

Chi-Hong KWAN, Ted CFA

Director, Fullness Social Enterprises Society

Chairman, Fullness Christian Social Enterprise Limited

Founder, Hong Kong Investment Training Institute

Dr. Chi-Hing KEE, 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

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

Kwok-Fong CHAN, Joseph

Director, Fullness Social Enterprises Society

Chief Executive, Olive Capital Fund

Dr. Chui-Ha NG, Tracy PMP

Director, Fullness Social Enterprises Society

Vice General Manager, ECSoft Technology

Consultant, Programme and Project Management

1. What is Social Impact Measurement (SIM)?	6-7
2. A comparison between social and business projects	8-9
3. The stakeholder theory	10-12
4. The urge to have better measurement	13
5. The beneficiary-centric approach to SIM a. Level 4 – investment and return	14-17 18-26
b. Level 1 to 3 – the empowerment effect	27-28
6. Depth and width of measurement	29-34
7. Theory of change (TOC) and logic model	35-36
8. Quality of indicators	37-39
9. Concluding remarks	40-42
Appendix I – Social Impact Measurement examples in Hong Kong	44-47
Appendix II – Typical indicators	48-50



1.What is Social Impact Measurement (SIM)?

Measurement is nothing new in the society. In the government sector, we measure the public spending and staff turnover rate; in the business sector, we measure profit dollar and turnover; in the capital market, we measure price-to-earnings ratio, enterprise value and growth rate; in the social sector, we measure the percentage of minorities, the percentage of population under poverty and the number of drug-addicts.

The reason why we measure depends on the purpose, and the usefulness of a measurement depends on how well it correlates with the intended purpose. For example, if we want to know the living standard of a typical family in Hong Kong, we can measure the family income; if we want to know how loyal the staff are in a company, we can refer to staff turnover rate; if we want to know the burden of housing cost to a household, we can measure the percentage of rent or mortgage payment relative to the household income.

Measurement is important because it shows the magnitude of changes that:

- a. Encourage improvement on current practices which ultimately bring better results;
- Allow comparison of similar social projects that provides insights of best practices to conduct societal betterment; and
- c. Seek to objectively demonstrate the social impacts created.

Measurement encourages improvement on current practices, provides insights in best practices and allows objective presentation of impacts.

For a front-line social worker who interacts with the disadvantaged on a daily basis, he/she sees persons leave their drug addiction, children start to read again or couples are happier. All these are solid evidences of positive changes. However, people are subjected to confirmation bias and too easy to generalize conclusions based on a small number of samples¹. To overcome such bias, many funders, non-government organisations (NGOs) and social project implementers are looking for a more rigorous evaluation of impacts.

There exist several methodologies in measuring SIM, such as randomized control traits, social return on investment, and evidence-based social impact assessment. In this booklet, rather than comparing the different approaches, the authors simply list out the **important principles** and **common issues** in the existing social impact measurements, and propose a model that we believe is suitable for the funders, social project implementers, and major stakeholders of Hong Kong. This model allows succinct understanding of the impact made. In our view, a practical SIM should be:-

- a. Relevant to the purpose of the social projects,
- b. Material to capture the major impacts,
- c. Parsimonious that each indicator can explain a significant portion of the impact and avoid overlapping indicators,
- d. Comparable so as to provide feedback for future improvement and for peer comparison, and
- e. Supported by research leading to faithful presentation of mean or median performance.





¹ Epstein, Marc J. and Kristi Yuthas (2014). Measuring and improving social impacts: A guide for nonprofits, companies and impact investors. BK Publishers Inc. San Francisco.



2. A comparison between social and business projects

Social projects differ from business projects for which majority of the impacts are denominated in dollar terms.

Business project measurements

Does it mean business projects do not generate social impacts in addition to the monetary returns? The answer is differently no. However, it is not the interest of a business project stakeholder to learn what social impacts have been created. Such social impacts are usually described as positive and negative externalities. Examples of positive externalities can be the personal growth and improvement on self-confidence of an employee, a harmonious relationship with the community and family members, fulfillment of accomplishments, and more. Negative externalities may be pollution, employee overwork resulting in health issues, a lack of work life balance, or others.

In recent years, people including government bodies, citizens, consumers are increasingly interested in the social impacts generated by the business operations. These stakeholders demand a comprehensive assessment of an enterprise alongside with its profitability. For example, a sweat labor workshop may have the issues of child labor/child abuse, illegal water pollution, CO2 emission, and others. To certain extent, these also create pressure on the business community to learn how social impacts can be measured.

In business projects, the stakeholders traditionally are not interested in the social impacts created along with the business operation . . . but this is changing in recent years.

Social projects measurements

On the contrary, social projects traditionally do not measure the impacts in terms of dollars, but have assessments on outcomes such as the mental health improvement of the elderlies, the reduction of destructive behaviour of the young people or the improving physical abilities of the disabled. Such measures are usually measured by using surveys, interviews and focus groups.

In recent years, funders including the government, public and foundations are increasingly interested in how to spend the limited resources effectively to bring about positive changes in service clients or in the community bonding. Again, this creates pressure on the social sector to articulate the social impacts more accurately and preferably in a quantitative manner.

In short, it is not that the business projects do not have social impacts, it is the current practice does not measure social impacts for neither business nor social projects.

It is easy to identify and experience the social impacts, but it is not yet a practice to measure them. As such, to commence a proper social impact measurement (SIM), we may need a discussion on the criteria of a proper measurement.

The impacts of social projects are traditionally measured by using surveys, interviews and focus groups.

There is a demand from the funders to evaluate the social impacts more quantitatively for resource allocation purpose.



3. The stakeholder theory

Let us begin to think of the opposite of the social impact, that is, the social issue. We expect the social projects or social enterprises to tackle the social issues. Social issues are those negative sides or undesirable aspects of a stakeholder who may be an individual, a family and the community.

For example, a drug-addict, at individual level, may suffer from loss of job, bad health, or unstable mental state. At the family level, he/she may also become a burden to his/her family due to over-debt or fragile relationship. At the community level, there may be hygiene issue, negative impacts on the next generation, black market or traits.

'Social', by definition, means a web of network from the individual well-being to the societal level. This contrasts the term 'business' which is usually defined by the relevant laws, regulations and private property. The boundary is clear and the private property ownership is upheld in our capitalist system. This makes a clear boundary for measurement of impacts.

