

The Tiresia handbook in Management for Sustainability and Impact



Chapter 5 **Sustainability and impact management and measurement**

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1. Introduction

The concepts of sustainability and impact encompass a wide variety of dimensions and perspectives. There exist multiple definitions of sustainability and impact, and these have generated an extensive debate among academics and communities of practitioners. As outlined during this course, impact can be considered as the change caused by an organization or an intervention in a social, environmental or economic outcome. Lately, the management and measurement of impact has become a mantra for those willing to create a positive change at a societal and/or environmental level. This is because claims about making a difference are no longer enough, and evidence is required concerning the change that any agents in society has been created (Ebrahim, 2013). To produce this evidence, it is necessary to develop appropriate approaches and methodologies to manage and measure the generated impact.

Sustainability and impact management and measurement is a topical and complex theme. It is of interest to a variety of actors, such as entrepreneurs, managers of social enterprise, non-profit organizations, lenders, investors, managers of for-profit organizations, policy makers and academics. At this time of significant change, the debate on this theme appears particularly relevant, and the need to include the practice of monitoring and measuring impact in the organizations' strategy is gaining momentum. This is particularly related to the attempt of public administrations to reengineer their procurement schemes according to: (a) an evolving outcome-based paradigm; (b) diffusion of evidence-based practices in philanthropy as well as in public policies; (c) the interest of financial actors in measuring the Environment, Social and Governance (ESG) criteria.

These elements increase the urgency for organizations to manage, quantify and make explicit their generated value. In this context, sustainability and impact management and measurement have become strategic, since they can allow an organization to communicate its results both externally and internally. In the first case (i.e., externally), sustainability and impact management and measurement can contribute to organizations' strategic positioning and/or reputation. In the second case (i.e. internally), managing and measuring sustainability and impact can allow organizations to: (a) improve impact generation processes; (b) build their own identity as a transformative actors able to solve societal challenges; (c) improve performances, on the basis of impact goals and targets; (d) integrate measurement approaches of investment funds and investees' operations.

2. The concept of (social) impact

While social impact might be considered as a key performance-based dependent variable related to hybrid organizations, the definition and conceptualization of social impact is still debated. With regard to the terminology, social impact is frequently used in the existing literature as a synonymous of social value (Moss, Short, Payne, & Lumpkin, 2011; Santos, 2012), social performance (Husted & Salazar, 2006; Mair & Marti, 2006; Nicholls, 2008), social returns (Emerson, 2003), and social accounting (Nicholls, 2009). Despite similarities and affinities, these terms actually refer to different concepts. Moreover, the fact that the concept of social impact can be applied to various domain, such as education, health care, environmental sustainability, and poverty, make its conceptualization even harder (Izzo, 2013).

2.1 Social value and impact

The concept of **social value** creation has been variously defined and characterized by many authors. Schwartz (1990) argued that an entrepreneurial activity creates social value when the aggregate utility of society's members increases after accounting for the opportunity cost of all the resources consumed during the activity.

Dees (1998), focusing particularly on social entrepreneurial forms, underlined that, broadly speaking, the creation of social value implies the creation of long-lasting improvements in society. This is particularly important for those entrepreneurial forms whose primary mission is the creation of social value, namely different forms of social entrepreneurship and social purpose organizations.

Many authors stressed that social value creation is strictly related to the capacity of entrepreneurial activity of generating value for a large variety of stakeholders. Brickson (2007) stresses that the social value can be produced by organisations in different ways based on their relationships with internal and external stakeholders. She explains that value can be created for consumers and employees by meeting human needs (personal esteem, belongingness, and love) and fostering human virtues (bravery, caring, and justice), linking the generation of social value to ethical values in entrepreneurial activity. According to Kroeger and Weber (2014) the social value generated by an organization is deeply tied to the capacity of generating and improving the well-being of a broad and various categories of stakeholders. Finally, Lazzarini (2020) provides a novel definition of social value as the sum “broad social benefits to a given population (including more vulnerable groups) minus their associated provision costs” (p.19). In this sense, social value creation, can be pursued both by private and public organizations, and it is strictly related to the capacity of entrepreneurial activity of generating value for a large variety of stakeholders and limiting to shareholders. From this perspective, enterprises and private organizations can create social value by improving the well-being of individuals, communities and society in general and sharing the value they produce with diverse types of actors (Porter and Kramer, 2019).

Social value is a broad, systemic and network-based concept that relates to the societal and environmental benefits generated by an organization or an initiative. On the contrary, when we shift to the concept of impact, we introduce a dynamic idea of change and causality and we refer to those changes which are strictly related to the effect of the organisation’s activities. These changes can be measured and evaluated through specific methodologies. If social value describes the wider social, economic, and environmental benefits that derive from an organisation’s work, the impact refers to the specific changes taking place as a result of our activities or services.

To understand the concept of impact, it may be useful to refer to the analogous concept used in natural sciences. In physics the word impact is the spatial-temporal momentum in which a moving object clashes with another. The collision leads to the generation of both direct and indirect effects. Direct effects are detectable and can be related to the two colliding objects. On the contrary, indirect effects can be undetected and are related to the broader environment and ecosystem where the objects are placed. Similarly, in social sciences the word “impact” refers to the long-term effects generated by different types of interventions. The majority of scholars and practitioners tends to clearly distinguish between the concept of impact and those of output and outcome. Particularly, impact usually concern a long-term perspective and a broad focus on macro contexts as a unit of analysis.

To understand the difference between impact, outcomes and outputs it is possible to exploit the so-called impact value chain (Bengo et al., 2016). The impact value chain is a theory-based framework that illustrates how an organisation’s activities lead to its ultimate desired outcome and impact. The Impact Value Chain is a linear and theory-based instrument: it is based on a pre-existing theory of Change which is articulated and linearized by the framework distinguishing the ventures activities, outputs, outcomes, and impact (see Clark et al., 2004).

The chain allows to visualise the movement from outputs to impact. Outputs include those products and services directly generated by an organization activity thanks to the transformation of inputs. Outputs are used by the target group of beneficiaries, customers, or users. Outcomes are the changes experienced by the target beneficiaries in the short term, thanks to the use of the outputs. Finally, impacts are the changes generated

thanks to outputs and outcomes in a broader context (compared to the direct beneficiaries of the organization only) in the longer-term.

