effectiveness. (Forrester 2005:4)

McKinsey & Company has developed a practice called Initial Hypothesis, which is defined as 'figure out the solution to the problem before you start' (Rasiel 1999:9). By starting with an educated guess about the solution, the subsequent thinking can be much more focused on ideas related to the guess, instead of wasting time by aimlessly jumping here and there. Furthermore, even if the initial guess ultimately proves not the right solution, by that time the right solution should have become clear.

Modelling for Retirement

As an example of how this modelling process works, supposing we want to take early retirement and live on the dividends and stock price growth from our investment portfolio. In this case, the 'fact' that we would start with is our Annual Living Expenses (ALE). We would then create an initial hypothesis based on the average percent Return-On-Investment (ROI%). The structure is given by the following numeric equation:

Annual Living Expenses < (Value of Investment Portfolio) x (Return-on-Investment Percentage)

In this case, if we want the ALE to be $360,000/year and assume the ROI% is 5%, the value of our investment portfolio must be $7.2 million or more:

$$\$360,000/year = \$7,200,000 \times 5\%/year$$

If we do not have $7.2 million for investment, we may have to turn to other options:

- Get more cash—for example, by moving to a smaller house

- Lower our living expenses by reducing some discretional expenses, such as reducing the number of overseas vacations

- Increase the ROI% by finding better investments

All of these are possible actions to realise the retirement plan.

STAGE 1
STATIC VIEW
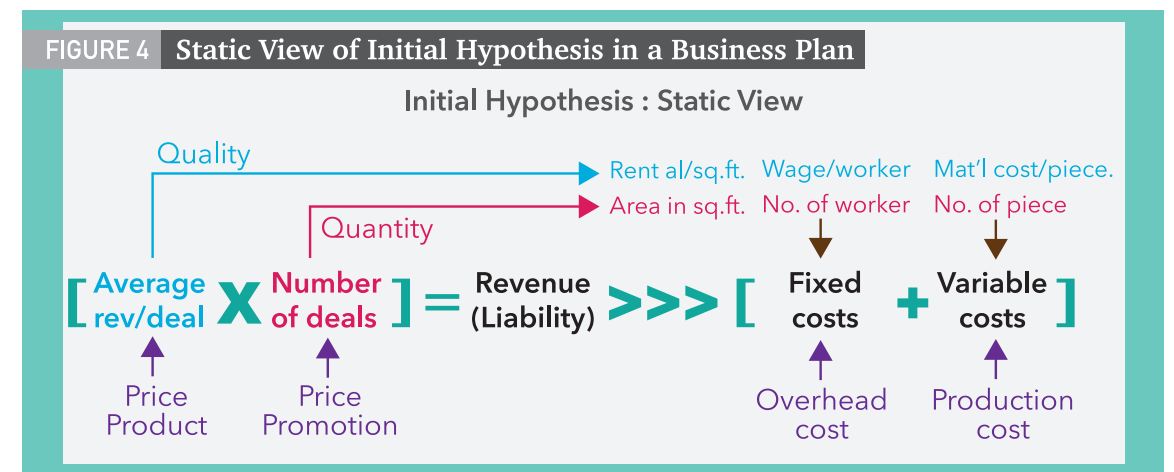## OF
THE INITIAL HYPOTHESIS

Developing an initial hypothesis is also a good approach to formulate a business plan for a social enterprise. When SE planners adopt a simple static view of the business — that is, when they develop a plan that looks only at the operation's break-even point — they may need only 35 minutes to draft the initial business plan. If they adopt a more elaborate dynamic view which includes more variables such as investment, production capacity, and window of opportunity, they may need approximately 120 minutes to draft the plan.

When developing the SE business plan, the initial hypothesis should be based on facts and structure. The first step is to identify the pertinent facts. The planners then structure the initial hypothesis by breaking down the problem into its key drivers. Finally, they make deliverable recommendations regarding each driver.

Modelling in a Business Plan for setting up a New Restaurant

Below is an example of drafting a business plan for a new restaurant. In this case, the 'fact' to start with is the monthly operating costs. At the operational break-even point, the monthly operating cost is equal to the monthly revenue.

Diagram 1: Static View of Initial Hypothesis in a Business Plan

FIGURE 4   Static View of Initial Hypothesis in a Business Plan

Initial Hypothesis : Static View

[Average rev/deal] X [Number of deals] = Revenue (Liability) >>> [Fixed costs + Variable costs]

Quality → Rent al/sq.ft.   Wage/worker   Mat'l cost/piece.
Quantity → Area in sq.ft.   No. of worker   No. of piece

Price Product   Price Promotion   Overhead cost   Production cost

Then we create the initial hypothesis based on the average price paid by the customer, or Average Revenue Per User (ARPU). The structure is given by the following numeric equation:

Revenue = Average Revenue Per User x Number of Users = Operating Cost + Profit or Loss

The number of users indicates the quantity of the product to be sold, and the ARPU indicates the product's quality as signalled through pricing. Pricing is a variable that the restaurant owner can set, but the number of users is a threshold that must be overcome through the promotion programmes.

The operating cost for the restaurant can be further broken down as follows:

Revenue = Number of Users x Average Revenue Per User = Rental + Salary + Food Cost + Miscellaneous Expenses + Profit/Loss

Usually the rental and salary expenses are fixed costs. Both can also be broken down into a quantity element and a quality element. The rental variable can be broken down into the area needed to accommodate the number of customers per day, especially during the lunch and dinner hours, and the rental price per square foot ($/sq ft). The latter depends on the restaurant's location, which in turn depends on the food pricing. If the price for an average lunch is approximately $300, the restaurant should be located in a prime commercial area or inside a hotel. In contrast, if the average lunch price is only a bit higher than $35, the restaurant can be sited in an industrial area.

Rental = Area Needed x Rental Price per Square Foot

Similarly, the salary expense can be broken down into the number of employees and the average salary for each employee. If a restaurant charges approximately $70 for a set lunch and it expects 100 customers during the 13:00 to 14:00 time period, the owner should estimate how many workers are needed in the kitchen to prepare 100 meals within the 13:00 to13:20 period so that all customers can finish their meals by 13:50 and be back to their offices without hurrying. Using a similar approach, the owner should estimate the number of waiters and other employees needed. The average salary per employee is then estimated by considering the salary of the main chef at the high end, and the salary of a waiter at the low end. If the pricing of a set lunch is not $70, but $300 or even higher, the waiters will probably need to speak English, or even other foreign languages, and must know how to introduce the dishes and the wine. Waiters and chefs in these categories of high-end restaurants, not surprisingly, will command higher salaries.

Salary = Number of Employees x Average Salary per Employee

The remaining two major cost items for the restaurant are food cost and miscellaneous operating expenses. As a rule of thumb in the restaurant industry, the food cost is approximately 30% of the total cost and expenses (i.e., roughly equivalent to the amount of revenue, as the operating profit is usually a single-digit percentage).

Example of the numbers for a Restaurant

The following is an example of the static view of the initial hypothesis in the form of an equation. It is taken from one of our previous training sessions:

Average Revenue per User x Number of User > Rental + Salary + Food Cost + Miscellaneous Expenses

$50/user x 10,000 user/month > 1,200 sq ft x $80/sq ft + 10 HC x $15,000/HC + $150,000 + $100,000

The final step in stage 1 of drafting the static view of the initial hypothesis is to improve profitability. A profitable business plan cannot guarantee a profitable business, but a non-profitable business plan is very likely to lead to an enterprise that operates at a loss.

The value of this initial hypothesis lies in the ability to provide an understanding of the inter-relationships among the elements, and the associated numbers, of the restaurant as a system. For example, the pricing of the meal will affect the choice of the restaurant's location and the calibre of the employees. All elements must fit together in a harmonious manner.

Thinking-Loud

Ideally, this modelling process will be a group process, so that there can be some kind of discussion or even debate over the key points. The positive conflict created by the voicing of different viewpoints will improve the quality of the subsequent decisions. In particular, the rounds and rounds of argument and counter-argument will help to reduce blind spots and blank spots. The group discussion is called thinking-loud.

Thinking-on-Visual

When the key points of discussion and decisions are recorded in real time on a whiteboard or a piece of paper, or even on a PowerPoint slide, the process is called thinking-on-visual. There are three major advantages of adopting a thinking-on-visual approach. First, the participants obtain a holistic view of the inter-relationships among different elements of the system or the plan, so that combination, integration, and cause effect identification become easier. Second, the discussions can jump back and forth, instead of being limited to chronological consideration of only the points just made. More creativity can be stimulated in this way. Third, when a group member voices out his or her opinions, which are then recorded, the acknowledgement of the member's contributions is likely to encourage more participants to speak up on the spot, thereby fostering a sense of shared planning and shared decisions, as well as duty to defend the plan due to shared ownership. The final version of thinking-on-visual is the business plan.
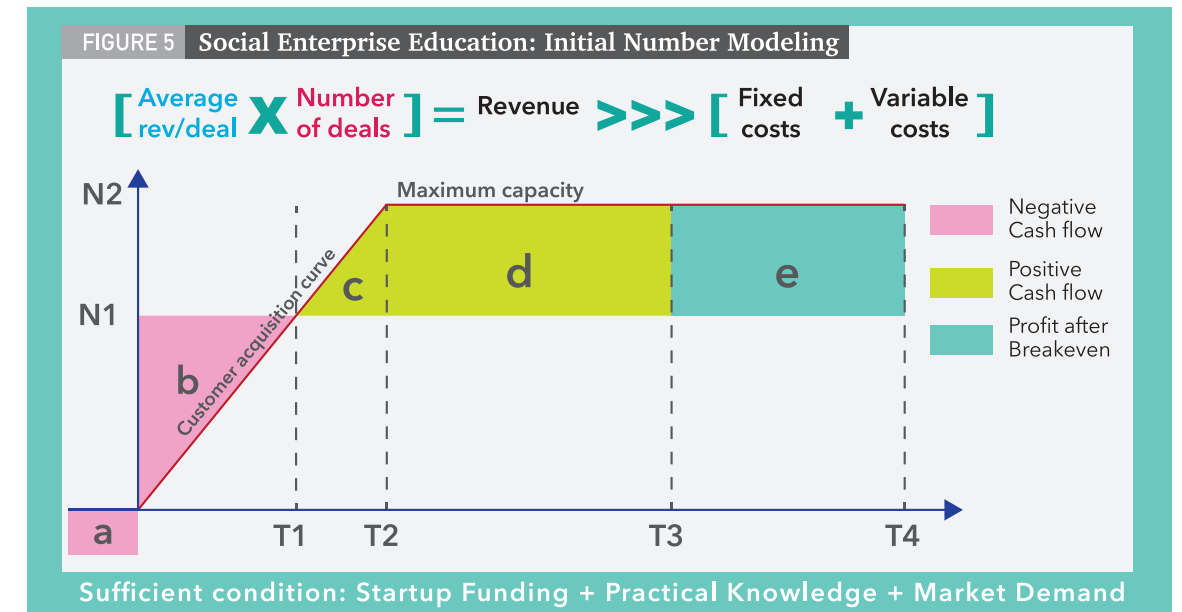
STAGE 2

DYNAMIC VIEW OF THE INITIAL HYPOTHESIS

Stage 2 of the modelling process is to develop a more complex initial hypothesis that includes the time constraint of the length of the enterprise's lease and the maximum capacity due to physical space. In addition, there is an initial setup cost.

Diagram 2: Dynamic View of Initial Hypothesis in a Business Plan

FIGURE 5 Social Enterprise Education: Initial Number Modeling

$$\left[\begin{array}{c}\text{Average}\\\text{rev/deal}\end{array}\times\begin{array}{c}\text{Number}\\\text{of deals}\end{array}\right]=\text{Revenue}\ >>>\ \left[\begin{array}{c}\text{Fixed}\\\text{costs}\end{array}+\begin{array}{c}\text{Variable}\\\text{costs}\end{array}\right]$$

Sufficient condition: Startup Funding + Practical Knowledge + Market Demand

In the diagram above:
a = Total setup costs before operation
b = Total operating loss before breakeven
c = Total profit after operation breakeven and before meeting the maximum capacity
d = Total profit when running at the maximum capacity before meeting the investment breakeven
e = Total profit after meeting investment breakeven and before the end the business, which may be caused by end of the rental contract and sold-out of the business
N1 = Number of customers at which the revenue equal to the total operating costs and expenses
N2 = Number of customers at which the business is running at the maximum capacity
T1 = Time that the revenue equals to the total operating costs and expenses
T2 = Time that the business reaches its maximum capacity
T3 = Time that all the setup costs and operation losses are recovered
T4 = Time that the business ceases

Example of the numbers for a Hair Salon

The diagram presented here is a simplified description of what is happening in the start-up of a new business such as a hair salon. The one-time setup cost is $600,000 (area A in the diagram).

1. The social entrepreneur has to estimate the average revenue per customer,then the number of customers needed for operation break-even(N1 in the diagram).

2. The social entrepreneur has to decide on the size of the salon (area by square footage) based on the maximum number of customers that the salon is prepared to serve (N2 in the diagram). For example, if the owner wants to reach break-even when the salon is two-thirds full, then the remaining one-third capacity will be considered profit. In this case, N2 = 1.5 × N1. In other words, the space needed will be 50% more of the space required for break-even.

3. The social entrepreneur has to estimate on the customer acquisition speed (CAS), as well as when the SE will reach N1— i.e., the point of positive cash flow or operation break-even (T1 in the diagram).

4. The minimum investment amount needed is the sum of the setup cost (shown as a rectangle in area A) and the operating loss before break-even (shown as an inverted right angle triangle in area B).

5. The social entrepreneur has to estimate when the SE will reach investment break-even (T3 in the diagram). This will happen when the sum of area A and area B is equal to the sum of area C and area D.