We suggest the first step to calculate SIM is to thoughtfully understand the social issue and the negative impacts created. For example, if we want to advocate an environmental friendly policy and to re-educate the public on the use of plastic bags, we should firstly define the current status, such as how unknowledgeable the public in terms of using plastic bags is, what the benchmark is or the expected level of knowledge that the public should

The first step to SIM is to thoughtfully understand the social issue and the negative impacts created.

demonstrate. We should also find out how serious the negative impacts are created each year. By defining clearly what we want to tackle, we learn what the most important things to be measured is and what the intended outcomes are.

Contrary to the above simple practice, many SIM practitioners begins applying stakeholder theory by identifying the various stakeholders of a project. The stakeholders may be the disadvantaged persons, families, customers, employees, organisations, government bodies, shareholders or community. Although this approach is a systematic way to categorizing the social impacts to all sorts of stakeholders, it may lose sight of the original social issue at hand and result in an impact list that is not coherent with intended purpose. It dilutes the focus.

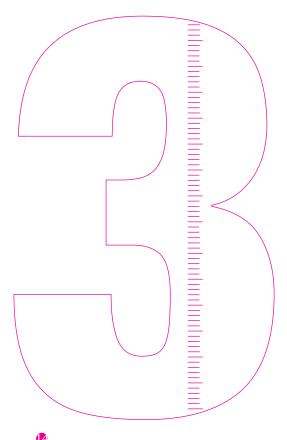
On the positive side, the stakeholder theory also tells us what parties are being positively impacted. It helps to understand the programme logic. However, from a SIM viewpoint, this does not imply that we should measure all such social impacts. Again, the scope of measurement depends on the purpose. For example, a business corporation may list out its stakeholders to include its employees, customers, suppliers, community and government bodies. If the purpose of measurement is to attract investment, it may be inappropriate to measure the impacts to these stakeholders. If the purpose is to understand the corporation's role in the society, it is appropriate to measure the impacts to these stakeholders.

In the same token as negative impacts, if one continues to expand the list of stakeholders and measure more impacts on each stakeholder, it will result in social impacts that can be as large as you can think of. This will create a performance trap. When a funder asks for a ratio of funding to social impacts such as 1:4 or any other ratio, the project team can always come up with the "right" figure. Even when the funder sets a higher multiple, one can always increase the impacts by adding more stakeholders. That is the reason why many SIM practitioners assert

the principle of "do not over claim".

In short, stakeholder analysis helps us to understand the social impacts but it should not be imperative to include all stakeholders in SIM.

In this regard, we need to a further framework for SIM that help to define the scope of measurement, namely the number of stakeholders and the number of measurements on each stakeholder.





4. The urge to have better measurement quick

In 2009, the paper "The Nonprofit Starvation Cycle²" shed a reality that donors do not want to pay for overheads in supporting social projects. Most donors rely on a gut feeling of 5 to 10 percent overheads. However, overheads in other industries range from 15% in transportation to 48% in software and services. The focus on reducing overhead from donors has made life difficult for non-profits, while the non-profits are encouraged to speak truth to power on the actual figures of overhead in order to deliver the outcomes. In the paper, it is proposed that "the first step that funders should shift their focus from costs to outcomes³."

As funders insist more on accountability and measurable impact, there is a tendency that grantee provides higher impact figures to compete for limited funding. This is coined as the measurement trap⁴ issue. One way to do this is to include more stakeholders and another is to measure more items of impacts on each stakeholder. However, such tendency will kill the original intent of using quantitative measures, that is to provide insights on further improvement of impact so that the beneficiaries and stakeholders can benefit more in long run.

Therefore, the relevance of the quantitative measures is important, it is not only about reporting 'good' figures but provide reasonable ones. In the followings, we will discuss how NOT to over-measure and set a reasonable boundary of measurement.

²Gregory, A.G. & D. Howard (2009) "The Nonprofit Starvation Cycle". Stanford Social Innovation Review. ³ibid

... to include more stakeholders and more items of impacts on each stakeholder ... will kill the original intent of quantitative measures, that is to provide insights on further improvement of impact so that the beneficiaries and stakeholders can benefit more in long run.



⁴Stid, Daniel (2014) "Breaking out of the Performance Trap". Blog at Hewlett Foundation. 25 Sep 2014. http://hewlett.org/blog/posts/breaking-out-performance-measurement-trap



5. The beneficiary-centric approach to SIM

From a theoretical viewpoint, there is nothing wrong to capture ALL social impacts of a project, however, it may be firstly costly to do so in practice; secondly it may exhibit performance-trap; and thirdly it may not coherent with the purpose of the projects.

The first two issues will cause excessive burden on the social project implementers and defeat the purpose of having a measurement that is constructive for further improvement. If social entrepreneurs spend more time and resource in preparing a 'good' number to compete for funding, which would also de-moralize their passion in putting effort in serving the ultimate needs of the beneficiaries.

On the other hand, without a measurement, it is quite impossible for the funders to allocate resources rationally and also for the social entrepreneurs to improve the social impacts over time.

To put the good intention in practice, the paper "The Nonprofit Starvation Cycle⁵" asked for first, the donors should specify what it wants to measure, and second, the non-profits should be more transparent in the cost and overhead allocations. When both parties work together, the starvation cycle can be broken.

Therefore, we suggest by limiting the scope of measurements and by focusing on the impacts on the beneficiaries, it will

\$ Gregory, A G & D Howard (2009) "The Nonprofit Starvation Cycle". Stanford Social Innovation Review.

reduce the cost of measurements and avoid the performance-trap issue, and yet capture the intended major impacts.

By focusing on the impacts on the beneficiaries, it will

reduce the cost of measure-

ments and avoid arbitrary measurements that feed the

performance-trap.

A beneficiary-centric model forces the SIM to be done on the beneficiaries first, while impacts on other stakeholders should be presented alongside as a secondary level of impacts.

In 1954, Donald Kirkpatrick's thesis⁶ on determining whether a training programme was successful in helping the foreman to perform better in terms of both attitude and behaviour changes. Although Donald never called this thesis a model or depicted the human changes as 'four' levels, people pick this up and apply in corporate training context in evaluating the effectiveness of a programme. Similarly, most of social interventions aim at achieving corresponding changes in human beings.