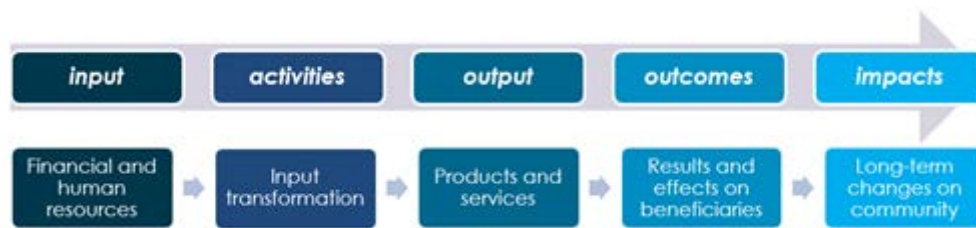


Figure 1 - Social Value Chain

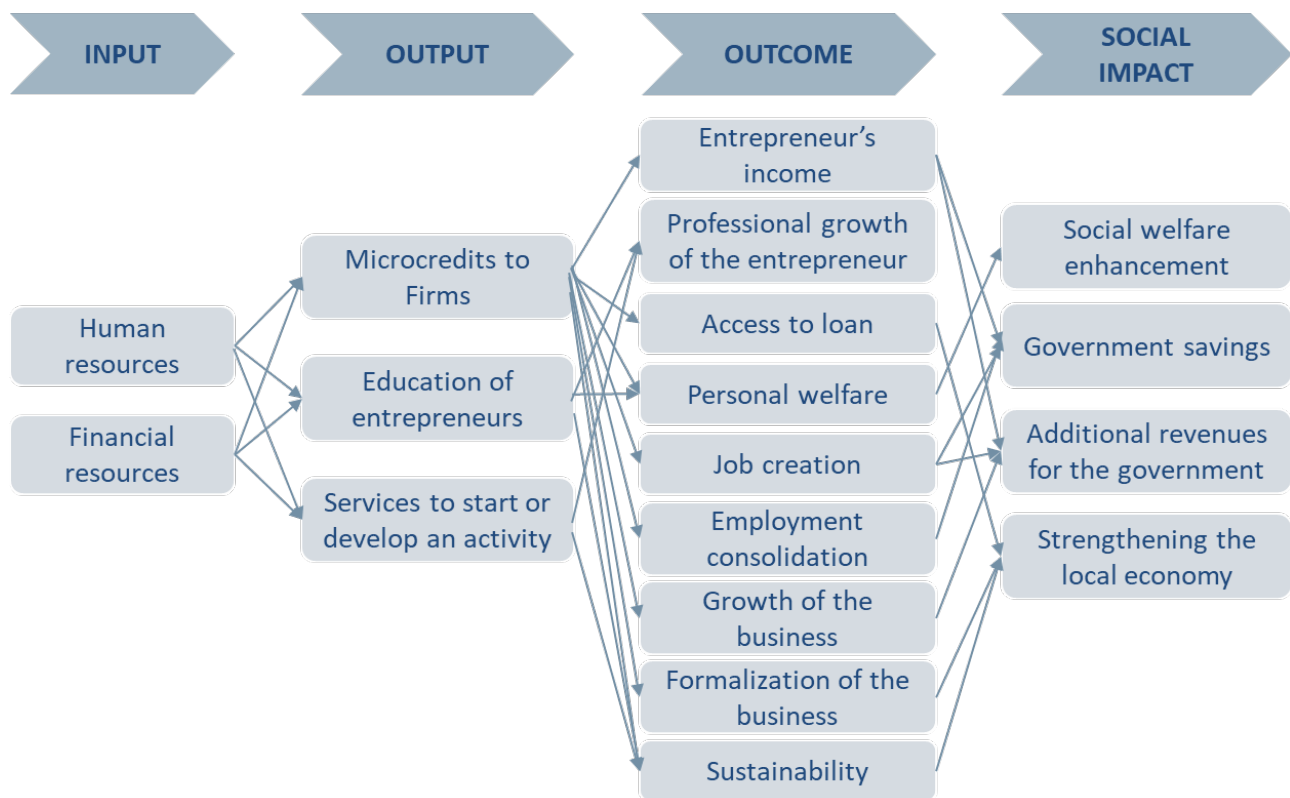


Figure 2 - Example of a Social Value Chain from a Microcredit Institution

Referring to the value-chain, it is possible to provide a first set of definitions of impact. This set of definitions mainly draws on Social Sciences disciplines such as Economics and Econometrics and variously relies on the methodological process leading to the identification and concept of “impact”.

- *By impact we mean the portion of the total outcome that happened as a result of the activity of the venture, above and beyond what would have happened anyway. (Clark et al., 2004)*
- *Impact [...] is the fruit of total outcomes minus external effects unconnected with the action, which would have occurred regardless of intervention. (Rossi et al., 2004)*

- *The portion of the total outcome achieved due to an organization's activities, above and beyond what would have happened anyway. (Grieco et al., 2015)*

These definitions can be grouped under the broad definition:

Impacts are those outcomes (of interventions, policies, programs) adjusted for what would have happened anyway, actions of others and unintended consequences.

The concept of impact, if regarded under this set of definitions, appears quite broad and open to a variety of interpretations. From this perspective, the concept of impact can refer to economic, social and environmental dimensions. The integration between these three categories appears coherent with the triple bottom line perspective by Elkington (1998, 2013), that represents an accounting framework used for evaluating organizational performance according to social, economic and environmental criteria. The triple bottom line is regarded by Vanclay (2004) both as a basis and a competing framework for social impact due to its content-related neutrality and broadness.

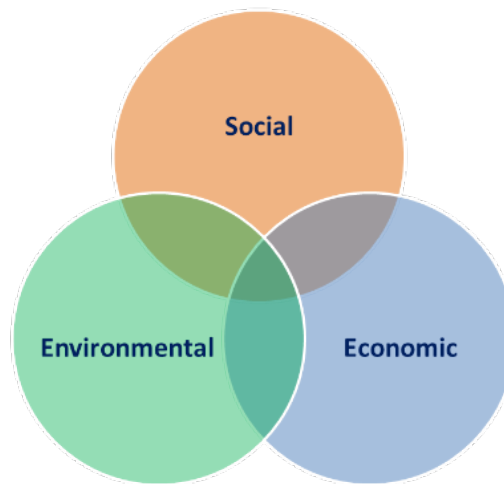


Figure 3 - Triple bottom line

Overall, the concept of social impact departs both from that of social value given its specific reference to the changes generated by an organizations' activity. Moreover, the concept of social impact differs from that of "impact", given its non-neutral identity and its content. Thus, the concept of social impact cannot be merely reduced to a definition deriving from an estimation methodology or a framework as the value-chain. These specificities characterizing social impact open key challenges both in terms of its definition, identification and measurement. Thus, the next section looks more into detail to the concept of social impact and its definition.

2.2 Defining social impact

The concept of social impact encompasses a wide variety of dimensions and perspectives. This has led to the generation of multiple definitions and approaches to the concepts and to a wide debate on its definition. A key set of definitions of social impact draws on the field of management, particularly referring to social businesses and social entrepreneurship.

Social impact refers to impacts (or effects or consequences) that are likely to be experienced by an equally broad range of social groups as a result of some course of action. Freudenburg (1986)

Social impacts are long term outcomes or program impacts follow from the benefits accrued through the intermediate outcomes. (McLaughlin & Jordan, 1999)

Social impacts are the wider societal concerns that reflects and respects the complex interdependency between business practice and society. Gentile (2002)

Social impacts are intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Vanclay, (2003)

Social impact is the long-term sustainable and sometimes attributable change due to a specific intervention or set of interventions. Tuan for Gate Foundation, (2008)

Impact only if it increases the quantity or quality of the enterprise's social outcomes beyond what would otherwise have occurred (Brest & Born, 2013)

Social impact as beneficial outcomes resulting from prosocial behavior that are enjoyed by the intended targets of that behavior and/or by the broader community of individuals, organizations, and/or environments (Stephan et al., 2016)

Overall, we can say that these definitions refer to social impact as:

The sum of effects and changes (in terms of knowledge, skills, status, living conditions, values...) often generated in the long term on the community by the activities of an organization.

2.3 The Key features of social impact: intentionality, measurability, additionality

It is possible to identify three key characteristics of organisations generating social impact:

- ***Intentionality***

This dimension refers to the explicit willingness of the organization to address a solution to a social problem and pursue the generation of a positive social impact.

In this view, the social impact pursued by the organization aims at explicitly generating positive change in the behaviors or actions of the beneficiaries directly involved in the intervention and in the community (Earl, Carden, and Smutylo, 2001; Niggemann and Bragger, 2011; Chiappini, 2017; Alijania and Karyotisb, 2018).