6. The social entrepreneur has to decide on the length of the lease (T4 in the diagram) — i.e., either two or three years (and longer). Area E in the diagram is the period in which the SE realises a profit on its investment. The return on investment (ROI) of this salon is equal to area E divided by the sum of area A and area B.

At this point, the dynamic view of the initial hypothesis of the business is in shape. Due to its complexity, we have presented it in the form of a diagram instead of an equation. Illustrating this hypothesis with a diagram has several advantages:

1. The diagram shows how the variables, represented by different pieces of the diagram, affect the return on investment of the business.

2. The total investment needed is strongly affected by the break-even time. Hence the general guideline is to get more customers as soon as possible. In addition to the effects on the financial and cash flow considerations, more customers mean that the learning curve can be shorter.

3. The length of the lease is a double-edged sword. If the business is profitable, a longer lease will generate higher the return on investment before the renewal of the lease. Conversely, if the business operates at a loss, a shorter lease will generate lesser loss. Determining the affordability of the loss (i.e., the ability to survive a loss) is of high priority when making decisions on the social enterprise.

4. The size of the shop is another double-edged sword. If the salon has a sizeable customer base, having a larger area would mean it could accommodate more customers and, as a result, brings in more revenue. Conversely, if there are not enough customers, the idle space would become a rental burden. Usually a more conservative approach is taken by social enterprises in terms of shop size. If the salon attracts more customers than it can accommodate, the easier approach to make the most profit out of it is by simply upward adjusting service charges.

Calculating the Total Investment Needed

In the hair salon example, in order to achieve operation break-even, the salon needs revenues of $160,000/month. In the model, the average revenue per user is $200, which means the number of users per month needed is 800 users. If the salon can add 100 users each month, it will take 8 months to accumulate 800 users. As such, the operating loss before break-even is ($160,000/month × 8 months)/2 = $640,000. The total investment needed is $600,000 + $64,000 = $1,240,000.

If the hair salon can add only 50 users per month, however, the total investment needed is $600,000 + $1,280,000 = $1,880,000. If the hair salon can add 200 users per month, the total investment needed is $600,000 + $320,000 = $920,000. Therefore, the time to reach the break-even point, called Break-Even Time (BET), has a great effect on the investment needed. For its part, the BET highly depends on the customer acquisition speed (CAS).

Calculating the Return on Investment

In the preceding case, assuming the operation break-even time is 8 months, the maximum capacity (N2) is 1.5 times the break-even capacity (N1), and the customer acquisition speed is linear, it will take 4 more months to reach the maximum capacity. In other words, this social enterprise will reach maximum capacity in its 12th month of operation. In this 4 months, the SE will have a positive cash flow of ($80,000/month × 4 months)/2 =$160,000.

From that point onwards, the SE will have a monthly $80,000 positive cash flow. The investment break-even will require ($1,240,000 - $160,000)/$80,000 = 13.5 months. That means investment break-even will happen in month 25.5 for this business. Therefore:

- If the leasing period is only 24 months, the investment results in a loss of $120,000.

- If the leasing period is 36 months, the profit is $80,000/month × 10.5 months = $840,000.

- The return on investment over 3 years is $840,000/$1,240,000 = 68%.

- The average annual return on investment is 68%/3 = 22.5%.

An annual ROI of 22.5% looks attractive to any salon industry veteran. If the shop owner is not an industry veteran, however, the success rate for such businesses is only about 22%. When taking this probability into account, the most likely profit is 22.5% × 22% = 4.95%. This is lower than the average ROI of approximately 8% for the Tracker Fund of Hong Kong (code: 2800).

2 VALIDATING THE ASSUMPTIONS

The purpose of this step is to improve the initial hypothesis by minimising the speculation through market studies. There should be five studies.

2.1 Landscape Survey

Once the nature of business and the district in which the business is operated are identified, the social entrepreneur must go thoroughly through the entire district, identify all direct and indirect competitors, and collect competitive information. For a restaurant, the data collected should include names of the restaurants, addresses, prices of their set lunch, set dinner, hours of operation, number of customers they can best accommodate, and the overall impression.

FIGURE 6	Sai Wan Ho Salon Marketing Survey			
Salon	**Address**	**Opening Hour**	**Price(Rinse,Cut,Dry)**	**No. of seats**
A	82 Shau Kei Wan Rd, Sai Wan Ho	10:00-20:00	195	6
B	1 / F, Laika Center, 361 Shau Kei Wan Road	10:00-20:00	135	16
C	Ground Floor, Youth Outreach Building, 2 Holy Cross Path	11:00-21:00	118	4
D	2 / F, Laika Center,361 Shau Kei Wan Road	09:00-20:00	108	9
E	52 Shau Kei Wan Rd, Sai Wan Ho	10:00-20:00	98	5
F	72D Shau Kei Wan Rd, Sai Wan Ho	10:00-20:00	92	7
G	33 Shing On Street, Shau Kei Wan	10:00-20:00	90	12

FIGURE 7

$169-195   1 Salon with 6 seats

$139-168

$109-138   3 Salon with 29 seats

$ 79-108   15 Salon with 102 seats

$ 48-78   8 Salon with 36 seats

2.2 Mystery Customer

As part of this study, the entrepreneur may pick two restaurants with comparable pricing to the proposed SE for their set lunch or dinner: one slightly more expensive, and another less expensive. A checklist should subsequently be come up so that total customer experience is handy at-a-glance — i.e., all touch points from stepping into the restaurant to leaving it. By the end of the visit, the entrepreneur has to make an informed guess of the value proposition of the restaurant, i.e., why customers pick it and are impressed enough to come back again.

FIGURE 8	Mystery Customer Survey				
	Salon A	Salon B	Salon C	Salon D	Salon E
Window Display	8		8	7	7
Interior Design	9		8	6	5
Hair Salon Products & Equipments	9	8	8	4	4
Reception	7	8	8	8	0
Hairstylist	8	6	7	4	7
Hair wash service	9		8	7	4
Business Hours	9	8	7	10	9
Customer Flow	8		8	6	0
Price	7		6	5	3
Strengths	7		7	8	10
Total Mark	81	78	75	65	49

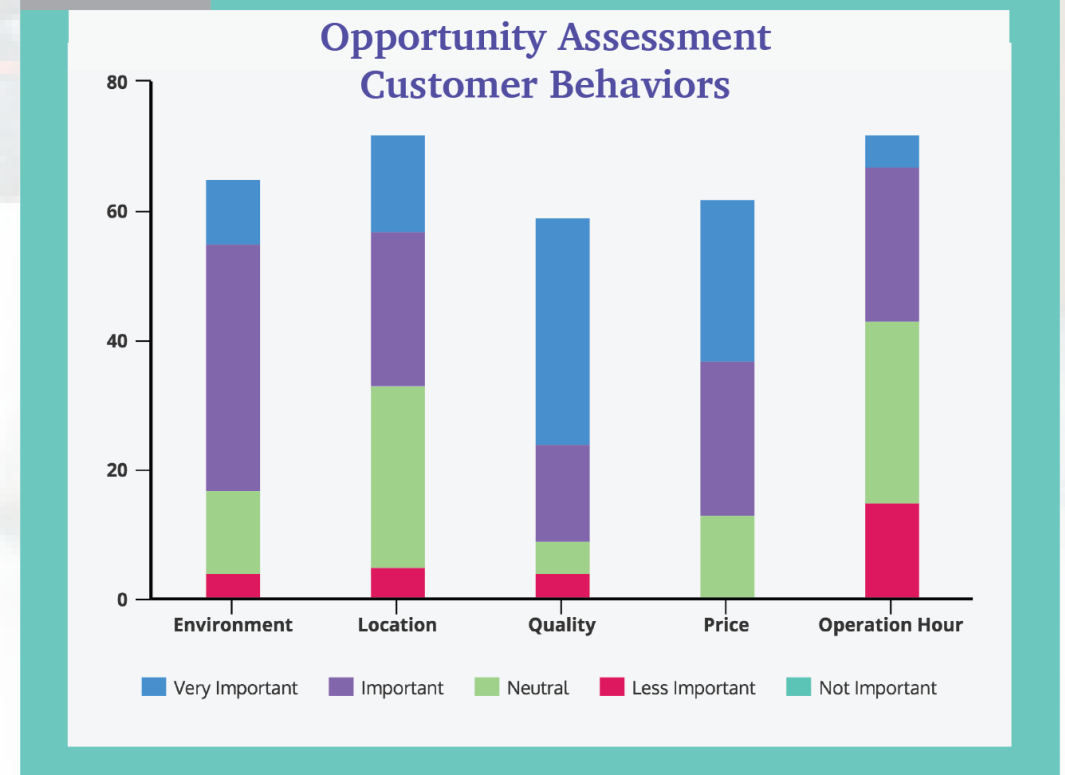|		
(teal)	Satisfaction	8 -10
(orange)	Nautral	6 - 7
(pink)	Dissatisfaction	0 - 5

2.3 Exit Customer Survey

Furthermore, the entrepreneur should also design a consumer behaviour questionnaire covering the following issues:

1. Whether the customer is new or repeat?
2. Why does the customer comes (choices can be location, friends' referral, social mission, leaflets, traditional media coverage, or social media coverage)?
3. How is his / her satisfaction with service, environment, price, and overall satisfaction?
4. Whether the customer tends to return?
5. Whether the customer will refer the shop to friends?
6. For repeat customers:
   a. Why does he / she comes back (choices can be location, services, environment, price, social mission, or media coverage)?
   b. How many times will he / she come again?
   c. How many friends have he / she referred the shop to?
7. Whether he / she lives or works nearby?
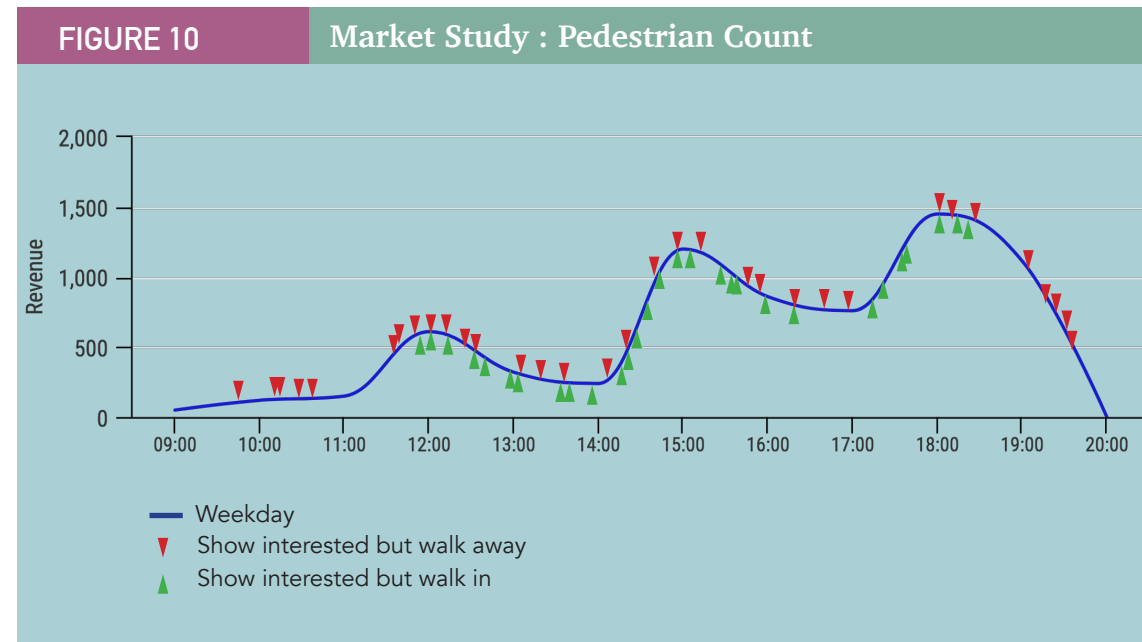8. Whether he would like to be further connected via email or whatsapp?

FIGURE 9

Opportunity Assessment Customer Behaviors

(Legend: Very Important, Important, Neutral, Less Important, Not Important)

2.4 Customer Count

This survey requires an entire week to complete. The entrepreneur stands on the opposite side of the street of the targeted competitor-shop and counts the following people:

- Those who go straight into the shop. These are repeat customers.

- Those who check around at the entrance before walking in. These are new customers.

- Those who check around at the entrance but hesitate to walk in. These are customers missed.

| FIGURE 10 | Market Study : Pedestrian Count |

Weekday
▼ Show interested but walk away
▲ Show interested but walk in

In a week, 62 interested and 29 walk in and 33 walk away. In a month, 126 walk in

2.5 In-Depth Interview with an Industry Expert

Industry experts can provide substantially useful information on topics such as rules of thumb for financial ratios, rental arrangements, seasonality of business, sourcing of food, promotion, and salaries for different tiers of employees. Some may even have referrals to help the nascent social enterprise.

Value of Market Studies and Surveys

Industry veterans who are starting a social enterprise in their own field of expertise may not need to conduct such a comprehensive survey, as they are likely knowledgeable enough with the trade. Novice entrepreneurs, however, definitely cannot afford to skip these surveys. The data will make them more credible when they approach prospective funders.

The purpose of the surveys described here is to collect data about competitors. The purpose of pilot testing or prototyping is to collect data about the new venture's products. These data include feedback from potential users. The credibility of data from pilot testing is even more powerful than the credibility of data collected from the competitors. An entrepreneur can do both surveys and pilot testing.

Data collected from market studies will help improve the initial hypotheses, by either substantiating or disproving the assumptions or guesses. They also serve as the basis for further investment or operation decisions.

At present, very few business plans applying for government grants to set up social enterprises are supported by data. In other words, those plans that are backed by supporting data are likely to have higher possibility of success when submitted as part of an application for government grants.

Pilot Test

The data collected through market studies listed above are from existing enterprises or providers. They are also the competitors once the planned social enterprise starts operation. The data are therefore about others. The data collected through pilot or prototyping are different. They are about the social enterprise itself.

