

# Impact Measurement Practices

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Relevance for the performance of social organizations

## Master Thesis

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## Acknowledgements

Three years ago, I had contact, for the first time, with the concept of social entrepreneurship. For someone who was very business oriented, this approach impacted me deeply. What if there was a sector that was actually focused on solving the most complex issues of the world through the best practices of business? I was hooked.

When I started to experience the so called social sector I soon realized that it lagged far behind in terms of efficiency and professionalism from the commercial sector, while it was, in my perspective, far ahead in terms of relevance and purpose. Since then I have shaped my path in a way that I have had the opportunity to experience the best practices of the purely commercial business world and I have been trying to bring them to the social sector. This approach led me to experience fast paced technology startups and commercial accelerators as well as social enterprises and impact incubators. My perspective on economy, growth and development has changed and my aim became to capture the business value of social change. For that, this thesis seemed the obvious way to explore it further and it wouldn't have been possible with the help and support of key people.

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## ABSTRACT

In the last decades, the world has observed the appearance of thousands of organizations trying to solve the world's most complex social and environmental issues. However, several of these organizations don't follow the conventional non-profit approach which has been commonly used by organizations intervening in the societal sector. Instead they combine the passion of a social mission with the discipline, innovation and models of commercial businesses.

For these organizations particularly, it becomes relevant, apart from measuring financial performance – through financial metrics or key performance indicators – to measure social impact. Social impact measurement practices are primordial to understand the effectiveness and efficiency of the organizations on the field. Nonetheless, most social organizations don't do it since it is relatively hard to assess, requires a set-in place structure and above all, brings an extra cost to the already resources stressed social organizations.

Until now, there is no conclusive study that explores the outcomes that impact measurement practices bring to an organization. This paper presents an exploratory analysis of the learnings that social organizations retrieve from impact measurement practices and how it is related to organizational performance. Through in-depth case research of social organizations in the education sector in India, some that have impact measurement structures in place and some that don't, this study intends to shed light on the outcomes of impact measurement practices and its influence in organizational operations and performance.

By comparing how learning happens in organizations that measure from the ones that don't measure, the intrinsic value of such practices becomes apparent and it becomes relevant in helping social organizations to understand impact measurement practices more in depth and how it can bring value to them.

Conclusions consider practical and academic recommendation as well as some further questions around the potential and limitations of impact measurement practices while suggesting some new lines of research going forward.

Key words: impact measurement practices, learning, organizational learning processes, organizational knowledge, performance

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# 1. INTRODUCTION

Imagine a world where there was no money. There was not a way that allowed us to measure the value of something or how well a company was performing. Imagine, in this world, how would organizations manage themselves and evaluate their success?

Now look at organizations that are having impact on the planet, in today's time. Is that impact positive or negative? Can we quantify the dimensions of that impact?

These are the questions that no one knows how to answer and everyone seems to be ignoring. These not answered questions are shaping our planet in a series of ways. These are the questions that impact measurement practices try to give an answer. Not a definitive one, because most of impact is subjective but at least it is trying to understand it deeper.

Imagine if that way of measuring the impact caused by organizations was actually a tool or a technique that enhanced organization's performance. How would organizations not measure impact then? Would it then be a world where companies that had a negative impact would be penalized by consumer's opinion and companies that had a positive impact would be benefited?

The motivation behind this thesis is to contribute to the overall discussion of the very unexplored field of impact measurement. There is not even apparent consensus on the definition of social impact as well as on how to do it. However, it is generally accepted that "the term social impact is used for the impact of a corporation on society on the economic, environmental and social dimension." (Maas & Liket, 2011, p. 2).

I won't claim to extract and state a universal and definite understanding of this phenomenon as that would require looking at it in several dimensions and perspectives. The aim of this study, however, is to understand and explore if organizations that are measuring impact are using it in certain ways that directly influence their performance that organizations that don't measure aren't.

Understanding impact measurement at the light of learning process theory, intends to be seen as a first step in understanding how organizations are dealing with impact not only in external terms but essentially, internally and how are they using it as a learning process to enhance performance while increase the impact as a whole.

Therefore, the research question that will be guiding this research is the following:

- How do learnings from social organizations' impact measurement practices influence organizational performance?

To help answering this question, three sub questions were drafted that intend to help to answer in a more complete way the main research question:

- Why are organizations (not) measuring impact?
- What learnings do organizations get from impact measurement practices that others do not?
- How do social organizations perceive the relation between impact measurement practices and performance?

With this research question in mind and with a clear objective stated for this Master Thesis, the reader will be guided naturally through the argument. After a brief introduction to contextualize the reader, it is presented an understanding of the theoretical framing and background behind the study. This research, after understanding what is impact measurement, it's emergence and how it is related to social entrepreneurship, based mostly on the work of Nicholls (2009), will use learning processes theory, based mostly on the work of Argote and Miron-spektor (2009), to understand what learnings do impact measurement bring to organizations.

With the context, theory and background in place, the thesis continues introducing the methodology used. This study uses an inductive empirical approach (Eisenhardt, 1989) which builds theory from case study research and is highly iterative and tightly linked to data. This approach is often seen as especially appropriate in new or very unexplored topic which made me chose it to explore the field of impact measurement, still considered by experts an undertheorized field (Mair & Martí, 2006).

To gather field information, a series of interviews were conducted. My interest for this topic and this area led me to move to India and live there for six months, studying and working in what I considered the best place to have direct contact with the most preeminent social enterprises there that would become the case studies of this research paper. The organization I was involved with is called Villgro and is one of the leading impact incubators and investors in India, where I had the opportunity to collaborate for three months, working on impact measurement with the education portfolio companies.

For this study, five for profit education social enterprises based in India were interviewed. Out of the five, three companies used impact measurement practices systematically and two others that didn't or had just started. Three of these companies were being incubated by Villgro (Mathbuddy, LeapSkills and Skilltrain), another one had been funded by Michael and Susan Dell Foundation

(Convegenius) and the other one has won the NSDC Innovations for Skills Challenge 2014 (Oyster Learning).

After those interviews, two experts were interviewed in order to triangulate the information gathered with a broader view of the whole education sector ecosystem. Villgro itself was interviewed as well as Gray Matters, an impact assessment service provider that worked with Convegenius.

The data was analysed firstly within each case study which means that a detailed analysis of the individual talks was undertaken to get the insights in detail and to make it easier to make the following cross pattern analysis.

For the discussion, primarily the data was based on impact measurement theory and learning processes theory in order to understand if organizations were able to create specific knowledge and learnings from the impact measurement practices. The thesis ends with the conclusion where limitations and further research are suggested as well as managerial and academic recommendations.



## 2. THEORETICAL FRAMING

### 2.1. Learning Processes Theory

#### **Defining organizational learning**

The primary theoretical framing used in this thesis concerns organizational learning processes. In a very general approach, learning processes explore how organizations learn.

There are several definitions of organizational learning but if we analyse the core of most of them we could define it as “a change in the organization that occurs as the organization acquires experience” (Argote & Miron-spektor, 2009, p. 1124).

Then the question becomes, changes in what? There has been reflection and debate whether organizational learning should be defined as a change in cognitions or behaviour but that debate was replaced by a general agreement to look at organizational learning as a change in organization’s knowledge that occurs as a function of experience. Meaning that when an organization executes or performs a task, knowledge can be created. However, it is important to acknowledge that executing or performing a task doesn’t imply necessarily learning (Fiol & Lyles, 1985).

There are several approaches to understand and measure organizational knowledge. On one hand, one of them is by measuring cognitions of organizational members or, in other words, by accepting that what counts as learning for the organization is what counts as learning for the managers involved in the process (Winter, 2000).

On the other hand, measuring changes in certain characteristics of performance, such as accuracy, speed or let’s say financial performance, can be used as indicative that knowledge was acquired and organizational learning occurred (Argote & Epple, 1990). As in the example of manufacturing organizations, it was realized that increases in productivity are associated with experienced gained in production. However, where some organizations show remarkable productive gains, others don’t show any learning from that increase in productivity. There are several reasons for that but if we look at the learning curves of the organizations, we understand that employee turnover, organizational forgetting or mismatched transfer of knowledge play its role. Notwithstanding, by

measuring changes in a particular characteristic of performance (such as production), we have an indication if knowledge was acquired (Argote & Eppler, 1990).

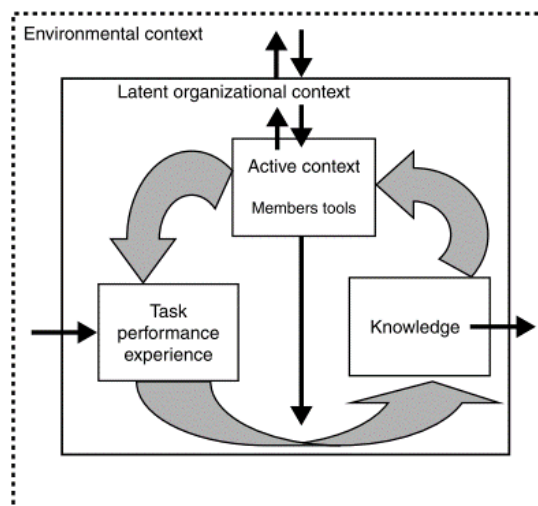
Additionally, when drawing conclusions regarding organizational knowledge, it becomes also important to have into consideration that an organization can acquire knowledge without a corresponding change in behaviour (Huber, 1991). Organizational knowledge acquired from some experience can take time to manifest, not being immediately observable whether through cognitions of members of the organization whether through certain characteristics of performance.

Subsequently, this study will mostly explore whether learning processes differ in organizations that use impact measurement practices from the ones that don't. And although ideally, it would explore cognitions of organizational members together with certain characteristics of performance, but due to the impossibility of collecting any data regarding performance, the study will analyse learning in an organization through organizational members' cognitions.

### Analysing organizational learning

To understand the implications of impact measurement practices in the learning processes and organizational knowledge of an organization, I have used a theoretical framework for analysing organizational learning - figure 1, proposed by Argote and Miron-spektor (2009).

Figure 1 A Theoretical Framework for Analyzing Organizational Learning



The framework indicates that organizational knowledge is a process that occurs over time. The underlying understanding is that the arrows exemplify an ongoing cycle through which task performance experience is converted into knowledge. That knowledge, in turn, transforms

organization's context and affects future experiences. Meaning that the knowledge acquired from performing a task will influence future endeavours of the organization.

Furthermore, organizational learning occurs in a context that includes the organization and the environment in which the organization is embedded. Experience is what comes out in an organization as it performs its tasks which can be measured in terms of cumulative number of task performances. When experience interacts with context or the other way around, knowledge is created. The environmental context includes elements outside the organization such as clients, legislation or competitors.

Conceptually, the authors propose differentiating the organizational context into an active context through which learning occurs and a latent context that influences the active context. In the active context, it is included the basic elements of organizations, members and tools, that interact with the organization's task. The latent context affects which individuals are members of the organizations, what tools they have, and which tasks they perform (Argote & Miron-spektor, 2009).

Additionally, experience can also include successful or unsuccessful units of task performance (Denrell & March, 2001). The authors show that organizational members tend to stick to successful task performance and devaluating the learnings that they can get from when a task is performed unsuccessfully. In the long run, organizational members tend to persist performing alternatives that are successful although poor in terms of learning.

Therefore, most of the times, learning that can be acquired on new tasks is often devalued compared to tasks that have been performed repeatedly in the past (March, 1991). The author explores the relation between exploration of new possibilities and the exploitation of old certainties in organizational learning and examines the complexity of distributing costs and benefits between the two of them over time and space which directly influences how an organization perceives learning.

### **Sub-processes of organizational learning**

On another note, looking at organizational learning processes, it is understandable that, according to the framework proposed by Argote and Miron-spektor (2009), learning processes are represented by the curved arrows in figure 1, which depicts a learning cycle. Furthermore, the authors conceive of organizational learning processes as having three sub processes: creating, retaining, and transferring knowledge. These sub processes are related (Argote & Miron-spektor, 2009).

When knowledge is created from a unit's own experience, this sub process is called knowledge creation. When knowledge is developed from experience of another unit, this sub process is called as knowledge transfer. The third sub process also called knowledge retention, is depicted by the curved arrow in the upper right quadrant of figure 1 that goes from knowledge to active context.

In this study, I will explore mostly the first sub process, knowledge creation. I will explore what sort of knowledge is created from impact measurement practices that organizations that don't use them don't create through other means.

### **Converting organizational experience into organizational learning**

Looking closer at how organizational experience is converted into knowledge it is understood that the effects of experience on learning at a fine-grained level contributes to organizational learning theory in a series of dimensions, being it organizational, content, spatial and temporal (Argote & Miron-spektor, 2009). For that reason, experience with different properties can have different effects on learning outcomes, hence analysing experience at a fine-grained level provides an opportunity to advance theory.

By examining closely and in depth several case studies, this research paper intends to provide this delicate level of analysis to forward theory and to examine the experience obtained through the practice of measuring impact as well as how that translates into learning.

Additionally, there is considerable evidence that performance improves with experience (Dutton & Thomas, 1984). There is a principle that predicts that organizations can expect continuous cost improvements with experience or cumulative output, but authors focused on understanding the dynamics underlying organization's progress function. With that it becomes easier for organizations to understand how to evolve performance with experience.

However, experience can be difficult to interpret (March, Sproull, & Tamuz, 1991). As the authors mention, by giving the example of history, they show that some events or past experiences are hard to analyse and in the study, it is explored how organizations convert infrequent events into knowledge and learning. Although there can't be consistent agreement on the interpretations of their findings, they shed light on possible insights into the possibilities and problems of learning for incoherent events. However, there is also the possibility that experience can have little or even negative effect on learning outcomes which is important recognize (Argote & Miron-spektor, 2009).

## 2.2. Impact Measurement Theory

### **Understanding social entrepreneurship and impact measurement**

In the last decade, social entrepreneurship has emerged as an important set of actions that benefit society, gaining relevance among policy makers, economists, academics and media. These organizations are having a key role in social welfare aspects while helping to restore economic activity locally and at a global scale (Nicholls, 2009).

Succinctly, social entrepreneurship can be defined as any innovative action that individuals, organizations or networks conduct to enhance or reconfigure existing institutional arrangements to address the inadequate provision, or unequal distribution, of social and environmental goods. It combines the passion of a social mission with an image of business like discipline and innovation (Dees, 1998).

Although some forms of social entrepreneurship have appeared in the past such as Ashoka, founded by Bill Drayton in 1980, to provide seed funding for entrepreneurs with a social vision, or the multiple activities of Grameen Bank, established by Professor Muhammad Yunus in 1976 to eradicate poverty and empower women in Bangladesh, or the use of arts to develop community programs in Pittsburgh by the Manchester Craftsmen's Guild, founded by Bill Strickland in 1968, the academic exploration of such a concept is relatively new (Mair & Martí, 2006). The authors explore how social entrepreneurship can be seen as a process that catalyses social change and addresses important social needs in a way that is not dominated by direct financial benefits for the entrepreneur. Despite the potential and importance of social entrepreneurship at a field level, the interest that scholars have shown has been limited resulting in a distinctively undertheorized field (Mair & Martí, 2006).

One fundamental dimension of social entrepreneurship is social impact which is what differentiates social entrepreneurship from common practices of commercial entrepreneurship. Therefore, and to have a clear view of social entrepreneurship, it is of primary importance to explore this fundamental key dimension to it – impact measurement practices.

Even though there is an apparent lack of consensus on the definition of social impact and the best way to measure it hampers both the academic debate on this issue, as well as on the usage of social impact methods, it is generally accepted that “the term social impact is used for the impact of a

corporation on society on the economic, environmental and social dimension.” (Maas & Liket, 2011, p. 2).

On this note, analogous to financial accounting methods, environmental and social accounting methods aim to measure the impact of organizations on society. Such impact (social and environmental) is often not expressed by the market or does not have a market value, therefore being often ignored by corporations. Nevertheless, research on linking accounting to the emerging concept of sustainability by consolidating the various approaches into a sustainability accounting framework is being developed and is getting more attention from international development organizations and conferences worldwide (Lamberton, 2005). Still corporations have demonstrated little interest in understanding this sort of practices.

Yet, accounting methods offer crucial information for managerial decision making and for internal and external reporting. In the same way that financial accounting provides important information for strategy and decision making from a purely financial perspective, accounting societal and environmental aspects can provide important information for business development and strategy. In the public sector, impact measurement practices have developed to help public expenditure decision-making entities with quantitative analysis of performance on impact to support public management reporting on more evidence based policies (Bevan & Hood, 2006). Meaning that impact measurement practices might be relevant not only for organizations but also for policy makers.

Thus, it is understood that without a well-founded and compelling ex-ante account of how project managers, and theme leaders foresee their projects will create impact, and later ex-post evidence of impact, the enforcing organizations’ efficacy and their very right to existence is cast in doubt (Anderson, Bos, & Cohen, 2005). Such authors have been contributing to the discussion of the need for consistency of assessment approaches before and after an intervention.

Not only, the practices of measuring or reporting impact are an emergent and dynamic phenomenon – “drawing up existing practice but also, in the process, innovating and reshaping these practices” (Nicholls, 2009, p. 755) but also, the development of the social impact field is generating tremendous innovations over time. These innovations are consistent with the social entrepreneur’s attitude of problem solving and have been providing alternative sources of information to base and formulate their innovative strategies. These emerging reporting practices form a variety of disclosure logics that social entrepreneurs exploit strategically to support their various mission goals with key stakeholders. This measurement or reporting practices not only account for financial performance but

also report more nuanced and contingent social and environmental impacts and outcomes (Nicholls, 2009).

It is this competitive self-interrogation of social performance and impact that has been labelled and summarize as the “moral obligation” of social entrepreneurs to perform better and be more accountable than other social purpose organizations. Hence, “social impact reporting practices in social entrepreneurship attempt self-reflexively to enhance social mission rather than merely to respond to regulation, convention, or other isomorphic pressures” (Nicholls, 2009, p. 756).

Until now the self-reflection practice has been focused on the impact aspect part. This study intends to provoke reflection on another aspect. By investigating the learnings that organizations retrieve from impact measurement practices, it tries to understand what are the implications of those learnings for the performance of the organization.

As stated by the authors, monitoring and evaluation has the potential to provide quantifiable information on the impact achieved or to be achieved but often does not, mostly because inquiry as an organizational learning system is highly underdeveloped (Cousins, Goh, Clark, & Lee, 2004). This means that organizations did not set proper evaluating processes which could then help them to learn. The authors aim is to describe and critique the current state of knowledge base related to the general problem of integrating evaluation into the organizational culture as a learning process.

### **Emergence of impact measurement practices**

In the past decades, there have been enormous changes in the resource landscape which have shaped some new social impact reporting practices. Adding to this, Governments, foundations, investors, philanthropists and other players have demanded more reliable monitoring of the outcomes of their grant inputs - increasingly seen as social ‘investment’ or contractual obligation within a quasi-market context (John, 2006).

Social investment or venture philanthropy provides a blend of performance-based development finance and professional services to social purpose organisations– helping them expand their social impact. This new form of partnership blend an approach similar to the practices of venture capital in building the commercial value of companies with the social mission defined.

Even though social investment is a recent concept, there has been a clear replacement of traditional models of philanthropy, that reported performance success by the number and variety of grants allocated by a new investment philanthropy. Which measures success as a function of

maximizing the impact of the donor's capital 'investment' by the total (social) value created (Anheier & Leat, 2006), (Bernholz, 2004). "The philanthropic perspective on performance has, therefore, moved from a focus on reporting philanthropic inputs to an emphasis on disclosing grantee organizational outputs and outcomes" (Nicholls, 2009, p. 756).

As a consequence of the shortage of grants that followed the stock market crash of the dot com bubble, progressively social organizations have turned to earning income strategies and profitable business models to survive, thus engaging, in many cases, with market competition for the first time. This produced the social enterprise model that combines a social purpose with a clear business proposition

Formerly, social organizations began applying competitive market models to their social purpose and mission. Regulation and investor's pressure required them to go beyond charity reporting to adopt the reporting practices found in commercially profitable organizations. In one hand, this increased the reporting burden on the organizations, but and most importantly, also offered the opportunity to assess some aspects of performance – notably financial sustainability – in a more rigorous way (Nicholls, 2009). Nonetheless, it is not clear yet the reason behind impact measurement and one question that remains unanswered is what is the purpose of impact measurement and reporting.

This study crosses the social impact measurement theory with organizational learning theory in order to understand the learning that companies get from measuring their impact and how that translates into performance.

### **Importance of impact measurement**

Social purpose organizations have typically been given immense levels of trust based on their stated objectives rather than their performance reporting. Therefore, the social impact of such organizations has been taken mostly as self-evident due to their stated public mission focus and non-distribution requirement. As a result, statements of social mission and organizational form have traditionally acted as risk mitigation proxies for the efficiency and effectiveness of management and operations and detailed performance reporting has typically been absent from the social sector.

There have been two explicit side effects resulting from this. First, it has diminished the public accountability of charities, non-governmental organizations, and other social purpose actors (Jepson, 2005). Second, it threatens to undermine their performance impact since there is a smaller incentive



to produce the information that could help shape strategic innovation and future operational improvements (Nicholls, 2008).

This new model, normally called hybrid, is reflected in the new reporting practices that go beyond the legal requirements to act also as strategic innovations designed to drive improved performance impact and better functioning stakeholder accountability (Nicholls, 2008). Adding to this, reporting innovations in this sector aim to also give strategic attention to capturing and disclosing social and financial value creation in combination.

This study tries to give a tangible answer to the relevance and purpose of using impact measurement practices by exploring the relationship between impact measurement, learning and performance.

### **Limitations of impact measurement**

Due to its recent development, impact measurement can be considered a relatively unexplored field in the academic world (Mair & Martí, 2006) and with the potential of innovation that it may bring to the social sector, it is also important to be aware of its limitations.

First, there is the question of what is to be measured and reported. There is a current perceived difficulty in settling the relationship between complex input factors such as grants, volunteers or market income and the social impact that correlates to the mission objectives of such organizations (Kendall & Knapp, 2000). In their study criteria for measuring performance of social organizations is suggested and the limitation described above was presented.

Second, there is the question of how to measure what is to be reported. So far, there are no standardized calculative system for social value creation, nor any comparative unit of measurement (Paton, 2003).

Third, there is the matter of what is the purpose of measurement and reporting. It was noted that modern economic interactions are complex and increasingly dehumanized and in this context “systems trust” has emerged to provide proxies for personalized interactions (Nicholls, 2009).

And lastly, social impact metrics have been interpreted as an example of creeping “financialization” of society. Some see this as part of a larger process of the ‘privatization’ of the social that is also evidenced in the quasi-market models now commonly used to distribute social goods in many countries (Bovaird, 2006).

## 2.3. The overlap – learning processes within impact measurement practices

To understand the findings, it becomes important to explore how impact measurement theory and learning organization theory connect. Therefore, this section will look at impact measurement practices as management practices or as practices that help managers to improve their work and how they might bring learning to organizations. In that note, I explore one line of thinking that sees certain types of management practices as a stimulator for a failure tolerant culture within the organization. Organizations that have a culture that is tolerant to failure are seen as organizations more devoted to learning. The section goes even deeper by exploring literature that connects how failure tolerant cultures are prone to deliver better performance results.

### **Learning from management practices**

Impact measurement practices can be seen as practices that managers use that helps them to improve their work and in an ever-changing environment, these practices gain more and more relevance.

At the fast pace that technology is diffusing and changing, organizations need to be able to experiment and adapt through different approaches to product and process development. Given the experimentation angle, it is inevitable that some of these approaches may be not successful since the beginning, but if the organization is oriented towards learning, all those approaches will provide new insights that can be applied in future endeavours. Hitherto, managers are not accustomed or trained to reward systems or cultures that foster adaptive learning or learning from mistakes.

Accordingly, the process of unlearning previous mindsets and fostering a culture open to failure as a learning process is an essential first step to help the organization move away from static, risk averse patterns of behaviour to proactive, risk taking learning (McGrill, Slocum, & Lei, 1992).