For example, a banking organization which pursues micro-credit and impact investing strategies intentionally pursues a social impact through its core activity. In the case of impact investment, the concept of intentionality can be translated into an explicit "ex-ante" declaration and in the proactive research of activities aiming at creating social value through capital allocation by impact investors (Bugg-Levine and Emerson, 2011; Alijania and Karyotisb, 2018).

- ***Measurability***

This dimension refers to the organisation's capacity and need to account for its activities in quantitative and qualitative terms.

Social impact has to be *measurable and measured* in a quantitatively and/or qualitatively way (O'Donohoe et al. 2010; Freirich and Fulton 2009; Hebb 2013). Social Impact Measurement is a system of trust (Nicholls,

2009), not only among the social entities and their beneficiaries; indeed, it is a “moral obligation” of organization with a social impact to be accountable of the social outcomes they generate (Bengo et al., 2016).

- ***Additionality***

This dimension entails that social impact generate a positive change in fields where market mechanisms fail or only partially work.

Additionality is the less cited criteria into social impact definitions. It refers to whether the intended impact would have occurred without the investment or the intervention (So and Staskevicius, 2015). The intervention or the investment has an impact only if it increases the social and/or environmental value beyond what would otherwise have occurred (Brest and Born, 2013; Lazzarini, et al., 2014).

2.4 The challenges of identifying the generated impact

The debated definition of impact, as was briefly presented above, implies some challenges related to its identification, characterization, and measurement. Above, impact was defined as the effects and changes “adjusted for what would have happened anyway, actions of others and for unintended consequences.” (EVPA, 2013, p.9). Thus, from a theoretical point of view, to identify the generated impact it is necessary to isolate the effects of an intervention from other inter-related effects or changes that would have happened even without the intervention.

The challenge of impact identification is twofold. On one side it concerns understanding what the effects on specific subjects would be (for instance, effects on a country, a community, a village, an individual) when the subject has been exposed to one specific intervention. On the other side, it is also related to understanding what would have been the outcome for a specific subject if the subject had not been exposed to that specific intervention. The challenges to impact identification come from the fact that we cannot be fully aware of the conditions of treated individuals (or communities) in the absence of the treatment. As pointed out by Gertler et al. (2016) the problem is that “We typically observe people, either when they have been subject to the intervention, or when they have not.” (Gertler et al., 2016, p.35).

To better understand the main challenges of impact identification, it is important to understand some key concepts that are strictly related to the concept of impact:

- Deadweight
- Attribution
- Displacement
- Drop off
- Externality/spillover
- Negative impact

These concepts are presented in the sections below.

2.4.1 Deadweight

The first concept we introduce is deadweight. Nicholls (2009) defines deadweight as “the extent to which outcomes would have happened without any interventions by the organization” (figure 4). The Scottish Enterprise Economic Impact Guidance also distinguishes between two different typologies of deadweight:

- Activity (or output/outcome) deadweight is an assessment of whether the actual activity related to the project/activity/program would have gone ahead without intervention.

- “Impact deadweight is the extent to which the resulting estimated impacts (within the economy) from an intervention would still have occurred without the activity/project/program.

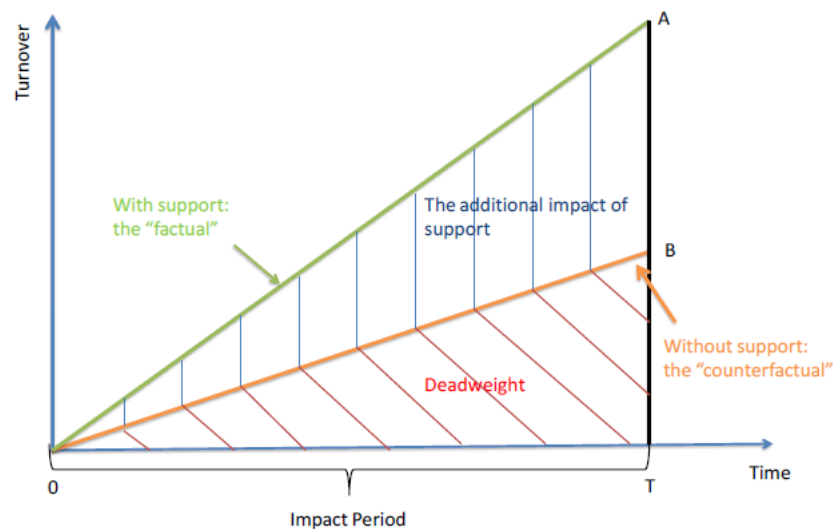


Figure 4 - Deadweight (Source: Scottish Enterprise Economic Impact Guidance, 2014)

2.4.2 Attribution

A second key concept which works in the opposite direction from deadweight is attribution. The attribution is an assessment of how much of the outcome was caused by the considered intervention and not by other factors.

The concept of attribution is strictly related to the wider concept of causality.

In the XVII the English Philosopher John Stuart Mill provided a theoretical formalization of the inductive approach to “causality”, listing key necessary conditions for causality to happen as: temporal precedence (X precedes Y), covariation (Y changes with X) and the absence of plausible alternative explanations.

Mackie 1974, p. 62 defined a “causa” as an “INUS condition” namely, “an insufficient but non redundant part of an unnecessary but sufficient condition”.

In this regard, a short circuit can be an INUS condition for a house fire: ... “Short circuits cause house fires is to say that the short circuit is an INUS condition for house fires. It is an insufficient part because it cannot cause the fire on its own (other conditions should be present). It is, nonetheless, a non-redundant part because, without it, the rest of the conditions are not sufficient for the fire. It is just a part, and not the whole, of a sufficient condition (which includes oxygen, the presence of inflammable material, etc.), but this whole sufficient condition is not necessary, since some other cluster of conditions, for example, an arsonist with gasoline, can produce the fire.” (Psillos, 2007, p. 126)

“Attributing” means proving a causal relationship between the change observed and the organization’s action, program or policy. Attribution appears as a key concept in impact identification and measurement.

Three main problems (Nonie Impact Evaluation Guidance, 2015) must be faced to guarantee attribution in impact evaluation:

- The establishment of a counterfactual, namely understanding what outcomes would have looked like in the absence of the intervention or policy or program (Ferraro, 2009).
- The elimination of «selection effect»: if the beneficiaries of an intervention are not “randomly” selected the inherent characteristics of the group selected for the treatment may bias the estimation of the impact of a treatment/intervention/program, potentially

leading to attributing to the treatment the effects which on the contrary are due to inherent characteristics of the group.

- A solution for the problem of unobservable characteristics of the groups which may be confused with the effects of the treatment.

A solution to the problem of attribution is the **Counterfactual Analysis**

The counterfactual analysis is an approach to impact evaluation which involves the comparison of the outcomes on the beneficiaries of a policy, a program, an intervention (the “treatment group”) with those of a group similar in all respects to the treatment group (the “comparison/control group”). In this analytical approach the only difference existing between the two groups is that the control group has not been exposed to the intervention.

- An open issue concerns how to select the control group. In the “differences in differences” design (another quasi-experimental design) two different groups are compared before and after the treatment. The effect of the treatment on the outcome of interest is obtained by comparing the average change over time in the outcome variable for the treatment group, compared to the average change over time for the control group. This design requires to assume “a parallel trend assumption” between the two groups. The choice of this design requires to reasonably assume that, in the absence of the treatment, the two groups would have followed parallel trends on the outcome variable.

According to the typology of research design adopted, the control group can be created in different ways (Table 1):

In purely experimental designs, as randomized controlled trial, the selection between treatment and control groups takes place on random basis.