Assuming that the new social enterprise is a restaurant, the pilot can be a one-time only 'private kitchen'. The event is a dinner. The 'customers' are friends or friends' of theirs who have to pay for the dinner. The venue can be at home or in a small restaurant which the entrepreneur rent for an evening, probably with kitchen facilities. During the dinner, the entrepreneur can collect qualitative feedbacks from the customers on services, food quality, pricing, ambience, etc, whether they will come again, and whether they will recommend to their friends. By the end of the dinner, the customers are asked to fill out a questionnaire to collect the quantitative results.

From the funder's point of view - such as those representing government seed fund schemes - market studies is imperative as it shows that the business plan submitted is backed by objective facts and data. Pilot test is even better as the data are about the applicants' capability. Having both the market studies and pilot tests is excellent as it means there are objective data by the applicants and the competitors.

Design Thinking

The essence of design thinking is the plan-do-check-act cycles, or simply trial-and-error approach.

In the 'do' stage, the entrepreneur will use minimum viable product to test the customer responses. The product is 'minimum' in order to lower the production cost so that for the same amount of budget for product development, there can be a few cycles more because of the saving.

In the 'check' stage, both the quantitative and qualitative feedbacks from customers are solicited and used for product improvement. In addition to asking customers on their satisfaction on the product, they may also be asked for their guidance on how to improve it, how it is used, how to sell it, and which pricing point can generate the highest profit. The customers' feedback is called 'spoken needs'. The customers may also have 'unspoken needs' or 'unaware needs' which is to be discovered through the entrepreneur's observation on how to customers learn and use the product.

In the 'act' stage, the product is revised based on the data collected.

3 VALUE PROPOSITION AND VALUE DELIVERY SYSTEM

In an affluent society, consumers are looking for more than mere satisfaction of their physical needs. In other words they tend to go beyond for unique experiences to fulfil their more sublime psychological quest such as self-esteem or self-actualisation.

Michael Lanning (1998:xv) explains that a business should be managed as a delivery system of a chosen scenario of experiences targeting a selected segment of potential customers. These customers will evaluate and compare the scenarios they experience from different providers, and choose the one they consider to have the most 'added value'. The scenarios of resulting experience are considered the 'value propositions'.

Purchasing and consumption are trading activities in which money is exchanged for goods or services. For the same amount of money, a rational consumer tends to look more favourably on those goods and services that offer more value. The thinking of this kind of consumer can be expressed in the following 'A = B - C' equations:

Added-value = Benefits perceived by the consumer – Competitors' offerings at the same price

Added-value = Benefits perceived by the consumer – Costs perceived by the consumer

Hence, to close a deal, providers add more value that is attractive to the consumer, while keeping the total cost of the goods or services low enough to produce a good profit.

For a consumer buying a smartphone, for example, the perceived benefits include the latest features, the brand of the phone, and the buying experience including the environment and services. The perceived costs include the price of the phone, the time taken to shop around for it, the time to transfer data from the old phone to the new one, and the time needed to learn how to use the new phone. Unlike the business market in which the procurement department looks for objective data to evaluate the benefits and costs, in the consumer market the benefits and costs are subjective perceptions that are partly shaped by the salesperson.

When planning a new SE, the social entrepreneur must make three main decisions upfront. First, what is the type of business? Second, what is the targeted disadvantaged group? Third, what is the targeted segment of customers who enjoy the services or products and who pay for the services or products sold? For the third point, usually a single person plays both roles, but sometimes there may be a beneficiary who enjoys the services and a donor who pays for the service. In the next three examples, the first two focus on the service or product, and the third on the beneficiary.

Social Enterprise Workshop

A recent development in the social entrepreneurship field is the growth of guided-tour businesses, in which customers have a new experience in an indoor venue, a customer-provided venue, or an outdoor environment. In the latter two cases, the SE rents a fixed facility—a strategy that lowers its fixed costs and allows the SE to avoid being tied up by a lease; thus, it avoids the risk of operating at a huge loss because of the burden of the lease as well as the risk that demand for the business's services will outstrip the capacity of the leased venue. This example explains how to design a tour based on transformative learning theory.

Fullness Social Enterprises Society (FSES) has a team that targets the school segment. The SE Workshop conducted by this team is designed for secondary school students and their teachers. It provides an opportunity for them to experience a social enterprise, listen to the stories of the disadvantaged employees and talk to them, and work as an employee of the SE to get a first-person perspective on the SE movement.

The value proposition is 'the feeling of the life of a SE employee'. In one of the workshops, students and their teachers visit a social enterprise that provides piece-work opportunities for women who are new immigrants. The craft is to make flowers or decorations with iron wire or other materials.

The real-life stories of these women can be very harrowing. For example, 'Jane' (not her real name) came from mainland China and was married to her current husband in Hong Kong. Jane could not adapt to the new environment, especially the need to learn Cantonese. She faced discrimination from her neighbours and, as a result, suffered from depression. One day, Jane decided to plunge herself to death from the eighth floor. She thought her death would be an emotional punishment for her neighbours. Suddenly, someone else jumped from the twelfth floor of Jane's building. The dead person was another new immigrant who also experienced depression. As the neighbours gathered around the dead body, Jane heard their cold and gravely inhumane comments that no one should have decided to die this way as it would have hurt other passers-by.

Jane was shocked and saddened. What they cared was no more than themselves but not the life and death of others. At split seconds she gave up the idea of ending her own life and began swimming herself out of depression. She eventually turned a new page by actively participating in the social enterprise. She now has a circle of buddies who help one another. She is also able to earn some money for the family, and her Cantonese is much improved.

The SE Workshop can be deconstructed into five steps based on Jack Mezirow's transformative learning theory:

- **Event.** In the workshop, students assume the role of the newly arrived women, experiencing her helplessness, disappointment, frustration, anger, and grief, before liberating herself by metamorphically transforming to become positive and energetic. While her family is still in dire poverty, she is now happy. This life-transforming experience is new to the students.

- **Examination.** The students are perplexed, as they thought that everyone needs money to be happy, and that only elites can have life stories characterised by positive turnarounds. The new-arrival women they encounter in the SE do not match their pre-existing notions, which present a challenge to their frame of reference.

- **Exploration.** In the debriefing part of the workshop, the facilitator guides the students to reflect critically on the validity of the assumptions in their frames of reference, and how they can adjust their conventional way of thinking. Moreover, if these 'vulnerable' women could change their life trajectories, the students should be able to do the same for themselves. The discussion among the students enriches the atmosphere for mindset and behaviour changes.

- **Experiment.** The facilitator leads the students to brainstorm possible actions that they can take, such as obtaining greater understanding of current social problems, supporting ethical consumption, or considering the option of working in a social enterprise or becoming a social entrepreneur.

- **Emerge.** As the workshop ends, the group memory is expected to last for quite a while.

Analysis of the social impact of the SE Workshop shows that on completion of the workshop, 91% of students commit to supporting social entrepreneurship through active participation.

Second-Hand Shop

A non-governmental organisation (NGO) operates severable second-hand shops. In its yet-to-break-even shop, only 30% of customers rate the services as a 4 or 5 on a scale of 1 to 5. At the other end of the spectrum, more than 90% of the customers of the most profitable shop rate the services as a 4 or 5. A significant percentage of customers go to the most successful shop every day. These customers treat the shop as a place for social gathering where they hang around with shopkeepers and other familiar customers. The value proposition of the profitable shop is the 'scenario of a club-like environment with buddies there'. This scenario is encouraged by the salespeople (women), who always welcome the repeat customers (also mostly women) to come to the shop to chitchat, or gossip, even when they don't mean to come here to shop.

According to Nobel laureate Daniel Kahneman - a psychologist who became laureate in economics - educating gossip[4] is beneficial as a stimulus for intellectual engagement:

Why be concerned with gossip? Because it is much easier, as well as far more enjoyable, to identify and label the mistakes of others than to recognize our own. Questioning what we believe and want is difficult at the best of times and especially difficult when we most need to do it, but we can benefit from the informed opinions of others. Many of us spontaneously anticipate how friends and colleagues will evaluate our choices; the quality and content of these anticipated judgments therefore matters. The expectation of intelligent gossip is a powerful motive for serious self-criticism, more powerful than New Year resolutions to improve one's decision making at work and at home. (Kahneman 2011:3)

In other words, the shop is housing a community which shares common interests, where members learn from listening to a second party commenting on a third party. More importantly, they gradually improve their judgements through case studies, just like the learning in Harvard Business School but in a more informal, casual, and fun setting. This may not be the outcome intended by the founder, but we all like to gossip — and the SE benefits from this popular phenomenon.

---

[4] Daniel Kahneman talks about slowing down our thinking and educating gossip: https://vimeo.com/139856412

Services for Young Olds

There has been a *blank spot*[5] among Hong Kong policy makers, scholars, journalist, and NGOs on the ageing phenomenon and solutions. For too long, they have ignored voices such as the World Health Organisation (WHO) which now defines 'youth' as people from age 18 to 65 and 'young olds' as people from age 66 to 79. McKinsey & Company's June 2016 article 'Are you ready to live to 100' also addressed this phenomenon and recommended abandoning the notion of a 'lockstep life'. Moreover, the July 2017 issue of The Economist, in a feature entitled 'The new old', argues that ageing should be considered a boon to society instead of a curse. The main message from these three credible thought leaders is that we should not enforce an involuntary retirement age - as in the United States - or at least we should extend the term of service by several more years. The addition of members of the 61 to 79 age group would allow the total workforce to increase by nearly 60%[6]. In the United States, according to The Economist report:

- 40% of adventure travellers are older than age 50.

- More than one-fourth of the members of Match.com(a dating site) are between the ages of 53 and 72.

- People of age 55 to 65 are 65% more likely to start up companies than those age 20 to 34.

Retirees - especially those belonging to middle class and have been at mid-management - usually have two kinds of activities in their anti-ageing portfolio. Their defensive activities include exercise, diet, relation- building, and strengthening of ties with friends and family. Their offensive activities include studying, volunteering, and earning through part-time or freelance work. Since most NGOs target middle-class people age 55 or older, the value proposition they use as an incentive is that they are 'adventurers' and 'life explorers'. An entrepreneurship development programme may focus on tasks such as how to write business plans, apply for government grants, and set up a business. The resulting venture may take the form of a business, a social enterprise, or a charity.

Although FSES does not specifically target persons older than age 55, we do have members in this age cohort. One of our values is to seek 'difficult pleasure', which requires a 'twist of will'. We enjoy the achievements that result from these difficult pleasures.

---

[5] Blank spots are solutions to the problems that one does not know.
[6] Under this scenario, the workforce increases from the population age 20–60 to the population age 20–79.
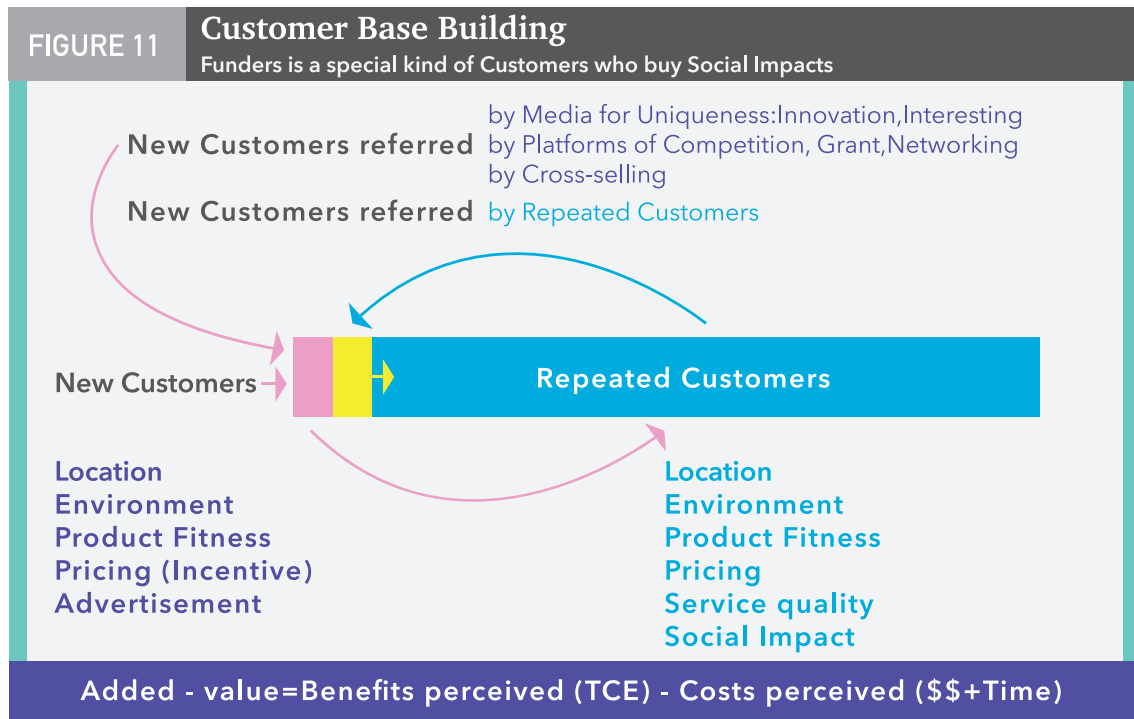
4 CUSTOMER ACQUISITION

Marketing has been defined as an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationship in ways that benefit the organization and its stakeholders. (Kotler and Keller 2009:45)

The key to success for any business is the customer acquisition speed. The customers can be broadly classified as either new or repeat customers. New customers may come to the business due to its location, advertisements, or referral. Repeat customer may come again because of the location, environment, pricing, quality, or to simply support the SE's social mission.

In this example, we assume a business has 100 new customers every month. With different rates of the repeat customers, the total number of customers is as shown here.