### **Tendency towards a failure tolerant culture**

Furthermore, in today's organizational knowledge, it is widely accepted that firms should be able to learn from failures but this is, most of the times, easier to point out than actually to put into practice (Cannon & Edmondson, 2005). For that reason, the authors propose a framework that relates technical and social barriers to three key activities - identifying failure, analysing failure and deliberate

experimentation. By shaping the mindset towards a more failure tolerance, failure is redefined away from its discreditable and negative associations to be viewed as a critical step in the learning within an organization (Cannon & Edmondson, 2005).

By following the three key activities, organizations allow themselves to identify errors before they became organizational disasters. At the same time, it allows organizations to thoughtfully experiment different approaches without compromising organizational medium term performance. In general terms, one of the tragedies in organizational learning is that catastrophic failures are often preceded by smaller failures that were not identified as being worthy of examination and learning. The author's research allows organizations not only to learn from failure but to learn to fail, as a deliberate strategy to promote innovation and improvement in order to maximize the opportunity for learning from failure and minimize its cost.

One of the aims of their study is to expose the challenges of organizational learning from failure. For that, three core organizational activities are presented through which organizations can learn from failure: being the first one, identifying failure; secondly, analysing failure and thirdly, deliberate experimentation.

This research paper will focus on the first step since it has more relevance for the study. This implies that proactive and timely identification of failures is an essential first step in the process of learning from them. The first step of identifying failures is to overcome the psychological barrier of identifying failure, which requires courage to face harsh truths and realities. However, the authors identify that the key organizational barrier to actually overthrow this barrier of identifying failure is the "inaccessibility of the data necessary to identify failures" (Cannon & Edmondson, 2005, p. 304).

Additionally, these activities not only allow organizations to reduce the impact of their errors but above everything to learn from them. As an organization, by developing activities of identifying failure, analysing failure and deliberate experimentation, leaders can seize opportunities, build processes and structures, and incentives to help the organization to enact these learnings processes. These learning processes might become fundamental for organization competitiveness and performance although for that "failure must be viewed not as a problematic aberration that should never occur, but rather as an inevitable aspect of operating in a complex and changing world." (Cannon & Edmondson, 2005, p. 305).

### **Learnings from failure tolerant culture as performance enhancers**

When mentioning competitiveness, it becomes interesting to explore the work of Dyck, Frese, Baer and Sonnentag (2005) that shows that organizations with a culture more tolerant to failure are susceptible to perform better.

The results of their study suggest that organizations may want to introduce organizational error management practice as a way to boost firm performance since it was shown to be significantly correlated with both organizational goal achievement and an objective indicator of economic performance.

The authors claim that the negative effects of failure or errors are much better developed than that of the potential positive effects of those failures or errors. This has led to the support of research on the concept of error prevention. However, errors have potential long term positive consequences such as learning, innovation and resilience which are less obvious. Nevertheless, there is a general agreement that people can learn from their errors but there are not many approaches that help managers to deal with them.

“In the long run, organizations that have an effective approach to errors may be more profitable because these organizations learn from errors, are more apt to experiment, and are more likely to innovate.” (Dyck, Frese, Baer, & Sonnentag, 2005, p. 1228).

One way to control the negative consequences of the errors while promoting the positive ones is through error management. Although error prevention management aims at avoiding errors to happen, the authors argue that errors should happen but in a certain way that the organization benefit from the learnings and experimentation and it doesn't harm organization's performance in the medium term.

Wrapping up, certain management practices have the ability to influence failure tolerance culture of organizations which, consequently, might directly influence performance. Therefore, understanding how to stimulate failure tolerant cultures through specific management practices can be a way to strengthen performance (Dyck, Frese, Baer, & Sonnentag, 2005).

### 3. METHODOLOGY

As a methodology, I found the inductive empirical approach the most appropriate for my research study, having used Eisenhardt rationale on how to build theories from case study research as a guide (Eisenhardt, 1989).

To expose this approach, I found important to start presenting grounded theory which can be considered the theory that pioneered the inductive empirical approach. After that, the data collection procedures and biases for the methodology will be presented and this section will end with the explanation of the data analysis procedure.

#### 3.1. Grounded Theory – the roots

The inductive empirical approach used by Eisenhardt (1989), where theories are inducted from case studies has its roots on the work of Glaser and Strauss (1967) on grounded theory and more recently on the work of Strauss (1987). Their work becomes essential for my research, therefore I found pertinent to dedicate a detailed section on this theory in order to understand the relevance of grounded theory for the bigger picture of building theory from case studies.

Grounded theory was developed around the 60s at a time that positivistic approaches monopolized the scientific landscape while qualitative approaches were looked at as unsystematic and biased. Then Glaser and Strauss (1967) suggested that theories could be built if the data gathering on field was systematized by collecting, coding, comparing and categorising. Grounded theory was born.

This theory promotes the development of theories from research grounded in data rather than deducing provable hypotheses from existing ones (Charmaz, 2006). It uses comparative methods taken to a very demanding degree of detail in the data collection process and by relying mostly on evidence to build theory, the way any researcher selects and collects that evidence becomes the backbone of their theories.

Additionally, according to Mintzberg (1979), “No matter how small our sample or what our interest, we have always tried to go into organizations with a well-defined focus – to collect specific

kinds of data systematically” (Mintzberg, 1979, p. 585). Therefore, the selection plays a major role in this kind of approach.

Understanding the importance of such a statement led me to put the utmost attention on the selection of the case companies. To assure that the social enterprises chosen had a minimum structure and potential to succeed, the companies of the universe were being incubated or have received some sort of support (whether funding, mentoring, expertise, a prize etc) from an umbrella organization.

In this study, I intend to offer insights on the relevance of impact measurement for organizational learning based on grounded theory and by inducting theory from case studies. This is done by following the principles of such theories such as codifying the findings as well as comparing and looking for patterns that can be relevant to build theory.

Before delving into the inductive theory using case studies, it becomes important to understand the development of the theory over time. After the emergence of grounded theory with the work of Glaser and Strauss (1967), other authors started exploring particular aspects more in depth, developing new theory on the field which were used and are relevant for this study.

Authors such as Miles and Huberman (1984), posteriorly outlined techniques for analysing qualitative data which reduced the gap seen until then between data and conclusions. Techniques such as within case analysis helped in dealing with the huge amounts of information collected.

Together with cross case search for patterns which was convenient to understand patterns of similarities and differences in a much easier way.

Several other researchers have also undertaken some variations of their own to the methodological work in which there is one that I found especially useful in my research – the triangulation of investigators proposed by the Warwick group (Pettigrew, 1990).

A triangulated method is used to gather different approaches and different types of data which can be used as cross checks. Triangulating information with an expert in the field, in this case Villgro, an incubator and impact investor and Gray Matter, an impact assessment service provider, strengthens the credibility of the data collected as well as collects insights on a more macro level which are good to complement the information gathered. To sum up, triangulation provides me with more credible data, allowing me to build stronger hypothesis.

To consolidate my analysis, I considered Bourgeois and Eisenhardt (1988) approach that developed cross case analysis techniques that could help me in this study. The approach with which I

identified the most was the selection of categories or dimensions followed by the finding of within group similarities coupled with intergroup differences.

Two of the categories were very straightforward and materialized as clear patterns while I was doing the interviews. While the other two required a more detailed analysis to recognize. These explorations become important to understand the full meaning of inducing theory using case studies.

### 3.2. Inductive Empirical Approach - Inducing Theory using Case Studies

I found that an inductive empirical approach was the best suited to allow me to provide new knowledge from the case studies within an empirical field, in this case, the field of impact measurement.

This study was born out of a perception I got after working in the field with one of the major players in the area – Villgro, which is one of the most relevant social enterprise incubators in India, which gave me the intent of putting my perception to the test with real case study insights.

One of the strengths that the process that Eisenhardt offers and one of the reasons I chose it was due to its highly iterative and tightly linked to data approach and it is a path that is especially appropriate and relevant in new topic areas such as impact measurement. As Glaser and Strauss stated, “It is the intimate connection with empirical reality that permits the development of a testable, relevant and valid theory” (Glaser & Strauss, 1967, p. 122), meaning that normally, the resultant theory is often novel, testable and empirically valid which goes according to my line of research.

Additionally, the theory that will emerge is likely to be empirically valid due to the intimate tie between the process of building it and the evidence. Thus, it makes it likely that the resultant theory will be consistent with empirical observation (Eisenhardt, 1989) which is very important at this point.

Although the proximity to data can be a strength, it can also constitute a limitation. Meaning that, in the same way that an intimate connection between evidence and the process of building theory brings advantages, it also fosters some limitations such as over complexity. This means that relying in such a way in empirical evidence on the field can yield theory which is overly complex. Just as the author mentioned, “A hallmark of good theory is parsimony, but given the typically staggering volume

of rich data, there is a temptation to build theory which tries to capture everything.” (Eisenhardt, 1989, p. 547).

Nevertheless, I believe that due to the size of the sample, the study wasn’t impaired by this aspect and that the benefits offered a potential “bigger reward” in terms of findings so I found this approach appropriate and likely to be fruitful.

To wrap up, this study follows the roadmap for building theories from case studies proposed by Eisenhardt (1989) and for this analysis it becomes essential to pay special attention to the data collection as well as understanding its biases which is what will be done in the next sections.

### 3.3. Data Collection Procedure

India has some of the most advanced social entrepreneurial practices globally which makes it an interesting place to base a study on social entrepreneurship. It has a fervent social entrepreneurial scene with organizations that serve as role models worldwide such as Aravind Eye Care Hospital, Barefoot College or Goonj.

For that reason, I decided to do an exchange semester there combined with a working experience that would allow me to get in touch with the most promising Indian social enterprises. I wanted to interact with organizations on the field which eventually led me to start doing a project based internship with Villgro, one of the leading social enterprise incubators and impact investors in India.

Being aware that inductive empirical approach based on grounded theory starts with gathering relevant data I knew that the quality of the insights gathered would determine the quality of the findings therefore the experience at Villgro played a central role. I was working in impact measurement within the education portfolio companies, and my role consisted in trying to understand how to analyse the aggregated impact of all education portfolio companies as well as how to build a general framework for these organizations.

By having access to Villgro’s network I would ensure my ultimate goal of gathering quality data that would allow me to build a significant analysis. However, there are consequences on which methods you choose to collect that data and “how you collect data affects which phenomenon you will see, how, where, and when you will view them, and what sense you will make of them” (Charmaz, 2006), therefore this played a central role from the beginning of this study.



Since my intention was to understand the learnings that organizations are taking from impact measurement practices I based my data gathering on open-ended interviews.

Interviews were made to organizations that had impact measurement practices set in place and to organizations that didn't measure their impact. The goal was, on one hand, to understand the perception of the person responsible to measure impact. And on the other side, understanding how organizations that measured impact and organizations that didn't learned.

This approach was applied mainly due to the nature of the analysis of the research – the emerging theory field of impact measurement.

It started with, and by being aware of the importance of the selection of the cases, a careful draft of the requirements of the case organizations I was looking for. Apart from the already mentioned need to have some sort of major organization supporting their operations, they all needed to be in the education sector, operating in India, and most importantly being in the same stage of growth, in this case, late traction to early growth. Traction means that the organizations have already seen proof of idea (problem-solution fit) and are in the beginning of proof of concept (product-market fit), which means that they have the first customers set and are now in the beginning of growth stage. Growth stage means that the organization has validated the product or service and is now scaling fast. In a social organization, this normally occurs between the 3<sup>rd</sup> and the 8<sup>th</sup> year.

The reason I chose organizations at these growth stages is that, at this point, companies are an already formed entity with several different processes and few departments set internally. At this stage, most companies face a transition between an informal way of running their operations and a more controlled way due to its size and rapid growth. For this reason, understanding where these companies learn from becomes very important for their survival.

Secondly, five organizations were interviewed, three that had an impact measurement structure in place and two that didn't plus. Additionally, two experts were interviewed. By experts I mean people working on the field that support, at a macro level, several educational enterprises achieving their goals.

By having an impact measurement structure in place, I intend to express organizations that are measuring impact in a systematic way, which means that from a specific time to other specific time organizations measure the progress of their initiative, which allows them to validate their success and understand the evolution and progress from previous years.

To understand the nature of the organizations interviewed, a brief presentation of them is provided. First, the organizations that have an impact measurement structure in place:

-**LEAP Skills Academy** is a skill development organization that aims to bridge the gap between the skills that students have and those that employers require in the hiring process. LEAP carefully researches the needs of a region and provides life-long skills as well as sector specific skills to allow students to create careers of their own choice ([www.leapskills.in](http://www.leapskills.in)).

-**Convegenius** is a mobile first, product company focused on digitizing education and making it affordable, fun and rewarding. Being a market based solution, Convegenius leverages on the power of technology to improve engagement of education content which children can use through tablets ([www.convegenius.in](http://www.convegenius.in)).

-**SkillTrain** is a technology-enabled vocational training organization. They provide vocational training on a blended learning format on skills like mobile repairing, electronics repairing, computer hardware repairing, electrical repairing, plumbing and masonry to rural school dropouts and urban youth enabling them to become self-employed or employable ([www.skilltrain.in](http://www.skilltrain.in)).

Secondly, the organizations that don't have an impact measurement structure in place:

-**Mathbuddy** is a social enterprise focused on helping children learn and practice math concepts through math activities, math worksheets, math quiz and fun math games ([www.mathbuddyonline.com](http://www.mathbuddyonline.com)).

-**Oyster Learning** is a virtual student workforce platform. Oyster Learning is a platform which provides live projects and virtual internships sourced directly from the Industry to students ([www.oysterconnect.com](http://www.oysterconnect.com)).

My initial intent was to not only have the interviews, but to collect the financial statements of the two last consecutive years of all these organizations. Unfortunately, I faced several hindrances regarding the provision of this type of data which didn't allow me to include in that information in this study.

Since I am using an inductive empirical approach, I was aware that I had the possibility to keep improving my interview guide over time or had "the freedom to make adjustments during the data collection process" (Eisenhardt, 1989, p. 539) to try to refine the approach and the information that I would gather from these interviews.

Nevertheless, an initial interview guide was drafted (see appendix 1) which was refined over time that can be seen on the transcriptions of the interviews and the transcription of all interviews can be found in the appendixes (see appendix 2 to 8).

In the end, two more interview were conducted, with Villgro, an impact incubator and impact investor and with Gray Matter, an impact assessment service provider organization with the objective of confirming, removing the bias and triangulating the information collected.

All the interviews were made over Skype due to the different geographical locations and were recorded (with permission of the organization) using a software called "Callnote". Later, all the interviews were transcribed resulting in more than forty pages of transcriptions and the information was analysed. It is important to be aware that this study will be inevitably limited in scope to the chosen organizations and their contexts but can be of use to suggest further research and test hypothesis on the field.

To summarize and conclude, five case studies plus two triangulation interviews have been undertaken and are presented that highlight different learning approaches to social impact measurement in terms of the available disclosure practices. Case study methodology will be used in a further section – analysis - to allow comparative analysis to be carried out at the organizational level.

Given the lack of existing research on social impact reporting in the social entrepreneurship area, the case approach becomes particularly appropriate to this exploratory study of reporting phenomena embedded in their context.

### 3.4. Biases

It is important to acknowledge that this methodological approach brings few biases that are important to mention. According to Fisher (1993), when conducting a study, it becomes important to recognise and compensate for different social biases. The first bias found is the social desirability bias, which refers to the impulse of presenting oneself in the best possible way, therefore denying socially undesirable actions or behaviours (Chung & Monroe, 2003). The authors show that social desirability bias is higher when the situation encountered is more inconvenient. In this case since the study revolved around the relevance of impact measurement, organizations might tend to overly present their impact measurement concerns, since they might perceive that it is what they should do.

To surmount this bias, not only precautions were taken during the interviews by asking indirect and neutral questions (Fisher, 1993) but also experts that had worked with the organizations on the field were interviewed in order to triangulate the information gathered.

These experts were Villgro, an incubator and impact investor that has been collaborating directly with Leapskills, Skilltrain and Mathbuddy with funding, mentoring and networking and Gray Matters, an impact assessment service provider organization that has worked with Convegenius on their external impact assessment studies.

Additionally, another bias that can be identified is the survivor bias. Survivor bias refers to the limitation that only looking into organizations that succeeded brings to the veracity of the analysis. For example, in other industries such as financial services, more concretely in the mutual fund sphere, survivor bias makes it harder to analyse fund performance since funds that have poor performance tend to disappear and it becomes hard to take them into equation (Elton, Gruber, & Blake, 1996). The same happens in this study. Since it is extremely hard to track organizations that have failed, it is not possible to analyse the reasons of the failure and most importantly how did these organizations learned and what was the influence of impact measurement practices in their failure.

Survival bias is not overcome in this study as it would require extensive resources to scout, screen, track and contact the people responsible for organizations that have failed in the past. Therefore, it is important to acknowledge that it constitutes a limitation and allows specific further research to be done to solidify the findings - details on the further research will be presented later the limitations and further research section.

### 3.5. Data Analysis Procedure

For the analysis section I started with an exploratory analysis within each case. This involved a detailed case study write up for each interview and each case organization.

During each interview, I drafted notes with descriptions of the most relevant parts and understandings on my own of the things I found particularly interesting which gave me a better understanding of the context and the information each organization was providing me. These notes are often simple descriptions, but they become central to the generation of insights (Pettigrew, 1990)

because they help researchers to cope, since the beginning of the analysis, with the immense volumes of data.

According to Eisenhardt (1989), the idea of this approach is to become intimately familiar with each case as an individual entity. This process helps the unique patterns of each case to emerge before investigators push to generalize patterns across cases. This familiarity is also fruitful since it further accelerates the cross-case comparison.

After analysing the data within each case, I started investigating cross case patterns to give me insights to shape my hypothesis later in the process.

For that I draw columns in three sheets of paper, similarly to a table, where each column corresponded to one company. In each of these columns or boxes I wrote the major points taken from each within case study analysis. Then when all the information was mapped out in a more visual way, I attributed a numerical code to each finding that would be similar in more than one company. These numerical codes were attributed to findings that resonate to more than one organization and were then analysed more in depth to see their relevance.

The numerical code went up to six. Six findings that resonated with more than one organization. From those six, four resulted into interesting points that were translated into the categories presented further at the cross-case pattern analysis.

The basic premise of this approach is that people are poor processors of data and with this approach, it becomes easier to look at data in many divergent ways. To do that, Eisenhardt (1989), proposes three different ways. From those, I found two particularly interesting and useful to me.

The first tactic is the selection of categories and dimensions which intends to look for within group similarities couple with intergroup differences. These categories or dimensions arise from the research problem, literature or by the suggestion of the researcher. In my case, it was a mixture of all.

The research question raises several sub-questions that needed to be answered to answer the main research question and for that reason, the categories were somehow shaped in that direction. As well as literature proposes different perspectives to look at the data which inevitable shapes the categories.

The second one is to select pairs of cases in order to list similarities and differences between each of the pairs. This forced me to look for subtle similarities and differences between cases which will be presented in the cross-case pattern part of the analysis section. I thought that to be more

understandable for the reader and coherent with the analysis, to map that all together in the cross-case category section.

This approach allowed me to extract interesting patterns that will be further confronted with literature to understand the relevance of the findings, in the discussion section.

## 4. ANALYSIS

This section is dedicated to the analysis of the data gathered through the undertaken interviews. During these interviews where I speak with whether someone from the founding team or someone directly involved with the process of measuring impact, I shape the interview, one after the other, in order to best address the organization and to better collect the information I am looking for.

It was found coherent to start with an individual analysis of each interview findings, where the perceptions of each speaker are analysed, after shortly introducing how the organizations work. And then moving towards a cross case pattern analysis, where patterns among the data are extracted and analysed, then divided into categories for a clear picture of the findings (patterns recognized in all the information gathered).

### 4.1. ANALYSING WITHIN CASE DATA

To start, the three organizations that have an impact measurement structure in place will be analysed (LeapSkills, Convegenius and Skilltrain), followed by the the two organizations that don't have such a structure in place (Mathbuddy and Oyster Learning). After that, the two expert organizations that were interviewed are analysed (Gray Matters and Villgro). All the organizations will be briefly described upfront and then the findings within each case will be exposed.

#### 4.1.1. LeapSkills

LEAP Skills Academy is a skill development organization that aims to bridge the gap between the skills that students have and those that employers require in the hiring process. LEAP carefully researches the needs of a region and provides life-long skills as well as sector specific skills to allow students to create careers of their own choice.

By combining interactive and experiential learning with mentorship, industry relevant content, non-cognitive skills and institutional partnerships Leapskills managed to enhance high quality

placements for those who interact with them. The organization offers a series of programs such as education for employment, SkillUp, STEP, Propeller or retail certificate course that tries to bridge the skills gap given by the academies and the ones necessary for the actual job market.

For this study, Aadya Singh, the Associate Director was interviewed and I was able to know that LeapSkills have had an impact measurement structure in place almost since the beginning and one of the main messages that could be taken from the interview was that the impact goals were very clear and important for everyone in the organization.

When asked about the value of measuring impact, it was stated clearly that having indicators like household income, placement and demographics served as guiding mechanisms when taking decisions or setting action plans. As a startup at the early stage faces many pathways to follow, it becomes essential to have a guiding principle that makes decisions coherent.

*“knowing that you are always coming back to question the impact of your work helps you stay on target and align with the mission and vision of the organization that you had set out.”*

Besides, measuring impact provides one of the major motivation drives behind the team. *“I am sure most of my team works much harder than a lot of other companies in the areas we work in.”* because the team can see, at the end of the day, that their student’s life’s have changed in a positive way. Furthermore, the more the organization explored and measured the impact, the more it realizes how much students need the sort of guidance that the organization offers (especially due to the fast pace changing job market) and this creates a tremendous sense of responsibility within the team.

Hence, she said that the impact is measured mostly for internal reasons but it also plays an important role externally with most of the stakeholders within their operations, more specifically, investors like Villgro.

On another note, if we look at the impact measurement practice within the organization at a process level, there is not a complete structure behind it, but it’s mostly the strategic planning part of the team that defines the metrics and makes sure that everyone is aware and that it reflects on their work. There is no third party involved (they measure impact by themselves), they don’t use any methodology and the metrics are collected at various stages of their intervention which allows them to keep contact with students for at least a period of 6 months after the program. Though it was stated that there was a need to strengthen this sort of data gathering after the program to have more complete information of the medium to long term impact of their intervention.



One important aspect mentioned was that Aadya expressed that impact metrics became a very important source of learning because it allows the organization to compare impact performance in a very straightforward way with previous year's performance which is important to understand the progress of the organization.

Moreover, it was very interesting to see that even before they had an impact measurement structure in place and calling it impact assessment study, they've always had some sort of impact analysis since the beginning, they just didn't call it that.

*"we weren't actively say, hey this is part of our impact assessment but of course, in retrospect we were collecting these numbers ...and we've gain a deeper understanding of how to do it also over time"*

When the theme of learning within the organization was approached, it was mentioned that there were two main ways for the organization to learn. The first one is through its culture of failure tolerance, where everyone is allowed to fail as long as it brings learning to the organization. And the second one is through research, testing and exposure in between cycles (semesters in the education year) where the entire team tries different approaches with non-conventional users or customers and gets refreshed regarding practices and knowledge.

One relevant point for this study was that LeapSkills stated that the most important aspect for learning was qualitative feedback. Impact metrics were somehow important to consolidate the learnings and to compare with previous years but where the organization actually learned was from the qualitative feedback collected through direct interaction with students, teachers and other stakeholders.

*"I feel like the larger part of the learning comes from what isn't quantified"*

Notwithstanding, it was understood that impact measurement is the backbone of strategic planning and for that reason, in her perception, it directly influences growth and performance. It impacts the work they do and the way they do it and above all, it directly impacts the motivation and sense of ownership of every employee within the organization. Which, in the end, strengthen and conducts the team to deliver the best results.

#### 4.1.2. Convegenius

Convegenius is a mobile first, product company focused on digitizing education and making it affordable, fun and rewarding. Being a market based solution, Convegenius leverages on the power of technology to improve engagement of education content which children can use through tablets.