- In “regression discontinuity designs” (a quasi-experimental design¹) the selection of treatment and control groups is based on a threshold established on a continuous assignment variable which must not be correlated with the treatment. Through the comparison of observations lying on either side of the threshold it is possible to estimate the average treatment effect.
- In the “differences in differences” design (another quasi-experimental design) two different groups are compared before and after the treatment. The effect of the treatment on the outcome of interest is obtained by comparing the average change over time in the outcome variable for the treatment group, compared to the average change over time for the control group. This design requires to assume “a parallel trend assumption” between the two groups. The choice of this design requires to reasonably assume that, in the absence of the treatment, the two groups would have followed parallel trends on the outcome variable.

1 The actual difference between experimental and quasi-experimental design lies in the random or not random assignment of units to the treatment group.

Methods	Description
Randomized trials (experimental)	<i>Random selection</i>
Regression discontinuity design (quasi experimental)	<i>Threshold above or below</i>
Differences in differences (quasi experimental)	<i>Different groups, different moments, parallel trend assumption</i>

Table 1: Typology of research design for counterfactual analysis and impact identification

Section 6 of this document will give details on these issues.

2.4.3 Displacement

The concept of displacement involves an assessment of how much of one outcome has displaced other outcomes. Displacement can be used to assess the effects of philanthropic or impact investing money. There is an effect of displacement when donors' or investors' money crowd out other money that would have delivered the same service (often, though not always, without philanthropic/impact investing dollars) (Karlan et al., 2016). A classic example is a healthcare clinic funded by donors: that clinic may simply be replacing an existing clinic, perhaps private, that served roughly the same population with roughly the same quality of services. The "impact" of those donor dollars is roughly zero (those patients would have gotten the same quality of care anyway).

Displacement can be negative or positive. Negative displacement reduces the impact of the donor dollars, as the outcome would have happened anyway. Good displacement increases the impact of the donor/investors' dollars; by displacing programs that are having little impact or doing harm. (Impact Matters, 2015). Displacement can be estimated through rigorous studies, but these studies are very seldom done on any social sector programs anywhere in the world.

In the absence of rigorous data, it is possible to make qualitative estimations through a "best guess" on a particular's organization's displacement, basing that guess on anecdotal information, non-counterfactual secondary data from studies, and general knowledge. Displacement (and externalities below) is often relatively apparent when it appears significant enough to be of concern. (Impact Matters, 2015). It can also be roughly estimated ex post with a survey approach with specific questions designed in the form: "what would you have done if you had not taken this program".

2.4.4 Drop off

With the drop-off concept we describe the deterioration of an outcome over time. The concept relates to the fact that over time the importance of the impact of a treatment decreases.

The organization should be aware of which beneficiaries are dropping off and if there are commonalities among them. (EVPA,2013). The creation of «panel dataset», can be useful to monitor the potential impact drop off.

4.5 Negative impact

The term «Negative impact» is an uncommon terminology especially if we adopt the first definition approach to impact which is expressed in section 4.1 (effects and changes (in terms of knowledge, skills, status, living conditions, values ...) generated in the long term on the community by the activities of an organization.)

From a more methodological point of view, negative impact can be regarded as significant, proved and reverse effect of an activity/program/policy with regard to pre-set objectives. Consequently, the negative impact is a different concept from that of «nonresult» i.e. absence or non-significant effects of the intervention.

Gertler et al. 2016, in the World Bank Impact Evaluation Guide, provide practical indications for organizations which have to cope with negative impact:

“Understanding how the intervention was implemented is particularly crucial when evaluation results show a limited or negative impact. Nonresults or negative results are no reason to punish program or evaluation managers. Rather, they provide an opportunity for program and evaluation managers to explain clearly what did not work as intended; that, in itself, can lead to large policy gains and should be rewarded.” (Gertler et al., 2016, p.218)

2.4.6 Spillovers & Externalities

A key challenge in the definition of social impact and its measurement is that of distinguishing the actual (social) impact of an intervention, an investment or a program from the externalities or spillovers it generates. The concept of attribution allows to distinguish the concept of impact from that of externality/spillover. The concepts of externality or spillover derive from the framework of neoclassical Economics.

From a microeconomic market transaction perspective an “externality” is defined by Hutchinson (2016) as “The effect of a market exchange on a third party who is outside or “external” to the exchange. Because externalities that occur in market transactions affect other parties beyond those involved, they are sometimes called **spillovers or externalities**. Externalities can be negative or positive.”

The economist Daron Acemoglu defines spillovers as “as indirect effects of a treatment”. Externalities “*can bias the direct effect, and/or they can be of economic interest themselves*” (Acemoglu et al., 2017, p.13).

The difference between externality and impact creates important issues for impact evaluation, since the effect of externalities is sometimes unknown or unpredictable ex-ante. Moreover, externalities can be both positive and negative, leading to gains or losses in the efficacy and efficiency of an intervention (Bernheim and Whinston, 2001). To measure externalities in practice, economists exploit a wide variety of different methodologies.

On one side quantitative methodologies rely on monetization. Through monetization techniques it is possible to quantify the value of an externality, estimating the cost of the damages product by the externality or the savings that the externality allows to obtain. Another potential and “reverse method” consists in the monetization of the cost required to control the externality itself. Moreover, other quantitative methods to estimate externalities rely on econometric counterfactual analysis.

Identifying and accounting for Spillovers: two lessons from Development Economics

Kremer and Miguel (2004, 2007) provide a counterfactual impact evaluation of a deworming program implemented in the Primary Schools of Kenya. In the program 30.000 students were treated with deworming pills. The output of the intervention was made up by the number of delivered pills, the outcome by the infections reduction and the impact of the intervention by health and nutrition conditions improvement and educational outcome. The experiment proved a positive effect on treated children.

However, the evaluation was not complete due to the presence of large externalities in health and in education. Actually, the fact that children received the pill and worm infections were reduced had fundamental effects also over non treated children both attending the same school of treated children both attending different schools closed to the treated ones.

The randomization of treatment intervention at school level allowed to catch important externalities across school and within schools. In this way the economists were able to estimate the overall impact of the program. Cross school externalities were measured analyzing outcomes and impacts and exploiting exogenous variation in the closeness of control schools to treatment schools. On the contrary, within school externalities have been measured comparing outcomes and impacts on individuals displaying low or high compliance to the treatment.

Also Janseens (2004) offers an evaluation of a women empowerment program named “Mahikya Samakya”, set in rural India. The impact evaluation study is provided with an analysis and an estimation of spillovers. In this case, in order to measure treatment spillovers, the authors implemented the survey both in treatment and in control villages. Running the survey including also program non participants, living in villages where the program is effective appears as a fruitful way to identify and catch spillovers.

Spillovers or Strategic Interactions?

Going beyond the identification of impact and of externalities/spillovers, Acemoglu et al., 2017 distinguish between the impact (direct effect) of a treatment, the pure spillover (externality) and the strategic interaction.

According to Acemoglu et al. (2017), strategic interaction takes place when there are interactions between the direct effects of a treatment (the impact) and the spillover effects. In the strategic interaction, the extent of the spillover depends on the treatment status of a specific individual. Strategic interactions play a key role in social innovation and social impact processes.

Spillovers as unintended consequences

A further perspective on externalities or spillovers, analyses these elements as the effects that come about as a result of an activity but that are not part of the desired and pre-set objectives. In spite of not having any theoretical formalization in academic literature, this approach is shared, as example, by the European Venture Philanthropy Association, which states that “By defining outcomes in line with objectives implies that an organisation focuses on the intended consequences of its interventions.” (EVPA, 2013, p.42).