FIGURE 11 — Customer Base Building
Funders is a special kind of Customers who buy Social Impacts

New Customers referred by Media for Uniqueness:Innovation,Interesting by Platforms of Competition, Grant,Networking by Cross-selling

New Customers referred by Repeated Customers

New Customers → | Repeated Customers |

Location
Environment
Product Fitness
Pricing (Incentive)
Advertisement

Location
Environment
Product Fitness
Pricing
Service quality
Social Impact

Added - value=Benefits perceived (TCE) - Costs perceived ($$+Time)

Repeat Customers

FIGURE 12

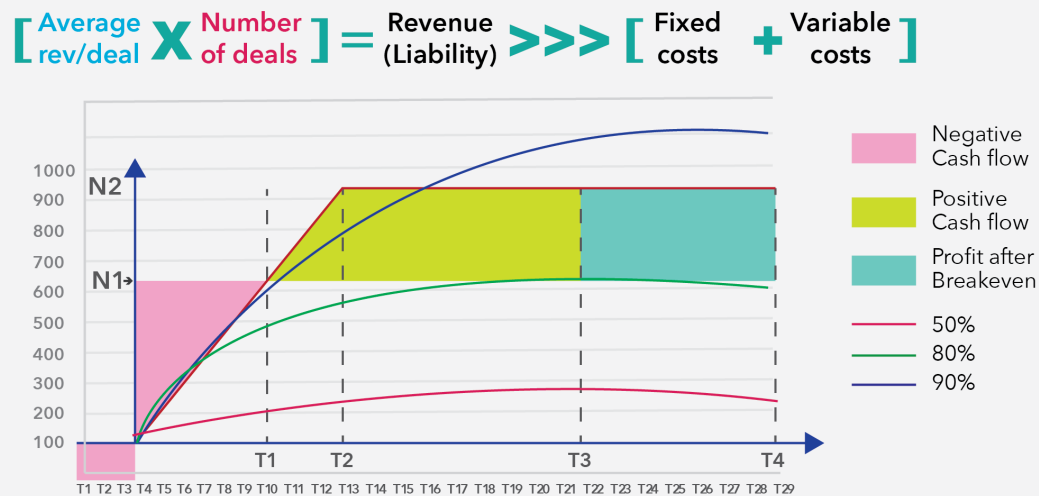|	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T∞
New customers	100	100	100	100	100	100	100	100	100	100	
Repeat customers with repeat rate = 50%	0	50	75	88	94	97	98	99	100	100	
Total customers	100	150	175	188	194	197	198	199	200	200	200
New customers	100	100	100	100	100	100	100	100	100	100	
Repeat customers with repeat rate = 80%	0	80	144	195	236	269	295	316	333	346	
Total customers	100	180	244	295	336	369	395	416	433	446	500
New customers	100	100	100	100	100	100	100	100	100	100	
Repeat customers with repeat rate = 90%	0	90	171	244	310	369	422	470	513	552	
Total customers	100	190	271	344	410	469	522	570	613	652	1000

The next diagram depicts the customer acquisition curve based on different repeat customer rates — namely, 50%, 80%, and 90%. The slope of the curve represents the customer acquisition speed. The slope of the 90% curve is higher than that of the 80% curve and much higher than that of the 50% curve.

As shown, if the repeat customer rate is 50%, the shop will never be able to break even. In fact, it will have a huge loss every month. The accumulated loss over the lease period will be multiples of the setup cost.

If the repeat customer rate is 80%,the shop will reach operation break-even around the mid-point of the shop's lease. The customer acquisition curve will then be plateaued forever, in which case the owner will not be able to recover his investment.

If the repeat customer rate is 90%, however, the business will reach operation break-even when it passes the one-fifth milestone of the leasing period. It reaches maximum capacity around the mid-point of the leasing period, and should then start increasing its prices so as to maximise its profit.

FIGURE 13 | Viability Modeling

$$\begin{bmatrix} \text{Average rev/deal} \end{bmatrix} \times \begin{bmatrix} \text{Number of deals} \end{bmatrix} = \begin{bmatrix} \text{Revenue (Liability)} \end{bmatrix} \ggg \begin{bmatrix} \text{Fixed costs} \end{bmatrix} + \begin{bmatrix} \text{Variable costs} \end{bmatrix}$$

Legend:
- Negative Cash flow
- Positive Cash flow
- Profit after Breakeven
- 50%
- 80%
- 90%

The customer acquisition speed is estimated by surveying the existing providers — i.e., the new business's competitors. If possible, launching a pilot project will provide even more accurate data for making this estimate. The main difference between a survey and pilot testing is that the former studies others, whereas the latter seeks to improve self-awareness.

For example, suppose all the restaurants in the district you are targeting achieve very good satisfaction ratings from customers on food quality. That does not mean that your workers' cooking skills will automatically achieve the same very good satisfaction ratings.

New Customer : Three Scenarios

The number of repeat customers is based on the multiplying effect of the new customers. Needless to say, if the number of new customers per month is zero, there will not be any repeated customer.

First, the social entrepreneur must forecast the number of potential new customers from each source. The sum of all these potential new customers is the best-case scenario.

Second, the win rate is composed of two numbers: the likely percentage and the worst-case percentage. The sum of the products of new customers and the likely win rate is the most likely scenario.

Finally, the sum of the products of new customers and the worst-case win rate is the worst-case scenario.

FIGURE 14

Source of New Customers	Promotions	Coverage (I)	Win Rate (P)	Weighted Number (I x P)
Friends	Make Appointment	Headcount (HC)	%–%	Most likely HC – Worst case HC
Traditional media	Story-telling	Headcount (HC)	%–%	Most likely HC – Worst case HC
Social media	Designated time	Headcount (HC)	%–%	Most likely HC – Worst case HC
Drop-in	Pamphlet	Headcount (HC)	%–%	Most likely HC – Worst case HC
Referral	Nudging	Headcount (HC)	%–%	Most likely HC – Worst case HC
Reseller	Search reseller	Headcount (HC)	%–%	Most likely HC – Worst case HC
Total		**Headcount (HC)**	**%–%**	**Most likely HC – Worst case HC**

If the business attracts 100 new customers per month and the repeat rate is 90%, 12 months on the total number of customers in the twelfth month will be 716. The following graph illustrates an actual example of how new customers become repeat customers.

5 SOCIAL IMPACT MEASUREMENT

Many NGOs complain that funders cover only the programme expenses, not the NGO's overhead. Some blame the funders as being irrational. In reality, when investors buy stocks, their primary concern is seldom the listed company's overhead (SG&A) or cost of goods sold (COGS). Instead, their primary concern is the net profit of the company, such as the P/E ratio (share price versus the earnings per share).

Most funders are in fact as rational as they are consistent: they pay for results. In a financial investment, the result is the profit. As long as the return is significantly larger than the amount invested, funders do not mind overhead, because they perceive the business as a good deal.

With donations or sponsorships, the result is measured in terms of social impact. All too often, however, NGOs emphasise the social needs but do not want to report the measurable social impacts. To the funders, this reluctance indicates that he NGOs only eye on their money but are unwilling to commit to what the beneficiaries will get in return. Since the funders cannot conclude if the investment is a good deal, they tend to be more cautious in their funding support.

What

Impact means the 'marked effect or influence on someone or something due to a forcible contact with another object or event'. It is different from outcome, which means a 'consequence'; it is also different from output, which means 'the amount of something produced by a person, machine, or event'.

Provision of 40 hours of vocational training is an 'output'. Students' overall satisfaction score of 4 on a scale of 1 to 5 is an 'outcome'. 'Half of the students can get jobs due to the training' is an 'impact'.

Social impact is a marked effect on beneficiaries in terms of their affective, cognitive and behaviour dimensions. For example, the beneficiaries feel good, learn new competencies, and change their behaviour in positive ways.

Why

When social enterprises report measurable or quantified social impacts, funders can at least justify their funding support. Moreover, they can compare different projects and pick the one with the best cost-effectiveness as a candidate for funding. In the long run, the better service providers will grow faster than the less efficient providers. Their success means that larger numbers of vulnerable people can be served with the same amount of input resources.

Furthermore, when the social impact is measurable, it means a goal for social impact can be set based on historical records, or based on the experience of similar types of social enterprises. The goal will then influence the design of the social value creation process in the direction of maximising the social impact.

HOW TO MEASURE SOCIAL IMPACT

There are three schools of thought on measurement of social impact. The 'gold standard' of social research is the randomised controlled trial (RCT)[7]. The cost of such a trial ranges from HK$0.5 million to HK$3.0 million or more. The Social Innovation Fund initiated by former US President Barack Obama adopts this approach.

In the United Kingdom, approximately one-fourth of all social enterprises monetise their social impact so as to calculate social return on investment (SROI) according to the method proposed by SROI Network. Originally the SROI method was initiated by Roberts Enterprise Development Fund[8] (REDF), though REDF eventually abandoned this approach due to disputes on monetisation rubric. Very few social enterprises publish their SROI, preferring to keep the results private and use them for internal reference.

In Hong Kong, FSES has proposed use of the Social Impact Measurement (SIM) based on the four-level model proposed by Donald Kirkpatrick (2006:5-8) as an outgrowth of his doctoral research on people development. Kirkpatrick's model was adopted by numerous multinational corporations, including Hewlett-Packard, beginning in the early 1980s. It is therefore both academically sound and commercially viable.

Levels 1 to 3 of Kirkpatrick's four-level model are beneficiary-oriented. They measure the effect of the logic of empowerment on the beneficiaries. Level 4 is funder-oriented. It measures the financial cost-effectiveness in terms of either the SROI or the unit cost per beneficiary. For social enterprises, the total SROI during the life span depends on the financial sustainability of the business. Hence the measurement results reflect the effect of the logic of control.

Level 1: Affective Impact

Level 1 measures the overall satisfaction of the beneficiaries with the programme or event. The primary factors affecting satisfaction include the impression of trust and respect, the social network, and the autonomy on the work and on the voluntary actions.

In addition, the effects on well-being may be measured. Satisfaction is a pre-requisite to achieving level 2.
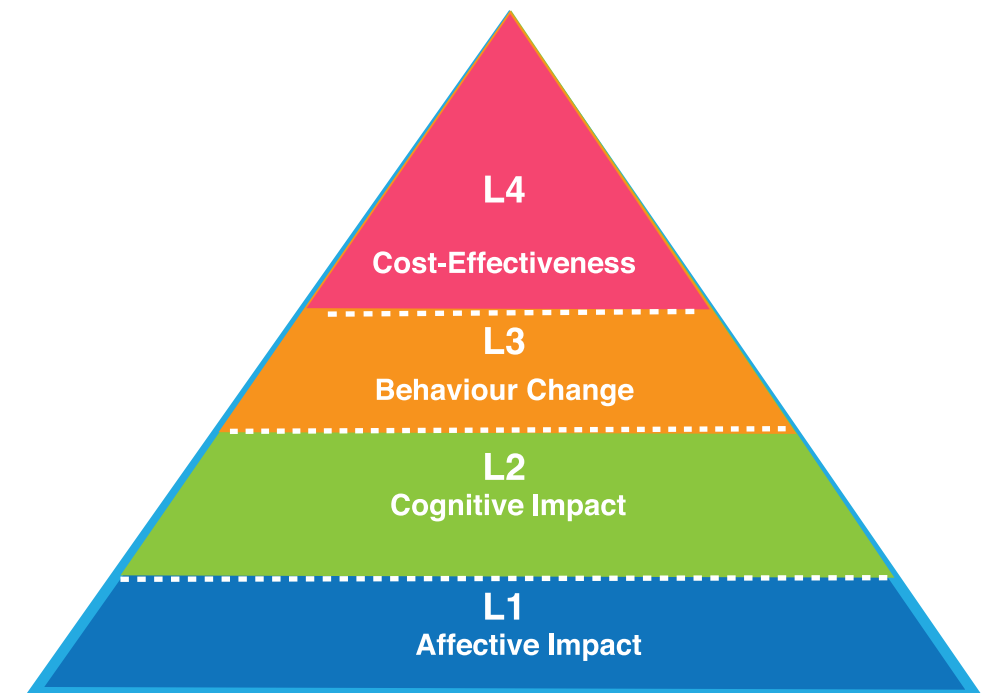
Level 2: Cognitive Impact

Level 2 measures the change in competence which consists of knowledge, skills, and attitude. This measurement can take the form of a simple self-assessment, use of a psycho-sociometric scale, or an RCT.

Level 3: Behaviour Change

Level 3 measures specific behaviour based on the type of the beneficiary. For example, for ex-offenders, the re-offending rate is measured. For net-addicted teenagers, sleeping habits such as time going to bed are measured.

Generic behaviours may also be measured — for example, the number of new friends made, and the number of good friends nurtured. This type of measurement is possible because social capital is a key factor in well-being.

L4 — Cost-Effectiveness
L3 — Behaviour Change
L2 — Cognitive Impact
L1 — Affective Impact

[7] Random Control Trial is a study method in which participants are randomly assigned into an experimental group and a control group. As the study is conducted, the differences between the control group and the experimental group is the outcome variable being studied.
[8] The web–site of REDF is http://redf.org/

Level 4: Cost-Effectiveness

Level 4 includes two types of measurements. The first is the SROI. The social return is the benefits to the vulnerable group together with the social cost savings by the government or society, such as a reduction in the level of Comprehensive Social Security Assistance (CSSA). The social return for a Work-Integration Social Enterprise (WISE) is the wage received by employees of the vulnerable groups, or the amount of discount as compared to the market price for the Subsidised Service Social Enterprise (SSSE); or the amount of profit used to support the social services in the Plough-Back Social Enterprise (PBSE), such as the hotels in the YMCA.

The second is the unit cost per beneficiary who receives Levels 1, 2, and 3 benefits. For example, the unit cost to help a deviant youth to re-integrate into society is approximately HK$50,000 spreading over 5 years if it is done by the social enterprise MyConcept. It teaches such youth to develop careers based on stage performance, such as singing, dancing, or magic. A similar result costs approximately HK$90,000 spreading over 3 years if it is done by a youth centre. Finally, re-integration of a deviant youth into society costs approximately HK$300,000 per year if it is done by the Correctional Service Department. Thus, similar results may be obtained through different strategies and by different natures of organisations, but with significantly different costs.