It can be seen as an education technology solution that uses content aggregation to enrich the overall learning and gamifies education to stimulate persistence, risk taking, attention to detail and problem solving. They have been funded by MSDF (Michael and Susan Dell Foundation) and consider themselves an edutainment organization - a mix between education, technology and entertainment organization.

For this study, Ritesh Agarwal, the Assistance Vice President (AVP) for Partnerships and Alliances was interviewed and he stated that for Convegenius, by being an education technology company, data plays an essential part in their innovation process. The kind of disruption that they are looking to cause in the education sector is by using data, captured through their technology and that becomes important because it is directly linked with the whole idea of impact and that is how they measure whether they are having a meaningful impact in their educational outcomes.

So Convegenius uses several kinds of metrics, some focused-on product usage and others related to social impact. By being a social enterprise, *“we also measure very rigorously the learning outcomes which are being generated.”*

Impact is collected not only through the device they give to the children but it is also verified via paper, their alternative method of impact assessment. By being a technology social enterprise, social impact ends up being directly connected with product performance. Therefore, understanding whether the product is effective for all geographies or not, for all age groups, for all social backgrounds, is the backbone of the company operations.

*“Also in our business development strategy, not only do profits make up an important chunk of the decision-making process but also the kind of impact it is trying to create.”*

Furthermore, because of the investor mandate, apart from the internal impact measurement, there is a third-party impact assessment (made by the impact assessment service provider called Gray Matters) which has been instrumental in helping them to understand how to place their interventions.

Additionally, it was interesting to see that they clearly stated three reasons why they measure the impact. The first one is the government, CSR agencies and NGOs which, for them impact

measurement *“becomes an outcome of the product itself”*. The second is the investor’s side. And the third is for internal reasons more concretely, the product team.

Ritesh added that there is huge amount of feedback which is created because of the data that comes in and how that data is used. Hence, measuring impact as allowed them to use the impact parameters (such as the learning outcome parameters) for their own iteration of the product.

Regarding the process of measuring impact, it can be divided into two parts at Convegenius. The first one is the device itself that they provide, where they do baseline and endline assessment tests. And the second one is the platform where they collect data points on the learning outcomes of the students.

When measuring learning outcomes there are two things that they measure: engagement index of the child and comprehension index of the child. These indexes make possible the adaptation of the tool to every step of the learning process of the students.

*“our gamification has been done in a certain way that the journey of the child has been mapped at different stages”* which allows them to understand where the struggles are and address them directly.

Furthermore, when asked how Convegenius learned as an organization, Ritesh stated, very clearly, that there are five important aspects.

The first one is the data collected in terms of the product. This means data which they got in terms of engagement, retention rate of the user, usage redundancy or when there was a need for another update. To sum up, all the data points that came directly from the audience engaging with the product. The second one is through business development. Engaging, interacting and doing projects with different customers allowed them to have greater insights and overviews about the needs of the stakeholders involved. The third one is through their distribution channels (where they sell their devices). Here they collect immense feedback on how their product sell or how it doesn’t. The forth is when working with government and NGOs and understanding the hindrances and difficulties that these entities had in using technology effectively. And lastly, the fifth aspect is learning through mistakes. Mistakes in product development, strategy, learning outcomes or everything related with their normal operations.

In the end, Ritesh acknowledge that impact measurement contributed to create knowledge and learning within the organization in decisive ways.

*“the impact measurement indexes all the time give us this check of how far are we and how close we’ve come, so it becomes a very important feedback loop, project by project.”*

Additionally, it was commented that measuring impact is also useful to understand the strengths and limitations of the product which is extremely important for product development and customization to different regions. This dimension played a central at Convegenius.

*“You really understand where will the product fit because impact measurement is different for different groups, different geographies, different settings, different organizations.”*

Hereafter, it was particularly interesting to see that impact measurement is a “currency” for their customers like the government or NGOs which inherently contributed to enhance the sales opportunities. Ritesh perception concluded that, in this way, there is a direct relation between measuring impact and their financial performance.

#### 4.1.3. Skilltrain

Skilltrain is a technology-enabled vocational training organization. They provide vocational training on a blended learning format on skills like mobile repairing, electronics repairing, computer hardware repairing, electrical repairing, plumbing and masonry to rural school dropouts and urban youth enabling them to become self-employed or employable.

Skilltrain uses a blended learning model to achieve these objectives. The organization has developed video content on 13 skills in Hindi language and offer these videos free of cost to interested learners on their mobile phones as well as through online channels. Then follow it up with on-the-field practical training, enabling learners to get hands-on training on the chosen skill. Eventually, evaluation, certification and employment support is provided to the successful learners. Apart from this, Skilltrain also supports other vocational training institutions by offering their video content on a licensing basis as well as developing video content for those customers.

For this study, Ganesh B., the founder of Skilltrain was interviewed where he stated that there were several reasons or purposes why they measured impact but the primary one was internal. The underlying line of thinking was that if Skilltrain didn’t know what they were doing, the impact they were having and their target group well enough it becomes hard to scale.

Following on that, he added that it also helps in other areas such as being more presentable to investors and also for marketing purposes.

since all the grants they have received have been through private organizations and not from the government, it was interesting to know that nobody really demands from them any sort of impact measurement. Normally, private organizations that want to see the impact go on a field trip to one of the locations where they act to see the impact done by themselves. But he clearly stated that just having impact information about the organization adds a lot of value to them.

*“I think it’s important to do this because it helps us securing future funding. So, I wouldn’t say it’s a demand from these organizations but I think it’s an obligation from our part”*

However, impact measurement and assessment was done internally by Skilltrain’s branch managers. According to Ganesh, they *“own it”*, referring to impact feedback. He added that this was just a good way to learn and act immediately on what was not working.

Ganesh commented that impact measurement actually influences the decision-making process naming particularly that impact measurement helps to identify areas of weakness where they can act immediately – as they did with entrepreneurship courses.

It was also mentioned that their learnings come primarily from qualitative feedback and that is what helps them to improve and enhance the business model itself in most cases.

It was interesting to understand that they didn’t start measuring impact since the beginning. There was a tipping point for that. Only after a year, only when they started to see the student numbers and started to see some impact, only then they started doing it. It came out of organization’s curiosity to understand their impact on the field. Additionally, when asked about the perspective cost of doing impact measurement, it was stated that *“the cost of not doing an impact assessment will be far higher than the cost that is there from actually doing the impact assessment”*.

In what refers to learning in general, three points were mentioned. The first one was learning through weekly calls or meetings where a lot of insights were shared. The heads of department would then hold their weekly meeting with their staff to keep exchanging knowledge from all angles and levels within the organization.

The second point was through experimentation. They have a very open culture to experiment and keep trying. They follow the rule of failing fast and their moto is *“keep agile”*.

The third point is talking with Villgro – his investors and mentors. These talks gave Skilltrain very deep insights into the industry and into organizational perspectives and also a third-party perspective which becomes essential when they were too focused on their own enterprise.

Furthermore, it was stated that impact measurement definitely contributed to Skilltrain's learnings in the sense that it is one of the key inputs taken into consideration for strategy and to plan the next course of action.

Therefore, impact measurement helps across all areas but product development is a very critical one and Ganesh saw a clear relation between measuring impact (and the learnings taken from it) and the growth of his organization.

*"I think that all our growth, I would say, has majorly been through the feedback and the impact data that we have collected from online channels as well as offline channels"*

When asked about the relation between impact measurement and financial performance he commented that it most probably has but they have never measured it and it will probably take some time before they can actually correlate impact measurement with financial performance in a absolute certain way.

#### 4.1.4. Mathbuddy

Mathbuddy is a social enterprise focused on helping children learn and practice math concepts through math activities, math worksheets, math quiz and fun math games.

After identifying a clear problem of math education in India, where math is taught like a procedure which makes students struggle when they face practical applications of the problems, Mathbuddy was born. Mathbuddy focuses on doing a lot of research on how people do math around the world to create hands-on interactive digital activities so that the students can visualize concepts as they learn.

For this study, Kannan Bharadwaj, the founder of Mathbuddy was interviewed and despite not having an impact measurement structure set in place, it was clear, since the beginning, that Mathbuddy saw the value of measuring impact.

Nevertheless, the reason they have never measured impact was because they never needed it. Since they were a privately-owned company and have been working mostly with private school, these organizations don't demand any sort of impact analysis. Therefore, they have been focusing their effort and resources in improving the product and engaging with schools.

Now that Mathbuddy was scaling up and wanted to start engaging with governmental entities and other NGOs in the field, these stakeholders do demand formal impact analysis that show a significant increment to the actual solution being used by the schools.

*"So, at the scale that we were working with, like 250 schools it wasn't needed. But if we want to take it to 2000 schools in the next three years, we will need."*

Kannan also added that non-profits that work with CSR need some sort of impact measurement analysis and, only then, the analysis is made.

*"It is also quite possible that you have to work with some Governments and most of the times, you need to find something solid – to show at least 80% improvement in math schools."*

It was interesting to observe that Mathbuddy, although didn't have an impact measurement structure in place, was collecting qualitative feedback through several forms – whether through direct contact with professors or through questionnaires sent to schools. They have been developing their organization through qualitative feedback but now they reached a point where they were starting to feel the need for more quantitative metrics. For that reason, they were planning on starting working with a third-party assessment organization to collect a very critical and unbiased impact report on their intervention, in the next few months.

When learning in general was approached, more concretely how Mathbuddy learned, Kannan stated that there were two straightforward ways that his organization learned – teachers and usability of the platform.

By constantly interacting with customers, they are able to understand the adaptability of their product. When a gap is spotted, the learning process revolves around intensive research on the internet, more specifically in forums to study the perspectives of teachers all around the world about that gap or how to teach that particular concept. Several different ideas from several different players are collected and are shaped into the new Mathbuddy approach.

*"So the product itself is an amalgamation of ideas from many different places and that's the reason why it was received extremely well by the people represented."*

I found particularly interesting that there is not an organized community or an open platform ran by Mathbuddy, they simply use general forums and websites where they dig for the learning that they are looking for.

It was stated that Mathbuddy is looking for constant learning experiences and feedback collection and tools like whatsapp have allowed them to gather hundreds of teachers in the same platform and collected instant feedback. And many teaching activities developed from this research are then tested in one of their learning centres. Only then, if successful, are implemented. That's how they validate their learnings, this is their *"testing model"*. Kannan stated that having some sort of formal impact measurement allows organizations to approach many more players (government, other organizations, CSR).

*"So, at this point of time, if we design the impact assessment studies then we will have a lot more insights into customer behaviour that should help us to build a better product compared to where we are today"*

By the end of the interview, when asked about the relation between impact measurement and performance, it was stated that impact measurement definitely *"opens a lot of doors"* and possibilities in regard to scaling up and partnerships but they haven't looked into it before because they were not looking into that.

They believed that impact metrics would have given them a lot more insights but the relevance of these insights would be directly related to how they chose the data points. Only when they started to collaborate with Villgro and were in a situation where they got resources such as capital available, they saw that this structure allowed them to grow the team, think bigger and start scaling.

Just before wrapping up, they expressed their desire to build a formal impact assessment structure but clearly stated that this impact assessment would only be of value if coupled with a qualitative feedback system. Otherwise, impact measurement by itself would be of little value for internal learning in his perspective.

#### 4.1.5. Oyster Learning

Oyster Learning is a virtual student workforce platform. Oyster Learning is a platform which provides live projects and virtual internships sourced directly from the Industry to students.



Oyster Learning identified the gap between the skills students got from their education and the actual job market, as well as the need for companies to scale at a city level with huge degree of flexibility. By having companies (like Facebook, TripAdvisor or Unilever) providing live projects, students have the chance to learn and immediately put the learnings into practice, having contact with a real-life project and get some working experience while kick starting their career. Simultaneously they get a certificate and most of the times actually earn a stipend for each project.

Oyster Learning uses a project based mentorship approach instead of classroom model to provide up to date job market skills and learnings directly to students.

For this study, Rimy Oberoy, the founder of Oyster Learning was interviewed and she stated that, even though there are conversations on a monthly basis with their major stakeholders (students), they are not doing any formal impact measurement or assessment study meaning that they don't have an impact measurement structure in place.

It was extremely valuable to observe that there is a great sense of purpose in Oyster, which translates into a belief that the more students participate in their programs, the more inherent value there is in it, therefore, based on these assumptions, it's not necessary to measure impact.

*"That overwhelming aspect of the mission is sort of very apparent and hence we have not tried to tangibly measure it."*

Without impact measurement, the learning to keep iterating the product comes whether from the customers and their feedback or the drive for efficiency, which pushes the organization to optimize the use of resources, being it, people, time or capital.

Rimy stated clearly that, right now she doesn't see any value in having an impact measurement structure in place since Oyster works only with private companies (apart from one government non paid project). They plan to engage with governments and public entities in the future but as regular customers (making available in their platform life projects from the government or organizations like the United Nations) and not impact customers.

It was very interesting to understand how Oyster learned as an organization, and as Rimy explained, the learnings are created in the same way that their students learn in their platform – by engaging in projects.

They understood that for technical skills like email writing or excel, the mentorship based, project oriented training process is very effective and *"there is a lot of excitement from the mentee – he feels*

*very empowered.*” So that is the approach they use in their organization as well. With this approach, Oyster could easily see that the person has completely gotten the command of the areas that they wanted her to learn.

Additionally, they would set a target and ask the students to come and tell them one thing that they proactively reached out and picked up. This creates ownership which translates into behavioural change. So, to sum up the organization learns and generates value in a project based mentorship approach instead of classroom model and by being a project driven company.

Regarding the business model, Oyster works like an outsourcing unit, just with a very dynamic workforce and extremely young people, they offer flexibility and scale option to their customers. However, Oyster manage the whole process and is an essential piece of the puzzle since they manage the whole operation including giving certificates, understanding and guaranteeing the training and learning, as well as providing the monetary compensation.

When asked about the learnings Oyster could have got from impact, Rimy stated that there is no doubt that she would have learned more if they had an impact measurement structure in place but there had always been other priorities.

*“there is no harm at all in it but it’s all about priorities, right?”*

Complementary to that, they found that companies are looking mostly to have the job done, especially in an efficient way. So, they shifted from focusing on output (moving from 500 students per month to 1000 students per month) to focusing on efficiency and impact for companies. What’s the point of having 500 students working if 200 can do their job. (Not the social impact, but the impact for companies in terms of performance and satisfaction).

*“It seems now that the compromise is to do what is impact for companies. That’s defined as value”*

Focusing on quality rather than quantity of the input is how companies perceive value in her perspective. To finalize, when asked if she thinks that impact measurement, could have, in the long run, directly impacted growth, she agreed. She sees that, this new way of measuring impact (according to company’s metrics – like projects done) is much better for sales and for actual impact.

It was extremely interesting to understand that the way Oyster looked at impact was from the perspective of the companies and not from a direct social perspective and impact on students, which influenced how she thought about impact measurement and the importance of having a formal structure in place.

#### 4.1.6. Gray Matters

Gray Matters is an educational assessment company that makes education child-centric by providing learning diagnosis and monitoring growth in learning over time, at a student, class, school and system level.

Gray Matters is a for-profit social enterprise focused on improving quality of education in schools through school assessments, educational analytics and evidence based school improvement advisory services. The organization works as a third-party assessment organization that supports social organizations or initiatives in the education sector in India.

For this study, Kumaresh G. M., the project manager of Gray Matters was interviewed and he stated that Gray Matters, as an organization, measure its impact through an in-depth framework. This framework essentially tries to convert all the impact assessment studies done for their customers to the same language so that the aggregated data can be analysed as a whole.

*“the idea of impact measurement is to see whether we can compare apples to apples, and then demonstrate growth”*

Therefore, all the impact assessments done by Gray Matters are showcased in a form of a scale, which allows them to see the impact that they have given to the programs.

He claims that what they do is a little bit like the business school’s rankings worldwide. They have investigated examples like why is Harvard the best business school in world as well as the criteria for that rankings and they apply similar principles.

This sort of analysis is made primarily for external purposes, naming customers and investors and secondly, internally with respect to learning outcomes and to show to the board.

*“it is driven by external factors and the driving is our internal interest.”*

It was interesting to observe that, by being the entity that measures impact on the field, one of their major problems is collaboration. For that reason, they have to keep the stakeholders, naming students, parents, teachers and schools, engaged to understand the seriousness of impact assessment. Kumaresh said that being there on the ground, in person, explaining them and making

them understand how the project is delivered and assessed can take collaboration levels to 85% to 90%.

Regarding learnings, the learning process is very similar to a business school as Kumaresh stated. There are experts, from different areas who come into their office to teach and explain to the team various measures on how they can do impact assessment. There is also an important part that is done outside namely visiting a lot of conferences.

*“Basically, the idea is to upgrade yourself over a period of time.”*

When asked how social organizations see impact measurement, if it is valuable or just a burden, after a laugh, he answered that to provide a comprehensive explanation, we need to look into two perspectives. One in Indian context and the other one, worldwide.

In the world, it is a continuous process like Switzerland, Finland or Singapore. In India, it is only now evolving and becoming more serious, that’s why we have witnessed an emergence of players in this field.

Additionally, according to kumaresh, it is very interesting to see that this increase in seriousness and relevance doesn’t come only from the funders angle but also from the organization undergoing the intervention because they feel the need to see whether they are improving or not. So, in general, he stated, that organizations are looking at impact measurement as more and more valuable.

The moment organizations see positive growth, is when there are a lot of stakeholders coming into picture. *“So that’s when the stakes become higher... the necessity is also created.”*

At this stage, in order to verify the information I have collected over the interviews and confirm my perceptions I explained him that I had the feeling that the need for measuring impact only comes when working with the government. In Indian context, before that, it is irrelevant. It was interesting to see that he has the same feeling.

Nevertheless, he urged on the importance of measuring impact even before or if not working with the government. It becomes essential to understand if organizations are upgrading and evolving otherwise it becomes harder to develop themselves. He even suggested that those organizations, at that point (before having the scale to work with the government or doing a full assessment), could try a model of small scale assessment where they would measure the progress in only one school so that they could use that argument to raise funds and later measure the progress in the rest of schools where they are operating.

To finalize, when asked what learnings did the organizations for whom they worked got out of their impact assessment, he giggled and said that their report tells organizations everything.

*“the data is something that people don’t understand... You give them a lot of data and they don’t know what to do with it. So that’s where we come into picture”*

Gray Matters, apart from the raw data from the assessment, provides organizations with a detailed report with all the information analysed and three to four suggestions of, not only, the gaps but also and most importantly, how to overcome them – just like a consultancy job. For that reason, it becomes hard to argue what the learnings are, apart from the direct insights provided by Gray Matters.

#### 4.1.7. Villgro

Villgro formerly known as Rural Innovations Network, is India’s oldest and foremost social enterprise incubator. Villgro funds, mentors and incubates early-stage, innovation-based social enterprises that impact the lives of India’s poor. Since 2001, Villgro has incubated 119 such enterprises, which have secured Rs 1195 million (Indian rupee) in follow-on funding, and touched over 15 million lives.

For this study, Maya Chandrasekaran, the practice lead for education and skills was interviewed and she stated that most of the organizations she has contact has some sort of impact measurement in place but very few of them, who are looking to raise institutional funding have conducted an external form of impact assessment.

One thing to take into consideration is that we are talking about the education space so for most of the organizations the easiest form of impact measurement is the progression on learning. The credibility and the validity of that measurement varies broadly.

When asked if organizations see impact measurement more as a burden or something that brings a return, she says that this is actually one of the filters for them as an accelerator and impact investor. In their perspective, a company or an entrepreneur that sees impact measurement as valuable even before the intervention of an institutional investor as less chances of drifting their social mission than others.

*“that’s where you know, from our perspective, there is a potential for mission drift or deviation because the core of the company is actually less focused on actual impact and actual learning outcomes and more on just scaling.”*

It was interesting to see that there are two sources of value that organizations see from impact measurement and one of their jobs as an investor is also to show them these values. The first one is internal value because impact measure should be used to *“monitor the health of their product or service”* while the second one – external value - can be divided into two categories. Marketing perspective and potential revenue stream. The revenue stream is associated with funding. These organizations are dependent on funders being them impact investors or corporate social responsibility (CSR) or grants and all of them demand some sort of impact measurement, therefore doing it bring monetary value associated.

She mentioned that there was a tipping point for companies to start measuring impact. The tipping point, for most of the organizations is the moment when you start raising any form of external institutional funding.

*“When you are raising angel rounds and grants from family and friends, there is much less rigor associated with it but the moment you are raising either from an incubator or an investor or a big grant... impact assessment becomes mandatory.”*

In her perspective, contrary to the insights collected in other interviews, the tipping point would come a little before the organizations have to deal with government.

Regarding learning, she sees that organizations, at this stage, are unlikely to have internal structures or processes around learning. So, for learning, they turn to external resources like investors, mentors or advisors and then take informal internal sessions but those are more ad hoc.

*“I have the feeling that it is a very evolved organization that uses impact measurement as a source of learning”* – that’s the role of investors. At this point, most organizations see impact measurement as a validation or as a way to check their success.

Maya was presented with one of this study findings where it is stated that companies claim to learn their biggest chunk from qualitative feedback and not from quantifiable impact metrics. She agrees on this point *“but I think that that transition from anecdotal to quantitative is actually representing a company scaling.”*

Impact measurement definitely impacts motivation but we are still not in the point that organizations use impact measurement for product development.

It was very interesting to understand her perspective when asked if she saw any relation between measuring impact and the financial performance of organizations, she said she didn't see any obvious connection. However, she sees that organizations that leverage their marketing and looking for funding on their impact measurement are the ones that are more successful.

She mentioned that the connection between measuring impact and growth is more tangible than the one with financial performance *"impact measurement leads to better marketing articulation and can be used to potentially raise funds from the investors and that can lead to growth (that's possible the connection)."*

## 4.2. CROSS CASE PATTERNS

In this section, four categories are presented. These categories are drawn from analysing the data as a whole and looking for patterns, whether suggested by the research question, by the literature or by myself. By aggregating the data and understanding the similarities and differences, insights are taken to further be explored.

### 4.2.1. Operational value of impact measurement

When examining the value or purpose behind measuring impact it was interesting to see a clear different pattern between organizations that measure impact from the ones that don't.

If we look at the organizations that don't have an impact measurement structure in place (Mathbuddy and Oysterlearning), they stated that whether they don't see any value in impact measurement or the value of it is associated with being able to show their results to Governmental bodies which means that the only value they see in measuring impact is an external value.

They understood that to work with the government, measuring impact is mandatory and in the education space, if an organization wants to scale after a certain level, it has to work with governmental entities.

On the other side, organizations that do have impact measurement practices, all of them (Leapskills, Convegenius, Skilltrain), see that impact measurement plays a double role, not only it brings direct external value but also internal value. Even more, two out of the three stated that the primary value they see out of impact measurement is internal.

This means that organizations that measure impact understood that more than serving merely stakeholder demands, it can be of extreme value internally for product iteration, learning outcomes, decision making, or as a motivator for the team to be engaged with the activities of the organization.

Impact metrics allow organizations to understand clearly the demographics of their target, their background, path, learning outcomes, engagement, performance and several more aspects. This information allows organizations to understand precisely the impact or consequences of their action and act upon the variables that are not working well.

So, in one hand measuring impact brings constant quantifiable insights to the organization and on the other side it can be used to build a stronger marketing proposition as well as an important requirement to raise institutional funding.

It is interesting to see that, in the organizations that use impact measurement practices, the value of impact is not only showcasing their intervention, but it has become an integral part of organizations' operations that play an important role in organization's strategy and performance.

As mentioned by one of the experts – Villgro - as an impact investor, their job is exactly this, to make organizations realise the full potential of measuring impact. Whether internal or external value, impact measurement can be more than a report that organizations do because investors demand, but some organizations see intrinsic value in it. It was mentioned by Villgro that the perception of organizations on the value of impact was a good filter for them to invest or not. If organizations have a strong feeling and insight about how important measuring impact is, there is a smaller tendency for mission drift because the organization is inherently more focused on impact and actual learning outcomes than just to scale.