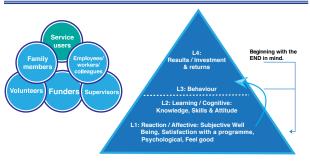
In the model, human changes can be categorized as follows: -

- **Level 1** Reaction, the degree to which beneficiaries find the intervention favorable, engaging and relevant.
- Level 2 Learning, the degree to which beneficiaries acquire the intended knowledge, skills, attitude, confidence and commitment during the intervention.
- **Level 3** Behaviour, the degree to which beneficiaries apply what they learned during the intervention when they are back to themselves
- **Level 4** Results, the degree to which targeted outcomes occur as a result of the intervention.



⁶ Kirkpatrick, Donald (1954) "Evaluating Human Relations Programs for Industrial Foremen and Supervisors". Unpublished thesis.

FSES Social Impact Mesurement Model (SIMM) Adapted from Kirkpatrick(1954) Four - level measurements



"Experience without the test of logic is ... chitchat, and that logic without the test of experience ... absurdity." - Peter Drucker, The Observer

Figure 1: Kirkpatrick four levels of measurements

In this regards, an effective intervention should be expected to achieve certain changes. Depends on the social issue, the desired outcomes can be grouped into three levels.

For example, the most important outcomes for a deviate youth reintegration programme will be getting a job in the market and rebuilding 'normal' friendship. One should therefore expect behaviour changes on the level 3 outcome.

For a project that aims to seek change in attitude towards minorities, the attitude (level 2) and daily acceptance behaviour (level 3) are the most intended outcomes.

For a project that aim to avoid drug-taking, the knowledge (level 2) on the harm on using drugs and the actual number of incidences of drug-taking over a certain period (level 3) are the most desired.

In many cases, behaviour change (level 3) is crucial because many social problems are reflected in peoples' behaviour and the most harm done unto the society.

In limited number of cases, the project seeks to infuse a certain kind of knowledge or attitude would have the most important outcome measured in level 2.

In rare cases, that the most desired outcomes are in level 1 such as an overall satisfaction about the programmes or the subjective feeling of individuals.

As a matter of fact, the three levels are inter-related in the sense that a change in level 2 may trigger changes in level 3, or a low score in level 1 will not lead to changes in level 2 or 3. Nevertheless, as a social entrepreneur, he/she should first determine the most relevant levels of measurements by re-checking the social issue that he/she wants to address at the beginning.

Level 4, on the other hand, is measuring the inputs or investments needed in order to bring forth the outcomes from level 1 to 3. It mainly serves the needs of funders and helps to determine the cost-effectiveness of a projects. Whether it is a social enterprise or a traditional grant project, it usually requires financial and other resources to deliver the outcomes.

We recommend the Kirkpatrick model because

- a. it covers the perspectives of funders, beneficiaries and the stakeholders;
- b. it links the funding to the social impacts created; and
- c. it covers the three levels of outcomes on the beneficiaries that is holistic and grounded in research.

Furthermore, in the past 50 years since the birth of the Kirkpatrick model, it is widely recognized as a tool that brought about effective measurement and effective change too.⁷

The following sections are going to provide the detail descriptions on each level.



⁷ Kirkpatrick, Jim and Wendy Kirkpatrick (2009) "The Kirkpatrick Four Level: A fresh look after 50 years 1959-2009". Kirkpatrick Partner, LLC.

5a. Level 4 - investment and return

In a typical social project, the grant will be the level 4 funding inputs. Similarly, in a social enterprise project, the initial investment will be the level 4 investment. Funding amount can be expressed as a per annum figure or an amount covering the project's horizon.

......

After ascertain the amount of funding needed, the social impacts generated should be represented by the changes from level 1 to 3, where quantitative indicators will be used. Moreover, some projects are expected to have financial or in-kind financial payoff which should be treated as a return to the funding / investment.

The various situations are illustrated in the following examples.

Firstly, for projects that aim to create employment for disadvantaged, there will be workfare elements and, in some cases, potential government savings. In such cases, both the workfare and government savings should be good financial proxies treated as return to investment as they are also depicted in monetary terms. Therefore, the results of the projects can be demonstrated by the aggregate amount of the two proxies comparing to amount of grants or investment. It shows a breakeven from a monetary sense.

Secondly, there are other projects that provide in-kind monetary benefits such as providing discounts on goods and services; points or tokens that can be exchanged for goods; or some form of direct subsidizes. If such in-kind benefits can be redeemed for market goods, such prices or discount values can be treated as returns to the funding too.

For example, in the Tin Shui Wai Dawn Market project which provided unemployed hawkers an opportunity in a flea market. This project provided workfare, reduced government spending on Comprehensive Social Society Assistance (CSSA), and provided discounts on goods for local consumers. Another example is some co-operative projects provide volunteering opportunities for low-income families who can accumulate points to redeem daily necessities. The value of such goods is a form of social

Workfare, government savings and in-kind monetary benefits are those that can be monetarized and form the social return on investment. impacts that can be monetized.

The following figures are the templates and samples of Social Impact Measurement Model (SIMM) Level 4 calculations using grants and investments.

Social Impact Measurement Model Level 4 – social projects using grants

Grant/Funding		Remarks
Cash grant needed	\$x,xxx,xxx	
Unused cash, if any, at the close of project	\$x,xxx	
Number of beneficiaries	XXX	
Cost per beneficiary	XXX	
Social Return		
Workfare to beneficiary	\$x,xxx,xxx	
Potential government savings	\$x,xxx,xxx	
In-kind benefits or dis- count provided	\$x,xxx,xxx	
Ratio		
Total Social Return / (Grant – Unused cash)	X.XX	

Figure 2: SIMM Level 4 using grants template

Social Entrepreneurship School Education Program (SENSE) Level 4 – social projects using grants

Grant/Funding		Remarks
Cash grant needed	\$4,000,000	
Unused cash, if any, at the close of project	\$0	6,000 students +50 teachers
Number of beneficiaries	6,050	
Cost per beneficiary	\$660	
Social Return		
Workfare to beneficiary	\$0	
Potential government savings	\$0	
In-kind benefits or dis- count provided	\$0	
Ratio		
Total Social Return / (Grant – Unused cash)	0.0	

Figure 3: SIMM Level 4 using grants sample – SENSE project

Social Impact Measurement Model Level 4 – social enterprise using investments

Grant/Funding		Remarks
Initial investment	\$x,xxx,xxx	
Revenue per year	\$x,xxx,xxx	
Net profit per annum	\$x,xxx	
Number of beneficiaries	xxx	
Social Return		
Workfare to beneficiaries per year	\$x,xxx,xxx	
Potential government savings per year	\$x,xxx,xxx	
In-kind benefits or dis- count provided per year	\$x,xxx,xxx	
Ratio		
Social Return per year / Initial investment	X.XX	
Net profit per year / Initial investment	x%	
Workfare content (%)	x%	