The unit cost approach can also help funders develop a sense of costs incurred by a social venture or education venture. The unit cost per student can be HK$600, HK$2,500, or HK$10,000 when teaching students about social entrepreneurship. The amount of funding approved for these efforts varies dramatically because the funders generally do not have a good sense of cost-effectiveness of social entrepreneurial education.

Another basis of comparison is the cost-effectiveness of incubation. In the United Kingdom, an incubator organisation assumes costs of approximately HK$100,000 per social entrepreneur, splitting HK$35,000 for the social entrepreneur and the remaining HK$65,000 for administrative expenses. The percentage of projects launched from the UK incubator that reach break-even within one year is approximately 1%. In Hong Kong, an incubator organisation typically provides HK$150,000 per social entrepreneur, splitting HK$100,000 for the social entrepreneur and the remaining HK$50,000 for the administrative expenses. The percentage of these projects that reach break-even within one year is approximately 20%.

Advanced Measurements

Advanced measurement approaches include mixed methods, comparisons, and journalist proxy.

CREATING SOCIAL IMPACT

The process of creating social impact proceeds through three steps. First, estimate the SROI of the project. The method was covered earlier. Second, identify the theory of change (TOC). Last, design the logic model.

Theory of Change

Basing the project on a proven theory improves the validity of its effects in creating the impact. For a WISE, the 'Six S' model is a good TOC; its elements include Salary, Social status, Social network, Sense of purpose, Stimulation of intellectual engagement, and Structure of time.

According to self-determination theory (SDT), salary and status are extrinsic motives. Social network, sense of purpose, stimulation of intellectual engagement, and structure of time are intrinsic motives.

The elements in the 'Six S' are the independent variables in studying social impact. They are also called 'handles' because they are meant to be operated to adjust the dependent variable — i.e., the impact. In the case of a WISE, the dependent variables are the loyalty of the employees from the vulnerable group to the job, and their motivation to learn and to transform.

Logic Model

The logic model is the change mechanism designed to maximise the overall cost-effectiveness by tuning the six handles as needed. For example, in Fullness Salon, the following logic model is used:
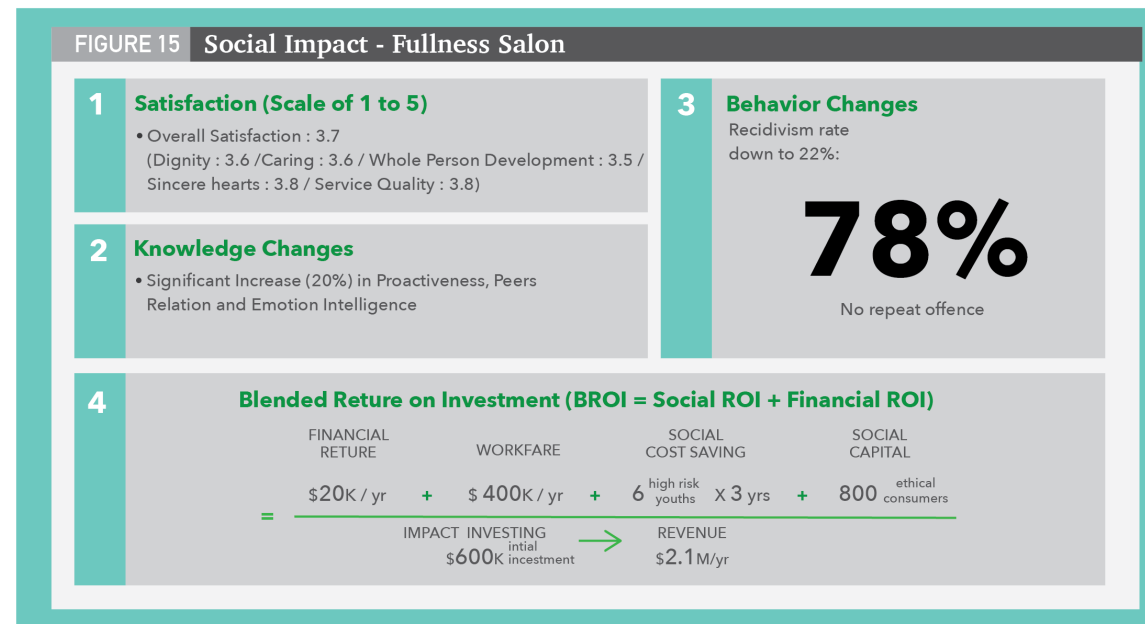
Salary: The income of the beneficiary.
Status: A job or role through which the beneficiary earn trust and respect from the others.
Social network: A social support system that includes strong ties and weak ties.
Sense of purpose: A career goal that the beneficiary wants to achieve.
Stimulation of intellectual engagement: Regular brain exercises, either as learning or coping challenges.
Structure of time: A work life that has a rhythm of ups and downs.

FIGURE 15 **Social Impact - Fullness Salon**

1 **Satisfaction (Scale of 1 to 5)**
• Overall Satisfaction : 3.7
(Dignity : 3.6 /Caring : 3.6 / Whole Person Development : 3.5 /
Sincere hearts : 3.8 / Service Quality : 3.8)

2 **Knowledge Changes**
• Significant Increase (20%) in Proactiveness, Peers
Relation and Emotion Intelligence

3 **Behavior Changes**
Recidivism rate
down to 22%:

78%

No repeat offence

4 **Blended Reture on Investment (BROI = Social ROI + Financial ROI)**

$$= \frac{\text{FINANCIAL RETURE } \$20\text{K/yr} + \text{WORKFARE } \$400\text{K/yr} + \text{SOCIAL COST SAVING } 6 \text{ high risk youths} \times 3 \text{ yrs} + \text{SOCIAL CAPITAL } 800 \text{ ethical consumers}}{\text{IMPACT INVESTING intial incestment } \$600\text{K} \rightarrow \text{REVENUE } \$2.1\text{M/yr}}$$

6 HOSHIN PLANNING SYSTEM

A plan is essential when there is a need to change behaviours. The purpose of a business plan is to improve the business's performance through actions related to control of costs, product quality improvement, and marketing and sales. The purpose of a strategic plan is to align the habits of mind and behaviours of all members of the organisation, so as to avoid trouble or to achieve a breakthrough, within three to five years.

A concise yet effective strategic planning system used by multinational corporations such as Hewlett-Packard is Hoshin(方針)Kanri(管理)(Witcher & Butterworth 2000:262-269). This name is a translation of a planning method used in Japan, which was originally learned from China.

FIGURE 16	Hoshin Planning and Review

LEGEND: STATUS: ● ON-TRACK ● W-WARNING ● OFF-OFF TRACK ⊖ P: METRIC PROBLEM

Organization:		Period:	Owner:		Version:	
Situation Analysis			Strengths (having. being)		Opportunities (becomeing)	
GAPS insights						
SPOT insights						

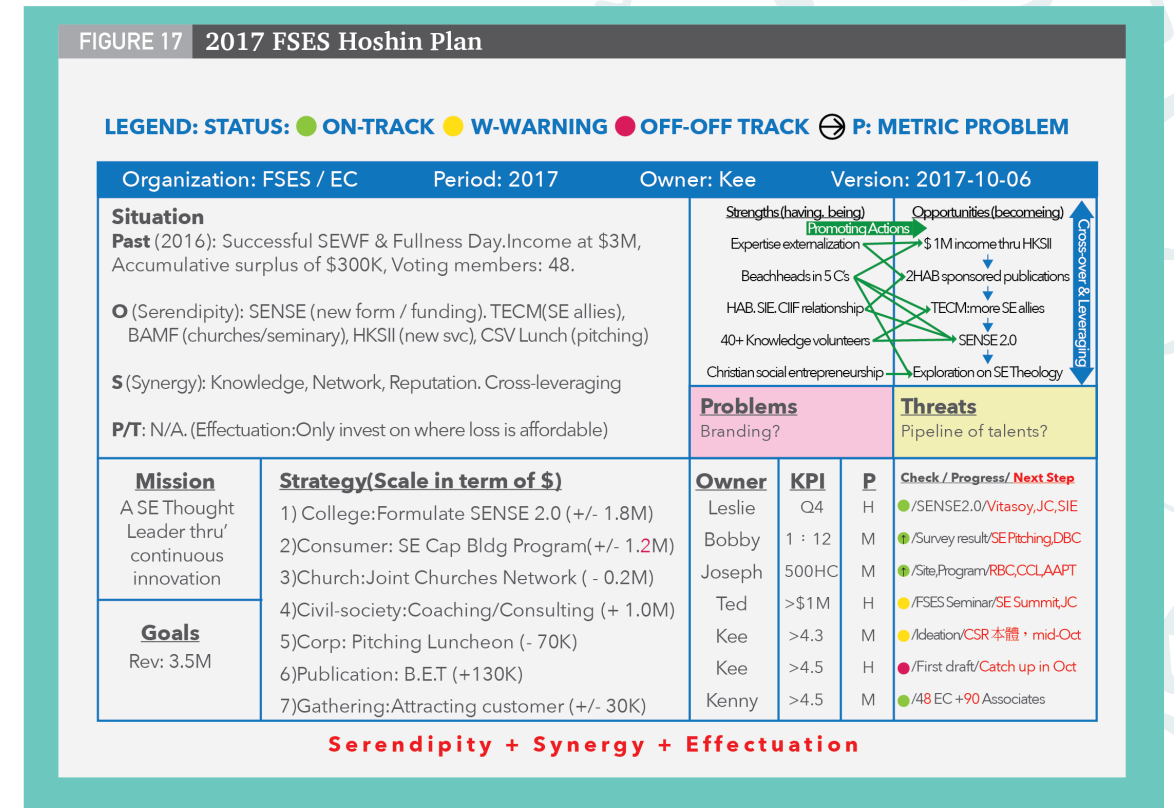| **Goal Setting**	**Planning**				**Review**
Mission	**Strategy(Scale in term of $)**	**Owner**	**KPI**	**P**	**Check/Done/Act**
					○ ○ ○
Measurable Goals					○ ○ ○ ○ ○

What
A Hoshin plan is a one-page document containing the three basic components of a strategic plan, namely, situation analysis, goals setting, and action planning. The improved version presented here is based on more than 30 years' experience with applying the Hoshin planning system. Two new components are added here: (1) the win rate, or probability of success, for each strategy; and (2) a review of traffic light indicators, the progress, and the next step.

Why
By putting it onto one page at-a-glance, the mutual exclusiveness and comprehensive exhaustiveness of the plan, as well as the logical linkages among the components, can be easily checked. Moreover, the design template includes labels and symbols which provide guidance when developing the plan.

How
The template includes 10 components.

FIGURE 17	2017 FSES Hoshin Plan

LEGEND: STATUS: ● ON-TRACK ● W-WARNING ● OFF-OFF TRACK ⊖ P: METRIC PROBLEM

Organization: FSES / EC   Period: 2017   Owner: Kee   Version: 2017-10-06

Situation
Past (2016): Successful SEWF & Fullness Day.Income at $3M, Accumulative surplus of $300K, Voting members: 48.

O (Serendipity): SENSE (new form / funding). TECM(SE allies), BAMF (churches/seminary), HKSII (new svc), CSV Lunch (pitching)

S (Synergy): Knowledge, Network, Reputation. Cross-leveraging

P/T: N/A. (Effectuation:Only invest on where loss is affordable)

Strengths (having. being) → Opportunities (becoming)
Expertise externalization — Promoting Actions → $ 1M income thru HKSII
Beachheads in 5 C's → 2HAB sponsored publications
HAB. SIE. CIIF relationship → TECM:more SE allies
40+ Knowledge volunteers → SENSE 2.0
Christian social entrepreneurship → Exploration on SE Theology
Cross-over & Leveraging

Problems	**Threats**
Branding?	Pipeline of talents?

Mission	**Strategy(Scale in term of $)**	**Owner**	**KPI**	**P**	**Check / Progress/ Next Step**
A SE Thought Leader thru' continuous innovation	1) College:Formulate SENSE 2.0 (+/- 1.8M)	Leslie	Q4	H	●/SENSE2.0/Vitasoy,,JC,SIE
	2)Consumer: SE Cap Bldg Program(+/- 1.2M)	Bobby	1：12	M	●/Survey result/SE Pitching,DBC
	3)Church:Joint Churches Network (- 0.2M)	Joseph	500HC	M	●/Site,Program/RBC,CCL,AAPT
	4)Civil-society:Coaching/Consulting (+ 1.0M)	Ted	>$1M	H	●/FSES Seminar/SE Summit,JC
Goals	5)Corp: Pitching Luncheon (- 70K)	Kee	>4.3	M	●/Ideation/CSR本體，mid-Oct
Rev: 3.5M	6)Publication: B.E.T (+130K)	Kee	>4.5	H	●/First draft/Catch up in Oct
	7)Gathering:Attracting customer (+/- 30K)	Kenny	>4.5	M	●/48 EC +90 Associates

Serendipity + Synergy + Effectuation

Heading
The heading identifies the name of the organisation or department, the name of the owner, the period covered by the plan, and the version of the plan. A plan is not a master of humans, but rather a tool for humans. Not only will the review component change as time goes by, the other components may also change, requiring the analysis, goals, and strategies to be modified to be in line with the latest challenges or opportunities.

Situation

The situation component summarises insights, instead of detailed facts, from the SPOT analysis and/or the GAPS Analysis. Only those insights relevant to the goals and strategies should be include.

SPOT stands for 'Strengths, Problems, Opportunities, and Threats'. The former two are what the organisation has now, and the latter two are what may happen in the future. Another version of the SPOT analysis is the SWOT analysis which means 'Strengths, Weaknesses, Opportunities, and Threats'. In the case of 'high rental cost' for a social enterprise, however, this issue may be better perceived as a 'Problem' to be faced rather than a 'Weakness' in the ability to pay; thus, 'Problem' is a more accurate name for this category in the social entrepreneurship realm.