#### 4.2.2. Quantitative impact metrics versus qualitative feedback

It was very interesting to see that all the interviewees clearly made a distinction between quantitative impact metrics and qualitative feedback collected.

If we look at organizations that use impact measurement practices, it is clear that they see a clear internal benefit. But why?

Impact metrics were pointed out as bringing different perspectives to organizations, especially in an operational way. First, according to Convegenius and Skilltrain, impact becomes a very important aspect of product development. By gathering constant quantifiable data on their initiative, they get tremendous insights on several perspectives as mentioned in the previous point, which allows them to iterate constantly. Product developers and business developers benefit from impact measurement in a very clear way according to these organizations.

Adding to this, LeapSkills and Convegenius stated that impact metrics became also an important aspect of decision making at all levels and strategy within their organizations. Impact metrics allows the organization to see, for example, if a solution is being better used in school “X” or school “Y” or if it is bringing more outcomes in a specific target group. Overall, impact metrics can be viewed as huge amounts of data collected on the impact of an initiative. If the information can be properly analysed, it can bring fairly new insights and help organizations position themselves according to their results.

Another aspect mentioned was that impact metrics allow the teams to see the impact they are having constantly. This constant acknowledge of how far the team has come, what they have accomplished and how it is improving people’s life, in a quantifiable and aggregate way is extremely important for motivation and to create sense of ownership according to Leapskills, Convegenius and SkillTrain. So, we can suggest that impact measurement also plays a role in the human resources dimension of the organization, team building, employee satisfaction and engagement.

On the other side, if we look at organizations that don’t measure impact, as mentioned in the previous point, whether they don’t see any value in it or only see inherent external value. Even though they understand the relation between impact measurement practices and performance (as will be explained in the next point), they don’t see any other direct and immediate benefits it may bring to the organization.

Nevertheless, and independently from seeing value in the quantifiable impact metrics, it was interesting to observe that almost all (four out of five) of the organizations stated that the biggest chunk of their organizational learning would come from qualitative feedback collection (Mathbuddy, Oyster, LeapSkills and Skilltrain).

This means that most of the organizations, even the ones that don't measure impact stated that, if they had a structure in place, it would only be of value if analysed with qualitative feedback.

*"Impact measurement by itself, without qualitative feedback system, were of little value for learning internally"* Kannan, Mathbuddy

According to the same organizations, it was understood that organizations at this stage learn mostly from qualitative insights collected and a formal structure of impact serves also to consolidate those learnings. With this, it is observable that the most important aspect for organizations to learn is through the qualitative feedback collected, and every single organization that we talked collected some sort of qualitative feedback on the field. However, the ones that do measure impact saw more opportunities and usage for the data collected such as product development, strategy, decision making, team motivation and sense of ownership as well as a good consolidation of the qualitative feedback learnings gathered which can be of great value for the health of the organization.

However, it is also important to acknowledge, as mentioned by one of the experts – Gray Matters – that apart from being hard sometimes to collect impact data, most organizations don't know what to do with that data. Quantifiable impact metrics can be of value not only externally and internally but also it can be of relevant importance for organization learnings. However, organizations need to have the ability to understand critically the data collected.

#### 4.2.3. Perception on the relation between impact measurement practices and performance

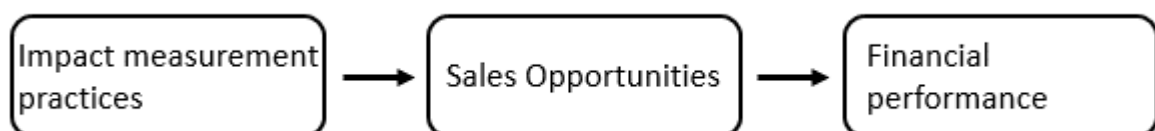
It was interesting to see that every single organization (MathBuddy, Oyster, LeapSkills, Convegenius, SkillTrain), whether measuring impact or not, saw a positive relation between measuring impact and organization's performance. However, the logic behind that relation follows two different main paths – increased sales opportunities and strategy.

First, there is the path that implies that by measuring impact and having the possibility to showcase that data, it enables organizations to engage with entities that otherwise they couldn't such as government, NGOs, corporate social responsibility funders or impact investors.

In the education sphere in India, organizations reach a point where they need to engage with the government to scale. This can be seen as a tipping point to start measuring impact for some organizations. Therefore, organizations need to have an impact measurement and assessment structure and show a significant amount of improvement from traditional approaches in order to open the conversation with governmental entities.

One of the experts, Villgro adds their perspective to this issue stating that the tipping point is even a little before, when organizations first start to look for external institutional investment (other than business angels or family and friends). And government could either come at the same time or even a little later the line.

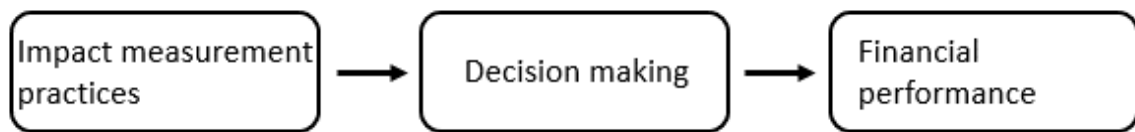
For this reason, organizations see a direct positive relation between impact measurement practices and financial performance since it can be seen as a sales opportunity enabler according to Mathbuddy, Oyster, Convegenius and Skilltrain.



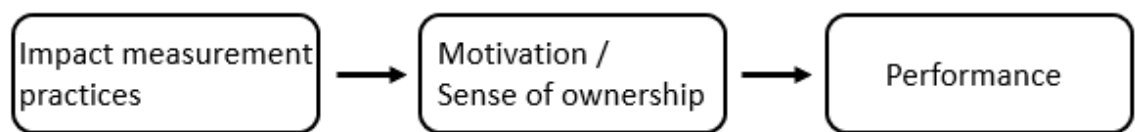
On the other hand, organizations also see a direct relation between impact measurement practices and performance but through a strategy point of view. Meaning that by having an impact measurement practice in place this enables the organization to analyse detailed information which will influence strategy and how the companies keeps growing.

However, within strategy, there were three paths mentioned by some of the organizations that are relevant for this study.

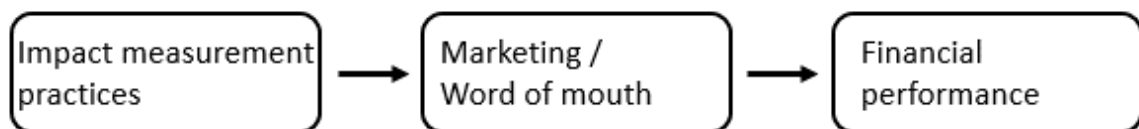
The first one is that impact metrics allowed the organization to have a clear overview of the success of the product in particular aspects such as demographics, geography among others. Thus, this influenced completely the decision making which shaped the strategy of the organization. According to Leapskills and Skilltrain this led to a more effective approach or perspective on expansion that is directly related with the financial performance of the organization.



The second path mentioned was the motivation of the employees. Impact metrics allow the team to keep constant track of the impact they are causing which fosters motivation among the team and a deep sense of ownership. These aspects would enable the team to dedicate in a deeper way which, according to Leapskills' perception, influences the results achieved and ultimately, performance.



The third path was mentioned by Skilltrain. This organization commented that having quantifiable impact metrics was essential for marketing and word of mouth. By having the metrics they were able to showcase their impact results clearly which, according to their perception, influenced directly the financial performance of the organization.



To wrap up, through the insights collected on the interviews, this study is able to suggest that organizations, by having an impact measurement practice in place, see a direct relation between impact measurement practices and performance. Adding to this, the strategy path indicates that the learnings taken from impact measurement can directly influence financial performance.

#### 4.2.4. Impact measurement as an instrument for failure tolerant organizational cultures

When exploring the way that organizations learned, it was clear the vastness of different methods and techniques that organizations use to learn. Those methods or techniques range from bringing

experts in to whatsapp groups with teachers to get instant feedback on the product, from weekly internal meetings to talks with investors, mentors or advisors, from conferences to learning platforms, from extensive research to interaction with customer and furthermore. When these methods and techniques were explored more in depth, there was only one clear observable pattern.

One of the learning points that the three organizations used impact measurement practices mentioned about where they would gather the majority of their learnings, that none of the organizations that don't use impact measurement practices mentioned, was from the failures and mistakes made.

Leapskills, Convegenius and Skilltrain mentioned that having a culture that allowed mistakes and failures and that didn't point out to the ones who failed was one of their major ways of learning. Skilltrain mentioned that they had a lot of space for experimentation and a culture of fail fast and that being agile was even one of their mottos while for example LeapSkills mentioned that failure was part of the process and a good learning for them.

There is no indication that organizations that don't measure don't learn from mistakes but it is not mentioned as one of the main learning points.

Looking at organizations use impact measurement practices, it was not clear the explanation behind it, whether organizations used impact metrics to track and quantify success or failure or if by being able to quantitatively understand the consequences of failure, they would be more open to failure itself.

Moreover, according to Villgro perspective, at this stage, organizations don't have the size to set internal processes of learning, therefore they recur mostly to external ones such as insights from investors, mentors or advisors while setting up, mostly ad hoc, internal meetings to share learnings but we our sample suggested us a slightly different perspective on that. And there are several internal processes embedded in the organizations, even though if they are not set as formal processes, they happen on a frequent basis, especially the processes related with impact metrics.

To wrap up, the organizations showed us through the interviews that they use a mixture of both internal and external processes to learn. And organizations that are using impact measurement practices see failure as a learning process while others are not objectively looking into that.

## 5. DISCUSSION

The analysis indicates that organizations see intrinsic value from impact measurement practices, being it in form of learning that can be converted into performance and growth or merely as a tool that helps them to deal with different stakeholders. But somehow, it seems that there is an apparent value involved for even the organizations that don't do it. But why is that? Is there really intrinsic value in it? If that is the case, why is not every organization doing it?

To answer these questions, I wanted to understand, more in depth, if there are similarities or differences on how organizations that use impact measurement practices learn from the ones that don't. And if there are, what relevance do they have for organizational performance?

Presently, there is no clear study that looks at the connection between impact measurement practices and financial performance so I looked at how learning theory could be an important approach to make this connection.

In the following sections, the questions raised are explored and discussed taking into consideration the findings stated in the analysis at the light of the theory presented.

On a parallel note, as mentioned previously, there are several interpretations for the notion of learning and since there is no consensus on one interpretation and there are some ambiguities regarding the same concept, what counts as learning for the purpose of this study is what counts as learnings for the managers involved in the process (Winter, 2000). Therefore, it is important to acknowledge that this study is based on the perceptions of the managers regarding learnings in the organization that they represent and learnings that come from impact measurement practices.

### 5.1. Internal operational value of impact measurement practices

One of the main findings of this study was that every single organization, whether having an impact measurement practice set in place or not, stated that they saw a positive relation between measuring impact and financial performance.

But why is that? Why doesn't every organization measure impact then?

While the external value might seem obvious for every organization, there is a latent internal value that might not be seen at first glance. Organizations that fail at seeing the potential of the internal value added might misjudge the relevance of setting an impact measurement structure.

To explore this further, it is necessary to look at another of the findings explored in the analysis. This finding shows that organizations that have an impact measurement practice set in place see impact measurement activities as something that brings value not only externally but also internally. Two of them even mentioned that the internal value that it brings is the major value added to the organization. On the other hand, organizations that don't measure impact, whether see no value in it or they see only a potential for external value added.

By external value the study intends to refer to the value that is created through interactions outside the organizations. In this case, impact measurement practices bringing external value means that this practice can be used to showcase funders the impact they are having or to incorporate in marketing campaigns with the recent numbers of their impact. This means that impact measurement practices don't create internal knowledge to the organization nevertheless it helps achieving organizational goals.

While internal value intends to refer to value created inside the organization that can be used to improve performance. In this case, organizations can use impact measurement practices to understand their impact better and how to shape their strategy, their product development path or how to engage the team in achieving a particular goal.

To sum up, both ways can improve the performance of the organization but the internal angle generates insights that can later be used in different ways to improve performance even further, just like a process. While the external angle works as just a tool that can be used to foster performance.

The same pattern was observed in the cross-case pattern analysis (point 4.2.3.) where it was explored how organizations see the relation between impact measurement practices and financial performance. So, then the question arises, why do organizations that measure impact see an intrinsic internal value in it while others don't?

The study suggests that this change in perception can be understood through the theoretical framework for analysing organizational learning proposed by Argote and Mironspektor (2009).

The framework proposed articulates that organizational knowledge is a process and that occurs over time. This process of generating knowledge is a cycle through which task performance experience is converted into knowledge that, in turn, will affect future experiences. Experience is the outcome of the organization performing its tasks which can be measured in terms of cumulative number of task performances. When experience interacts with context or the other way around, knowledge is created.

Additionally, the environmental context represents elements outside the organization while the latent organizational context represents everything inside the organization, from people to processes to tasks performed. In such a manner, we understand that for knowledge to be created, there has to be an interaction between the task performance experience and the outside of the organization (or the environmental context).

Therefore, because these organizations had experienced the internal benefits of impact measurement practices, they could see the internal value whereas for organizations that don't measure impact, impact measurement practices didn't bring anything else than the potential to bring external value.

On another note, accounting methods, offer crucial information not only for external reporting but also for managerial decision making and internal reporting (Bevan & Hood, 2006). Impact measurement practices can be seen as accounting methods since they report or account for the impact caused instead of the conventional financial accounting that accounts for the financial performance.

Organizations that had an impact measurement structure in place stated that quantitative impact metrics provided them knowledge in areas such as product development, team engagement, strategy or decision making, thus suggesting that impact measurement practices allow the organization to create specific knowledge within that helps the operations, while organizations that don't measure, don't grasp. The question then becomes, do organizations that don't measure impact don't get this sort of knowledge or they get it through other sources?

Even though the study doesn't explore this question at a deep level, the findings indicate that they don't. Organizations can develop themselves and grow as healthy organizations without an impact measurement structure but this study indicates that having one in place gives the organizations the possibility to extract certain knowledge that will help in organizational operations. If this



knowledge can then be incorporate in the operations, it can ultimately improve the performance of the same organization.

To summarize and conclude, the findings suggest that organizations that have an impact measurement structure in place can see additional value and knowledge that the ones that don't measure can't. The task performance experience of measuring impact provides internal knowledge that enhances activities such as product development, decision making, strategy or team engagement that can ultimately lead to an improvement in performance. The question then becomes if organizations that don't measure impact acquire the same knowledge through other sources or channels. While inconclusive, the findings indicate that they don't.

For that reason, organizations that misjudge the relevance of having an impact measurement structure in place might miss valuable opportunities for internal development of the organization which can lead to growth and performance development further.

## 5.2. Quantifiable failures – a road to learn and innovate within social enterprises

One of the longitudinal intentions of the study was to explore and understand how social organizations learned, whether with or without an impact measurement structure in place. Consequently, during the interviews, organizations were questioned about how they learned and where they originated the majority of the learnings within their organizations.

Several different techniques and methods were presented by each organization ranging from whatsapp groups with teachers for instant feedback, weekly internal meetings, talks with investors, mentors and advisors, extensive research, bringing in experts in the area, conferences to interaction with customers among other strategies. Apparently, there was no emergent pattern apart from one aspect. One of the learning points mentioned by the three organizations that have an impact measurement practice in place, that none of the organizations that didn't measure impact mentioned was the willingness to learn from failures and mistakes.

All of the organizations that have an impact measurement structure in place, naming Leapskills, Convegenius and Skilltrain mentioned that having a culture that allowed mistakes and failures and

that didn't point out to the ones who failed was comprehensively insightful and it was a great source of learnings. Skilltrain mentioned that they had a lot of space for experimentation and a culture of fail fast. Being agile was even one of their mottos while for example LeapSkills mentioned that failure was part of the process and a good learning for them.

And even though, there is no indication that organizations that don't use impact measurement practices don't learn from mistakes, they haven't mentioned it as one of their main learning points.

Additionally, as previously observed, Impact measurement practices can be seen as accounting methods since they report or account for the impact caused instead of the conventional financial accounting that accounts for the financial performance.

This finding makes it relevant to explore if accounting management practices stimulate organizational cultures to be more willing to accept failures in other contexts. And while no conclusive study about the relation between accounting and failure culture was found, the study conducted by McGrill, Solcrum and Lei (1992), explores an insightful approach on management practices as a main source of learning for organizations.

Technology is disseminating and changing fast which makes it mandatory for organizations to experiment and adapt different approaches to product and processes development as well as organizational processes. Given the experimentation angle, it is inevitable that some of these approaches may be not successful since the beginning, but if the organization is oriented towards learning, all of those approaches will provide new insights that can be applied in future endeavours.

This means that fostering a culture open to failure that looks at mistakes as a learning process is a crucial first step to help organizations to move from a static, risk averse pattern of behaviour to a proactive, risk taking learning attitude (McGrill, Slocum, & Lei, 1992).

The findings suggest that having a structure to measure impact in place foster an open culture of failure and mistakes. Even though the findings don't state a clear explanation on whether organizations used impact metrics to track and quantify success or failure or if by being able to quantitatively understand the consequences of failure, they would be more open to failure itself.

It can then be questioned if this means that impact measurement practices enhance the likelihood of having a failure culture in place or is it the failure culture that incentivizes the use of some framework to measure the consequences of the mistakes?

This research doesn't offer a conclusive answer that states that measuring impact is a cause or consequence of a failure tolerant culture but just the fact that this research suggests that there is a connection, makes it relevant to explore the consequences of a failure culture to the organization's performance.

In today's management practices, organizations are widely encouraged to learn from their failures but this is something that most find easier to espouse than to effect (Cannon & Edmondson, 2005). The process of learning from mistakes has been decodified by the authors into three key activities, identifying failure, analysing failure and deliberate experimentation.

Adding to the fact that the findings suggest that impact measurement practices are associated with a culture more open to failure, the theory indicates that being able to proactively and timely identify failures is an essential first step in the process of learning from them. Furthermore, creating an environment in which people have an incentive - or at least do not have a disincentive - to identify and reveal failures is the job of leadership. What if impact measurement could actually help leadership in fostering this sort of culture? Looking at the findings, they suggest that impact measuring practices can be a useful tool for leaders to install and promote this sort of culture.

Impact measurement practices can be key to identifying failure, however, this is not, by itself, enough to learn from it. Thoughtful analysis and discussion of failures has to occur to result in learning that can benefit the organization (Cannon & Edmondson, 2005).

Consequently, according to Dyck et al. (2005), organizations with a culture pointed towards failure tolerance are prone to perform better. It is revealed that organizational error management culture was significantly correlated with both organizational goal achievement and an objective indicator of economic performance.

Accordingly, as stated by the expert Villgro, having an impact measurement practice in place, even before institutional investment, makes organizations less likely of a mission drift or from not achieving organizational impact goals. The findings propose that impact measurement practices can be an essential part of organizational error management.

To summarize, the study suggests that having an impact measurement method set in place contributes, as the findings indicate, for an organization to be more tolerant to failure. Additionally, theory shows that failure tolerance enhances innovation and learnings within the organization which translates into an improvement in performance.

Accordingly, the findings show that organizations see a direct relation between impact measurement practices and financial performance through means of increasing sales opportunities or influencing strategy. Parallely, failure tolerant cultures benefit from having an error management culture approach in place. When this happens, it directly influences strategy and theory suggests that it influences performance positively.

To conclude and finalize, there is an underlying general assumption which is that firms make mistakes. Failure tolerant cultures understand how to learn from mistakes made while conventional approaches to failure try to reduce it to a level that it shall be ignored. This research paper intends to provoke reflection on the connection between impact measuring practices, failure tolerant culture and performance by suggesting that measuring impact stimulates a culture of failure tolerance because it allows organizations to easily identify mistakes and quantify failures. Therefore, it can be suggested that impact measurement practices enhance error management which will further on improve performance.

## 6. LIMITATIONS AND FURTHER RESEARCH

There are two major limitations in this study that stand out. The first limitation is the universe itself. Since the beginning, the interviews have been limited to social organizations in the education sector in India. Due to the duration of the study and the hard accessibility to organizations in other sectors, I thought it would be beneficial to explore in depth one particular sector, especially one that I had experience on and was acquainted with most of the companies I was about to deal from my previous working experience.

Nevertheless, to have a broader conclusion and insights that could be applied immediately to the sector as a whole I would have needed to explore different sectors in different countries or even several other regions within the same country. Also, the education sector has a tendency to pay more attention in having some sort of metrics in place since it's harder to quantify the outcomes than, for example, the energy sector or the healthcare sector. I believe that here is a good opportunity for further research. If the same insights can be taken from different places and different industries, then the impact measurement theory would move one step further.

The second limitation is the source of data that I collected. Initially, the study aimed at collecting not only qualitative data through interviews (as it did) but also quantitative data through financial statements that were requested from every organization. I realized that, even after having previous contact with some of the organizations, sharing this sort of data would be difficult. India's conservative approach, especially in regard to organizational financial data, makes financial statements a difficult document to get hold of. Indeed, I faced a lot of hindrances which didn't allow me to collect, analyse and take into consideration this information which could contribute to the study to be more solid and complete.

This limitation presents another good opportunity for further research. This research looks only at the perceptions of some organizations regarding the learning originated from impact measurement practices and how it influences performance and growth. By analysing together with the quantitative data - the financial statements of the organizations - clear growth and performance could be calculated which could support or deny the arguments made with only the qualitative data available.

Additionally, there is one limitation related to the methodology used that can be overcome in the same way. The inductive empirical approach benefits from its close link to empirical evidence up to

the point that it might become overcomplex. Even though I believe that the size of the sample doesn't allow that to happen. Nevertheless, by encompassing a quantitative approach apart from the qualitative data collected, it would make it easier to avoid staggering volumes of subjective data and would be more prone to the stinginess of the theory instead of building theory that tries to capture everything.

Furthermore, the biases that couldn't be overcome such as survival bias already presented in the methodology, where the study should have included data on organizations that used impact measurement practices and ended up failing, can be seen as a limitation.

Survival bias plays a huge role in the conclusion that needs to be mentioned and reinforced. Organizations that measure impact reported to have a more failure tolerance culture. However, the study didn't investigate organizations that have failed in order to understand if they were using impact measurement practices neither how tolerant to failure they were. By overcoming this bias, that would allow me to extrapolate arguments with a more scientific rigor.

Another way to overcome this bias that can be interpreted as a suggestion for a further study is to follow the development of the organizations interviewed in the medium to long term. By doing that, the study could compare performances, understand why some succeeded while others didn't and understand the relevance of impact measurement whether for success or failure.

To finalize, there is one limitation to the theory presented in the theoretical framing that I have faced myself while collecting the data which I believe constitutes a limitation to this study. Limitation which I couldn't overcome since the provision of documents such as financial statements or impact metrics is considered as sensitive information to share in Indian context.

When referring to impact measurement practices, there is always the question of what is to be measured and reported. According to Kendall and Knapp (2000), it is complicated to draw a clear relationship between complex input and the social impact that correlates to the mission objectives of such organizations. During data collection, I witnessed that different organizations consider some aspects of their intervention as being social impact while other organizations see it as merely outcomes. For this reason, it becomes complicated to assess precisely what organizations perceive as being actual impact which might influence the findings.

To overcome this limitation further studies need to be done in analysing how each organization perceived their impact measurement practices as well as defined their impact metrics and clarify the organizations about the differences and how this might influence their impact studies.

## 7. RECOMMENDATIONS

### 7.1. Managerial recommendations

Overall, the study suggests that impact measurement practices can be relevant for organizational learning processes which might contribute to an improvement in performance. For that reason, I consider that the findings provide an explanation of how organizations benefit from having an impact measurement structure in place or even how they can start benefiting from the one that they already have.

The goal of this research was to understand more in depth the relevance of a social organization having impact measurement practice set in place. With a deeper understanding of the topic, initially, the aim would be to suggest whether they should implement impact measurement practices and secondly to suggest in which ways they could explore its benefits.

The findings suggested two perspectives that might be interesting for social organizations to grasp. The first is that there is internal value inherent to impact measurement practices.