Figure 4: SIMM Level 4 using investment template

Fullness Salon Level 4 – social enterprise using investments

Grant/Funding		Remarks
Initial investment	\$800,000	
Revenue per year	\$3,280,000	
Net profit per annum	\$70,000	
Number of beneficiaries	6	
Social Return		
Workfare to beneficiaries per year	\$588,000	
Potential government savings per year	\$0	
In-kind benefits or dis- count provided per year	\$0	
Ratio		
Social Return per year / Initial investment	0.74	
Net profit per year / Initial investment	8.75%	
Workfare content (%)	18%	

Figure 5: SIMM Level 4 using investment sample – Fullness Salon

Tum Yum Thai Restaurant Level 4 – social enterprise using investments

Grant/Funding		Remarks
Initial investment	\$1,800,000	
Revenue per year	\$5,800,000	
Net profit per annum	\$0	
Number of beneficiaries	12	
Social Return		
Workfare to beneficiaries per year	\$2,200,000	
Potential government savings per year	\$0	
In-kind benefits or dis- count provided per year	\$0	
Ratio		
Social Return per year / Initial investment	1.22	
Net profit per year / Initial investment	0%	
Workfare content (%)	38%	

Figure 6: SIMM Level 4 using investment sample – Tum Yum Thai Restaurant

Thirdly, not all projects have monetary return. In order to demonstrate the cost-effectiveness of a project, we can use a unit-cost approach. In most social projects, there is a defined number of beneficiaries, we suggest to calculate the amount of funding required per person.

For example, a HK\$4 million grant for a school programme (refer to Figure 3 above) that has 6,000 participating students and the unit cost will therefore be HK\$667 per person. Another example is a project that needs HK\$20 million to tackle 500 family violence cases. In this example, the unit cost will be HK\$40,000 per case. Although there is no monetary return to the grant as shown in level 4, the outcomes can

be demonstrated by the other three levels of measurements.

In Hong Kong, some social projects aim at providing jobs for disadvantaged group. Examples are the projects under the Enhancing Self Reliance Through District Partnership Programme (ESR) and Enhancing Employment of People with Disabilities through Small Enterprise Project (3E) scheme. The returns can be calculated in the form of workfare. Some others aim at poverty issues that cover people's daily needs on food, shelter or learning opportunities which largely have market values. Others seek to reduce government spending on healthcare costs or CSSA subsidy.

Yet many other projects aim at tackling issues such as social cohesion, family well-being or self-esteem which do not have monetary proxies as returns. Nevertheless, all these projects shall have unit costs per beneficiary. In this regard, the level 4 measurement in Kirkpatrick model is applicable.

Needless to say, there will always be projects that aim at a wider scope of impact such as policy change, advocacy, justice and human rights, change of habit or culture. Regarding these projects, the beneficiaries are not very well defined. For example, project aims at promoting liberty in the society. Such impact may be better represented by a custom-made index. In such cases, the level 4 measurement of Kirkpatrick model may not be the most applicable one. However, the expected outcomes can still be represented by changes in satisfaction (Level 1), attitude, knowledge (Level 2) and behaviour changes (Level 3) among citizens.

For projects that have no social return on investment, a unit-cost approach can facilitate comparison.

Issue of Valuation (Monetization)

Before we discuss the measuring of level 1 to 3 impacts, many SIM practitioners are investigating if those impacts, such as a well-being score increased from 4 to 7, can be translated into monetary terms.

From a social viewpoint, monetarizing the impacts will 'marketize' the human behaviour which is not marketable. For example, a better parent-child relationship's worth is HK\$40,000. It does not mean such money can be exchanged for a better relationship. Worse still, it may distort the meaning of parent-child relationship. Nor it means if the grant needed for a family is over HK\$40,000, then it is not worthwhile to support such social project. Furthermore, if a better parent-child relationship worth less than the amount of a better elderly relationship, it does not imply that the government should prioritize funding toward the elderly project. In short, the act of monetizing may distort the meaning of "social" and this is a moral issue as well. However, it is fair to say that monetizing does not necessarily 'marketize' the social goods. It is not a problem of the measurement but a problem of how we use the figures.

From an economics viewpoint, monetizing the impacts will facilitate comparisons of competing projects. This is useful if the projects under consideration are mutually exclusive, for example, both project A and B are going to address the same parent-child issue, the one with higher monetary impacts should be chosen. It thus provides a rationale for the decision-making. However, it is not good to compare projects with different social objectives.

Another use is when there is only one project. People can seek way to increase the impacts by increasing the monetized value. This kind of measurement aims at improving effectiveness over time rather than making a choice between projects.

For the sake of interest, there are techniques available for monetizing the impacts. These techniques have been widely used in the United States on environmental assessment. The techniques are too complex to be discussed in this booklet⁸.

⁸Valuation of non-market goods is the interest of economists that wish to value such goods so that decision can be made between two competitive projects. For example, the valuation of a nice scenery does not have a tradable market, such valuation will involve using surveys to elicit value from correspondents. Putting a dollar value on social impacts may alter the meaning of those positive changes. This is a moral issue.

Techniques are available for valuing social impacts, but they are complex, expensive and not yet widely accepted.





Table 1: Techniques for valuing non-market goods/services

	Observed value	Revealed value
Market goods	Market prices ⁹ Opportunity cost ¹⁰	Hedonic model ¹¹ Conjoint Analysis
Non-market goods	Contingent valuation ¹² Willingness to pay	Choice modelling Contingent ranking

Source:

Carson (1989) "Using survey to value public goods:

The Contingent Valuation Method". McGraw-Hill

In spite of the controversies in whether social impacts can or should be monetarized, one should note that the costs of conducting such valuation would be enormous. Given the size of the majority of social projects in Hong Kong, which are funded from a few hundred thousand to a few millions, we suggest the issue of valuation should be left for further research and reserved for huge projects.

5 b. Level 1 to 3 – The empowerment effect

For level 1, 2 and 3, they demonstrate the changes on the beneficiaries.

First, we suggest that for the beneficiaries, the scope of measurement should cover all the three levels of changes.