Nonetheless, in spite of this focus, every intervention, policy, program displays a series of unintended consequences. According to the EVPA point of view, a part of the unintended consequences may be foreseen by the organization because, although the results of the activities on a particular community or group are not explicitly intended, they appear as a clear result of the organization’s activities and hence they should be factored into the defined outcomes and assigned indicators.

Other effects, which coincide with the spillover concept, may only manifest themselves once the activities of the organization are underway: for example, the beneficiaries of a treatment may respond to it in an unexpected way, or the effects may reach more peripheral stakeholders than the forecasted direct beneficiaries. To pick up these unintended consequences, an organization should review its activities periodically as part of the monitoring and evaluation process. In this perspective the absence of an explicit and forecastable intention may be regarded as the distinguishing element between impact and externalities. Impact to be identified ought to be distinguished from its unintended consequences.

3. Context and sustainability and impact management and measurement drivers

Sustainability and impact management and measurement have become a topical theme. For this reason, it is crucial to consider the context in which and the reasons why sustainability and impact management and measurement play a role in society. The next sections of this chapter will outline: (1) how social and environmental challenges affects measurement systems; (2) how the issues of impact measurement, and

more generally of an impact economy, are closely linked to regulatory aspects; (3) how companies and impact finance influence and are influenced by sustainable and impact management and measurement processes.

3.1 Social and environmental challenges

The world is facing new challenges. These are generated by emerging social, economic, environmental and political transformations which, in the last two years, have been exacerbated by the Covid-19 pandemic. Since the beginning of the century, our society has been characterized by new demographic trends such as an ageing population, new forms of households, urbanizations and migration, among others. The sustainability of our society (and of our planet at large) is also affected by climate change, which is causing economic losses and growing demand for energy, food and water. These transformations are challenging existing welfare systems and calling for new welfare and caring models that are able to tackle widening social exclusion and inequalities.

To address these challenges, different global initiatives to achieve sustainable development have been designed and implemented. Among the main recent ones, the most well recognised framework to communicate objectives and results connected to economic, social and environmental sustainability is the 2030 Agenda for Sustainable Development, which includes 17 Sustainable Development Goals (SDGs).



Figure 1 SDGs

SDGs, which are framed within a wide program that encompasses 169 specific targets and a set off more than 240 indicators, have become the cornerstone for the development of many national and local strategies due to their universality, mutual interconnection and transformative power. The SDGs framework has also inspired different methods and approaches to sustainability and impact measurement, all of which intended as a means to demonstrate and monitor the achievement of specific development targets.

3.2 Regulation pressure

In recent years, there has been a law development, especially at European level, which aims to set out a regulatory framework for how market players - including investors and entrepreneurs - shall operate in order to be impactful and ESG compliant.

Before mentioning some of these measures, it is worth looking briefly at the policy framework that has driven such development. Europe's orientation towards an impact economy has its roots in the Treaty on European Union and it has been reinforced through the European Pillar of Social Rights, according to which "pursuant to Article 3 of the Treaty, the aims of the European Union are inter alia to promote the well-being of its peoples and to work for the sustainable development of Europe based on a highly competitive social market economy, aiming at full employment and social progress. The Union shall combat social exclusion and discrimination,

promote social justice and protection, equality between women and men, solidarity between generations and protection of the rights of the child". Subsequently, there has been a cascade of policy interventions, among which the most relevant are the "European Commission Innovative Union Initiative & Social investment Package" (2010), the "Social Business Initiative - SBI" (2011), the "EU Programme for Employment and Social Innovation - EaSI" (2013), the "European Fund for Strategic Investments - EFSI" (2014), also known as the Juncker Plan, the "Social Impact Accelerator - SIA" (2015), and, in more recent times, the "Action Plan on Financing Sustainable Growth" (2018), the "European Green Deal" (2019), the EU Taxonomy (2020), the Social Taxonomy (2021) and the European Social Economy Action Plan (2021). All these initiatives have stimulated the market to adopt social innovation solutions as a resource for growth and jobs, mobilising private investors as well as social entrepreneurs, and creating the basis for a favourable legal environment.

Following such policy development, the European Union has defined common rules and a regulatory perimeter to drive the ESG and an impact economy market, covering both the financial and corporate sector through, for instance, benchmarks, standards and obligations of corporate due diligence, disclosure and reporting. For example, EU Reg. 346/2013 "on European social entrepreneurship funds" has established the so-called "EuSEF" funds, dedicated to social entrepreneurship, for the promotion of investments in companies that has "the achievement of measurable, positive social impacts as its primary objective in accordance with its articles of association, statutes or any other rules or instruments of incorporation". This intervention sets out the obligation for fund managers to adopt procedures to define the extent to which target companies achieve the expected (positive) social impact and to communicate to their investors the method used to measure such outcomes. More recently, EU Reg. 2088/2019 "on sustainability-related disclosures in the financial services sector" (so called "SFDR Regulation") has introduced specific disclosure requirements with regards to the sustainability risks of financial products; the SFDR was then complemented by EU Reg. 852/2020 which establishes "a framework to facilitate sustainable investment" (the so-called "Taxonomy Regulation").

It is interesting to note that these recent legislative developments intervene and complement the non-financial reporting pursuant to Directive 2013/34/EU, for example by including in the non-financial statement the extent to which companies' activities are associated with environmentally sustainable economic activities. At the same time, even if the combined two regulations are currently focused on environmental aspects, their scope is expected to be further extended by including "social" objectives. Furthermore, with specific reference to pension funds, Directive (EU) 2016/2341 specifically designed for pension funds includes considerations "on environmental, social and governance factors related to investment assets in investment decisions".

Finally, it is essential to consider the legal framework also in its formation, namely looking ahead and considering the ongoing legal initiatives that are expected to materialize as effective and binding legislative acts. This regulatory path has already been marked by the: (i) recent European Parliament resolution with recommendations to the European Commission on corporate due diligence and corporate accountability (with reference to ESG, value chain and Business Human Rights due diligence); (ii) proposal for a European legal act on "sustainable governance" that incorporates sustainability issues in companies, for example by redefining fiduciary duties of directors and the concept of corporate "social interest".

From the above, it is evident that the European legislator is focusing on impact assessment and measurement through disclosure obligations with the objective of leading market actors towards a sustainable transition. Essentially, the legal system discussed so far aims to provide clarity and common rules for such transition and, in turn, prevent impact and green washing, which are those practices that threaten the integrity of the sustainability framework and expose market operators to reputational and legal risks.

This regulatory evolution is also widening the access of consumers, and stakeholders in general, to remedies. More precisely, such regulatory changes at European level are providing stakeholders with the legal capacity of invoking liability of companies and funds for not fulfilling sustainability obligations. For example, human rights, adequate responses to the climate crisis or avoidance of green and impact washing business practices.

It is evident that companies and financial actors should adapt to the new regulatory frameworks, possibly anticipating any regulatory trends. Adopting adequate legal safeguards should not exclusively result into a mere compliance activity, but also into a full integration of impact and ESG measurement into the core business. This would allow companies to avoid legal and reputational risks and at the same time - as a consequence and with effects on a strategic level - ensure an advantage over competitors, also in terms of attracting investments and anticipating market trends.

3.3 New hybrid actors and finance for impact

The emergence of new social needs, pressing societal and environmental challenges and the evolution of new economic paradigms, prompted the development of new organizational forms that aim to address new global social, political, and economic trends. These organizations adopt innovative business models by blending social, environmental and economic purposes and generating impact as part of their core activities. These organizations, known as “hybrid organizations”, aim to fill the gap between purely philanthropic organizations (e.g., traditional third sector organizations and charities) and purely commercial ventures. Hybrid organisations are characterized by a varied stakeholder profile; their governance structure includes multiple stakeholders, and their activities have an effect on a broad range of different actors (e.g. beneficiaries, customers, funders and employees). All these stakeholders often have different needs and expectations (Dohrmann et al., 2015; Hockerts, 2015; Santos et al., 2015). Moreover, hybrid organizations have to balance between the achievement of both social and environmental mission and profit generation. Thus, the question is how hybrid organizations can integrate, manage and prove their hybridity.