Therefore, impact measurement can be an activity that brings pivotal insights to organizations in terms of product development, business development, strategy, decision making and even team engagement. Hence, impact metrics should be analysed frequently, maybe on a weekly basis at a place where people that are working on different aspects of the organization have the opportunity to share insights and realise the direct impact of their work. These metrics should be available to everyone at every time since it constitutes a hallmark on people's work, fostering motivation and a sense of ownership for what is being achieved.

A clear example of how impact measurement metrics helped shaping an organization was when Skilltrain mentioned that they started their entrepreneurship courses based on impact measurement metrics. They identified that some people that were completing their courses were actually starting their own businesses, but eventually most of them were not developing as they should. This provided a clear angle for Skilltrain to explore and few months later they were coming up with entrepreneurship courses.

Also, in Skilltrain's example, there are some people that take courses on mobile repairing and then go to the job market or start their own shop. These people realize fast that there is a particular set of mobiles that are most common or if there is a particular problem that needs to be addressed. By measuring and tracking the impact they are having in the life of people, they keep track and contact with the people that were impacted by their intervention which allows them to collect real time feedback about market needs, which end up being essential for product and business development.

The second perspective is related with impact measurement practices allowing a more experimental culture. By collecting data on a frequent basis about the impact of an intervention, this allows the leadership team to, not only, spot failures and mistakes sooner but also to control in a more precise way a new iteration of the product or any experimentation taken.

Leapskills states that "There is no fear that you will be called out for not having done your job or not having or not having delivered the results because we recognize that failure is important to understand what you are doing" and to recognize that the results haven't or are not being delivered, impact measurement practices play an essential role by providing metrics where organizations can analyse their intervention.

The study indicates that organizations can benefit from having an impact measurement structure in place not only to improve the impact results but also to stimulate performance and offers few examples of how organizations operating on the field realized the value of impact measurement practices.

From the findings, impact measurement practices were developed internally by team members and they were also responsible to keep track of the impact metrics. However, it is important to acknowledge that if there is no expertise inside the organization regarding impact metrics, setting up an impact measurement structure might require external expertise which represents a cost.

Nevertheless, starting with very basic impact metrics that are easily defined and easily traceable might be a good start to explore the potential value of having such metrics internally and externally and then, if the results are positive, the organization can allocate resources to define and track more detailed and complex metrics.

## 7.2. Academic recommendations



There are a couple of aspects that do not constitute a limitation *per se* but if explored and developed could strengthen the relevance of the findings and advance the theory field of impact measurement.

First of all, this study could be complemented with studies on how to define and measure impact metrics and how to best incorporate impact measurement practices in daily operations of the organization. There are few methodologies and tools to help organizations measuring impact but, overall, it is still an underdeveloped topic and most organizations struggle not only to see the value in impact measurement practices but also, when they are able to see the value, how do they implement them in their organization. And after implementing, how do they extract the learnings and embedded these learnings into organization's processes to improve performance.

Secondly, one of the findings suggests that organizations that measure impact tend to be more open to failure. One possible explanation for this to happen is because with impact measurement practices, organizations can spot and quantify the error faster and easily but this needs to be examined further.

Additionally, theory suggests that organizations more open to failure or with a culture tolerant to failure tend to perform better (Dyck, Frese, Baer, & Sonnentag, 2005). Quantifiable studies need to be done to analyse this and make the direct connection between impact measurement practices, organizations with a failure tolerant culture and better performance.

Overall, the study sets the first step on the relevance of the practice of measuring impact on the field and intends at provoking reflection on the intrinsic value of impact measurement practices. If complemented with studies on different perspectives of social organization learnings and performance and on the impact measurement practices, more solid insights can be taken to advance theory on the field.

## 8. CONCLUSION

### 8.1. Concluding remarks

The aim of this study is to explore the relevance of impact measurement practices for social organizations performance. Hypothetically, social organizations have one inherent value proposition in their structure which is the social impact they are causing, that can be societal or environmental. Therefore, being able to showcase it and use it internally might bring value to the organization.

Until now, impact measurement has been looked at as a practice that enhances the social mission of organizations. This study intends to shed some light on the influence of impact measurement on distinctive learnings that can directly influence organizational performance in several other ways.

Therefore, the following essential research question was raised that guided how the study was conducted - how do the learnings from social organizations' impact measurement practices influence organizational performance?

To answer this question, three sub questions were structured that served as the base to administer the research. These sub questions are why are organizations (not) measuring impact? What learnings do organizations get from impact measurement practices that others do not? And how do social organizations perceive the relation between impact measurement practices and performance? They are answered throughout the study and its understanding forms the base to answer the main research question.

When analysing the findings, few patterns emerged that are relevant to answer the main question. First, the findings show that organizations that have an impact measurement practice in place see impact measurement activities as something that brings value not only externally but also internally. While organizations that don't measure impact, whether see no value in it or they see only a potential for external value added.

The same pattern was observed when organizations were asked how they saw the relation between impact measurement practices and organizational performance. Once more organizations that didn't measure impact saw only an external relation since impact metrics can be used to enhance

sales opportunities (since it allows them to work with governmental entities and NGOs) while organizations that measure impact, apart from the same external value, also saw an internal benefit.

This internal benefit can be translated into several dimensions. These organizations mentioned that they use impact metrics in their product development, decision making processes, strategy, team engagement and sense of ownership. This, in turn, allows these organizations to see how impact measurement practices provides detailed knowledge to influence critical aspects of the organization that can result in an improvement in performance.

Secondly, the findings also showed that when organizations were asked how they learned, from the several approaches they mentioned, there was one that was presented in all the organizations that use impact measurement practices that was not present in the ones that don't. That approach was their acceptance of failure as a learning process.

Basically, the findings suggest that having an impact measurement method set in place contributes, for an organization to be more tolerant to failure. Additionally, theory suggests that failure tolerance enhances innovation and learnings within the organization which translates into an improvement in performance. The findings then suggest that there is indeed a positive relation between learnings from social organization's impact measurement practices and organizational performance.

Although the findings propose a different way of considering impact measurement practices, this study presents few limitations that need to be taken into consideration. The most crucial ones are the limited universe taken into consideration that makes it hard to take general conclusions and the sources of data collected being only qualitative and not quantitative. Further studies that encompass a broader universe in terms of sectors and countries represented as well as quantitative data on performance collected are recommended. Nevertheless, these limitations constitute a suggestion for further research to be done which can contribute more conclusively to the field.

The findings also allow suggestions of how to use impact measurement practices such as how different organizations used them in decision making processes or for product development. These and other suggestions are presented in the managerial and academic recommendations such as how to define and measure impact metrics on the field which would then need to be accompanied by a theoretical approach.

To conclude, this study intends to give the first step on the understanding on whether there is a positive relation between impact measurement practices and organizational performance and

suggests that stakeholders in the ecosystems naming social organizations, impact investors, incubators, accelerators, NGOs and the government could benefit from such practices to be implemented more broadly.

Therefore, if the previous further studies are taken to complement and solidify the findings and conclusions proposed, conditions are placed for us to have a stronger, more impactful and above all, sustainable social sector.

## 8.2. A glance into the future

As a final remark, sometimes it becomes useful to take a glance into the future to understand the relevance of the present and of what is being done today.

John Seely Brown and John Hagel have observed that although large organizations are built to scale efficiencies, in this new economy what is actually needed to scale is learning (Hagel & Brown, 2013).

And albeit there are very good business intelligence systems out there, they are set up largely to measure scaling of efficiency. What becomes necessary in today's world is a dashboard that measure the learning capability of an organization (Ismail & Malone, 2014).

Accordingly, in 2008, when CEO of LinkedIn, Jeff Weiner shared that, in the future, the most defining metric for organizations won't be return on investment (ROI), but return on learning (ROL).

Furthermore, Kyle Tibbitts took this notion to an individual employee level stating that in today's marketplace, the most valuable compensation for working at a startup as opposed to a "normal job" is a greatly higher rate of learning (ROL) (Tibbitts, 2014).

Increasingly, the next generation of workforce considers learning as one of the most important criteria when choosing a job. If impact measurement practices can indeed allow organizations to learn in particular ways, it's relevance might become primordial in the organizations of the future and might turn into, not only, a current essential management practice that foster performance but also, an attractive aspect of the image of the organization.

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## APPENDIXES

### Appendix 1 – Interview Protocol

#### Questions:

- Do you measure impact in your organization\*\*? (Yes/No answer)

\*\*By measuring impact we intend measuring impact in a systematic way, which means that you can observe some sort of evolution (have measured impact in two consecutive periods)

#### If yes:

1. If yes what is the value that you see on it or basically, why do you do it?
  - a. Who are you measuring your impact for? -
    - i. internally,
    - ii. external public,
    - iii. investors?
2. Can you elaborate a little on the process of measuring impact on your organization and also on the collection of the same?
  - a. Do you use an external source to collect it or you measure by yourself?
3. When have you started measuring impact in a systematic way? (how old was the organization)?
4. What tool/methodology do you use to measure impact?
  - a. Did you come up with your own framework or use a theoretically proven method?
5. Do you know how costly it is to measure impact in your organization? If not, as a proxy?
6. How do your organization learn? Can you describe the learning in your organization?
7. How did impact measurement helped you learning? (or) Do you feel that impact measurement has contributed to your knowledge/learning? (If yes, exactly where? Example: product development, social understanding, customer/user understanding, logistics expertise)
8. Do you feel that impact measurement or the learning from it has contributed to your organization's growth?
9. Do you see any connection between measuring impact and the financial performance of your organization?
10. How do you feel that it affects your performance in terms of impact?

That's all, thank you so much for your valuable collaboration. Wish all the best to you and your organization and that you keep positively impacting the live of more and more.

Please do keep my contact and if I can be of any help anytime, don't hesitate.

If no:

1. Can you elaborate on the reasons why you don't do it or haven't done it so far? (don't see the value, it is too expensive, it is too time consuming)
2. Where do you get knowledge on the impact you are having? If you don't get that information, do you think it would be of your interest/valuable to get?
3. Based on what knowledge or information do you improve your impact?
4. (learning) How does your organization learn? Can you describe the learning in your organization?
5. Do you see any connection between measuring impact and the financial performance of your organization?
6. Does any of your stakeholders demand any sort of impact analysis?
7. If you were to start to measure impact in your organization in a systematic way, would you be able to do it with your resources or you would have to hire a third party?
8. (Learning) Do you think you would have learned more if you had had measured impact?
9. Do you think you would have grown more if you had had measured impact?

That's all, thank you so much for your valuable collaboration. Wish all the best to you and your organization and that you keep positively impacting the lives of more and more.

Please do keep my contact and if I can be of any help anytime, don't hesitate.

## Appendix 2 – Transcription of the interviews

### Transcription of the interview – LeapSkills

***Me: So, my first question is, do you measure impact in your organization in a systematic way?***

So, systematic way you mean to track... I think we spoke the last time and the first indicator of impact is achieving in the household income on the students that we are working with, so we do track that and we sort calculate the difference in the household income post our intervention that how much has changed with the employment of the students that we are working with.

The other factor we look at is placement, so that shows us the success level of our training. Our training is industry job oriented. If a student does get placed, let's say, within 6 months of our training we see it has positive impact and the training has been validated.

Other than that, we also look at the profiles of our students. For example, this time, we have recently embarked on a couple of government projects and what we want to do not just to, so if you look at the payment capacity of our students we don't wanna just go to the key people that easily can afford the training because they have easier access to opportunities. We also want to reach out to people who may not be able to afford that training and hence, we reached out to students who come from minority backgrounds by working with the government this year, and that is a very new step for us and is helping us to go to the bottom of the pyramid to students who may need it but may not be able to afford it. So this year we started training in Himachal Pradesh, a new state entirely as opposed to Karnataka and there we are working with students from minority classes, as you heard here, the backward castes and schedule castes as well.

These are students who had been given an education opportunity by the ministry of social justice and empowerment in Himachal Pradesh, they were given residential training and as a part of that, Leap has partnered with the ministry to go in and provided employment trainings and also placement opportunities for those students. So basically what I am saying is that the third factor to look at is the demography of where we are teaching our tools so we want to diversify that and reach out to communities where the marginal impact of our work is probably higher than it would be in other communities.

***Me: That's very good to hear, good to know, so I would like to understand what value do you see on measuring impact? So basically, why do you do it as an organization?***

Hm, I think that measuring impact helps you stay closer to your roots. It helps you ensure that whatever you set... Because the thing with a startup in a very dynamic environment is that you can sometimes get led a stray because of a new opportunity or a new partnership or a new exciting area that presents itself to you but knowing that you are always coming back to question the impact of your work helps you stay on target and align with the mission and vision of the organization that you had set out. So I feel that's one very important part of things.

The second is that, I feel that is very motivating to be doing this sort of work and I speak from an organizational perspective, you know? Because being a startup where all of us are working very hard. I am sure most of my team works much harder than a lot of other companies in the areas we work in. In small towns and cities I don't think the work is that demanding or people aren't working six days a week sometimes, but the benefit for someone who is doing this sort of work is knowing

that yes, at the end of the day my students, to be clear about, I know that their lives have changed and they are coming back today with a salary that they are able to give to their parents and I know that today they are able to make a difference and feel much more empowered than before. That really keeps you going as well. So from an organizational perspective that's important.

And the third is that, these small towns and cities, is the more you work you recognize how much students need guidance because I feel like today, especially in India, the job market is changing at such a rapid rate. I'm sure you are aware as we are talking on skype, for example. Skype is something that in these areas is still coming up and technology is becoming such a large part of things so the job market is evolving too fast for even colleges and faculty to be able to give right advice to students. So in the absence of relevant career guidance, I feel that there is a very market need to be there right now. I would say even a year ago that this need was as urgent as I feel it is today. The urgency for skill training and employment today is more than ever before. And we are seeing that. We are seeing that jobs are falling, we are seeing that companies who were hiring in mass numbers earlier, are not hiring in such large numbers today but students are still preparing for the same kinds of jobs which means that the chances of them failing or not making it are much higher. So they need that support system and security system that will help them navigate this new complex system that is in front of us.

***Me: Alright, let me just get back to one thing that you said. So basically, you said that measuring impact is a good way to engage everyone in the company with actually the mission. It is how you see that you are actually progressing, right?***

Absolutely

***Me: Ok, so if I have to ask you who are you measuring your impact for, would you say internally, externally, investors, how do you see that you measure it? Is it all the players in the sector?***

So, I mean it's definitely internally as well because looking at that impact helps us design the way we have to work so I mean, it helps us with the plans for the next six months. So whenever we are sitting and executing, sorry, planning for strategy and planning for execution, we will always look at that impact numbers and basically compare those to our implementation targets. So internally I think it's very important to make sure that you are able to deliver high impact because it's a strategic call at the end of the day, right? You can't get high placement numbers but can you get job satisfaction? Maybe, maybe not. So you have to look into everything, in order to get the right strategy. So internally it's important and externally of course, because I feel like we are a social enterprise and investors like Villgro are funding us because we are a social enterprise and because it's important, more than anything else, document that impact.

So that, even people who are stakeholders of the business know how the money is being used and how the funds are being used to create that sort of impact.

***Me: Ok, can you elaborate on the process of measuring impact in your organization? And also on how you do the collection?***

Hm, so let's start with the collection because I think that's the first step. So what we do is we do capture student data at various levels when students register with us, when students enrol for our programs, when they are part of our classrooms. We do take a lot details on their social economic background, on the demographic details. Current income and family details as well and we do the

same thing once they are all graduating or leaving our programs. That helps us capture the data in terms of the improvement in household incomes.

Then, because for the second point, which is placements, it's slighter easier because we are very, I mean, students are starting from zero, so let's take zero and one. Of course, before the training they are not employed and after they will be, so that's what we try to map, and we usually stay in touch with our students for up to at least six months after they've graduate from our programs so that they can reach out to us as well plus, even if they have left LeapSkills academy, we still know whether or not they are able to find a job and in most cases right now, what's ending up happening is that we are still helping them find jobs even three to four months after the program so we are also actively trained to do that, so for that we will obviously gather our data in terms of when students were placed, in which companies, what sectors, what salaries are they bringing home and we will hoping to also start collecting a lot more data on the job which also helps us understand how many months or years they stay in the organization which makes us understand their job satisfaction.

That's something we are doing in a very small amount right now. We haven't been able to cover that with all students, but things like that we do gather data on and compare year over year the kind of progress we are making. Whether the progress of these indicators are better for certain programs as compared to others. That's the kind of processes that we follow.

***Me: Ok, and do you use any external source to collect the impact or you collect with your own means within your own organization?***

We collect it on our own as of now and externally I don't think we gather any data but externally yes, research and studies help us create benchmarks. Sometimes when we are trying to figure out, say, you know, what is the usual enrolment ratios of colleges and universities and you compare that to us. Sometimes external studies help us validate our benchmark or impact targets, but other than that no, it's all internally.

***Me: Ok, you don't use any third-party organization to measure?***

No

***Me: Ok, regarding the metrics that you measure impact? Is it internally, is it your team? How is the process?***

It's internal, It's not everyone who is involved in this. So, there are a few people on the team who work on strategy and planning so whenever we do this strategic sessions we do brainstorm about how we want to map these various factors and we make sure that the people who are working on student administration, on student placements know exactly what we are trying to capture and why and are also stakeholders in that process. So we understand what a good placement is, so everyone understands how income details can be calculated. Everyone knows the importance of verifying the accuracy of the data that they collect, so things like that. So that we can make sure that the data is reliable and in line with what we had planned.

***Me: Do you measure impact since the beginning of the organization or how old you were when you started?***

So sometimes yes, and that's only for the sake of learning though and I think that we do compare ourselves to how we worked in the first year, for example I think that our placement numbers in the

first couple of years were not that good as now, but at the same time there were other factors that were better in the first couple of years just by being a smaller organization and a smaller team.

So I think that those things are just for the sake of discussion and learning because I think that we appreciate the fact that things are very dynamic and factors have changed a lot across years but at the same time it's good to validate and look at numbers from last year and the year before that and see what overall trends were happening. So I think we definitely do that for the sake of learning.

***Me: ok, but let me ask you, when LeapSkills was formed, did you start measure impact since the beginning or there was a point in time where you were just delivering your initiative and you realized that ok, we should measure impact? How was the process? Were you aware since the beginning?***

It's an interesting question because impact is just a word at the end of the day. Hm, we were doing it but maybe we were not putting a word to it. I mean, we would be talking about how we can ensure the programs we were giving were kind of outcomes but I don't think we were thinking of it as an impact assessment at first, at least from the time I was there. I joined a year after LeapSkills started so I can't speak for the very first year but from that point onwards we weren't actively say, hey this is part of our impact assessment but of course, in retrospect we were collecting these numbers, looking at these factors from the beginning itself and we've gain a deeper understanding of how to do it also over time. So, we were definitely doing it but it's just that the words use to it were different, I guess, but now we know this is part of an actual impact assessment.

***Me: And what tool or methodology do you use to measure impact? Is it something digital or, do you follow a particular methodology like theory of change or anything like that?***

No, we don't follow any methodology. We simply do simple statistics with the data we have. That's it. So everything is digitalized, all the data that we have and we run simple analysis with correlations and things like that to look at the impact. We don't use any model that is out there for impact evaluation yet.

***Me: Tell me one thing, do you know how costly it is to measure impact for your organization? Or do you have a proxy or it is something that is just diluted?***

Hm, I think you asked me this question the last time as well. I would say that we don't have any clue till today since we are a small team. So people that collect the data are people that are good at data analysis or the strategy team will take some time to look at these values as well. So I felt that this happens in bits and pockets, it is not one specific impact team or there is no monitoring and evaluation team as such so it becomes very difficult to isolate the cost of data collection analysis. It's very mixed in other processes.

***Me: ok, now focusing a little bit more on learning, how do your organization learn? Can you describe the learning behind the processes that you do?***

I do think that we are a learning organization and I feel that the kind of culture that we build in our team is one of not just doing things the way you used to or doing things the way you've always done them. We always talk about end outcomes. So you know, even if a trainer goes into class and says this lesson plan isn't working and my students didn't learn what I set out to teach them, they feel, like they can come back and talk to anybody in the organization about the failure of a lesson plan or

the failure of an entire training program or the fact that maybe five students were not placed in a company that they sat for.

So, I think we are very ok talking about failure as a team. There is no fear that you will be called out for not having done your job or not having or not having delivered the results because we recognize that failure is important to understand what you are doing even that, I feel like the team is always pushing hard to do better and differently and sometimes we are a little too dynamic in that way because of that but I think that is a big advantage in terms of making sure that you evolve and you recognize different points. So, that's one part of the learning which I think comes with the culture you have in your team and the second part is that it turns out well for us that we work in the education sector because we work in cycles so you know that you have more activity during the semester when students are in college and in the breaks between semesters what Leap does is to continue training with other clients.

At the same time, that lean period is a time that we use to invest in our own team. Since we don't offer a product, we are not a technology product who is locked to one product or one item. We are locked to a service, so it's very important that our teams keep learning and growing and becoming better like making sure that they learn better training methodologies. What kind of new ways are being used in the classroom, new methods of experiential learning or even what are the jobs out there in the market so they can go back and provide career counselling. We try to focus on that in the lean period during the year, like the summer break and the winter break so that even our entire team is getting refreshed in the knowledge they have.

***Me: So now, specifying a little bit more, how did the impact measurement helped your learning? Do you feel it has contributed or it contributes to your constant learning?***

It definitely contributes and I feel like it also helps us question. We recognize the limitations of the facts that we are looking at sometimes, I feel like in any impact organization it is very challenging to define impact. There is a challenge between quantitative data and qualitative data. I feel that, that for us, is the biggest challenge in terms of learning because we are learning from the qualitative. I was talking earlier that we are looking at household income and placements, these are thing that we can establish numbers for. We look at assessment data like how much students score pre assessment as opposed to how much they score post assessment, so we look at that kind of data. But I feel like in education and skills training there are so many aspects that you impact that you can't quantify and that are difficult to bring in to your methodology or your approach.

So I feel like that's something we continue to learn from because those are stories and are evidence, you know? You hear about some college students, really benefited from a training but those are just stories, you have no data for that. So I feel that there are some limitations of impact analysis that we don't understand how to overcome and I am sure that there are ways and models available out there that people have found how to do that.

But when it comes to learning from our impact analysis, I feel that we are learning a lot more from the qualitative impact than we are from the quantitative. I mean, now we established that we want to see an improvement in assessment scores or in placement numbers so I feel like that's part of the learning but the larger part of the learning comes from what isn't quantified.

***Me: Very interesting. Hm, and do you feel that impact measurement or the learning that comes from it as contributed to your organization's growth directly?***

Directly? Definitely, because that's what drives us at the end of the day. You know, when you are sitting down, for example now, before we started next year financial year (April to April) we are right now in the process of figuring out a strategy for the entire year so we know that these are the factors that drive how we want to work or where we want to work, what we want to be doing, who we want to work with. All of those questions are driven from this. So yes I would say it has a direct impact but it's also a sort of under current that's there in our work, so yeah, definitely impact the kind of work we do.

***Me: ok, great. Hm, now I have a question that is slightly similar but has a little shift which is do you see any connection between measuring impact and the financial performance of your organization?***

I actually wouldn't know how to answer that as I am so far away from our budgeting and financial reporting that I wouldn't know the numbers well enough to make that call but that's something I would be happy to connect you to the team that does it.

***Me: Alright so to finalize and to wrap up a little bit do you feel that the impact measurement has affected your individual performance and also your organization's performance in terms of impact?***

Hm, are you asking whether the fact that we measure impact has changed and affected the company?

***Me: yes, and the learning that you got from it, individually and at an organizational level.***

I mean definitely. I do think that the impact drives us as an organization. We are definitely an impact driven organization. I know that every person who joins the team feels that everyone is driven by a common sense of purpose. So organizationally I feel that helps find us together. So even on days where people will be like, you know, maybe there will be differences on how people want to do things or say, our strategy to get into a college or you know, the methodology we follow in a classroom, there will be many different opinions but at the end of the day I feel that that impact on what we are trying to do, helps us to come up to a common shared platform and I see that playing out a lot of times, you know? There will be like, one person who will certainly come in a middle of a debate who will say this is what we set out to do, these are students who are engineers and they have this problem and we are trying to make sure that they get this sort of a job and that sort bring us back onto a shared platform.