Second, for stakeholder, we suggest to include one stakeholder to be measured in order to avoid issue of over-measurement. The scope for the stakeholder can include all the three levels. We understand that some projects claim to have more than one stakeholders. However, it should be the SIM practitioner's burden to demonstrate the necessity to include more than one stakeholder with respect to the intended purpose of the project.

The benefits of using threelevel impact indicators are that there is clear theoretical basis and have individual depth of changes namely affective, cognitive and behaviour changes.

For example, Fullness Salon is a social enterprise in helping deviate youth to reintegrate into society through a two-year vocational training. So, the three levels of changes of deviate youth should be covered, namely, the overall satisfaction of working at the salon (Level 1), the skills enhancement in the job (Level 2), and the increase in contact with friends and good friends, and the ability to get a job in the market (Level 3).

It is hard to deny that the social impact should include that are of other stakeholders, such as the hair-stylists, the deviate youth's family, the community, and others. As such, we recommend including only one stakeholder. In this case, the hair stylist is the one that we choose to be included.

If resources allow, it is possible to include impact measurement on other stakeholders. However, the cost and effort may not be justified.

More important, the scope of measurement has to be material enough, cover major impacts, and be coherent with intended purpose of Fullness Salon.

We recommend covering the three levels of measurement because it can represent the depth of human changes, that is, the affective, cognitive, and behaviourial dimensions.



⁹Market prices of goods provided is directly observable and is readily available for use incomputing monetary return to investment, i.e. the workfare

Opportunity costs are referring to savings from government or other opportunity savings, such as discount on goods because of presence of the project.

¹¹ Hedonic model and Conjoint analysis are regression techniques that try to find out the valueas revealed by peoples' choice, these values are not directly observable because such goods are not esparate sold in the market but as an attribute attached to other goods. For example, only a four-door car without sunroof and a two-door car with sunroof are available in the market. Through multiple regression techniques, we can compute the implied value of a four-door car with sunroof and of a sunroof separately. Both techniques are commonly used in real estate market as well as pricing strategic in corporations.

¹² Contingent valuation asks explicitly the value from the correspondents, common issue is that people usually overstate the value attached if ask explicitly. While Contingent ranking and Choice modelling asks indirectly the preferences or rankings over a set of choices from correspondents, and after which, compute the implied value from their choices made.

Social Impact Measurement (L1- Affective; L2- Cognitive; L3- Behavior)

Outcome Indicator			
	L1- Affective	L2- Cognitive	L3- Behavior
Beneficiary			
Stakeholder #1			
Community			
Societal			

Figure 7: SIMM Level 1-3 Template

Fullness Salon (L1- Affective; L2- Cognitive; L3- Behavior)

Outcome Indicator			
	L1- Affective	L2- Cognitive	L3- Behavior
Deviate Youths	Change in Well-being Feel being respected Self esteem score	Change in Skills im- provement Change in Attitude to- wards others	Can find a new job More new friends More good friends
Stylists	Change in well-being Job satis- faction	Peer relation- ship More empathy & knowledge in youth issue	More friends

Figure 8: SIMM Level 1-3 sample - Fullness Salon



6. Depth vs Width of Indicators – Stakeholders, Community and Societal impacts

The Kirkpatrick model has proven records of measuring effective human changes because it represents the depth of change. Apart from the depth, social impacts can happen on a wider scale, namely, the individual, organisation, community and societal levels.

Here, the issue is again to avoid over-measurement unless the project is specifically aimed at changes at these wider levels. For a typical project, there are likely to have impacts beyond the individual level. It should be noted that the wider impacts are more difficult to measure because there are many environmental (exogenous) variables that may affect the results. For example, when we claim the wider impacts that involve other people in the community or a wider change in the public, the issues of deadweight, attribution and displacement will arise more often and at the same time carry more weights. Therefore, in our view, such impacts should be subjected to stricter screening and more rigorous validation.

- For deadweight, it means the impact will have happened anyway without the specific social project.
- For attribution, it means there are other exogenous variables that contribute to the positive change observed and the social project should only claim a portion of total impact.
- For displacement, it means the enactment of the social project. While producing positive impact, it also creates

When we claim impacts on wider scale, the issue of deadweight, attribution and displacement will become significant

- ... thus difficult to distinguish the actual impacts
- ... randomized control trail is a scientific tool that can help but is expensive
- ... it is not that we cannot measure those wider impacts, but a matter of the cost involved.

negative impact on other people in the society. An example is when a very large job creation programme for a disadvantaged group is implemented in a small village. It may cause difficulty for other employers to recruit the necessary number of employees, or it may result in higher wages. Therefore, the social project displaces some benefits of the others.

Theoretically, the deadweight and attribution issues can be ascertained through a randomized control trait experiment. However, the cost will as high as HK\$1-2million. For displacement, it is even more difficult to identify the effect, let alone to measure it. Therefore, we suggest the SIM practitioner should qualify the possibility of such issues in order to present a fair and prudent report.

Apart from randomized control traits, practitioners can use societal-wide indicators such as benchmark data, to present alongside impacts claimed by the project. For example, if we measure the change of the subjective well-being of a deviate youth before and after an intervention. It changes from 2.3 to 3.2 (on a scale of 1 to 5). We suggest the results can be compared with the benchmark data that is available in the society such as the average subject well-being score for Hong Kong people is 3.27. Although this will not correct the issue of deadweight, attribution and displacement, it shows how well the deviate youth is doing at this moment. Therefore, it facilitates reasonable comparison.

Many of these wider community and societal benchmarks are already being published by some platform organisations, government, or super-nations. A range of indicators are commonly used in different countries. Examples are well-being index, helpfulness in neighborhood, development index and liberty index.

We suggest existing indicators published by the authorities and universities should be used whenever they are available. This enhances comparability and consistency in survey design.

In Appendix II, we list out the common indicators that cover the individual, family, community and societal levels.

Unless the project in concern primarily addresses the community and societal level, measurement of such wider scope of impacts shall be treated as secondary. For projects that have well-defined beneficiaries and stakeholders, we believe the three levels of Kirkpatrick measurements should be used first as it covers the most relevant and material impacts.

For readers interested in the wider scope of social impacts, Table 2 below provides a list of keywords for further elaboration. There may be impacts on a community level that mainly involve the social capital, networks in nature, trust in neighborhood, and others, while impacts on the societal level are mainly freedom, mobility and corruption.