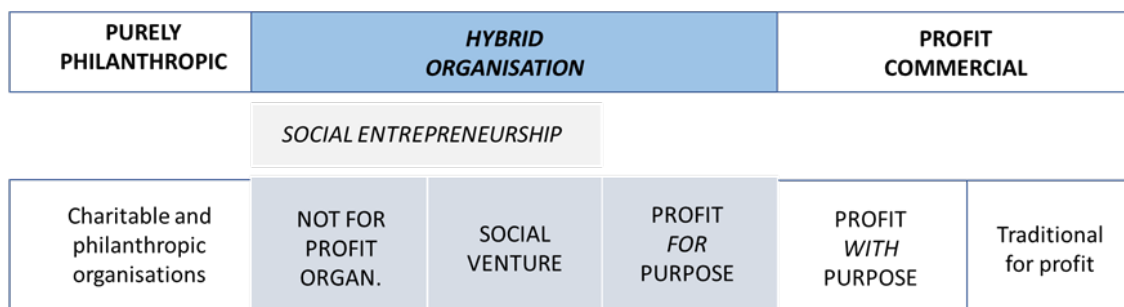


Figure 2 Hybrid organisations spectrum

The global financial crisis in 2007 has also led to re-thinking financial innovation processes (Khraisha and Artur, 2018) and pursuing innovative financing (Sandor et al, 2009). Since 2007, considerable efforts have been made to reform the financial system and make it more innovative, democratic and inclusive (Kim and Hann, 2019), by also rediscovering the importance of the ESG dimensions for the economic and financial system (Chapra, 2014). Over the years, the market has started to realize how shareholder wealth maximization is no longer a valid guide for the creation of sustainable wealth (Fatemi and Fooladi, 2013). This has led a paradigm shift that stirred the development of various model of sustainable finance. Moreover, traditional rating players have entered the market, with some recent important operations such as Moody’s acquisition of a majority stake in Vigeo Eiris as well as S&P Global’s purchase of the ESG business of RobecoSAM. Even if this market expansion is contributing to let the ESG ratings and rankings entering the mainstream finance, some concerns on data quality and integration with traditional financial reporting and research are still concerning main players. Company level ESG ratings from different rating agencies show low correlations due to differences in their methodologies. In this context, the ESG criteria are differently combined with financial expectations of the investors. For example, the concept of impact finance refers to the deployment of financial resources primarily for generating impact on the ESG components, as well as in some cases, a financial return. Conversely, ESG components can be measured just to mitigate the risks of unexpected events that may affect the financial performance of the investments. Impact investors aim to allocate their financial resources to investments that

combine two dimensions and potentially conflicting logics: financial performances and impacts on the ESG criteria. The problem is, therefore, how to combine conflicting logics in the same entity, and thus how to make sure impact investors can measure and demonstrate the impact generated by their investments while achieving expected financial performances.

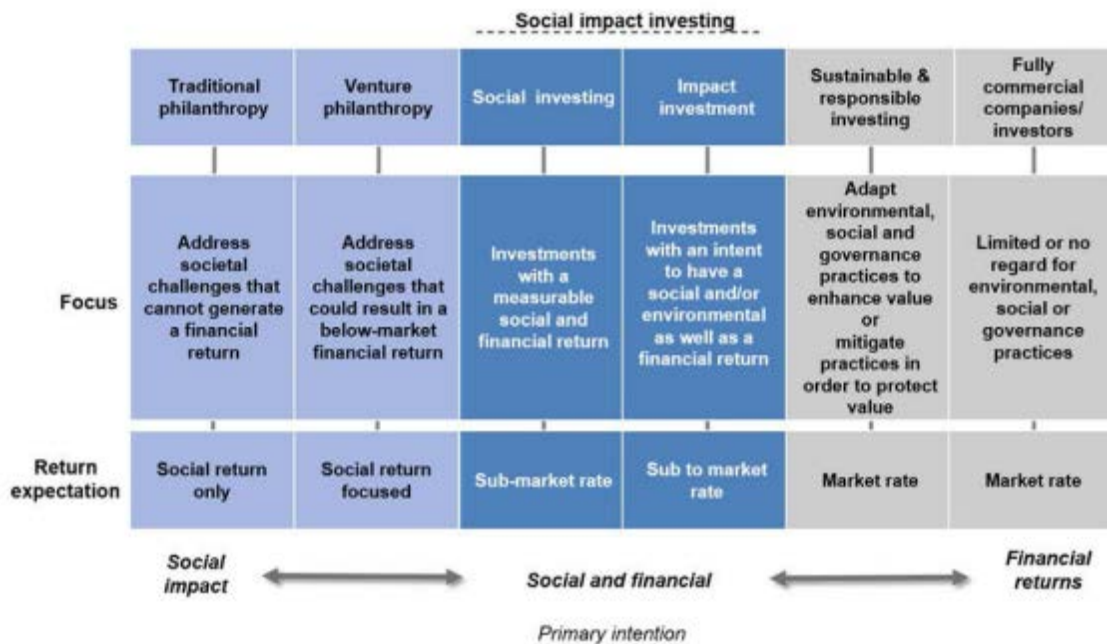


Figure 3 - Impact finance spectrum

4. Approaches, methods and metrics evolution

As detailed above, the evolution of sustainability and impact management and measurement is strictly related to the social and environmental challenges and the different ways impact organisations try to address them. We argue that the best approaches to measure and manage impact are the ones that overcome the risk of impact washing. This type of phenomenon is today challenged by both organizations' stakeholders (more and more sensitive to environmental and social issues) and new laws and regulations that try to limit these kinds of distortion and by driving companies towards an increased sustainability. In sum, organizations are increasingly required to show sound evidence of the impacts they can create and how these impacts are evidenced.

Sustainability and impact management and measurement practices can have implications for organizations in terms of communication, identity and transaction.

Communication

Among the multiple drivers that can lead an organization to develop or adopt an approach to measure impact, the need of communication, or reporting, is certainly one of the most widespread. The chosen measurement approach can lead to different kind of communication. Investment funds, for example, manage the measurement of impacts of their investees to properly communicate with shareholders or to comply with mandatory institutional regulations. Organizations can have different communication objectives. They can assess their social, environmental and economic performances in order to be transparent with their stakeholders. In this case, the impact measurement practice is used with an informative scope. Alternatively, organizations may want to communicate externally their strategic positioning with respect to sustainable or impact objectives and align internally the organizational values to these goals. Lastly, impact measurement

can be also used to communicate the impact strategies internally, to the staff and other internal stakeholders, to improve impact management processes and grow in terms of impact generation.

Identity

Sustainability and impact management and measurement practices can contribute to build an organization's identity. Measurement can enhance the identity of organizations, investors or funds, in terms of their propensity for integrating sustainability and impact in their business proposition. Thus, sustainability and impact management and measurement can have different results. Organizations that focus on demonstrating their social and commercial performances can use measurement tools to build on their own image as responsible entities to their stakeholders. Moving from a purely external approach to an internally driven managerial perspective on assessing social and environmental effectiveness, the image concept can evolve into identity. An organization that integrates impact measurement practices into its strategy and decision-making processes can concretely become a responsible entity and build its identity in this direction. Moreover, if an organization integrates impact measurement tools into its operational processes, it could be able to strengthen its identity and become a transformative actor able to solve societal challenges.