So I feel that organizationally that is what drives us and it becomes like a beacon for us to look at.

***Me: I see... which directly influences the performance, I guess?***

Absolutely. It affects how motivated people feel. It also impacts the sense of ownership that people feel. So like, when a children goes into a classroom, they know that they are upholding Leap in their values and that they are part of the organization to do something for the students. It's not just, hey I am here, I am doing my job.

So I feel it makes a lot of difference in the way people end up interacting with anyone, being it students, colleges or different companies.



That's organizationally speaking and individually speaking I would say that I know that I am the sort of person who is driven by this so I know that this is my personal motivation for working at Leap as well.

***Me: I think it was everything. It was really good to have your insights and thank you for your collaboration and I will analyse the data and if I have any other question I can just email you if that is ok?***

Absolutely, that would be perfect

## Appendix 3 – Transcription of the interviews (Convegenius)

### Transcription of the Interview – Convegenius

***Me: My first question is do you measure impact in your organization in formal way? I mean is there a structure in place for you to measure impact in your organization?***

There are two things here. First, we are an education technology company so data becomes an important part of our innovative process. The kind of disruption we want to cause on the education sector is by using data that can be captured to this technologies and of course that becomes important because it's directly linked the whole idea of impact that is how we measure whether our product is meaningful for educational outcomes or not.

So that, of course, translate into a number of metrics which is important for us to understand whether the product is being used as intended. One metric is of course, in terms of the usage – whether the Ux is alright, where are the wasted clicks on the platform. So one of course is from the product side in terms of the data we are getting but apart from that we are also a social impact enterprise where our solution gets employed or deployed in a number of other large scale impact programs so in that case, what happens is that we also measure very rigorously the learning outcomes which are being generated.

And all of that is not only generated through the device which we give the children but is also verified via the on paper, our alternative method of assessment which is done. So that is something which has been a key to us in understanding what works and what does not work for our product. Whether it's effective for all geographies or not, whether it's effective for all age groups or not, whether it's effective for all social backgrounds or not.

So that kind of assessment mapping impact measurement is done. Also in our business development strategy, not only do profits make up an important chunk of the decision making process but also the kind of impact it is trying to create. So we are a startup at the end of the day, so we do get a number of opportunities in terms of what to pursue and what not to pursue and impact also forms an important part of that – it's like a parameter to make a decision happen.

Other than this, because of the investor mandate there is also a third party assessment that we do for impact measurement. In this case, we are using this organization which is doing the third party assessment in terms of you know? Understanding how viable is the product or the program is an organization called Gray Matters Assessment. So they have been instrumental in helping us measure how are our interventions placed.

As that answered your question?

***Me: Definitely. So, if you have to define to whom are you measuring the impact for? Is it internally, externally, public, investors, stakeholders, is it all of them? Can you name them?***

Yeah. So I think for us as a company, when we do impact measurement, impact measurement for us is two parts, actually three parts.

One is of course the clients with whom we deal with. So dealing with governmental bodies, we are dealing with CSR agencies and we are dealing with NGO's, for them impact measurement becomes

an outcome of the product itself, so that is sort of mandated. When we sort of deploy our product, is part of the service, basically how does the measurement of the learning outcomes happen.

The second part is of course, from the investor's side, where it's part of the mandate, in terms of the learning outcomes that our company brings on a year on year basis along with the bottom line and top line which we are doing.

The other part is of course, for our product team. That's the part where tech team and the quant team work. Because as a platform, where we want to make a platform very intelligent towards a period of time to get elements of adaptivity and personalization inside it. Now, because of that what happens is the data which comes in from the ground for us becomes very important. Whether for us to make an absolute claim that this product is improving educational outcomes is a function of whether it is creating impact in the pilots it's already been deployed to.

So, what that has done is that there is a huge amount of feedback loop which is created because of the data that comes in and that data is used. Saying, whether the product, which is for the rural market, government schools, IB schools, so in that we also bought a formal structure where we use the impact parameters (the learning outcome parameters) for our own iteration of the product.

***Me: Interesting. Can you elaborate a little bit on the process of measuring impact in your organization and also on the collection of the same? You mentioned it briefly, but can you elaborate more in detail?***

Right. So, there are two parts to the impact measurement. One is via the device itself. So the device itself has a number of baseline and endline tests which are there before each and every model that the child goes through. Now within the platform, this are internal datapoints which we get out of the the learning outcomes of what the child was at before he started using the product and after he used the product and went through the whole journey of exploring different modules in that.

So this is data which we extract directly from the tablet to our servers which is in raw format and then we get the impact.

The second part of the impact mechanism is the off line, on paper assessments. Sort of corroborate and see whether the data which we have gotten from the tablet is in sync with the one that they are doing it on paper, or not.

Now, when we come to the idea of learning outcomes, there are two things we measure.

(call went down)

***Me: you were talking about off line assessment, continue please***

Yes, so then we do the on paper assessment that's how we sort of connect both of the bridges there.

So what do we measure when we talk about learning outcomes? There are two things.

One is, we measure what is the engagement index of the child. If the child has been able to sort of go through all the modules and what's his level of engagement. The second is the comprehension index which is measured through assessments so, because our gamification has been done in a certain way that the journey of the child has been mapped at different stages. So whether the video has been viewed or not, for how long was it viewed, whether he has read the book, what was the time duration of that book reading. All that in terms of his engagement indexes at different metrics

that he covered in terms of the assessments that are there within videos, within books and separate tests which are timed as well. That gives us the comprehension of that child and whether the child as really understood the concept or not. These are the two important data points which inform us the final impact that has been done.

***Me: ok, and just to clarify, you measure it internally you also use an external party to give some sort of credibility to the investors, is that correct?***

Yeah, so there is an agency called Gray Matters Assessment, so they do our third party assessment in terms of impact measurement, more formal, more rigorous which they follow like a control and planned way.

***Me: ok, and when have you started measuring impact in a systematic way? Was it since the beginning of the organization or was there a point that you realized that there was actually this need?***

So, we have been doing it from the inception itself because the kind of business we are in, we started with B2B and not B2C clients so we are working with CSR and Government from the first call itself, so that made it very important for us to test it out whether the product was working in a sense of giving impact or not.

So in that way, we have always kept the impact as one of the important indexes through which the product was seen and developed.

***Me: Is there any tool or methodology that you use or how did you build your impact metrics?***

In terms of the tools we have been using, the Gray Matters people I think they use the RCT methodology. For us, we don't have any sort of very rigorous methodology in that way in terms of impact. What we are seeing is basically the differences in the assessment in the comprehension and the engagement, before and after. So it's more of, you know the measurement in terms of what's the delta of change of what is happening, which is module by module, chapter by chapter which is competency by competency.

***Me: Do you know how costly it is to measure impact in your organization?***

For the third party assessment, it is quite expensive. I wouldn't be able to tell you exactly how much it costs per child or per program but internally, because our device is quite powerful, I said that there are two parts to it. The operational expense of conducting an off line activity is quite expensive because people have to go into different locations, have to conduct tests, have to bring it back, so basically it is a lot of operational expenses in that front.

Otherwise, from the device, the data that comes back is actually embedded within the system itself. So, it was just production cost initially, now it's quite smooth in terms of cost, so the cost is basically the AWS cost which is involved and the data are in the salaries which is within the company.

***Me: Just to clarify, how many people are you working with?***

We are a 40+ company now. We raised a pre series A. We are looking out for a series A, series B kind of investment now.

***Me: if you have to state which growth stage are you in your organization, what would you say? How would you define your organization in terms of growth?***

Growth happens steady from the B2B side (grow at 5x rate every year). In terms of the B2C, the traction is coming up slowly. We are taking our B2C product to international markets as well like Philippines, Bangladesh, etc.

***Me: ok, I guess that if you are looking for series A or series B, as an organizational as a whole you are in a growth stage, correct?***

Yeah

***Me: ok, that's impressive. So now I wanted to ask you questions related to learning in general in your organization. This might seem a little broad but how do your organization learn? Can you describe the learning in your organization?***

So, basically the learning from our organization is one, from the data we are getting in terms of whether our product is you know? So the learning comes, one is from business development (a lot of learning). The more clients we meet, the more work we do for different clients, that is in forming a product really well.

The other thing is that the kind of data which we are getting in terms of both the B2B and the B2C product which are there in the market right now, the data which we get in terms of engagement, retention rate of the user, when is the product becoming redundant, when do we need to put in the next update, these data points which are coming from the audience. So we have sold about 3000 units till now, so the parents have started telling us what do they think about the product, what is good, what is not good.

We are trying to establish a distribution channel for ourselves, so the distributors tell us if the product is good by how it sell or how it doesn't sell, so that is one part that is informing us greatly in terms of how can we really move from an MVP to a good market fit.

The other thing is, when we are employing products for enterprises and NGOs and government bodies, we see, what are the different bottlenecks, which is hindering an effective use of technology. So that is a good learning point for us.

Of course also mistakes have been a huge part of our learning journey. So the failures that different marketing and branding activities have given us have been a good source of learning for us.

***Me: ok. Do you feel that the impact measurement and the impact assessment has contributed to create knowledge and learning within your organization?***

Definitely, I wouldn't doubt that. So, for me, talking outside about this product, or even doing the current job I am doing, depends a lot on for what the product was made for what it was intended to do and whether it is delivering it or now. And the impact measurement indexes all the time give us this check of how far are we and how close we've come, so it becomes a very important feedback loop, project by project.

We also understand what is the strength of the product as well as the limitations and weaknesses of it. So that's why the impact measurement becomes a very important part of the exercise to sort of make the product better, to make it more usable, more user friendly and also to create change partnering with different organizations.

***Me: Ok, is there any particular field that you think that impact measurement help? For example, product development, customer understanding, logistics? Is there any particular field or you think it's just, as a whole, it has contributed to get knowledge to your organization?***

So I think that impact measurement of course helps an organization as a whole but more importantly it helps in operations, not only for auditing, monitoring, evaluation and all of that, it also helps understanding what are the different bottlenecks and how they can be mitigated.

And a product development stage it's huge. The implications are huge. The data is not agile as you wanted it to be so you don't get a lot of meaningful data at one go but over a period of time because when you are dealing with something like a social change in education, the data which you get on day one will never be as useful as the data you get on day sixteen. So product development, of course becomes a patient, collaborative with the data which is coming in so it's really helping in that stage.

Also it helps a lot in business development. You really understand where will the product fit because impact measurement is different for different groups, different geographies, different settings, different organizations.

For instance we saw a product being used in government schools, we saw a product being used in rural settings and it gave us really interesting and good results whereas sometimes when it is used at a learning centre might not give the same results so that really helps us to understand that maybe our solution is a better in school solution than compared to an after school solution.

***Me: Great. Do you feel that impact measurement has contributed directly to the financial performance and growth of your organization?***

See, for a company like us, I think it has because a lot of our clients, the currency of impact measurement becomes very important.

So the currency of us, delivering a product which also goes through the source of impact measurement just means it's more valuable and that helps us getting more clients. In that function, of course it has been something which has contributed to create sales opportunities for us.

***Me: Interesting. Do you feel that impact measurement has impacted directly the improvement of your impact?***

Yeah, 100%, like I was saying that product has gone through huge, because it's a tech product, you know? The development is a process. You never create a product and ok, that's it.

The tech products go through huge amount of stages and phases which keeps on improving and impact measurement has been an important part of that process for us. So, the first project that we did, we didn't know exactly how good the product was so we had very limited data capturing and impact measurement which has been done. But today we are a far more robust system and we get more intelligent in the days to come and that has happened because we have captured data, we have captured the whole idea whether impact has been done or not and been able to incorporate that within the development.

***Me: Ok, I think that from my side it was everything. Thank you so much for your valuable insights and collaboration. It was really good to hear your insights and motivation.***

## Appendix 4 – Transcription of the interview (Skilltrain)

### SkillTrain – Transcription of the interview

***Me: my first question is, do you measure impact in your organization in a systematic way?***

We do, although we don't have extensive methodologies so to speak because we are still growing and the numbers so far have been manageable, but yes, we do have some level of impact measurement that happens

***Me: ok, I want to understand a little bit, what is the value that you see in impact measurement? Meaning, do you measure it for internal purposes, is it for external purposes, is it for your investors? What sort of value do you see that comes from impact measurement?***

I think it's a mix of all of them. Primarily, I think it's an internal requirement. Because unless we know what we are doing and what is impacting the target group, it's really tough to scale, it's really tough to look at other opportunities, even modify the model that we are working on. So definitely, the primary intent is for internal reasons.

Having said that, yes it does also help us in other areas. It does help us in ensuring that the way we present the organization is better to the investors that we have. Most of the investment that we have got have been in the form of grants. So definitely the grant giving organization will expect to have some level of knowledge on the impact that we are making, so it does definitely help us in that as well.

Also from a marketing perspective because we are in a segment where we need a lot of word of mouth promotion and a lot of these success stories are the ones which actually help us scale it faster or reach out to a larger audience so it does help from that perspective of ensuring that we are able to reach out to different target groups and that's also the reason why we do the impact assessment.

***Me: Ok. Just to dig down here a little bit, which stakeholders demand some sort of impact analysis?***

Nobody actually has demanded it from us because I think that a lot of the grants that we have received, I mean it has only been private organizations, we don't have any grants from governments organization as yet. They don't really demand it because when they want to see the impact, they typically do a field visit and that will give them a lot more hands on first hand experience of what's happening on the field rather than relying on a report or on an analysis of what we do. But having said that, yes, I mean, having that information about what impact we have been made, definitely add a lot of value to the organization.

For us also, I think it's important to do this because it helps us securing future funding. So I wouldn't say it's a demand from these organizations but I think it's an obligation from our part to ensure that we do this and give them the required information so that it helps us to continue the partnership with the organization going forward.

***Me: ok. Going a little back when you start saying primarily it's internal requirements, can you elaborate a little more on that?***

Right, so when I say its internal, yes it's typically done by the field team for themselves, so we don't have a separate department has such. We can't afford to have separate departments to do impact

analysis yet, but definitely, these are the field staff, so for example you have two centres in the central part of India, so the centre managers themselves are fast to keep sure that they keep tracking what's happening. So, they are the ones who typically go visit candidates who have completed the program, get an understanding of what they have done. In fact, we also go one step further to actually video record some of these interactions so that we can come back with a far more deeper understanding of that they have done, how they are doing and in some cases it gives us a lot of feedback also on our training methodologies.

So the branch managers are typically tasked with this responsibility. So it's not a separate team that does it, so we believe that it's the branch team that owns it and has to take it and at the end of the day they are the ones who are delivering the training program. So if they are also tasked to ensure that they assess the impact, we will ensure that they get a lot of feedback and they will be able to work accordingly and use that information respectively when they promote the programs within their local areas.

***Me: ok and how do you keep improving your product? Does the impact measurement or the impact assessment that you do influence the decisions you make regarding the product? Or it's something that you don't take into consideration?***

We do take that into consideration and we do some level of tweaking based on the impact measurement like, for example, if you think there is a particular area that we need to include in our course like for example, somebody has not been given enough exposure. In fact, entrepreneurship courses that I feel that have started have basically been made out of the impact measurement that we have got.

So we understood that this is an area of weakness and we have to do something to ensure we offer entrepreneurship. That come from impact measurement of meeting people from completely different places that were doing some level of small scale businesses and were lacking some of those basic skills like financial skills and things like that. We came back with a module incorporate into our course. So we definitely do that into the practical training component as far the videos are concerned, the videos are on youtube so, therefore it's an open thing and we had a lot of feedback on youtube itself and that feedback is what helps us improving the product naming the video content that we have then we are improving the video content addressing the needs depending on what is the latest technology that's in place, so building new course content. All of that is based on the feedback that we get on youtube channel.

***Me: ok, so, let me ask you this question, do you feel that you learn more from the quantitative impact metrics or from the qualitative feedback that you get?***

Predominantly it's qualitative because quantitative for us is very, the parameters are quite little, I mean, we just have like, how much money is he making after he completed the course, if someone is going for a job, how did they get the job, what are the salaries they are getting now after the program. So those numbers are usually pretty limited and it doesn't go beyond that, it's not gonna help us improve our product per se. Rather, it's quite the qualitative element definitely is the most critical element and we spend a lot of time in trying to understand the qualitative feedback from the NGOs and our students and that data really helps us in fine tuning a lot of the business model itself in most cases.



***Me: ok, and for example, for the investors or the public you mentioned that for them normally you go on a field trip but impact metrics helps to show case your work, but do you have a perception of what is more important from an investor side? Is it looking at the numbers or hearing the success stories?***

So it depends on the investors. Not every investor or grant organization are the same. We have grant organizations which primarily look at numbers so at the end of the year they come back to us and say hey, give me the numbers, give me the data for these candidates and that's about it, they don't usually care about the qualitative data that we have or what really has happened, how much change has happened to the candidates lives, they are not really bothered about it, they just come back and ask us for numbers. We give them the numbers, they print it and give annual reports and that's the end of it.

And we do have organizations which go deeper and try and understand the qualitative impact. So they are actually trying and reading the case study around it, they make a video around it which they wanna use it internally for their purposes, for their marketing purposes and so on. So I think, there are a mix of both these organizations and for us I think both are important. We tell these organizations that both are important but by the end of the day the granting organizations they have your priorities and they know what they want to showcase. We are ok with that as long as we are able to ensure that we make things and we are satisfied with the impact that we are making in the market.

***Me: You told me that your own team collects the impact, but have you done any study with a third party or you keep this part internally?***

No, we haven't done it with any third party. Actually, we didn't feel the need to do it with a third party. One obviously, we can't afford to have a third party assessment coming and do it, number one and more importantly, I think that our staff needs to know, as they go to the field then they figure it out and this data is not for me. It's not like there is a management and then, there is a taskmaster who says hey, I want this report, you get this report done, no. The team needs to feel that they need to do it proactively because it helps them modify their strategies, modify the way their work. A lot of freedom that we give to our field team, so that way they can dig deeper in their decisions. And they own this form themselves and I think that this work gives them the reality check that whatever they have done in the classroom, how much of impact has it made on the field and I think that is a critical element therefore we are not like a taskmaster asking them do go and do this data, and then send it to us as a report. No, we don't do that. Because that takes it away the whole point of doing this. It is not just to collect data, it's more for the local teams to understand and be able to take the necessary action based on the impact assessment that they do.

***Me: very interesting, did you start measuring impact since the beginning of the organization or there was a tipping point that you decided or realized, now we need to start doing it?***

Yeah, I think there was a tipping point for us. Because initially the numbers weren't huge and we did have, as always, this struggles of trying to put into place a completely new model of vocational training, so we did have all of these challenges. So, I think we probably didn't have any impact assessment for almost a year or a little more than a year but then we started to see the student numbers, we started to see value, we started to see impact, that's when we started doing it. So I think, we have been doing it for about one and a half years now. We also have a couple of videos on our youtube channel that we post interviews with candidates also based on their experience and we

do have a lot of this video content with us internally that we use for our marketing purposes and things like that.

So yes, not from the beginning but yeah, probably, for a year, year and a half we have been trying to do it.

***Me: ok, do you use any tool or methodology to measure the impact or you just measure according to your needs and to collect some statistics?***

So, its largely subjective, we have a broad outline of what we want to really look at so all our interviews with our successful students typically we have a set of questions that we normally use, again, that's pretty informal, it's not a tight questionnaire that you have to ask questions for the sake of asking, it's more a conversation but we try and collect of information on what were they doing before, what are they doing now, how has the training made an impact, how was the financial impact on them, how are they able to earn money now, what kind of impact it had on their families, how does it impact the respected day, in their society and community, so those kind of questions actually give us a lot more input on than the impact we had been able to do on them.

***Me: ok, do you know how costly it is for your organization to measure impact? Do you have any perspective on this?***

See, I would look at it from a different perspective. See, there is a cost impact, for us it's an opportunity cost, I would say. See I am taken to go and do one impact assessment, it's the time that is lost in bringing in new businesses. So it's the same thing as doing, for example, for us, the branch team is doing they are actually the time that they are gone, in the promotion of our courses, instead they are going and finding out people. So that's the opportunity cost.

But I think that the cost of not doing impact assessment will be even higher because then you would really not be able to showcase. So today I don't mind if my branch manager is not going out for marketing purposes instead he is spending time collecting feedback from an existing student but I know that this feedback can be used in effective multiple ways and should actually increase the students that walk into our centres in the future. So, first the cost of not doing an impact assessment will be far higher than the cost that is there from actually doing the impact assessment. So either way I think that diligently we continue doing it on a regular basis.

***Me: Now, if we look more in a perspective of learning, how do your organization learn? Can you describe the learning inside your organization? Learning in an operational way... How do you learn to keep improving yourselves?***

So, we do have our weekly calls with the entire team, which is primarily the managing team of our branches and the respective department head, so there is a content head, that takes care of the content, there is a technology head, who handles technology plus our branch managers from two of our own branches, so this are weekly calls that we do to try and take knowledge of what's happening, where and there are a lot of learnings that we share in these calls and that's a way to keep track.

But more importantly, as an organization, we have this principle that we, we go by the principle you know, of fail fast. So we are opening to try as many things so if you see that something is not working, we don't cling to it and keep open but we just give it one try to something new, try it out and see how it works. So being agile is critical for us. And we clearly want to be one organization that

really believes in the agile methodologies you know? Trying doing multiple things, you know, try 10 different things, 2 fail, 3 probably be alright and 5 will succeed but we wanna keep trying, we wanna keep failing fast because that will help us construct more on. So we made a lot of failures but we are willing to take that risk because I think that's what will help us to figure out what is the ideal strategy that we need to do for our businesses. And all of this comes through our weekly meetings that we have.

Internally each of the branchers have their own weekly meetings with their staff where there is constant feedback that they keep getting. There is also a meeting that happens with the marketing team, in which of the branches typically gives inputs on what the market is looking at, how things are moving ahead and we also do these meetings with our partners where we take inputs on and how things need to be looked at, what are the changes that we need to do.

We also have these talks frequently with our incubator Villgro. So every month we have a call with Villgro where we look at what we have done, how are we doing and Villgro gives us a third party perspective on what are the other things that could be tried because we are part of the business and sometimes we may miss the obvious but an outside perspective of Villgro will be able to point out and say hey, this is something that you guys are probably missing so you can try and quickly course correct and try to make those things.

So, I think that the mantra for us is "Be Agile" and I think that way we will be able to really really look at picking up learnings and trying to keep ourselves ahead of whatever we want to do.

***Me: ok, so you would say that you develop your learning internally but also with some external output?***

Yes

***Me: ok, Regarding impact measurement, how did impact measurement helped your learning? Do you feel that impact measurement has actually contributed to increase your knowledge and your learning?***

Definitely yes, no doubts about that because clearly that is one of the key inputs that we have in our meetings to decide what is the next course of action.

***Me: ok, does impact measurement help you on your product development and iteration?***

Yes, it does helps us across all areas, as I said, so product development is very critical primarily because the content that we make is based on the impact measurement like we have a mobile repairing course. Now when this student passes out and goes into the market, he starts a shop, he realizes that there is a particular set of mobile that are most common now and there is a particular problem that needs to be addressed and that is some skill that need to be taught and part of the course and if we don't have it as part of the course, that's when we take that input and build the video based on that particular requirement.

So it does help us in shaping our videos and new courses that we are actually bringing to the market are based on again, impact measurement because we have people that are already in the market so they give us this feedback saying hey, you know what, there is a lot of demand for this particular trade so when you guys develop content on this, then we do identifying an expert within to develop content.

So yes, it does. It does a very large role as far as product development is concerned.

***Me: ok, and do you feel that the product development is more dependent on the quantitative impact assessment that you have or on the qualitative feedback that you collect from youtube videos and from the platform?***

Yeah, it is primarily based on qualitative feedback, not on the quantitative feedback.

***Me: Do you feel that impact measurement or the learning that comes from it has contributed directly to your organization's growth?***

Yes, it has definitely.