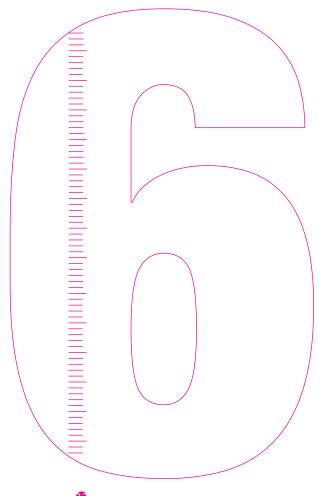




Table 2 – Sample indicators on community and societal levels

Impacts	Sample indicators	Kirkpatrick Levels
Harmony	Subjective scoring of present Level 1 relationship	
	Ability to empathy	Level 2
	Frequency of contacts	Level 3
Helpfulness	Feel safe when alone	Level 1
	Knowledge of hotline, emergency	Level 2
	% of positive response when asked for help	Level 3
Inclusiveness	Feeling about ethnic minorities	Level 1
	Knowledge of ethnic minorities' habit, etc.	Level 2
	Frequency and duration of contacts per month	Level 3
Relationship		Level 1 to 3
Trusts		Level 1 to 3
Cohesiveness	Feel responsible for group behaviour	Level 1
	Duration of contacts	Level 3
Corruption	Feel safe about conducting business	Level
	Knowledge of the law	Level 2
	% of successful prosecution	Level 3
Mobility	Feel easy to move to other places to work if wishes	Level 1
	Recognize one's own ability to move	Level 2
Life Satisfaction/ Well-being	Evaluate your life up to present	Level 2
	Present happiness scoring	Level 1
	Have hope in future	Level 1
Freedom and Liberty		Level 1 to 3

For mega projects, the SIM practitioners may develop their own measures that are the most relevant. However, the cost of conducting a wide-range survey may be quite enormous.

Back to Basics

As one considers both the depth and width of measurements, a project can easily come up with about twelve (12) indicators (refer to Figure 9 below). In most cases, such scope of SIM would be more than enough for the practical assessment for the purpose of funding, evaluating, and managing the projects.

SIMM - Width & Depth

Increase in Depth

Outcome Indicator			
	L1- Affective	L2- Cognitive	L3- Behavior
Beneficiary	Allective	Oogriitive	Beriavioi
Stakeholder #1			
Community			
Societal			

Figure 9: Twelve indicators of SIM – Width & Depth

In practice, we do not suggest filling every box. Instead, the impacts on stakeholder may be represented by one attitude change (level 2), and there may not have community and societal level impacts.

Last but not the least, there are drawbacks on having more than ten indicators.

Kirkpatrick model is handy, cost effective and material enough to cover the major impacts.





- First, the more we measure simply imply we need a bigger budget in measurement. We suggest managing the cost to be within 5% of total funding. That is, for a HK\$1million grant, the amount for SIM cost shall be HK\$50,000. As the project size grows bigger, the percentage can be lowered.
- Second, readers may have difficulty to understand whether the project is doing well or not; or the core impacts are unable to be identified.

After considering the issues on measurement width and depth, we will say that it is the quality of the indicators that matter the most. If a few quality indicators can encompass the most critical impacts created by a project, it is better than to have ten indicators. In our view, good indicators should be material, relevant, comparable, and

parsimonious.



7. Theory of change (TOC) and logic model

Before we go into the quality of indicators in the next chapter, we intend to address the popular issue - Theory of change (TOC) and logic model.

TOC tries to explain the cause-and-effect relationship in producing outcomes. It primarily addresses the why the social impacts are created. The Logic Model (The Input-Activities-Output-Outcomes-Impact) tries to show what has been done leading to the impacts. It addresses the how impacts are created.

Although in social science, there is no neat and tidy theory of predicting human behaviour, a TOC gives an idea of what are the key variables that a social good can be achieved. These key variables (parameters) are important levers that the project implementers can make changes in them and thus create better social impacts. For example, there is a research showing people how to adopt a desirable habit and it demands a six-month unbroken practice. This TOC will help the project implementers to design the programme and put into the Logic Model. An example is for long term behaviour change in deviate youths, respect and peer group are found to be two important levers by researches.

The TOC and Logic Model (refer to Figure 10 and 11 below) should underpin the SIM. A better measurement should not limit to reporting what has happened but should providing feedback for the future improvements. By considering the TOC and Logic Model behind the SIM, it should include measuring those important variables that allow more effective management in the future. A TOC can also give people more confidence that the social impacts are reproducible in other context.

Theory of Change¹ Between intentions and results lies a TOC Precondition indicators Intermediate/ long term outcomes Intended results Beneficiaries Beneficiaries

Meaningful

Life

Measurable

Impact

TOC is outcome-based, visionary exercise $\,\dots\,$ not set in a single attempt but reiterative

Cost

Effective

¹Serrat, O (2013). Theories of change. Manila: ADB

Existing

Condition

Figure 10: Theory of change (TOC)

Logic model Fullness Salon

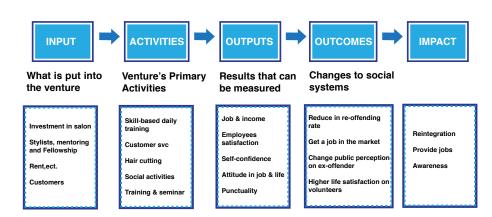


Figure 11: The Logic Model - Fullness Salon as an example



8. Quality of Indicators

Before an indicator is chosen, it should fulfill certain qualities, namely:

- Material and Relevant
- Comparable
- Parsimonious

Material and Relevant

The indicators should be relevant to the desired outcomes depicted in the TOC. For example, an improved family relationship among family members should be reflected in both quantity and quality of their contacts. Therefore, these two indicators are the most relevant ones. On the other hand, the content of their dialogue may not be very relevant.

Another example is to help the youth to reintegrate into the society. The percentage of youth that can find a job or go to school after the intervention period of two years is more material than the percentage of them that finally get a job five years later. This is because over a longer period, the measure of successful reintegration will be more subject to the deadweight effects.

Moreover, according to the TOC for behaviourial changes of young people, self-esteem and peer relationship are the two most essential factors that drive changes. Therefore, a good SIM should measure the youth's improvements in these two areas.

It is not the number of indicators that matters, it is the qualities of the indicators; whether they are material, parsimonious and comparable. A sound TOC will help to determine the most relevant and material indicators. At the same time, it helps to identify the most important variables for future improvement on impacts. As said earlier, a good batch of indicators should be effective in both measuring and bringing social changes.