When doing SPOT analysis, many people make the mistake of ignoring the relevance of the strengths and problems to the opportunities or threats. If strength does not help the business take advantage of the opportunities, it is irrelevant to this exercise. If solving a problem does not help the business realise an opportunity or remove a threat, it is also considered irrelevant.

Another common error arises when picking strengths and problems. If your organisation has a good team or staff, but all your competitors have better teams than yours, your 'good team' is still a relative problem. In many social enterprise business plan competitions in which I am one of the judges, the business plans of the award winners may have scores of B or B- if they are submitted as part of a university course assignment. They win simply because their competitors have scores of C or lower. We win in a competition because of making fewer mistakes.

GAPS stands for 'Goals, Actual results or ability, Past or Perception, and Standards'. Thus a GAPS analysis is a comparative analysis between actual and past performance, between actual and internal or external standards, and between actual outcomes and the goals.

When the actual performance is higher than the standard, it is strength. When the actual performance is lower than the standard, it is a problem.

When the actual performance is better than the past performance, the organisation is growing. If not, the business is declining or in trouble.

The goal should be the last criterion set. It may be a turnaround goal, a growth goal, or a breakthrough goal. If the SPOT analysis is carried out before conducting the GAPS analysis, the goal will probably come from one of the opportunities.

Objective

The objective describes what is to be achieved within the period specified in the business plan. Usually it comprises a short statement about the state of the organisation when the objective is achieved, such as 'Achieve financial break-even within 1 year', 'Turn around the business', or 'Become an opinion leader in SE sector'. The formula for stating the objective is 'Action + State + optional Time frame or Domain'.

Goals

Goals are the criteria by which we can tell whether the objective was achieved. Usually, a goal is phrased in terms of a number or a dollar amount. Sometimes it may be the completion date of the event or project. It can also be a name, such as a corporate customer that the organisation wants to penetrate. In rare cases, it is the verdict from a strongman in the organisation, such as the founder. Thus, the goal is a 'must' to answer the question of whether the business has achieved its objective.

Many NGOs fail in the implementation of their strategic plans because the chief executive cannot or will not set a measurable or quantitative goal for the plan. For example, instead of setting a goal of 'earn $100', the goal may be 'have good earnings'. The amorphous nature of this goal means there is no way to measure the progress of implementation. It is like students who do not have their home assignments and exam papers marked. There is no means to accurately measure if they are qualified to move on to the next level of study.

The numeric goal can be just a number, or a range containing two to three numbers, including the worst-case scenario number (the lowest goal), the most likely case number, and the best-case scenario number (a stretch goal). For highly uncertain situations that may have either a big upside or downside, all three numbers may be quoted. For mature and stable businesses, usually the most likely scenario number is quoted.

Strategy

The 'Strategy' section of a business plan describes the strategies that, as a whole, can achieve the overall goals. The description includes identification of a domain and an approach to achieve the desired outcome. It does not include details, thereby leaving room for flexibility during implementation.

In terms of the number of strategies identified, the general guideline is to have a critical few but sufficient strategies. 'Critical' is evaluated in terms of the magnitude of the impact. 'Few' implies fewer resources are needed and efforts can be more focused so that the time required to achieve the key performance indicator (KPI) can be shortened or made timelier. 'Sufficiency' of the strategies is the most overlooked issue in most strategic plans.

One of the insufficiencies is the disconnection between departments on the Hoshin strategies. For example, there may be no business-information technology (IT) alignment, such that the operational data needed by the business department to analyse the situation or to report progress or deviations are not available from the IT department. Another common problem in NGOs is the human resources (HR) department's sourcing of training programmes that are irrelevant to the organisation's strategies. A third example related to sufficiency is the inability of the finance department to provide timely financial reports within a few working days after month-end closing, or to provide financial forecasts based on seasonality or year-to-year patterns.

Owner

Only one person should be identified as being responsible for a strategy. Team ownership, such as a department, usually means no specific individual takes responsibility. Clarity of ownership is important when deciding who should be rewarded, 'penalised', or at least ultimately held responsible (please decide).

During the business planning process, it is important to obtain the expected owner's inputs on the strategy and KPI, with these inputs being incorporated as much as possible into the plan if they are reasonable. Through such engagement, it is assured that the owner of the strategy understands and agrees with the arrangement.

When subordinates are assigned responsibilities for specific strategies, the Hoshin plan is cascaded down to either the subordinates' Hoshin plan or items in their performance appraisal.

Key Performance Indicators (KPI)

The management philosophy of Hoshin planning can best be described as 'management by objective' (MBO). The assumption is that the employee is a knowledge worker (what do you mean?) who will try his / her best to hit the KPI, as long as the employee is provided with relevant training, resources, authority, and incentives to implement the strategy.

Moreover, numeric goals and KPIs can facilitate the cascading of the business plan and the alignment between the business's headquarters and the subordinate centres or business units.

Probability or Success Rate (P)

The probability of success in meeting the KPI can be assessed as high (H), medium (M), or low (L). Alternatively, it may be quantified as a percentage from 0% to 100%. The percentage can be calculated by surveying the stakeholders and taking the average of their responses, or by estimation based on historical records and industry norms. A score of 'low' or a percentage close to 0% means it is difficult to meet the KPI. When such a probability is explicitly documented, the pressure placed on the strategy owner is decreased: if the owner fails, the outcome is the expected result; if the owner succeeds, he / she is lauded as a hero.

The strategies in the Hoshin plan that have the lowest probabilities should be reviewed again through potential problem analysis and potential opportunity analysis to increase the success rate, and to ensure that the failures are tolerable. If they are not, the business must develop a contingency plan.

Check

Hoshin Plan uses traffic light to indicate the status of the strategies. A green circle will be shown if the progress of the strategy is on-track; a yellow circle if the progress is slightly off-track, and red circle if it is far behind the target, hence the entrepreneur should take drastic actions to catch up on the progress.

If during the Hoshin Plan review, all the strategies get green circles, a possibility is that the owners of the Hoshin Plan had not pushed themselves to the limits. On the other hand, if all strategies get red circles, it means the owners are all incapable. The best pattern is that of most are green, a few yellow, with 1 to 2 red.

Done or Progress

When progress is on schedule, the status should signal a 'green light'. If it is a bit behind schedule, a 'yellow light'. If it is far behind schedule, a 'red light'. At the beginning, they should all be green lights. As the plan proceeds, the implementation of some strategies may fall behind, so that yellow or red lights begin to appear.

At the end of the period, it is considered disappointing to have all red lights. It may also be disappointing if all indicators are green, as this means the KPIs were set too low. This phenomenon, called sand-bagging, suggests that employees are not working to their full potential. The best pattern is mostly green light, a few yellow, and one or two red. In addition to the traffic lights, the 'Progress' section should include a few words to summarise the progress.

A special indicator that is used in the Hoshin plan is a white light with an arrow mark. It implies the strategy or the KPI is inappropriate, and should be changed.

Act or Next Steps

Unless the strategy is fully implemented and no more actions are needed, the plan should describe the next steps to be taken. For those elements of the business that have gone off-track, the next step will be corrective actions or catching-up actions.

How Often

The purpose of a plan is to create changes in the routine or habits. If everything can follow the usual path, there is no need for planning. Usually the progress made towards implementation of changes is not so much a matter of the duration of the planning period, but rather depends on the number of reviews conducted or the review frequency.

Review frequency need not be fixed — for example, as quarterly or monthly. Instead, it may vary from weekly or bi-weekly in the start-up phase to identify early wins so as to boost the team's morale, or to uncover problems before they are too late to fix. When the progress is on track and stable, it can be spread out to monthly or even quarterly.

The case of
Sharing Kitchen HK

The case of Sharing Kitchen HK by Community Development Enhancement Fund Limited

Social enterprise has become one of the most important ideas from social sector to business sector all over the world. While business magnates like Bill Gates are donating a substantial portion of his wealth for charity deeds, more and more businessmen are thinking about how to do business with good reputation or even leaving behind a legend. The fantasy on meeting social needs and maintaining stable income is the basic idea when thinking about social enterprise. "Sharing Kitchen HK" is one of the adventures we attempted in 2015, in order to build the fantastic dream for the food production sector. With the support from Social Innovation and Entrepreneurship Development Fund and Oxfam Hong Kong, we launched this social enterprise in April of 2016. It becomes the first example of sharing economy now, using the idea of sharing kitchen in Hong Kong.

共廚家作
自家味道

Background

In Hong Kong, a lot of passionate grassroots would like to start their own business, like the kind of micro-enterprises. Most of them are talented in cooking and food presentation. In order to obtain a licence for food production, a minimum of $800K initial investment is required for renting a kitchen so as to comply with government regulations. This barrier shatters their dreams all at once.

Dodo Cheng, Chairman and co-founder of Community Development Enhancement Fund Limited founded the social enterprises venture 'Sharing Kitchen HK' to solve this problem. Cheng said, "Given the sky-high commercial rents in Hong Kong, the grassroots dream of starting up their own business only seems too remote to be attained"[9]. The concept of 'Sharing Kitchen HK' takes advantage of the idle kitchen space for 'releasing more possibility' for food production - in other words, to put these idle space and time of kitchens into better use, and at the same time allowing flexibility for the grassroots to start their food production business in a less risky environment.

This new social venture has gone through a number of steps including market research and financial forecasting. In the article they would like to share some of the important steps they have gone through in these two years.

Idle kitchen possibility calculation

In 2014, Hong Kong Food and Environmental Hygiene Department recorded that there were totally 9,282 licences for general restaurants. [10]

Our team members have tried to reach over 100 restaurants in Yuen Long, Tung Chung and Tsuen Wan, we interviewed restaurants' owner and staff to find out whether there were idle kitchen hours in their restaurants. About 68 of them responded that they have idle kitchens of around 4 hours per day, for example, from 7 am to 11 am, from 2 am to 6 pm, or after 9:30 pm. This means the restaurants are not serving breakfast, afternoon tea or late night snacks.

We use the interview result to make a hypothesis that 70% of the restaurants have idling kitchen time

9,282 licensed restaurant x 70% x 4hours x 365days = 9,486,204 hours

[9] Yau, C. 2017, 'Hong Kong chefs savour project in which they share kitchens of popular restaurants', South China Morning Post 14 February. Available from: http://www.scmp.com/news/hong-kong/education-community/article/2070853/hong-kong-chefs-savour-project-which-they-share
[10] Pleasant restaurants statistics, 2014, http://www.fehd.gov.hk/english/statistics/pleasant_environment/statistienh_2011_2014.html

In order to rent a kitchen space in Hong Kong, the market price is about $150-$200 per hour.

9,486,204 hours x $175/hour = $1.66 billion

In the previous calculation, we assume that there is totally $1.66 billion paid for the idling time of the kitchens. These are important resources waiting for an innovative idea to release its potential.

Sharing economy venture

We start up a new social enterprise 'Sharing kitchen HK' try to match up the idle kitchen with the talented food producers. In Chinese, it is '共廚家作'.

Behind the Chinese brand name it emphasises on the concept of sharing idle kitchen, so that customers can taste the homemade products which are produced by grassroot participants from the local community. We call the participant 'Home Chef', literally, the master of cooking in a family. 'Sharing kitchen HK' is the platform for them to demonstrate their talents.

Value Delivery System and Value Proposition

'Sharing Kitchen HK' is set up with an idea to share the inherent space and sales network of restaurants with idle kitchen times. We design temporary contracts to hire special grassroots food producers as part-time employees, and we sign cooperation contracts with participating restaurants. The time slots open to grassroots food producers, for example, is from 7 to 11 am or from 2 to 6 pm. The food cooked is sold in the restaurant.

Value Propositions

The value proposition to the needy workers is more income through working with autonomy. The value proposition to the restaurants is to fill the gap left by insufficient kitchen staff[11], to increase the total sales by 3%, and at the same time create media exposure which is important to the restaurants' main business. The value proposition to the customers is the opportunity to practise ethical consumption, as 47% of the price paid goes to the needy workers. The value proposition to the media is to facilitate a story on the crossover of social innovation and sharing economy which serves as a platform for the less privileged to earn their living with considerable autonomy.

Customer Segments & Channels

The restaurants' existing customers are about 3,000 people per restaurant. We target to cooperate with six restaurants in the first year, which means that there are a total of 18,000 customers to be our customer segments.

Two channels were set up to facilitate communications between restaurant owners and customers. First, regular reviews with each restaurant owner on the operation, with promotional programmes every month.

Second, regular customers' survey is done to review pricing and quality of the products.

---

[11] The annual attrition rate of restaurant staff is about 80%.

Pilot Test experience and result

Sharing kitchen is an entirely new business model in Hong Kong. We can hardly find any similar venture or project before. It is therefore hard to predict the business in real situation. In order to gain experience and subsequently gather data, we tried to launch a pilot to test the feasibility of sharing kitchen in August 2015.

In the pilot test, we invited five grassroots to join and produce five kinds of desserts in the idle time of a restaurant in Tsuen Wan. The food is sold in the operating hours of the restaurant. At the same time we conduct a customer survey to gather their feedback.

Meanwhile, we apply the Kirkpatrick model to do the customer survey and the result is very encouraging:

Level 1: Feeling

The customers find the food prepared by our home chef is nice. The average satisfaction rate is 4.3 on the scale of 1 to 5. Customers suggest for a 16% increase on the price in average.

Level 2: Cognition

Customers are not familiar with the concept of sharing kitchen. Only 26% have heard about such an idea or generally sharing economy before. However, when we explained to them the concept of sharing kitchen and homemade food production, over 87% find that it is important and they are supportive.

Level 3: Behavior

Over 84% will return to patron again. 61% will recommend family and friends to come and try sharing kitchen products. 53% will order for takeaway. Quite to our pleasant surprise, 16% of the pilot test customers express their intention to donate and support the startup of sharing kitchen.