***Me: ok, in what sense?***

So I think that one of the fundamental things is our growth is dependent on the number of courses that we offer, so that's a primary thing. The more the number of courses, the larger the number of students that they will be able to reach out, the larger the impact we will have on the target segment that we are looking at. So without an impact measurement, we wouldn't know what is the next product that we need to development which is the next course that we need to develop. So it has had a huge impact because from being some company which had just 4 courses, to having 15 courses and another 5 courses which are under production and to becoming a company which is moving into another country, I think all of that has primarily been possible because of that feedback that we got with measurement.

Looking at that feedback has again happened due to feedback measurement. We have a lot of people from African countries who have been writing to us over youtube and through our emails asking us to give content in English language and wanting to learn about the skills and that's what really opened up this market for us and scaling up into another country recently.

So I think that all our growth, I would say, has majorly been through the feedback and the impact data that we have collected from online channels as well as offline channels.

***Me: Do you see any connection measuring impact and the financial performance of your organization?***

It would have, although we haven't really measured as yet. I will tell you where it could have because I think if I am looking at impact measurement as a way to actually spread the word about the work that we are doing, it indirectly brings in new students, and when it brings new students, naturally it has an impact in the financial sustainability of the organization. So definitely it has it's impact but have we measured it that way and have we tried to look at it if it resulted in increased financial performance, we really haven't done that kind of study yet. And I think it will take us a little more time for us to get to that point where you can really look at correlating this impact measurement with the financial performance.

***Me: one last question, if you have to define a growth stage of your organization, which growth stage would you say you are in now? Do you feel that you are still validating the product or that you are already in a growth stage where your product has already a fit in the market and you are just scaling?***

Yeah, I think that we have seen that the product has a fit in the market, definitely would agree to that, and that's the reason why we have survived for three years and we have been able to bring in and measure impact, just the number of people that we have been able to reach has been phenomenal, in youtube, a 100.000 subscribers is a huge feedback on the kind of content that we have on our videos. 100.000 subscribers is people watching our videos, giving us feedback we did see that there is a lot of impact that we made there.

More importantly, the offline model, the blended model that we have, we have already trained close to about 3000 people across these centres and recently we launched the mobile app. The mobile app, was launched only on February 14<sup>th</sup>, which is like 2 months back and in just two months we have more than 10.000 students registered on our app and we are actually doing this also through our mobile app and that shows us that there is a huge market out there, which is waiting to access to learn skills through this methodology, and this is what makes us believe that we are at a stage where we have a product, we have a market which is looking for a product like this, I mean it's just a matter of time for us to be able to scale it up and show that we reach a point of financial sustainability.

***Me: ok, great, I think that for me it's everything. I can't thank you enough for your collaboration once more.***

My pleasure

## Appendix 5 – Transcription of the interview (Mathbuddy)

### Transcription of the interview – Mathbuddy

***Me: Alright, as you told me, at this moment you are not yet measuring impact but you intend so in the future, is that correct?***

Yes

***Me: Alright, ok, my first question is, can you elaborate on the reasons why you haven't started to measure it?***

The reason why we have never done it is that there was no real need for it so far, primarily because we were a privately-owned company. Spending all our time on how to create features, how to keep adding features, how to work with schools and how to make it simple and enjoyable.

No one really came and asked us if we had any formal impact study or haven't had questions like that in the past but we really didn't find it a priority. But now we are looking to have or to see if we can get grants or work with non-profit organizations to scale it up much more than what it is today.

So the scale that we were working with, like 250 schools it wasn't needed. But if we want to take it to 2000 schools in the next three years, we will need it. This means that we need to work quite a bit with other organizations. Partner with other organizations to achieve scale. When you have to partner it's a lot better to go with some formal metrics to show that it makes sense. It is also quite possible that you have to work with some Governments and most of the times, you need to find something solid – to show at least 80% improvement in math schools.

So those things are helpful and are things that we learn as we go. This is not something that we don't want, it's just nobody cared to ask us that this is something that we get done.

But now that we see the need for it, this is something that we are looking at to start from this June to next April. We are applying to partner with an organization that does impact assessment. So we want to pick few schools and do some testing.

***Me: You told me you have a team but you are partnering with an outside organization to do that impact measurement outside your company?***

Yes. We are in talks with them but we haven't really started it. Formal impact measurement we plan to start in June. June will be a pre-test and December a post test.

***Me: Right now, how do you have a sense of the impact you are having. Is it because you are on field and you understand the interactions or is there a key person on your organization or a place where you get that knowledge and brings it to the company?***

It's basically on the interactions with the schools. So when we go to schools we try to find out from the teachers, whatever is working or new features they would like to see in the product. And also some of the schools that we work with, we send in some questionnaires' to see how the product is useful to them.

So we get a lot of qualitative feedback. And we have been quite satisfied with getting qualitative feedback in the past but now we are trying to make it more quantitative.

(second participant tries to speak but it is not audible)

What she was trying to say is that in indian context the formal impact assessment studies needed is when someone wants to work with rural schools or government schools right? That's why several organizations don't find the need for formal impact studies.

Impact measurement is mostly needed in India when someone wants to work with rural or government schools so unless you get to that point, you don't really find the need to do it. Many companies don't spend time and energy in doing impact assessment.

But in our case, at this point of time, we want to work with rural schools, we want to work with government schools so we have a need to do an impact assessment and we are doing it with an external organization to be more critical.

***Me: So, let me recapitulate, you see that educational organizations start in some sort of formal way and when they want to scale and work with government they need to start to present some sort of data?***

That are a lot of Non-profit organizations that work with CSR. So when you want to work with this, it's better to work with some sort of formal impact measurement to show that you product actually makes a difference. When a company gets to that point is that when they get a formal impact measurement and mission so they can take it to other companies or organizations.

***Me: And talking in learning more in general, how would you describe the learning process of your organization? How do you describe that your company learning? (in order to deliver your product)***

Ok, so, learning is based on two things:

One is, the teachers that we have on the product. Teachers and usability of the product. They are continuously looked at based on how the customers use the product.

So we keep learning by interacting with customer, understanding where the gaps are, we also have our own studies internally. We are trying to map out our current content to the various curriculums available and aware. Take India, we have so many different states that some states fall behind in the curriculum, so we are trying to see at this point of time whether our content is suitable to all curriculums or if there are gaps in the curriculums that we can fill.

If there are gaps, we try to understand what things can be done to fixe those gaps. For that what kind of activities can be done. For that we do a separate type of learning. If I want to teach a particular concept – what is the best way to do it so we spend a lot of time on the internet. Basically, the pull product was created spending a lot of time on the internet, specially working with teachers from all over the world. With the advent of internet, there is a lot of information sharing. So, if they want to know, for example, how to teach additional fractions, all I have to do is to spend a little bit of time and I can get lots of different ideas of how people teach additional fractions in different parts of the world.

Someone may be using fraction circles, so I can get people's ideas and we try to put all of those things together and put the best out of the ideas and that's how we actually create our content.

So the product itself is an amalgamation of ideas from many different places and that's the reason why it was received extremely well by the people represented. It's not one single person's idea, it's

not a specific set of math teachers who created it, it's so many different math teachers all across the world.

They propose their ideas, what has worked in their classes, what has not worked in their classes and we take the best and use it. So the whole, what we do throughout the year is getting a lot of learning both from a content front as well as understanding customer behaviour. So if, for example, when we work with schools, and we see that the product has not been used for a certain period of time. So again, why has it not been used for that period? What were the constraints of the school and maybe how can we get around those constraints.

Just to give you an example, we give these instructional videos to schools that we provide hands on instruments and instructional videos and we would install the videos within the school campus so teachers could sit in front of the computer at any time and watch the videos. Now as we worked with more schools, what we found was that there was hardly any time for the teachers to sit in the school and watch these videos so our next step was to think of some way for them to access these videos from their homes so we are creating an app where teachers can watch these videos on their mobile phones at any time and learn how to build these activities. So most of our time is spent on some kind of learning. It could be learning about customer behaviour and find ways on how to teach a particular topic and coming up with activities. So that is the main part of learning.

(second person - One thing we want to do is a network of academy students)

So, to reiterate, we are trying to use objects of interest to students like, we have a whatsapp group for all the teachers where they can share ideas. One of the advantages is that you can get feedback from the teachers and continuously keep learning.

***Me: Sorry Kanan, you were talking about that you collected a lot of insights from teachers and curriculums around the world, can you just elaborate on that process? Is it an open collaboration platform where people come up with ideas and other teachers build on those ideas or is it some sort of a community? Can you elaborate a little bit on that process of gathering information from several players around the world?***

Yeah. No it is an informal process, it is not specifically Mathbuddy community but basically there are so many forums on the internet. So you have so many forums where teachers love to come and discuss, right? So what we did was to include ourselves in many of these forums and we wanted to know how did teachers feel about a particular topic we either asked some questions or do some research on what the teachers have been discussing about that particular topic.

The beauty of internet is that lots of information is available and one of its problems is that there is too much information available. So what we tried to do was to go through a lot of materials and lots of different ideas and see which ones might be a good fit from the Indian teachers standpoint. Then we go to schools and try it with the students and try it with the teachers and if it makes sense, then we add it as part of the curriculum.

Because now it is not a formal process that was defined but it was purely just doing a lot of research on the internet and enrolling ourselves in forums with teachers from everywhere and then we try to find out the best ideas and implement them.

(second person speaking – can barely hear...)



A lot of teaching activities we try them on a center and only after we implement them if they are successful.

Yes, so we have our own learning center just near our office, where we have children coming in and we have our own teachers who work with them to do activity based activities from us, right? So that is our test model. So we actually get the teachers to implement it in the center and that has actually helped to refine most of the things we do with the schools.

***Me: Ok, hm, one of the questions, I believe you have already answered is, does any of your stakeholders demand any sort of impact analysis?***

Stakeholders do not demand for it but we do understand the need for doing an impact assessment. Because the whole purpose of what we are trying to ask people to forward into the future is the scale of the organization from where it is today to impact ten times more than it does today.

If we have to scale it up we need to work with governments or work with public schools. The way we were working was going to each and every school separated and trying to enter that school and work with those teachers whereas, if we want to scale this organization to more schools and lot more students. If we want to make this product available to a lot more students, than the only way to do it is to either go to governments or to partner with loads of organizations that would be working with schools and if you have to do it, absolutely, one of the key requirements would be to make an impact assessment.

***Me: ok, and do you see, from your experience, any connection between you measuring impact and the financial performance of your organization?***

It's too early to say. I can visualize that if we have a formal impact study then I would be able to take this product to many different organizations who probably I can't approach at this point of time.

So anytime I take it to these organizations they will ask for quantitative data right? So if I have data that will open a lot of doors for me which indirectly impact my financial performance.

***Me: you told me before that if you would measure impact, you would hire a third party. Can you explain me why you chose a third party and not doing it internally?***

It just gives more credibility. Generally, anybody can say that the state has interest right? So it's a lot easier to get a third party to do an assessment. Despite we are quite confident that we are making an impact with our product, we just don't have any data to show that.

So that is that a third party creates a lot more credibility.

***Me: And, my question now is, do you think you would have learned more if you had had a formal way of measuring impact? Do you think that there are several insights that you would get from that formal impact or qualitative feedback collection you were having was enough?***

At this point of time it's hard to comment but I really think we would get a lot more insights, depending on how we choose the data points right? That maybe different experiments that they want to know, right? If we do impact assessment not just from a pure school approach with a pre-test and a post-test assessment. So, doing it that way, designing the test in such a comparative way.

Gives you more insights on what is actually happening, which are the things that we are providing to schools that are actually working with those schools. So, at this point of time, if we design the impact

assessment studies then we will have a lot more insights into customer behaviour that should help us to build a better product compared to where we are today. If I can get more insights from this impact assessment study, it will help me with the product development.

***Me: And lastly, which is a little bit related with the performance, do you think that you would have grew more if you had had measured impact? Do you think that this would have provided a faster growth to your organization? Or it would have slowed down?***

No, it wouldn't have slowed down for sure. Again, as I said, it could have opened us a lot more doors. We are in a stage where a formal impact measurement could have opened us some more doors but we were not looking for it at that point.

If you asked me a year back or two years back, we were not really interested in taking this to government schools because we thought we didn't have the brand to support government schools so with our small team. Five to six months back we were only a 10 people team ok? So we never imagine that we would be taking this project to a government school with that size team and when the idea comes from Villgro's partner than we could see that we can actually scale it up now. We have the resources, we can employ support schools and if we go to the government it can support all these schools and actually make an impact.

So, if we have done the impact study at that point of time and if we wished to work at a much bigger scale we should have done it.

***Me: ok, I guess that as of me, that's all. Just, when we were talking about learning in general in your organization, you said there were two things you would like to mention in the learning part, can you reframe them.***

The first was customer behaviour and the second one was the content that we put inside the product. So, the content in terms of knowledge and how can we taught. So those things are how we keep learning and that learning continues, even today. There are a lot of times that we do a training and the teachers who are part of the training give us ideas – we can use this instrument or we can do this also – so that kind of learning keeps happening.

(second person speaking – can't hear anything)

Impact study alone is not going to help. Coupled with a feedback system to asses our intervention. It is a process that we want to build

***Me: So, you are looking for something more iterative, where you can collect some data, you join with the feedback and you assess what you are already doing.***

Yes

***Me: Ok, I think that for me it's pretty much everything. All the questions I wanted to ask have been answered. Thank you.***

## Appendix 6 – Transcription of the interview (Oyster Learning)

### Transcription of the interview - Oyster Learning

**Me: Ok, so do you measure impact in your organization in a formal way?**

No we don't, not in a formal way. We do have conversations on a monthly basis. How many students are we having, what's the work they are doing, amount of work they are doing but no formal assessment

**Me: Ok, but that information you said you collect is it through your digital platform or is it through any other specific place?**

The information We have data collection application via mobile that's how the data comes through – so we get to know that

**Me: Can you tell me the reasons why you haven't done it so far (measure impact)?**

Hasn't occurred to us. Honestly speaking.

When we look at the conversations we have internally, at the company we feel a lot of purpose. As a team we feel there is substantial meaning in what we are trying to do

And we all share the belief that the more students participate in this whole initiative there is substantial value inherently will occur

That overwhelming aspect of the mission is sort of very apparent and Hence we have not tried to tangibly measure it.

**Me: Hm, ok. So when you are building your product, where do you get the knowledge to keep improving the product. So my question is, How do you do iterations? Where do you get the perspectives on you should do this instead of this or you should go this way or that way?**

There are two pulls and pushes for us

The biggest pulls is of course the customer. When the customers says they want certain things in a certain way, then we understand that we need to do some tweaks in our businesses

Second is us driving more efficiency when we try to do more with less, being it resources or people or time or capital. So the more we look at that, we see more efficiencies being built and that we believe that plays a big role in our conversations

**Me: if you had the opportunity to have a formal impact measurement in place, do you see any value in it or do you think that the information you collect is enough for your operations?**

I might need to have a demonstration in terms of an example of how before and after has occurred for the companies maybe then I get a better sense of it but right now, no, I don't see any value in it

**Me: to understand a little bit more your model, you work more with private companies? Or do you also work with the government**

Yes. We do have a project with the government right now called Schwach Barat but that's non-financial right now. We don't get paid to do it. Students get certificates from the government but there is no financial element to it.

***Me: Do you have any plan in the future to engage with non-profits or to continue this collaboration with the government?***

Yes, I do think that's important because ... (skype call over) 3:45 mins

(New call) We do think we should do more work with non-governmental organizations, that's again based on the feedback that we get from the system where, student want to get experiences of that nature also – amnesty international or the UN DP – this kind of international organizations, they look at such agencies as powerful for them also so we are trying to look at such options for such opportunities.

***Me: ok, so now if we look more in the perspective of learning inside your organization, how would you describe the way that you create learning in your organization? How does your organization learn?***

Alright, so we have an interesting model in place which we have started to see benefits often in an initial time

Earlier Traditional approach to training, we tried but not with much success, giving training in a standard class model, but we soon realized that each student is a completely different level but to customize was too difficult

Then we moved on to a stage where we didn't watch any at all because it was just too complicated and each one had too many different customization issues, then we started one piece where a person who has a training gap was assigned a mentor who would give them small work assignment. Instead of teaching in a classroom. Let's say I have to get a person to a certain level of Microsoft excel, one was getting everyone in front of a class to sit in front of teacher/trainer and teach them the basics. The other, which is the one we are working sort of actively is where we find where a person is stuck and then assign a mentor who knows how to teach that particular setup that he doesn't know.

But at the same time that the mentor is not taken away.

The tasks are given and the person as to complete their tasks and show it to the mentor

There is no point in teaching the ... individuals in a level far than what she/he is right now at so

Incremental learning is more powerful because you immediately apply that at the workplace so this method came to us because of the way we work

We are a project driven company and we have learned that our students are also learning when they do projects not only when they are in classes, you know? hardcore online or offline based approach.

So we thought why don't we adopt the same thing in our office also? So that was where we noticed that for technical skills like email writing or for excel, mentorship based, project oriented training process is very effective – there is a lot of excitement from the mentee – feels very empowered. Feels its customized personalized to the issues that she has there is a lot of ownership to complete those projects on a daily basis, so if its excel on a very particular project where the data is given and

the person has to kind of learn a set of learning and formulate, then the formulation will get a little tougher.

The person has completely gotten the command of the areas that we wanted her to learn

We don't teach stuff that we don't need the person to apply in the organization right way. And intangible skills that we need a person to do – we had a Development gap in the person who we felt who is not actively able to think of areas that needed his or her support. A sort of a tendency of avoidance of work that was visible to him or her that had to be done but not willing to reach out and say I do this, because somehow she felt that either do more work and that would not help me to do my current work, so we have first to get a lot of that and pitching out like I do this work good work again.

But in spite all that counselling we didn't change too much but then we give this target you would come and tell us one thing that you proactively reached out and picked up and the moment it became a project where she was out there looking trying to seek that one thing just effective and that she had picked

Ownership for, over a 6 weeks period we saw a substantial value for the company as far as this particular change is concerned

This is an example of behavioural change which we tell to us more effective, we did it on the job, project based mentorship instead of the classroom model so that's where we see more and more value.

***Me: Ok, can you explain a little bit more in detail the model of oyster***

Yes, which part

***Me: Business model behind it***

Alright ok, so we go to companies we ask them about work that they believe that needs to be done at a large city level (scale) we tell them the area that our students can work on (market research, lead generation, etc) then we get the project kind of framed and post in our portal

Students apply for those projects, we make them go through a series of tests to check the compatibility with that project after that we assign them training material on the cloud

They go through the material and learn at their own pace, then they go to an assessment (which is again, up to them to take). Once they pass the assessment than the project management team comes in and starts to work with them to achieve the output that the company had given us.

It is like an outsourcing unit it just that its dynamic workforce and extremely young people, and we got the flexibility

And we have got the scale option to enlarge our man power based on customer requirements

***Me: So, the companies, what they are looking for is to have the job done. They don't do any follow up on the students?***

No they don't, that's done by us, we are the ones who manage the whole thing. Ensure that students get certificates of proof of the work they've done. Certificates which clarify the work and the skills

the students have learned, they get rating from us and the money that is paid to the students, all of that is managed by us.

***Me: So, in that case, that generates a lot of information that you end up looking for to improve your product. In the end, this is almost like impact metrics that you keep following.***

Definitely, we do look at how many certificates are we giving every month, how many students have completed the project, how many students started working on the project, how much is total amount of work that students put together, did for companies work in terms of value, yeah you are right

***Me: So, do you think that you would have learned more or get more learnings in your organizations if you had a formal way of analysing this metrics? If you had a process or a structure in place to analyse this follow up?***

Yeah, there is no doubt about that, there is no harm at all in it but it's all about priorities right? Right now for me it is to grow every month so when we look at this numbers we will tell ourselves and the team now let's try to get a better number like more students, more certificates, more value, so we keep looking at that. We have noticed that its more important to get the total output that we are doing

Because that's substantial impact from companies and that's what companies want to hear from us

Earlier we used to worry about how many students were actually on ground doing this, so that's a very important thing that's changed from us. Here we were trying to see if we could move from 500 students per month to 1000 students and so forth but now we realized that companies value impact – what's the total amount of work that students did, I mean, what's the point of having 500 students a month if they did just some sort of work because they didn't have the time versus we have like 200 students and they do work which is equal to that of a 1000 students, so we understood that impact which we thought is impact is the total of the students working versus the impact for companies which is the total amount of work that happen, you know?

It seems now that the compromise is to do what is impact for companies. That's defined as value and when you have success stories, companies want to hear that.

So, yeah, they do want us to tell them things like do you have scale, even if its two students in a small city, that's what they want to hear. They don't care if it's 10, 20 or 30 students in a city but if I have a local presence in a particular city, so we have understood that the impact now has to be more about scale and city level and output level than just input which is just the number of students so, yeah, those kinds of stuff have changed and move forward.

***Me: ok, interesting, so let me just recapitulate to see if I understood clearly, you're saying that now companies are focusing more on the effectiveness of your company than actually just the numbers?***

Yes. Earlier they used to ask us how many students do you have on hands, how much work can they do and we used to think that if we can give more students, the better, but we realized that over time, you know, that doesn't really matter if we would have 400 or 500 and the average work was determined by 5 kids or 10 kids there so over time, we paid more attention to picking up high quality kids than just a lot of kids. So our process and assessment process and training courses have ensured

that we, even though, get lots of applications, almost 2000 in a month, we take a much more smaller fraction of that, often maybe because of the fact that impact happen when these students actually deliver high quality work for our customers, not just quality but quantity also

Otherwise earlier we didn't have all these assessment processes, you know, we didn't have a straight assessment we took everyone who wanted to do a particular project but we realized we were wasting our time, there was really no impact. The project management team was just getting stretched trying to, you know, manage so many students but we thought that when we worked with lesser students we had a greater output because they were the committed ones who really wanted output

***Me: ok, previously, you mentioned about priorities, you mentioned that you could see the value of impact measurement but now you were focusing on growing. My question is that, if in a medium term, you could have grown more, if you had measured impact before? So to sum up, do you think that now, if you focus on impact measurement, in a long term this impact measurement, could convert into more sales or more data to show to your customers?***

Yeah, I agree. I actually agree. I think that the matrix that I was using as impact was in the early days wrong, because that's not what was helping us to increase sales, yes.

***Me: Perfect, I think I got all the answers I wanted. Let me just ask one last thing, more about the company. How many people work with you at the moment?***

Proxy 20

***Me: And in which stage would you define that your company is right now?***

Growth

***Me: you are just trying to get traction and more customers?***

Yes, the model in place is just to get more and more customers and reaching more users

***Me: let me ask you just one more question? Did you get any investment?***

No, no this is just something I have built up with money from friends and family.

***Me: I think that from my side is everything and I really wanted to thank you for your collaboration.***

## Appendix 7 – Transcription of the interview (Gray Matters)

### GrayMatters – Transcription of the Interview

***Me: I am curious to understand, do you, as an organization, measure your impact?***

You mean the employees impact?

***Me: I mean how do you understand your impact as Gray Matters on the field?***

We have been doing these assessments for the past 3 to 4 years now, right? So year on year, that's where Rash comes into question but before let me ask you this counter question in order to be more meaningful in my explanation.

When I have a student at class 3 and a student at class 10, meaning that their age levels are definitely different, so do you think there is a difference in their ability level? In terms of ability of learning and skills process.

***Me: I would say so***

Yeah, it should be. Otherwise there is no point in a third grader to progress until class 10, otherwise he could just jump to class 10. Right, so the idea is, students demonstrate higher abilities as they progress to higher grades, right? There is two reasons for that: one is that in built thought processes mature and they develop more a quite skill set and abilities as a human being and two the syllabus of the content that has been given to them also increases as they move to higher grades, correct? So for example, you are also doing an MBA program, so you see a significant improvement in you when you join the program and where you are right now, right? With respect to knowledge, with respect to networking, content and various other attributes right? So now you are back and you see yourself as a more knowledgeable person.