Comparable

Indicators that are comparable can facilitate either across time (time-series) or among peers (cross-sectional) comparison. The two dimensions serve different purposes.

Time-series comparison allows the project outcomes to be improved over time. A given grant or investments is expected to be able to generate higher impacts over time. Peer comparison allows funds to be allocated more rationally. It may also reveal certain deficits in a lower outcome project where some resources may have been wasted. It also allows a re-check of the TOC and a learning opportunity from those higher outcome projects.

In developed societies, an ultimate measure of the healthiness of the society is the well-being of the citizens. If social projects aim at societal betterment, the well-being can be served as the common denominator in achieving social good.

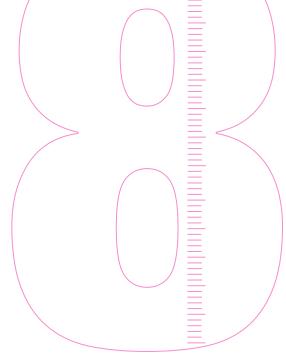
Enormous amount of researches have been done on well-being. Well-being includes subjective, cognitive and objective measurements of different aspects of life that count toward people's life satisfaction. A discussion of well-being is out of scope of this paper, readers can find more information here - http://www.oecdbetterlifeindex.org/topics/life-satisfaction/.9

9 http://www.oecdbetterlifeindex.org/topics/life-satisfaction/

Parsimonious

It means we should use fewer measurements to demonstrate the impact created. In other words, if a project's impact can be illustrated materially by using four indicators, adding a fifth one that contributes slightly is not recommended.

For example, if workfare generated for a poverty family will greatly enhance the well-being and a large part of the workfare is being used for children education that greatly contribute positive impact for the parents involved. Although both indicators (family income and children education) are able to explain the impacts, however, measuring one is 'good enough'. One rule to determine whether we can drop one measurement is to study the correlation between the two indicators. For example, when the family income increases, the 90% of the incremental portion goes to the children education, we can say these two indicators are highly positive correlated. In such case, we can determine which one is more important and drop the other one.







9. Concluding Remarks

Many social projects in Hong Kong are addressing the popular social issues such as child learning, family relationship, poverty, elderly, counselling, youth, re-education, re-training, physical and mental health, and so on. The most typical ones are shown in Table 3 below.

Table 3 – List of Typical Social Projects and Social Enterprises (SEs)

Typical Social Projects/ SEs

Social Projects		SEs
Youth Life planning School Behaviour Tutoring Volunteering	Critical Youth Outreaching, Custody Emergency support Emotional support, Counselling	Work Integrated Social Enterprises (WISE) Workfare for disad- vantaged group, e.g. Fullness salon
Community Volunteering Self-help Mutual support	Physical /mental health Rehab workshop, Medical services Counselling services Stress, Anxiety, Pressure	Plough-back SE Profit generated trans- ferred to charity e.g. Hotel in YWCA, Benji
Elderly Dementia, Day caring Nursing, Health care Elderly employment	Family Marriage & family counselling Violence	Subsidized Services SE (SSSE) Provide price discounts for poverty families, e.g. Light-Be
Education Re-training Re-schooling Job matching	Child Art/ play therapy SEN & SEN parents Autism	Community Need SE (CNSE) Social capital & Integration e.g.天光墟,互相社區
Environmental Recycling Promotion	Poverty Food bank, Shelter Financial subsidy	Environmental Protection Social Enterprise (EPSE) CO2 price ~ HK\$200/ ton.

Objective - Changed Human Lives or Societal Betterment

The social issues in Hong Kong are well-known and fall into a few categories.

At present, many of these projects are seeking funding amount ranged from Hong Kong dollars a few hundred thousand to tens of millions. The funding sources are mostly from the government, family foundations or social investment funds. Most of them are aiming at seeking changes on individual and community levels rather than on societal or policy level.

In this context, this booklet attempts to provide a SIM framework which is both easy to use and with sufficient width and depth that allows comparison and rational funding decision. Since the burden of preparing SIM will usually be borne by the social workers or social entrepreneurs who initiate the project. A handy approach will be more appropriate.

For those who wish to conduct SIM in a more rigorous manner, they may take a professional valuer once a year to articulate it more comprehensively and accurately. However, the cost of doing so may be high. For example, a randomized control experiment to demonstrate the effect of changes may cost around HK\$2 million; a survey design and focus group may cost another hundred thousand Hong Kong dollars. Even when the above is done, it is still unable to calculate the social impacts in monetary terms unless some financial proxies are used. In order to monetize the changes, one may need more survey designs and experiments that may be more expensive.

In reality, we have a number of tools and methodologies readily available both in the fields of social science and economics. However, the acceptance of such tools or methodologies is still subject to academic debate. It is not that we do not have the tools but the cost of doing so is too high. Therefore, we propose a simple Kirkpatrick model which is client-centric and sufficient to capture the most material and relevant impacts.

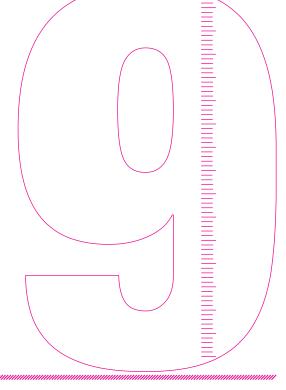
The field of SIM doubtless needs more research. The innovation in this booklet is to present a practical approach which serves the imminent needs of the funders, SIM practitioners and project implementers that seek societal betterment every day in Hong Kong.

Limitation of Measurement

Last but not the least, this booklet does not address the social impacts that inherently are not measurable. The authors are very mindful to the limit of measurement of anything. We do not to ignore that social good also comes from the moral values that are being upheld in the civic society. Lastly, the authors quote this reminder that measurement is not the ONLY thing that we should seek in progressing the society.

"The first step is to measure whatever can easily be measured. This is OK as far as it goes. The second step is to disregard that which can't be easily measured or to give it an arbitrary quantitative value. This is artificial and misleading. The third step is to presume that what can't be measured easily really isn't important. This is blindness. The fourth step is to say that what can't be easily measured really doesn't exist. This is suicide." -

The Macnamara Fallacy.