Level 4: Results

The pilot test lasted for a week. In average 21 tables ordered food from Sharing Kitchen HK. The total sale was $504 per day, which accounts for 3% of the total turnover. The food costs were controlled to be within 30% and therefore the gross profit was 70%. As we wanted to value the contribution of the home chef, about 40% of the business turnover became home chef income. The income came from two parts. First, the producer has a basic daily wage. Second, there is revenue split to the producer from the total revenue. The more they sell the more revenue split they can earn.

After the pilot, we used the test result to support our financial forecast. We have the first year forecast as follows.

FIGURE 18	Scenario Planning		
Items	Best case (100%) Holiday situation	Expected case (75%) Pilot situation	Worst case (50%)
Average number of restaurants table purchase per day	28 tables	21 tables	14 tables
Average amount of customer purchase per table	$24	$24	$24
Daily turnover for each restaurant	$24,000	$18,000	$12,000
Each restaurant Sharing Kitchen HK turnover (2.8% of restaurant turnover)	$672	$504	$336
Gross profit 70% (net of food costs)	$470	$353	$235
Recurrent expenses: Producer's daily salary ($32.5 *3 hours * 2 people)	($195)	($195)	($195)
Each restaurant creates revenue per day	$275	$158	$40
Expected production days	240 day	240 day	240 day
Each restaurant creates revenue income for one year	$66,000	$37,872	$9,600
SE creates revenue in the first year (six restaurants)	$396,000	$227,323	$57,600

With the help of the first year forecast, we have now come up to a four-year forecast:

FIGURE 19	Financial Forecast for first four years			
Items	1st year	2nd year	3rd year	4th year
Average number of restaurants table purchase per day	21	23	25	26
Average amount of customer purchase per table	$24	$25	$26	$26
Each restaurant Sharing Kitchen HK turnover (2.8% of restaurant turnover)	$504	$575	$650	$676
Gross profit 70% (net of food costs)	$353	$403	$455	$473
Recurrent expenses: Producer's daily salary ($32.5 *3 hours * 2 people)	($195)	($195)	($195)	($195)
Each restaurant creates revenue per day	$158	$208	$251	$269
Expected production days	240	240	240	240
Each restaurant creates revenue income for one year	$37,872	$49,800	$60,240	$64,608
Expected number of cooperation restaurants	6	13	21	23
SE creates revenue in the first year	$227,232	$647,400	$1,265,040	$1,485,984
Producer's income (40%)	($90,893)	($258,960)	($506,016)	($594,394)
Profit per year	$136,330	$388,440	$759,024	$891,590
Accumulate investment return	-$303,670	-$275,230	+$123,794	+$655,384

Dynamic View of Initial Hypothesis on Financials

Our expected total investment amount is HK$782,000. Based on the data from financial forecast, every dollar invested in this venture will create $7.4 (i.e., $5.8M as the investment is $782,000) sales in the coming three years. The total cost for ingredients is $2.2 ($1.7M). Every dollar invested in this venture will lead to $1.4 ($1.1M) as the admin cost for SE, and $3.5 ($2.7M) directly goes to the grassroots in the coming three years. That means the social return is at least 350%.

FIGURE 20

Break Even Analysis

Have $480,000 to Scale-up

(a) Set-up cost=$480K
(b) Accumulative loss before breakeven =$280K
(c) Financial return within first 2 years =$60K
(d) Financial return within year 3 and 4 is $220,000
(e) Financial return of $655,384 over $760,000 investment, ROI=86% over 4 yrs

Operation breakeven | End of year two | Investment breakeven | End of year four
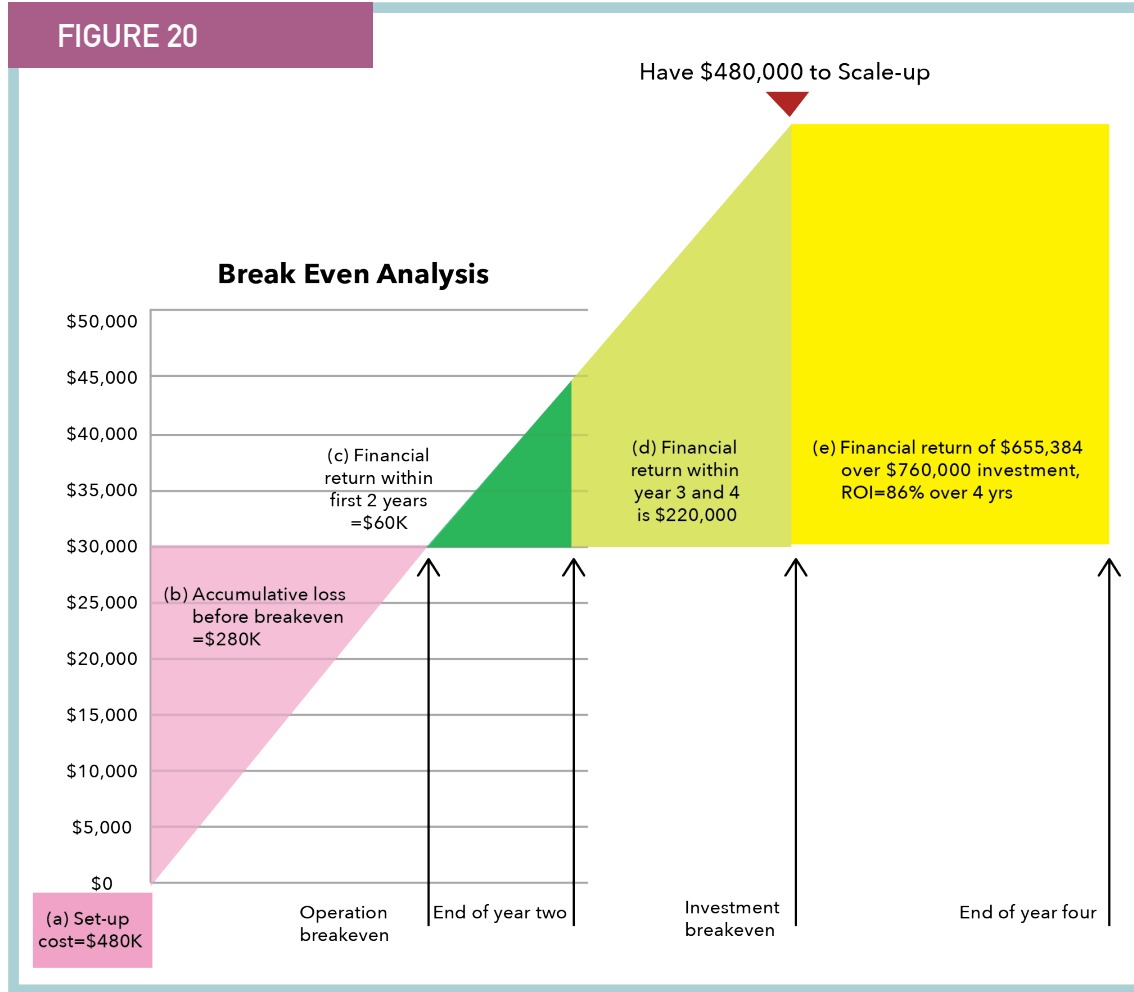
The chart shown is another type of financial forecasting. We predicted that after one year of practising this model, we will able to lower our administrative cost. And if it goes smoothly, we will come to our operation breakeven in 18 months. Investment will breakeven between 36 to 48 months, and it is often feasible to scale-up this model by opening new branches.

Business Model of Sharing Kitchen

Key Partners	Key Activities	Value Propositions(VP)	Customer Relationships	Customer Segments
• Six restaurants - Signed contract • Another 17 restaurants - Verbal agreement	•Use temporary contract to hire grass-roots producers who can make unique hand-made food as part-time employees •Sign cooperation contracts with interested restaurants •Schedule the production time in idle kitchens, for example, from 7 to 11 am or from 2 to 6 pm •Set the price and arrange the sales of the finished products in the restaurant	• **VP to needy workers:** more income through working with autonomy • **VP to restaurants:** Fill the gap due to labor shortage; increase total sale by 3%; get media exposure which is important to the restaurants' main business • **VP to customers:** Ethical consumption as 47% of the price go to the needy workers • **VP to media:** Have a good story on Sharing Economy crossing over with Social Innovation	• Poster, leaflet and booklet in the restaurants to explain the social mission of the program and the actual social impacts created	•**The restaurants' existing customers:** about 3,000 per restaurant •**Online media friends and supporters** - Hapischool 11,000 - Fair circle 32,000 - Agency friends 5,000
	Key Resources •**Business advice:** Simon Wong (LHG) •Management advice: Mr. Kee Chi Hing (FSES) •**Legal advice:** Bruce Liu (Solicitors) •**Media coverage:** U magazine, Sing Tao, AM730		**Channels** • Regular reviews with each restaurant owners on the operation and the promotion programs • Regular customers survey to review pricing and quality of the project products	

Costs Breakdown as a percentage of Revenue
Admin Overhead : 19%
Material Cost : 30%
Grass-root income : 47%

Revenue / Investment Ratio
•Total investment is $782,000. The forecasted total revenue in three years is $5,800,00. The three years accumulative Revenue / Investment ratio is 7.41. The annualized Revenue/Investment ratio is 2.47.

Social Return on Investment (SROI)
($5,800,000 x 47%) / $782,000 = 349% over 3 years, or 116% per year

Results on Financials and Social Impact after 16 Months in Operation

There are three ways of buying Sharing Kitchen HK products. The first is the original idea of restaurants consignment. While home chef is using the idle kitchen for food production, food produced is sold to restaurant customers. For example, in a roast fish restaurant, the home chef has prepared several kinds of herbal and fruit tea. This is in line with the needs for both restaurants and customers.

The second is online reservation order. During the festive seasons, home chef will prepare corresponding festive cuisine and promote it via social media and friends' network. Customers can order them online and pick them up at a designated time. The pickup point is the restaurants which join Sharing Kitchen HK. Home chef will prepare food as ordered by customers.

The third way is B2B cooperation. Corporations are welcome to place orders with Sharing Kitchen HK in order to provide a steady takeaway service. Snacks, light desserts, drinks, lunch boxes, etc, are provided.

Results on Financials

Sharing Kitchen HK has made a steady increase in revenue. It came to a breakthrough in the period of 10-12 months and reached the first operation breakeven. The table below shows the development of the business.

FIGURE 21 — Income situation of Sharing Kitchen HK (16 months)
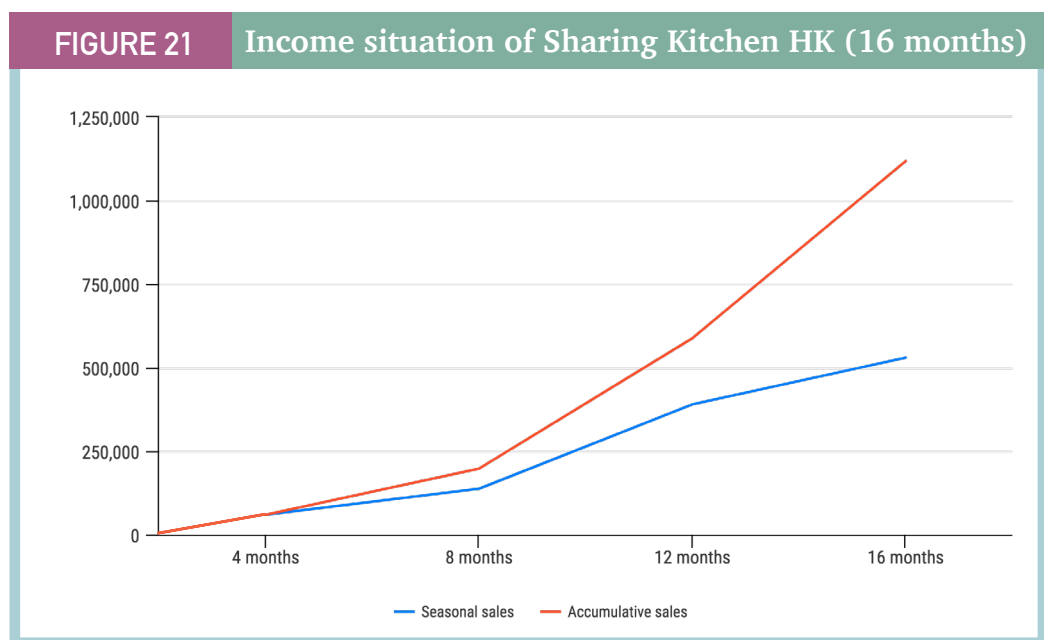
Results on Social impact

Within 16 months, Sharing Kitchen HK cooperated with six restaurants and one food factory to develop a "shared kitchen" business model. Sharing Kitchen HK created more than $1.1 million accumulative sales, and a total of $505,000 income for the grassroots, which accounts for 45.7% of total sales.

So far, more than 30 grassroots have joined us and came up with more than 100 products, 27 of which have been launched in the market. 17 grassroots continued to participate in Sharing Kitchen HK as 'Home Chef'. Each earns about $50-$80 per hour, and some can even earn $100 per hour in specific projects. The range of hourly rates is much higher than those offered by the traditional catering industry. By now, 9,101 hours of idle kitchen have been put into good use through this venture and the saving of rental fees is $2.2 million.

In other words, the total revenue earned is only half of the rental fees. If the restaurant owners did not share the kitchens, the social enterprise would be far from viable, and the grassroots would not have the opportunity to earn the income.

There are a total of 39 media coverage on Sharing Kitchen HK, including television episodes, radio interviews and press release, which create $4.3 million equivalent advertising value. These media exposures also function as public education on wholesome deeds.

Furthermore, 53 public talks have been conducted to educate on the concept of sharing economy and share of private ownership for public goods.