So every year there is a tendency to improve and progress, so on the same context, what we also do is, we do several impact assessments for multiple organizations on a year on year basis, right? So that's where we see whether the impact has been progressing with respect to the program that has been implemented by the organization.

So we have the data which shows that yes, there has been incremental impact in respect to assessments, across years. But I would say it's too early to dive in and make that conclusion because it just has been 3 to 4 years for us now. I think that if we do assessment for 10 to 15 years, then it would be very periodic and it would actually show how improvements with respect to impact to the program.

***Me: ok, but you as an organization, do you have an impact framework your evolution or, my question is basically, do you have some sort of structure to measure the impact that you are having over the years internally?***

Yes

***Me: ok, can you elaborate a little bit?***

Absolutely



So that's where we understand this methodology called RASH. So, the idea of impact measurement is to see whether we can compare apples to apples, and then demonstrate growth. It can be negative or positive but the idea is that you need to demonstrate them so then you can compare apples to apples. So that's where we do our normalization, we do scaling, to bring and iterate all this items which is both the ability and the difficulty in one scale, so let me give you an example on how we do that Joao.

Let's say I want to measure my height and your height. How can I measure that? I mean, you are in Copenhagen, I am in Hyderabad, come on, I can't travel back and forth to measure your height. So I use a measuring scale, it can be in inches, it can be in feet, it can be in centimetres, it is all the same. So, let's say your height is around 1:80 to 1:85cm and I say, my height is 5.9, I just need to use a converter to convert either centimetres to inches or inches to centimetres and then I can compare, right?

We do the same thing. So in order to answer your question, all the impact assessments that we do is showcase a form of a scale, which allows us to see the impact that we have given to the programs.

***Me: interesting, now you got me curious. Ok, can you try to briefly explain me how it works? (don't need details). So for example, you measure impact for four different organizations and different projects in a year and then you kind try to standardize the information you collect so that you can actually aggregate and analyse that information as a whole?***

Absolutely. So typically what happens is, so if I want to understand whether there is an impact on, let's say, Copenhagen Business School on all the students, that's the study I want to do, so what do I do? Basically I would try to understand and see the grade that each student had and take an aggregate, right? And I have historical data right from the inception, when the school started till now so how progressive my aggregator is over a period of 5 years? That enables me to understand better as the students come in, as a poll of new cohort begins, whether that cohort is better than the cohort that existed last year. So, do I see an improvement in the number of students that are coming in and is that directly correlated to the standard of the business school, right? Does that make sense? So that's how rankings are also defined internationally. So, to understand why Harvard is the best business school in the world and why do they receive a lot of applications, so that's why they try to correlate with respect to how these students who are coming as a cohort are going out and are placed in several organizations or they become entrepreneurs so that's also how the programmatic goal also happens.

***Me: very interesting. And if I could ask you, this sort of analysis that you do an aggregate of your company's performance let's say, do you do it for internal purposes, do you do it for external purposes, for your investors? Do you think that it brings actually something valuable to you?***

We do it primarily for external purposes, so it's a client who wants to understand whether there is a problematic growth or not, right? I did mention we are a for profit organization, right? So yes, we also have to show that to our investors as well and ideally, we want to show to our board as well and we are doing this assessment and we are actually trying to impact these organizations in respect to education and with respect to learning outcomes so it's for both internal and external.

So I would say it is driven by external factors and the driving is our internal interest.

***Me: normally, the social organizations that I've been talking with, some of them use third party assessment organizations so that it gives them more credibility, so my question would be, do you***

***also feel the need of using a third party assessment tool on yourself to give you some sense of, let's say, a different perspective?***

So, we are the third party assessment.

***Me: yeah, so my question would be, does the third party assessment uses a third party assessment?***

So, that's the gap we try to bridge. So there is an organization, let's say schools and there is a funder, who is funding those schools. So if you say that there is an internal assessment that is going on, then it can be a little bias and it's questionable, right? So that's when we come into picture, so we are the third party assessment agency that conduct the impact assessment to bridge the gap between the funder and the organization and to show both of them whether there has been growth in the program. But we, ourselves, we don't have schools for us to impact ourselves. We only grant those services.

***Me: can you elaborate on, very briefly on the methodologies that you use?***

Alright so RASH methodology basically enables us to do a comparative analysis. So, within rash methodology, we use various statistical aspects like linear regression or co-variances so lots of statistical models come into picture, depending upon the scope of our that we want to understand, right? So, the methodology basically underprints with respect to what kind of impact we are trying to measure. So let's say, for example, if you want to understand the enhancement in parents satisfaction in a certain school, so the attributes is measuring them in the form of a survey, right? So you ask this parents certain set of questions, related to certain attributes and then come back again, after a year, then again basically, ask a different set of questions and try to relate them right? So that is the proposed methodology we have which is understanding the satisfaction levels of parents in a organization or in a school system.

So basically, what I am trying to say is that your methodology is defined based on the purpose. When we want to do analysis, we do a standard analysis like we do an aggregate, we do a frequency distribution, we do achievement levels, we do standard deviation. So these are basic analysis that have been followed across the globe in respect to impact assessment and we stick to the same because the nature is like sort of consumption, right? Although we have a lot of complications at our end, but when you present it has to be very simple right? Very consumable, right? So that's why we keep it very simple in respect to understanding what the client wants from this data.

***Me: interesting. Another question, how do you overcome the problems of collaboration, you were talking about the surveys to parents, I can guess that people are not 100% collaborative right?***

Correct, that's actually a huge challenge that we face. It's very important to collaborate with them. So that's where our discussion starts very early. We have that point at various levels so that we keep engaging them to understand the seriousness of impact assessment.

I actually work as a project manager in my organization and I basically handle a lot of clients so the idea is to be there in person and explain them and make them understand how that project is delivered and assessed right? This can take the collaboration level at least to 85 to 90% but getting 100% is extremely difficult given the scope and giving the tremendous effort that we are putting in and also the scale that we are looking at, so 85 to 90% is done when you need them and make them

understand that they can help solving this particular situation and that it can help to solve this problematic issue.

***Me: Ok, and do you have some sort of incentives for people to participate? For example, you offer something to the students, or is there anything that you've worked on this issue?***

Right, we don't provide incentives because we do the assessments. So the incentives are provided by the organization to the schools and students to come and participate in the assessment. For example, you come and participate in the assessment and we probably give you a pencil or a sharper or a chocolate so that you come and take this test seriously. So initially you need to create that need and then it becomes a necessity.

***Me: Now, I want to understand a little bit more in general, how do your organization learn? Can you describe a little bit how do you generate learning within your organization? Now it's focused on learning processes and not so much on impact.***

So learning within an organization it is very similar to how it happens in the business schools right? So what we do is we got in experts from different aspects who come into our office and explain to us and teach us the various measures on how we can do impact assessment. So we also do a lot of processes outside, we visit a lot of conferences. There are various aspects that have been aligned that we do at various stages of the hierarchy.

So to give you a more relevant example, we have identified experts in various domains. So let's say, content development, we have a content team improves on a day by day basis .

So what we have, from an impact assessment standpoint, we are various experts in the organization. So we have someone whose expertise is in content development and knows how robust your question paper is and how applicable is it to the audience, right? And then we have an expert who sets the impact assessment. From the administration to data collection, etc. and then we have an expert who does the analysis, who brings in several methodologies to understand what kind of analysis needs to be done for the relevant program. So this way, we collaborate internally as well and we work in cross functional teams to ensure that the impact assessment we catered to is full fledged and we do justice at various levels. So that's where we get experts for specific areas where we feel we need to improve, we need to acquire more knowledge or we would go to conferences or guest lectures or attend courses or there will be some external party who has expertise in one aspect who would come in and probably take a session with us for a week or so.

Basically the idea is to upgrade yourself over a period of time.

***Me: From what I understood you do mostly large scale projects right? You don't do small scale projects?***

We do. We also directly work with schools independently as well but I would say that percentage is a little lesser as compared to large scale.

***Me: ok, and in your perception, how do social organizations see impact measurement? Do they see it mostly valuable, do they see it mostly as a burden that they need to do because of an investor?***

Let me give you two perspectives on that

So, I give one with respect to the context, let's say, at least India and then also with respect to the world. In the world it is a continuous process. An impact assessment is taken extremely seriously, I am not very sure about particular countries but I am just taking on an aggregate. So if you take Finland or if you take Switzerland or Singapore, all these countries take impact assessment seriously because they want to see a development on a year on year basis. Because it is very supportive from the government aspect as well who drives them to take this as a mandate.

In India, it is now evolving, I would say and it is becoming more serious, that's why you see a lot of players in the impact assessment space as well. It is very important that they identify a third party evaluator to do the evaluation and assessment. So at this point in time I would see a continuous instill seriousness in how they perceive impact assessment because they see it very important at the current point of time and from what they see from the last 5 years, it has evolved and now they see that there is a necessity to do impact assessment.

And it is not only coming from the funders angle, but it is also coming from the organization undergoing the intervention as well because they also want to see whether they are improving or not.

***Me: I see, so in general you see that companies are looking at impact measurement as more and more valuable? They are starting to see the value?***

Absolutely

So, João, this is a standard perception. The moment you see growth, when I say growth I say positive growth, the moment you see positive growth, is when you see a lot of stakeholders coming into picture right? Because somewhere in your implementation is successful. Once your implementation is successful, you want to see and repeat whether that growth is sustainable or not. Whether you are able to show that positive growth in another year or in a year basis, so that there are more people who trust your methodology, there is more people who will invest in you and there is no program holders who will come and participate in your organization.

So that's when the stakes become higher and the necessity is also created.

***Me: So I want to share something that, through my interviews, I got acknowledge and I want to understand your perspective on it which is, I talked with a lot of organizations that previously they didn't measure impact and they claimed that they didn't feel the need because they were not working with the government. And they said to me that only when they reach a certain point, where they want to scale to a level that they need to work with the government schools or they want to work inter states, then they feel the need for impact measurement but before that, they don't see the value of it. Hm, do you feel the same way? Do you struggle with this? To try to make companies to see that impact measurement has value by itself for the organization. Do you also have the same perception?***

I think I have the same feeling I would say but I would try to bring in a different perception altogether which is more inclined towards what you just mentioned.

So one is yes, I would totally understand that when the volumes are low to do an impact assessment actually does not make sense. So when you say you have an organization which is catering to 5 schools and you have say, less number of students there, for me, to do an impact assessment does

not make a lot of sense because one, they won't be able to afford to the cost and two, they will not be able to see whether that's scalable or not.

So once they are able to widen the scope or widen the horizon, that's when you are able to see whether your impact is being measured or not. So once you have a huge scale, it makes it easier to carry it forward and it also makes it quicker right? Because then they have a standard budget every year to carry the impact assessment.

Else, if the organization or the funder has the budget, there is no government intervention, even then it is possible, so it happens both ways, yes, but you need to be associated with the government because at the end of the day, it is in government schools where you want to see the impact.

But if it is an affordable private school, if it's in the private space, then it is totally up to the organization that is catering to these schools and the decisions maker there

But if it is government schools or an organization working with them, then it is the government whom is eventually the decision maker, because it is through his permission that we can actually carry out the impact assessment.

***Me: Then before they reach that stage, where they work with government, some of them have already some dimension but not yet to work with governments to scale, how do you think or how do you see they should operate? Is it relevant for them to measure impact? How do you see the importance to somehow, maybe not doing an assessment but just measuring?***

I would find it extremely important for two reasons.

One, to see whether, I as an individual, am I upgrading or not? So if I want to understand whether I am upgrading, I need to evaluate myself from a third party assessment. So, it is very simple, if I have a fever and I don't go to a doctor and I try to understand and cure the fever on my own, it is very difficult, because I would not know the exact symptoms, the exact medication to take. If I go to an expert, it basically helps me to solve the problem that I face. In my case it also becomes extremely biased because the third party, with the kinds of interventions it brings and the kinds of remedies that is providing, it's very unbiased and standardized. Because he know that if you have fever, your medications vary with respect to the severity of the fever you have. It's very similar in the impact assessment studies as well right? If you see a program is not working well, you probably give him the kind of remedy, the kind of suggestion to adhere a certain principles, that can improve your program.

***Me: I see, so just to rephrase a little bit, for organizations in the beginning, it is not affordable a third party assessment, so from your expertise and experience, how would you recommend that somehow they try to measure impact or they try to understand what they are doing until they reach a level where it makes sense for them to do an impact assessment?***

Correct. So what they can do is that they can try a model of a small scale assessment, where they are looking at one school and they show a growth in that school using a third party assessment. Then they can pitch in for external organizations and say hey, we have been working with a couple of schools, would you like to invest in us so that we can show a large scale growth in them as well.

Because see, the problem is they lack funds, and they are not able to do it on a large scale basis because they don't have that scope right? For them to have that scope they need to expand their

horizon as well, and once they expand, then they can use the external funds to afford the large scale assessment. So they can start by taking baby steps where they can look at 1 schools or 2 schools or 10 schools to start with and show a good growth with respect to their program and then pitch in various players from outside who are willing to invest in programs that are actually showing good growth, and then get to the next level that you are talking about.

***Me: ok, so what are the main reasons why organizations approach you, is it because they have investors now and they need to report something? Is it because they feel the need internally? What's the main drive for them to actually reach you? Do you have this perception?***

Absolutely

So it is more from the investors, that they want to see whether the money that has been invested has been consumed in the right spirit. But that question is changing now and I would be more happy to say now, because it is also the organizations who are curious to understand whether they are doing justice to the program. So, it was more inclined from the former aspect but now it has been a balanced answer. Because if I invest the money in an organization, I would want to see whether they are utilizing it for the intervention properly or not.

But for the organization to come forward and approach third party assessment and see whether, hey, can you come and measure our impact? And see whether we have improved is something that we are experiencing right now.

***Me: interesting. So, I am not sure if you can answer me this question but what are the learnings that you see that organizations get after they receive your impact assessment?***

So what we do is that we give them a detailed impact assessment report. So the report basically tells them or the stakeholders to which the report is for consumption, we tell them the various aspects which we have carried out when we do the impact assessment. So we tell them the gaps that we have identified, we tell them what type of changes they need to bring in to the program and how can they do that, what type of students do they need to target, which grades they need to ensure remediation.

So the report will basically help them as a guidance, some sort of proposal where they can do some change in next year. So a report will be like a guidance that can help them to improve themselves.

***Me: So the report is almost like a consultancy job?***

Absolutely

***Me: Alright so you give them not only the data but the data analysed and saying that this are the things that we suggest that you should go for and this are actually the learnings, ok interesting.***

Because João, the data is something that people don't understand. So that's a huge problem in the current scenario right? You give them a lot of data and they don't know what to do with it. So that's where we come into picture and analyze the data and give them final elements of analysis which is directly related to the program right? So if you give them, say, a huge data set and an excel sheet with some like 15000 columns and rows, with all data they don't know what to do with it. They would want to filter that data, they will want to analyse certain layers of that data and that's where our expertise comes into picture. So we would fine tune that, extract relevant information and do certain analysis which is directly related to their program and there is three to four points that they

will want to understand from this huge data set which is actionable from their end, else, if I give them 120 points they won't be able even to implement that in one year. There will be three actionable points that they will be able to approach and apply in their program, so that they can improve slowly.

***Me: I think that from my side is everything, is there anything you would like some clarification? I can't thank you enough for your collaboration.***

I would also like to understand a little more in depth your study, can you briefly explain it?

**37:50 – 42:15** (explanation of the study – not relevant for the analysis)

That's a lot of information in very little time. I think that if I look at it from a very larger aspect, it actually makes a lot of sense, because I feel that the importance is there and specially with respect to various levels that you have mentioned, various attributes like customer satisfaction, product development, so various aspects of an organization, so I feel that's very important.

Because it depends on the layer that you would want to understand because everywhere you see an impact. It can be a direct impact or an indirect impact but if you are able to showcase that impact is what makes it more meaningful to continue it forward and make it more sustainable. And I think it is not only applicable in the education sector but it is applicable everywhere indeed.

Every sector that you see, if you want to understand the release of a product or let's say the release of a beverage, if you see it's not impacting people or it's not being consumed, there is no point in continuing with the beverage. On that context, on that note, I really feel that it is extremely important that I really wish you all the best and that you can get some valuable insights and help these organizations to make a meaningful impact in the life of people.

***Me: Thank you very much.***

## Appendix 8 – Transcription of the interview (Villgro)

### Villgro – Transcription of the Interview

***Me: My first question is, I believe that you contact with several education organizations frequently even those that are not in Villgro's portfolio am I right?***

Yes

***Me: Do most of them have some sort of impact measurement structure in place or do they measure impact in some way?***

I think most of them has some form of internal impact measurement, so it's not necessarily something that has been validated neither an external person who come in and do the measurement. Also, one thing to take into consideration here is that I am talking about the education space right? So most of these companies, the easiest form of impact measurement is actual progression on learning outcome and pretty much all of the companies in some way or the other do an impact measurement but the credibility and the validity of what they do varies very broadly. So there are some companies that do a proper baseline, mid line, and endline and they also have a proper assessment associated with it, there are others who are very quantitative, there are others that use qualitative survey methodology which is administered maybe once or twice a year and so, from our perspective, that is something less rigorous in terms of capturing the impact.

But to answer your question short, they all do some format, very few of the companies we have engaged with prior to raising institutional funding, have done an external form of impact assessment. Because that tends to be somewhat expensive to do. Someone has to fund it, so if they have never raised institutional funding and by institutional funding I mean everything, it can either be incubation funding, be investment funding, it could even be like a grant, so companies that have not raised any of these, are unlikely to have done external impact measurement.

***Me: In your perception, do you think that companies look at impact measurement more as a burden that they need to do because there are investors, or there is someone asking for it or because they actually see something in return?***

So, that's a tricky one to answer, I think it really varies between the types of companies and the type of entrepreneurs you have, I think it's actually a good filter for an impact investor to see how they view impact assessment because a company that actually deeply believes in some philosophical perspective even before an investor came in, is potentially more leaning towards actual impact versus a company that is doing it only because the investor asks for it. And that's where you know, from our perspective, there is a potential for mission drift or deviation because the core of the company is actually less focused on actual impact and actual learning outcomes and more on just scaling.

And, please take this all as very very broad generalization.

***Me: Ok, and I don't know if all the companies that you engage or that end up being part of Villgro portfolio, the ones that don't have an impact measurement in place before, how do they react when they understand that now they gonna have to do it? Do they just accept it or do they try to negotiate the terms?***



At least in my experience it has never been negotiated. I think that it is something that most entrepreneurs understand that it is part of what it is to be involved with an impact incubator and an impact fund.

***Me: in your experience, what is the value or the purpose that organizations see in measuring impact? Is it more for internal use, external use like marketing is it only because investors, is there other reasons behind it? What is the intrinsic value?***

Again, broad generalization, initially, they see it as a reporting appointment but I think that as investors, it is our job to show them that it has significantly more value this is also assuming that this is something that they don't feel strong about themselves. If they already felt strong about it, then they would see that there is a lot of value in terms of the impact assessment essential for them to monitor the health of their product or service but assuming that they don't see that, this is something that we help them see which is that if you are trying to address this market, the impact measurement it's actually a way for you to measure your success. That's one and that's from an internal product perspective. From an external perspective, I think there is also a significant value one from the marketing perspective and two, to actually some potential revenue stream perspective. Because many of the companies that we work with, they need...one of the streams of revenue that they are working with is CSR funders and for them it's a clear requirement that impact needs to be very very clearly established so having an impact assessment study in place that is strong, rigorous and validated is a very good first step towards getting third party funding.

***Me: in your experience, when do organizations start measuring impact, is it since the beginning or is there a tipping point or a scaling moment that they realize that without impact metrics they cannot keep growing, like they just stagnate?***

As I said, really generally, it depends on where they come from, what their own focus is. The kind of organizations that we have seen have traditionally done some form of assessment right from the beginning. Because they tend to come with some sort of mission driven views and so they validate for themselves whether their initiative is actually serving the bottom of the pyramid.

***Me: ok, throughout our interviews, apart from the organizations that only work with private companies, most of the organizations they told us that they've reached a point that to scale they need to work with the government and the government always demands this sort of impact measurement or structure or some sort of field partners and if they don't show a certain percentage of improvement from the services that are already in place that doesn't work so some of the enterprises they said that this was the tipping point, do you also have this perception?***

I think the tipping point is the moment when you start to raise any form of external institutional funding. When you are raising angel rounds and grants from family and friends, there is much less rigor associated with it but the moment you are raising either from an incubator or an investor or a big grant giver let's say US something organization, impact assessment becomes mandatory.

And government could either come at the same time as any of these funders or even later on the line but I would actually say that the tipping point comes a little earlier, like it comes the moment you need to raise a slighter larger amount of funding.

***Me: Now talking a little bit more about learning, learning in general, inside the organizations, I don't know – how do you see that the social organizations that you work with learn? Do you see***

***that it's more related to internal sources, is it internal resources that they use to learn or it's more related to external sources and resources?***

When you say internal sources what do you mean?

***Me: For example, a lot of the organizations we talked with, they said that they developed process inside for their teams to learn, while some others bring experts from outside to teach them, they go to conferences, they bring certain people inside so that they can get knowledge in specific areas.***

Right, so I would say that the companies that are in the stage you worked with them, they are unlikely to have internal structures or processes around learning. Part of that is they actually look for external sources, they look for their investors and incubators to share a lot of learnings, they look at advisors and mentors as the ones to help to provide that perspective and then they often do take informal internal sessions but those are more ad hoc, it's not like a structure monthly or a quarterly process where someone is actually responsible for setting something up and following up and you know?

***Me: Interesting. Do you have a sense of how does impact measurement helps organizations learning? In another way, do you feel that impact metrics contributes to specific organization's knowledge creation?***

As I said earlier, I have the feeling that it is a very evolved organization that uses impact measurement as a source of learning. Most of them don't see it as a source of learning at this point of time and that's why it's kind of the role of the investor or the incubator to help them to see what does that report will actually help them work on their product or on their service.

At this point of time I think that many of them see that, in some sense, as a validation or as a way to check their success. They might see it, you know at an optimistic level, see it as a way of measuring their success, at the least optimistic level they see it as a reporting requirement but they don't release the learning option from it in general.

***Me: Where do you see that organizations learn the most? Is it from quantitative metrics or qualitative feedback? Do you have a sense on this?***

It's very very broad and it really varies from organization to organization. I really can't come up with any generalization. For some it has to be something quantitative for other more qualitative, so I can't really give you any sort of insight.

***Me: let me try to reformulate, from our research, all the organizations said that their key thing to learn was the qualitative feedback and that the quantitative metrics would just serve to consolidate the qualitative feedback and would be mostly used in some parts of the product development or in some parts of the strategy and decision making well all the rest would be basically based on qualitative data. Do you have the same feeling?***

I mean I would tend to agree. Obviously there are different view points around it In the early days they tend to be very anecdotal and relying on anecdotal stories. From our perspective as an institutional funder we like to go towards a more data driven approach.

***Me: ok now these are more confirmation questions: do you feel that impact measurement helps the organizations specifically in product development, decision making and the motivation behind the team?***

So as I said earlier, definitely motivation and we would like to move to a point where it does actually impact things like product development, I don't think that is happening at this point in time.

***Me: ok and do you see any connection between measuring impact and the financial performance of organizations?***

I don't see a very obvious connection between the two to be honest. The only thing that I would say is the companies that are able to..the way that companies should be leveraging it is, as we discussed earlier, for marketing purposes, ability to raise CSR funding and things like that and the companies that have definitely been able to use the data from impact assessment towards marketing are the ones who are more successful.

***Me: Looking at this question in a slighter different perspective, do you feel that the learnings that companies take from impact measurement, being it qualitative or quantitative, if they directly influence growth? Do you see a connection between the learning generated and growth?***

I think that the connection is more tangible as I said, impact measurement leads to better marketing articulation and can be used to potentially raise funds from the investors and that can lead to growth (that's possible the connection).

***Me: Alright, I think that from my side is everything, thank you so much for your collaboration. Is there anything you would like to ask?***

Share the study with us once it's done. It can be very useful for us to show to portfolio case companies.