Appendix I – Social Impact Measurement Examples in Hong Kong

SIMM - Fullness Salon

Beneficiaries/ Stakeholders	Outcome/ Impacts	Measurement Type
Deviate Youth (6 nos.)	Level 1 Life Satisfaction Feel respect Peer relationship	2.4 3.2 (+57%) (HK Avg = 3.27) 4.3 4.0
	Level 2 Skill improvement Holistic development	3.08 ⇒ 3.27 (+9%) 3.6 out of 5.0
/	Level 3 New friends Good friends Can find a new job	14 nos. 4 nos. 78%

Input (\$)	Output (\$)	Ratio
Initial Investment = \$800k	Financial return = 120k per year	15%
	Social return, Workfare = \$560k per year	0.70

Social Entrepreneurship School Education Program (SENSE)

Beneficiaries/ Stakeholders	Outcome/ Impacts	Measurement Type
Secondary school students (832 nos.)	Level 1 Overall satisfaction to the program Level 2 Learn more about SEs and social innovation Learn more about the disadvantaged group/ social issue Level 3	4.34 2.66 → 3.84 (+71%) 2.66 → 3.83 (+70%)
, "	Willing to take action to help the disadvantaged	78%

Input (\$)	Output (\$)	Ratio
Grant = \$4M for 3 years	No. of teachers trained = 50 No. of students trained = 6,000	\$660 per person

46

SIMM - Fullness Salon

Beneficiaries/ Stakeholders	Outcome/ Impacts	Measurement Type	Benchmark or Monetary Proxy
Hawker	Level 1 Life Satisfaction Level 2 Knowledge in business Understand the community Level 3 New friends Good friends Close friends	2.4 → 3.6 (+50%) OR 6.5 on a scale from 0 to 10 2.6 → 4.5 (+73%) 2.7 → 4.4 (+63%) 38.4 friends 9.9 nos. 2.3 nos.1	\$126 \$253 per day Customer 27; Hawker 6; Govt people 5. Helped once before Willing to lend 2 month's income
Customer	Level 4 Dollar saved on goods	Discount to mar- ket prices	\$1.3million

Input (\$)	Output (\$)	Ratio
Salary for RSW for 3 years = 1.5m 2 professor, 5 RSW & 6 volunteers = 360k Total = 1.86m	Income hawker = 8.9m Saving on CCAS = 3.7m Discount to market price = 1.3m Total = 13.9m	7.5

Social Entrepreneurship School Education Program (SENSE)

Beneficiaries/ Stakeholders	Outcome/ Impacts	Measurement Type
Poverty family	Level 4 Net proceeds donated	HKD \$500k-140k-89k = 269k
Volunteers (140 + 185 pax from Corp partners, Total 325 volunteers)	Level 1 Life satisfaction Level 2 Knowledge changes on recycling and poverty Level 3 More new friends Interaction with colleagues	Well being survey Scaling No. of new friends Duration of contact per mth
Book buyers	Level 4 Discounted prices 15,000 books sold	Dollar saved (HKD)

Input (\$)	Output (\$)	Ratio
	Donation to poverty family = \$269k Savings on book purchase = \$100k Total = \$369k	1.48

Appendix II – List of Typical Indicators

Beneficiaries	Indicators
Child	Pressure scale Autism behaviour checklist Social responsible scale Parent contact time
Physical/ Visual/ Mentally Impaired	Workfare Subjective well-being Peer contact frequency Family contact hour No. of clinical visitation Depression scale Patient healthcare questionnaire (PHQ9) Participation and Activity Limitations Survey
Youth	Role-model scoring Leadership score Number of visitation to mentors Courtesy Attitude Increase in positive behaviour No. of contact with family No. of school day missed
Deviate Youth	Job satisfaction Punctuality Courtesy Skill level Attitude Peer relationship Friends Reduction in negative behaviour Contact hours with family members Monthly savings Self-esteem Trust and respect Subjective well-being Increase in knowledge in youth issue Increase in empathy Role-model score

Beneficiaries	Indicators
Active Elderly	Quality-adjusted Life Year % of attendance in activities Clinical visit per year
Elderly	Quality-adjusted Life Year MMSE 30 No. of health-seeking behaviour
Poverty	Workfare Amount of financial subsidies Self-esteem Ability in communication Subjective well-being No. of job applications Successful % of getting a job
Family counselling	Incidences of violence Duration of conversation Self-evaluation on relationship Mutual trust Number of conflicts per week No. of positive behaviour Pressure scale
Retraining & Educa- tional	Exam score % of getting a job Average duration of staying in job Amount of CASS received Self-esteem Re-employment rate
Minorities	Duration of contact with different minorities Duration of contact with major ethnic group Score on closeness with different ethnic group
Ex-offenders	Average duration of getting a job Family relationship scoring Successful % of finding a job

Beneficiaries	Indicators
Environmental	CO2 emission in tons Amount of recycled materials Kilograms of hazardous wasted treated Government savings in dump treatment Resell value of recycled materials Pollution index kWh of sustainable energy used Liters of wastewater produced
Community	Mutual positive feeling towards each other Perception of safety and security Identification with community members Group pride Feel responsible for group outcome Knowledge of neighborhood resources Number of emergency contacts No. of people suffer from illness Crime rate Number of social connections No. of community meeting No of government interactions Number of access to public transportation
Civic Society	Liberty index Corruption index Human development index Happiness Index Subject well-being Life Satisfaction score Ginni score

References

Patti, Rino J, Charles A R, John Poertner (1989) "Managing for Service Effectiveness in Social Welfare Organisations". Routledge. 1989

AVPN (2016) "A Guide to effective impact assessment". Asian Venture Philanthropy Network. 2016.

Muir, Kristy and Stephen Bennett (2014) "The Compass: Your guide to social impact measurement". Centre for Social Impact. November 2014

Cabinet Office "A Guide to social return on investment". Cabinet office, Office of the Third Sector, UK.

FSAB Statement of Financial Accounting No.4. "Objectives of financial reporting for non-business organisations."

OECD (2013) "OECD Guidelines on Measuring Subjective Well-being" OECD Publishing.

Fujiwara, Daniel and Ross Campbell (2011) "Valuation Techniques for Social Cost-Benefit Analysis". HM Treasury, UK.

Epstein, Marc J. and Kristi Yuthas (2014). Measuring and improving social impacts: A guide for nonprofits, companies and impact investors. BK Publishers Inc. San Francisco.

Carson, Richard T. (1989). Using Surveys to Value Public Goods: The Contingent Valuation Method. RFF Press. 1st ed.





Published by



Sponsored by