## 2017 TITHE ETHICAL CONSUMPTION MOVEMENT

REPEATED SE CUSTOMER SURVEY

SUMMARY OF KEY RESULTS

Introduction

In Hong Kong, the average life span of the 320,000 small-medium enterprises is 3.7 years. One of the reasons of the short life is that many start-ups cannot reach breakeven before they run out of operating cash. Breakeven is achieved when the Number Of Customers (NOC) multiplied by the Average Revenue Per Users or customers (ARPU) is equal to the Total Costs (TC) including fixed costs and variable costs and expenses.

Breakeven : (NOC X ARPU) = TC

FIGURE 22
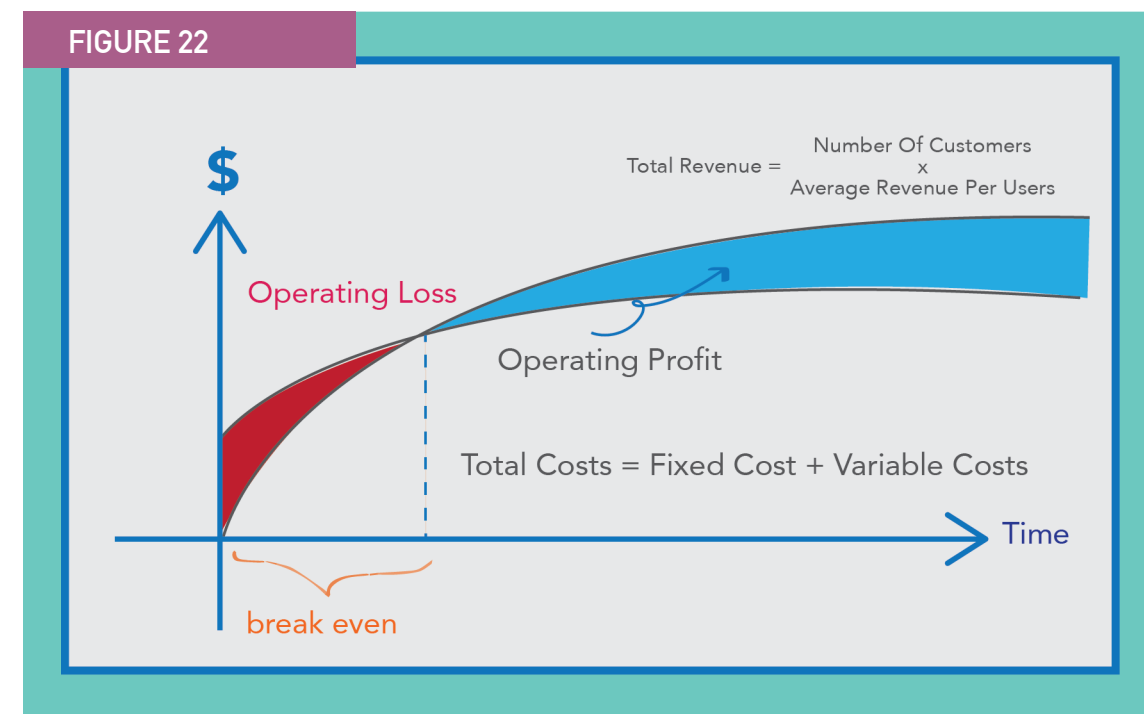
Break Even Time[12] is defined as the time from startup to the time when NOC X ARPU = TC. In the equation, Total Cost and Average Revenue Per User can be set by the entrepreneur, but the Number Of Customers is the challenge because most entrepreneurs do not understand its composition and how to make it.

The composition of customers includes New Customer (NC) and Repeat Customer (RC). For some shops and restaurants, location and environment are the main attractions to New Customers. In general, for all businesses the other two attractions are referral by friends, and advertisements[13]. But for social enterprises, media coverage and the mission of the social enterprises are also significant attractions.

---

[12] In this article, Break Even Time (BET) is used instead of Breakeven Time because if the entrepreneurs have not acquired the skills to manage breakeven, then it becomes a 'bet'.
[13] For social enterprises, usually the attraction of advertisement is much lower than the other factors mentioned.

Appendix B

Attractions to Repeat Customers and New Customers are different. Repeat Customers will decide on the re-purchases based on pricing and experience on previous services. Personal experience always overrides referrals and media coverage. Location and environment certainly still count.

This year, our Tithe Ethical Consumption Movement organised a Social Enterprises Capacity Building Programme (SECBP) to train 30 SEs on sales and marketing, business management, and social impact measurement and articulations. Twenty-five social enterprises designed customer surveys. The purpose is to develop some baseline data on customer acquisition for social enterprises in Hong Kong. Most of them are the modified version of our standard survey so as to cope with their specific businesses.

Research Results

There are a total of 1,382 customer responses. Out of the 25 surveys, 20 had 30 or more customer responses.

FIGURE 23

Attractions that Customers come to purchase	New Customers	Repeated Customers		Correlation to Repeated Customer%
	% Favourable	% Favourable	Score	
Words of Mouth	42%			
Media Coverage	38%			
Supporting the SE Mission	81%	94%	4.40	0.88
Location	71%	87%	4.17	0.38
Environment	87%	82%	4.10	0.52
Service quality		89%	4.26	0.65
Pricing		71%	3.89	0.10

The most important finding is how the data in the table above affects customer acquisition. The five charts below explain the relationship between the favourable percentages of each attraction and their impact on the Repeat Customer percentage.

SE Mission, 0.88

Service Quality, 0.65

Environment, 0.52

Location, 0.38

Pricing, 0.10
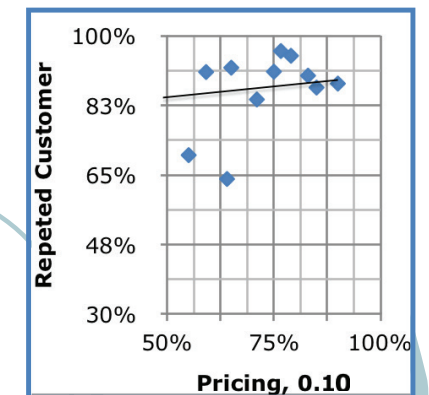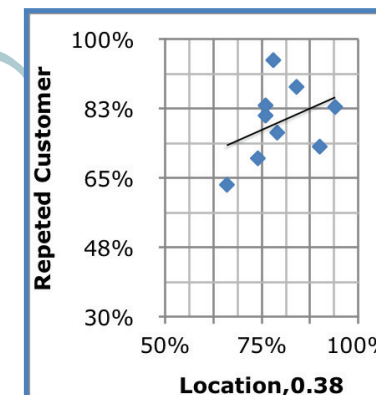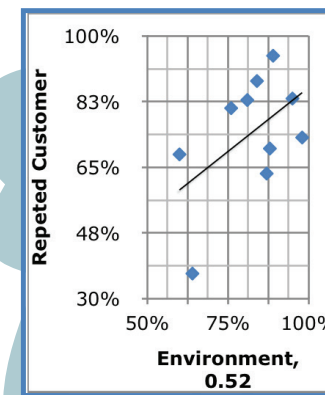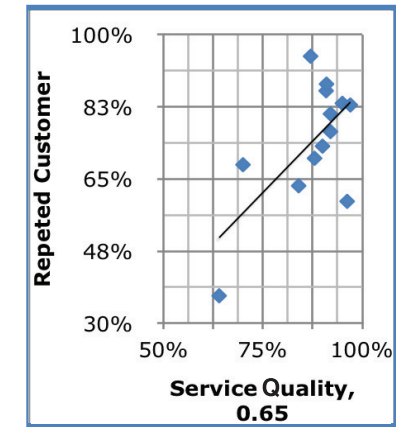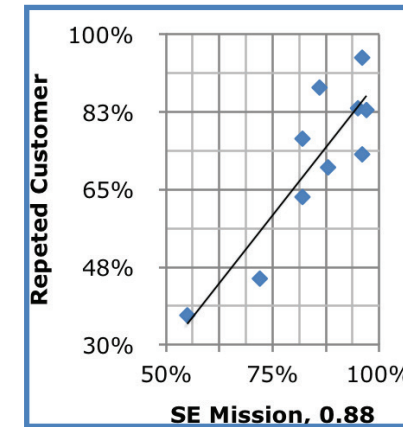
Summary of the Table and the Five Charts

1) The reasons why New Customers come include Environment: 87%, Supporting the SE: 81%, Location: 71%, Words of Mouth: 42%, and Media Coverage: 38%.
2) The reasons why Repeat Customers come again include Supporting the SE: 94%, Service Quality: 89%, Location: 87%, Environment: 82%, and Pricing: 71%.
3) For 10% increase in Repeat Customers for Supporting the SE, the total Repeat Customers increase by 13%.
4) For 10% increase in Repeat Customers for Service Quality, the total Repeat Customers increase by 10%.
5) For 10% increase in Repeat Customers for Environment, the total Repeat Customers increase by 7%.
6) For 10% increase in Repeat Customers for Location, the total Repeat Customers increase by 4%.
7) For 10% increase in Repeat Customers for Pricing, the total Repeat Customers increase by 1%.

Implications of the Finding

a) For both New Customers and Repeat Customers, Location and Environment are important attractions, as expected.
b) Supporting the SE is ranked high in New Customers, and the highest in Repeat Customers. This means that the branding of the social enterprise in general, as well as the branding of specific social enterprises in particular, is bringing in financial value.
c) Repeat Customers for Supporting the SE are not only loyal; they are also more ready to influence others.
d) Repeat Customers for Pricing are the least loyal. They shop around for the cheapest available. Similarly, Repeat Customers for Location usually look for convenience.
e) Hence, SE should target at those who are socially conscious, strive to maintain service quality and ambience, and be price-sensitive. This segment of customers should be SEs' niche market.
f) Unless an SE is cash-rich and is confident enough to turnover its investment, it should avoid high traffic, high rental locations, as there are bound to be direct competitors nearby offering similar nature of products and/or services, in which case will undoubtedly dilute your number of new customers.

Appendix C : Form for Hoshin Plan

LEGEND: STATUS: ● ON-TRACK ● W-WARNING ● OFF-OFF TRACK ◐ P: METRIC PROBLEM

Organization:		Period:	Owner:		Version:	
Situation Analysis			Strengths (having, being)		Opportunities (becoming)	
GAPS insights						
SPOT insights						
Goal Setting		**Planning**			**Review**	
Mission		Strategy (Scale in term of $)	Owner	KPI	P	Check/Done/Act
Measurable Goals						○ ○ ○ ○ ○ ○ ○

Bibliography

Banks, J. A. (1972), *The Sociology of Social Movements*, London: Macmillan.

Barringer, Bruce; and Ireland, R. Duane (2010), *Entrepreneurship: Successfully Launching New Ventures*, 3rd ed., United States: Prentice Hall.

Carter, Sara; and Jones-Evans, Dylan (2000), *Enterprise and Small Business: Principles, Practice and Policy*, 3rd ed., United Kingdom: Pearson.

Dees, J. Gregory; and Anderson, Beth Battle (2006), "Framing a Theory of Social Entrepreneurship: Building on Two Schools of Practice and Thought", *Business*, 1(3):39–66, http://www.redf.org/system/files/Greg+Dees%27+Framing+a+Theory+of+SE.pdf; accessed 31 March 2012.

Dowejko, K. Marta; and Au, Kevin (2017), *Global Entrepreneurship Monitor: Hong Kong and Shenzhen Report*, Hong Kong: Under Production Ltd.

Drucker, F. Peter (1985), *Innovation and Entrepreneurship*, USA: Harper & Row.

Forrester, Duncan (2005), *Theological Fragments*, New York, NY: T&T Clark International.

Gratton, Lynda; and Kirkland, Rik (2016), 'Are you ready to live to 100', McKinsey & Company, June 2016, http://www.mckinsey.com/business-functions/organization/our-insights/are-you-ready-to-live-to-100

Forrester, Duncan (2005), *Theological Fragments: Explorations in UnsystematicTheology*, NY: T&T Clark

Hampden-Turner, Charles (2009), *Teaching Innovation and Entrepreneurship: Building on the Singapore Experiment, Cambridge*, UK: Cambridge University Press.

Kahneman, Daniel (2011), *Thinking Fast and Slow*, New York, NY: Farrar, Straus and Giroux.

Kee, Chi Hing (2016), 'Developing social workers to run social enterprises', *Core*, https://core.ac.uk/search?q=%22Kee%20Chi%20Hing%22

Kepner, Charles; and Tregoe, Benjamin (1981), *The New Rational Manager*, Princeton, NJ: Princeton Research Press.

Kotler, Philip; and Keller, Kevin Lane (2009), *Marketing Management, 13th ed.*, London, UK: Pearson Education.

Lanning, Michael (1998), *Delivering Profitable Value: A Revolutionary Framework to Accelerate Growth, Generate Wealth and Rediscover the Heart of Business*, Oxford, UK: Capstone Publishing Ltd.

Mezirow, Jack; and Taylor, Edward (2009), *Transformative Learning in Practice: Insight from Community, Workplace, and Higher Education*, San Francisco, CA: Jossey-Bass.

Osterwalder, Alex; Pigneur, Yves; Bernada, Greg; and Smith, Alan (2014), *Value Proposition Design*, United States: Wiley.

Rasiel, M. Ethan (1999), *The McKinsey Way: Using the Techniques of the World's Top Strategic Consultants to Help You and Your Business*, New York, NY: McGraw-Hill.

Sarasvathy, D. Saras (2008), *Effectuation: Elements of Entrepreneurial Expertise*, United Kingdom: Edward Elgar.

Schumpeter, A. Joseph (1939), "Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process", http://docenti.lett.unisi.it/files/115/17/2/1/BusinessCycles_Fels.pdf; accessed 2 April 2012.

Swann, Peter (2009), *The Economics of Innovation: An Introduction*, United Kingdom: Edward Elgar.

The Economist (8-14 July 2017), a special report on 'The new old'.

BUSINESS PLAN

WORK