Transaction

"Principal-agent" relationship between two or more stakeholders (investors and investees, social enterprises and their clients and beneficiaries) can be affected by sustainability and impact management and measurement practices in terms of: managing the level of information asymmetry, the bargaining power, the risks of moral hazard and mission drift. In this case, the negotiations among stakeholders and the final arrangement depends on the bargaining power of different parties. This process may lead to mission-drift: for example, social enterprises may have to divert from their social-oriented purposes to meet the expectations of business-related stakeholders. In the finance context, the risk of mission drift is higher when investors require their investees to perform an ex-post measurement of the impacts criteria (e.g., ESG criteria). On the contrary, mission-drift is less likely when investors and investees define ex-ante their impact goals and impact criteria (e.g., ESG) and coherently integrate them into contractual agreements and investment performance monitoring systems. Lastly, this type of relationships negotiated through impact management and measurement may also generate a new set of impact measurement practices, which are relational and non-transactional in nature and entail an evolving and ongoing mutual learning process (Chen and Harrison, 2020). This is the case when the organizations actively engage with their stakeholders to improve their benefits, on the basis of impact goals and scalable targets.

We propose here a taxonomy of existing approaches to sustainability and impact management and measurement as outlined in the figure below.

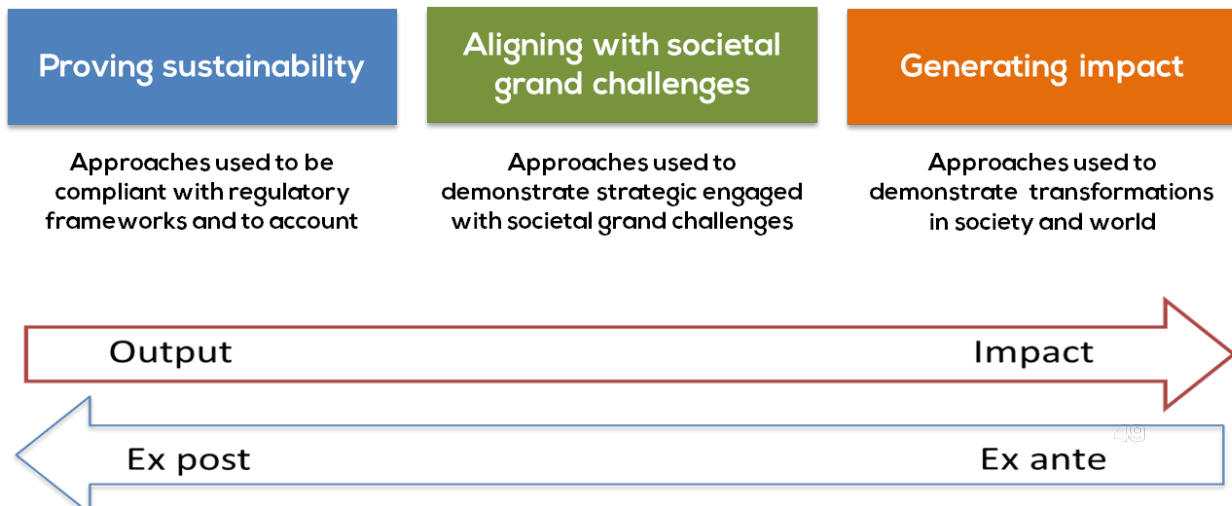


Figure 4 Taxonomy

4.1 Proving sustainability

Proving sustainability approaches to impact management and measurement are used by organizations to be compliant with regulatory frameworks and communicate the results of their activities to mainly external stakeholders. Proving sustainability practices demonstrate, in an informative way, the overall performances of an organization and enable its legitimacy to external audiences. This model, which is conceptually related to non-financial disclosure practices, aims at better defining an organization's image as a responsible entity. For example, in the finance world, this practice is used to manage negotiations between investors and investees, in that the investor requires the investee to report ex-post how ESG risks of their businesses are managed. In this sense, proving sustainability practices are mainly underpinned by a logic of compliance and are usually translated by organizations into reporting non-financial performances. Accordingly, the measurement of impact takes a narrative shape in organizations' reporting practices. These practices disclose information mostly at an output level, thus avoiding picturing a trajectory of outcomes and impact directly attributed to organizations' activities.

The main instrument through which organizations communicate their socially responsible behaviour to different stakeholders is the Sustainability Report, that must be comprehensive and representative of the relevant issues affecting a company and its sector, as well as functional to the informative needs of the different stakeholders. Sustainability Reports are produced on a voluntary basis, except for large companies or groups of companies. Another option is to develop an Integrated Report, in which companies' financial statements and non-financial information (environmental, social and governance issues) are merged into a descriptive sustainability report. To produce a report, organizations usually adopt available standards that provide a benchmarking tool for communicating with external stakeholders in an open, balanced and consistent manner. This is done by organizations to strengthen or maintain credibility and provide assurance of practices through independent certification.

The Global Reporting Initiative (GRI) is a non-financial disclosure methodology that ensures organizations' accountability to internal and external stakeholders in terms of environmental, social and governance performances. The GRI is an approach adopted mostly by listed companies and is used as a tool to adhere to regulatory compliance mechanisms. It supports organizations with disclosing information on how business models operate in terms of specific social and environmental outputs. Similar to financial reporting practices, the GRI embraces an ex-post valuation approach, mostly due to compliance issues.

The ESG approach is another important model which can broadly fall within Proving sustainability approaches to measuring and reporting the sustainability and impact of an organization. ESG frameworks guide

organizations through environmental, social and governance factors against which measuring the impacts of their activities. While non-financial organizations broadly adopt ESG frameworks as non-financial disclosure practice, financial institutions may instead make use of ESG frameworks in different and more complex ways. More precisely, ESG frameworks have witnessed important advances in the financial sector, in that financial institutions have progressively adapted ESG frameworks to different and more robust approaches to impact measurement and management. The GRI standards and the ESG approach are briefly presented in Annex 1&2.

Proving sustainability models have implication in terms of communication, identity and transaction as outlined in the following table:

Communication	An organization communicates (both internally and externally) its results only with an informative scope
Identity	Measurement aims to build an organization's image as a responsible entity
Transaction	Investors require investees to perform ex-post measurement of results

Table 2 - Proving sustainability implications

4.2 Aligning with societal grand challenges

This category includes approaches entailing more robust systems of impact management than those of Proving Sustainability. In this type of models, practices interpret sustainability from a "nice to have" to a "must have". In this context, measurement of impact emerges not only from a narrative perspective, but also from the identification and disclosure of a set of overarching social and environmental challenges that need to be addressed. In this context, the alignment with societal grand challenges has been regarded by scholars as a method of disclosure that helps boost corporate sustainability credibility because it ensures a link between the outputs and impacts (Ferraro et al. 2015). In this type of methodologies, the focus is on stimulating companies to align the assessment of their internal management and decision-making practices with their contributions to the most urgent social and environmental needs. Organizations that adopt these methodologies coherently picture their interests and strategies with broader objectives. They also provide a disclosure mechanism that is characterized by understanding, managing and communicating the social and environmental objectives which align with their organizational practices and function.

These approaches enable organizations to communicate, externally, their strategic positioning with respect to sustainable or impact objectives while aligning, internally, their organizational values to these goals. Moving from a purely external legitimacy approach of narrating social impact, these methodologies stimulate an internally driven managerial perspective on assessing social effectiveness. In this context, there is a shift from communicating ethical and responsible behaviour for a matter of reputation to a proper concept of organizational identity that is oriented towards sustainable development. Through these types of methodologies, organizations integrate the vision of contributing to societal grand challenges in their strategies and decision-making processes. For example, compared to Proving sustainability processes, Aligning with societal grand challenges approaches to measuring and managing impact require organizations to negotiate ex-ante common goals and targets that should be aligned to the performance monitored and measured ex post.

