StrataMetric

Quantitative social impact measurement

Presentation Contents

- 1. STRATA metric concept
- 2. STRATA metric prototype
- 3. STRATA metric implementation/future direction

Metric Concept

- Summary
 - Quantitative measure of charitable project/program performance
- Rationale
 - Assist humans in selecting most cost efficient activities
 - Review impact of existing activities
- Overview
 - Efficiency metric = Effect / Cost

- Advantages
 - reduce influence of cognitive biases
 - domain independent
 - semi-automatic
 - relatively fast to calculate
 - cost efficient
 - algorithm applied pre- or post- intervention
- Intended Users
 - startups, charities, corporations, foundations and governments

Limitations

- limited to charitable/NFP projects
- measures project/program (not organisational) effectiveness
 - assumes project will be successfully executed
- requires literature review
 - development comparison/integration with existing methods
- ignores indirect impact of projects to organisations or society (continued..)

- Limitations continued (indirect effects):
 - Ignores intermediary beneficiaries
 - staff employment
 - volunteer empowerment
 - Ignores incidental beneficiaries
 - benefit to relations of end beneficiary
 - family, society, etc
 - Ignores how funding might be leveraged
 - support commercial entities
 - use to anchor/match funding to raise other funds
 - accumulated research

Metric Prototype

STRATA metric prototype

- Metric Prototype component factors
 - A. Underlying Problem (seriousness)
 - select the underlying problem the project ultimately seeks to address
 - B. Number of People Directly Affected
 - number of direct individual beneficiaries of project
 - C. Probability of Effect
 - probability of significantly helping any beneficiary (B) with respect to underlying problem (A)
 - D. Level of Relief
 - average level of relief expected to be experienced by significantly influenced beneficiaries (C) with respect to underlying problem (A)
 - E. Duration of Relief
 - average time for which a beneficiary is expected to receive the relief
- Efficiency metric = Effect / Cost = $(A \times B \times C \times D \times E)$ / Cost

STRATA metric prototype

- Prototype limitations:
 - Cannot be used where the number of beneficiaries is unknown
 - Relies on accurate (unbiased) user input
 - Ignores full possible range of probability of effect and level of relief
 - these can vary dramatically between scenarios
 - only limited resolution in capturing differences

STRATA metric prototype

- Project Type Specific Limitations
 - Capital funding
 - beneficiaries: who will make use of the capital over its useable life
 - Personnel funding (support staff / contractors)
 - beneficiaries: who will directly benefit from the funding of the personnel for the duration of the funding
 - Medical research
 - beneficiaries: who suffer from the medical condition which is the subject of the medical research
 - Capital/Personnel upgrade funding
 - requires est of degree a capital/personnel upgrade will affect the overall program/existing infrastructure

STRATA Social Impact Score

Account | STRATA Social Impact Score | Logout

-Job Creation

STRATA Metric Demo

This program performs a STRATA metric calculation for a prospective project

Application Summary

Sector (What sector does the organisation primarily operate in?)

OEducation OSocial welfare OHealth Care (inc Aged Care) OHealth Research and Medical Research OConservation and environment OAnimal welfare OArts and culture OOther WARNING: This tool can only be used for charitable and/or medical research projects

Demo — StrataMetric — Mozilla Firefox

Activity

Project Description (what will be done)

Goal (Is the project charitable/research?)



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	Factor B (Number of end beneficiaries)			
	In order to better estimate the number of end beneficiaries (B), please	OCapital/material project		
	select a Project Type:	OPersonnel project		
		OCapital upgrade		
		OPersonnel increase		
		OStaff training project		
		OMedical research projects		
	 You will now be asked to estimate the number of end beneficiaries of Quote end beneficiaries only: End beneficiaries are the people who will ultimately beneficiaries, patients, youth, elderly, etc). Exclude intermediary and incidental beneficiaries: Intermediary beneficiaries are those involved in the activity youth workers, doctors, researchers, etc). Incidental beneficiaries are family members/friends of the 	of the activity. It from the activity, they should reflect the inter acy delivery (such as organisational staff and vo e end beneficiaries or the wider community.	nded target group (such as plunteers, teachers, trainers,	
	Number of end beneficiaries (not staff or volunteers):		(e.g. students, patients, youth, elderly)	

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	Factor C (Likelihood of significant influence)				
	 Please take significantly influenced to mean a particular end benefic underlying problem (A). Examples of not being significantly influence when the programme has no lasting effect on the beneficiary. when the programme provides some benefit for the beneficiary. when the programme is successfully completed for the beneficiary. 	ciary (B) is significantly influenced by the programme d: y (e.g. mood), but does not contribute to allievation o ciary, but does not create measurable changes to th	e, with respect t of the underlying neir behaviour/c	o the g problem. condition.	
	For the end beneficiaries above (B), what is the likelihood that any given beneficiary will be significantly influenced by the programme, with respec to the underlying problem (A)?	Olt is virtually certain that any given beneficiary we st significantly influenced OThere is a high probability that any given benefic be significantly influenced OThere is a moderate probability that any given beneficiary will be significantly influenced Olt is possible that any given beneficiary will be significantly influenced	ill be ciary will		

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Factor D (Level of relief)

- Please rate the level of relief with respect to the underlying problem (A).
 - Do not rate the level of relief with respect to the specific/individual goal(s) of the programme.

For those significantly influenced end beneficiaries above (C), what level of relief is expected to be experienced with respect to the underlying problem (A)?

OThe intervention offered will effectively eliminate the underlying problem
OThe intervention offered will greatly reduce the underlying problem
OThe intervention offered will help reduce the underlying problem
OThe intervention offered will improve quality of life

Demo — StrataMetric — Mozilla Firefox

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Factor E (Lifetime of Relief)			
What is the average age of the end beneficiaries?	 Babies & pre-school-aged School-aged youth Post school-aged youth Elderly Other 		
Status Credits Available: 2			
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Community Link			Report

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Budget How much funding is being requested for the project (total)?		JD)
Status		
Credits Available: 2		
Follow		
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Project Efficiency (dynamic based on decisio tree)

Project Efficiency Rating (dynamic based on decision tree)

	20
	3
	7
	1
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	1.1727993522567
n	0.014000701001500
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	1.1727993522567

STRATA metric implementation

- Future Directions
 - Improve prototype questionnaire with multilayered decision tree
 - Natural language processing of charitable funding applications
 - requires supervised training of neural network
 - large historic record of application performance;
 - expert estimation from application contents alone, or;
 - measure actual project performance, post-intervention

STRATA metric conclusion

- References
 - strataimpact.com
 - online demonstration of prototype

Acknowledgements

Richard Baxter (prototype)