The impact management and measurement standards which fall within aligning to societal grand challenges methodologies are tools that support organizations with converging towards the SDGs. The SDGs can help a company or a whole sector align their social and environmental outputs with one or more SDGs. The SDG Impact Standards (see annex 3 for detailed information) are a set of Key Performance Indicators (KPIs) of social and environmental outputs that can be applied by most organizations to identify their specific contributions to one or more SDGs. They provide actionable guidance for embedding social and environmental objectives into an organization's strategy and influencing decision-making and risk management processes. As

anticipated, Aligning with societal grand challenges models have implication in terms of communication, identity and transaction as outlined in the following table:

Communication	Organisations communicate: externally its strategic positioning with respect to the sustainable or impact objectives; internally to align the organisational values to the sustainable or impact objectives
Identity	Measurement aims to build the organization's identity as a responsible entity
Transaction	Investor and investee define ex-ante impact goals and targets coherent with their strategies and integrate them into both agreement and investment performance monitoring system

Table 3 - Aligning with societal grand challenges implications

4.3 Generating impact

Generating impact methodologies support organizations with defining an impact strategy and the pathways for impact generation. According to these approaches, impact is the change in a social, environmental or economic outcome caused by an organization and it is characterized by three key features: intentionality, measurability and additionality. *Intentionality* refers to the explicit willingness of an organization to address a solution to a social problem and pursue the generation of a positive social impact. *Measurability* refers to the organization's capacity and need to account for its social-oriented activities in quantitative and qualitative terms. *Additionality* entails that social impact generates a positive change in fields where market mechanisms fail or only partially work. When organizations attempt to pursue these three features, their communication strategies are driven by impact generation aims. This implies that organizations define a robust sustainability and impact management and measurement process of analysis, monitoring, measurement and management of the short, medium and long term effects of their activities on the community in relation to the identified objectives. For example, in the finance sector, this process supports investees and investors with: (i) agreeing on and aligning internal practices with ex-ante defined overarching societal goals; (ii) translating such goals into impact action to better inform decisions and drive activity and investment capital to where it is needed.

According to Generating impact methodologies, the impact management and measurement of an organization's activities is built around communicating impact strategies internally, to the staff and other internal stakeholders, with the aim of improving impact management processes and internalizing a culture of impact generation. Furthermore, organizations that adopt methodologies that integrate impact measurement tools into their operational processes are also able to strengthen their identity of transformative actors potentially able to solve societal challenges. Oftentimes, this typology of approaches emerges from the negotiation process between organizational stakeholders. This process, which is relational and non-transactional in nature and based on mutual learning, can lead to choosing impact measurement practices that best fit the interests of all the actors involved in an organization (Chen and Harrison, 2020).

The standards for Impact generating approaches are those in which outputs, outcomes and impact are all linked by an ex-ante defined Theory of Change. Theory of Change is the logic model that supports organizations with identifying what environmental and social impact can be generated or achieved by their specific activities (Ebrahim and Rangan 2014). It implies the creation of a dashboard of KPIs that derive from the activities of an organization and are strictly connected to overarching impact objectives. A Theory of Change is defined as the causal connection between activities and results (in the form of output, outcome and impact measures). Such measures will then be translated into a range of qualitative and quantitative indicators, depending on the scope and depth of analysis. Theory of Change should integrate intentionality, measurability and additionality in organizations' logic models. This means that the activities of an organization should intentionally aim at certain measurable performances and impacts, possibly in contexts where they are needed the most (additionality). Examples of generating impact approaches are: Impact Management Project, Impact Weighted

Accounts and Social Return on Investment (SROI), all of which are described in annexes 4, 5, 6. As anticipated, Generating impact models have implication in terms of communication, identity and transaction as outlined in the following table:

Communication	An organization communicates its impact results externally with a strategic positioning purpose and internally to improve the impact management and generation processes
Identity	Measurement aims to build an organization's identity as a transformative actor in solving societal challenges
Transaction	On the top of the previous activities, the investor actively engages with the investees to improve their performance, based on the impact goals and targets, and to fully integrate the measurement infrastructure into the operations of the investees as a learning process.

Table 4 - Generating impact implications

4.4 Sustainability and impact management and measurement approaches and standards

As seen throughout this chapter, managing and evaluating impact is crucial to and relevant for many sectors and stakeholders. However, there is not a unique approach that is globally accepted and to which all products and processes, all activities and services of the same series can conform or comply with. Over the years, several impact measurement and management models have been developed by academics, international organizations (such as the UN, ILO, OECD), financial institutions and private organizations (Kah & Akenroye, 2020; Rawhouser et al, 2019; Bengo et al, 2016; Grieco et al. 2015). Around 100 sustainability and impact management and measurement models can be identified (table 4). Some models aim at supporting organizations and/or investors with proving their governance effectiveness, accountability and transparency through corporate sustainability disclosure (Proving Sustainability Models). Other models focus on aligning the assessment of internal management and decision-making practices with organizations' contributions to the social and environmental most urgent needs (Aligning with Societal Grand Challenges Models). Some other models include the entire process of analysis, monitoring, measurement and management of the short, medium and long term effects of an organization's activities on the community, in relation to the identified objectives (Generating Impact Models).

ID	Approach	Year of development	Positioning in the framework		
			Proving	Aligning	Generating
1	AA1000AP	2018			
2	Acumen Lean Data	2015			
3	Aeris Impact Management Assessment	N/A			
4	Anticipated Impact Measurement and Monitoring	2017			
5	Atkisson compass assessment for investors	2000			
6	B Impact Assessment	2015			
7	Best available charitable option (BACO)	2007			
8	Bridges Ventures Impact Radar	2013			
9	Business Reporting on the SDGs: An Analysis of the Goals and Targets	2017			
10	CDC Impact Grid/Impact Framework	N/A			
11	CERISE ALigning INvestors due-diligence and reporting with the Universal Standards	2018			
12	CERISE Impact-Driven Investor Assessment	2018			
13	CERISE MetODD-SDG	2018			
14	CERISE Social Business Scorecard	2018			
15	CERISE SPI4	2018			
16	Client-Centric Approach: Impact Evaluation that Creates Value for Participants	2015			
17	Cradle to cradle certification	2010			
18	Dalberg Approach	N/A			
19	DCED Standard for Measuring Results in Private Sector Development	2017			
20	DTA Fit for purpose	2008			

21	Eco-mapping	1998			
22	EPIC Long Term Value Framework	2017			
23	Equator Principles	N/A			
24	EU Ecomanagement and Audit Scheme (EMAS)	1993			
25	EU Technical Expert Group – sustainable finance taxonomy	2020			
26	European Foundation for Quality Management Excellence Model	2002			
27	EVPA and SVI Impact Management Principles	2019			
28	Expected return (Hewlett Foundation)	2009			
29	EY Total Value	N/A			
30	Fitch Ratings ESG Relevance Scores	2019			
31	FMO ESG Toolkits	N/A			
32	GECEs Five-step process to impact measurement and management	2013			
33	GIIRS Fund Ratings Methodology	2011			
34	Gold Standard Certification	N/A			
35	GRESB Infrastructure Fund Assessment	2016			
36	GRESB Real Estate Assessment	2009			
37	GRI sustainability reporting framework	2000			
38	HIP Rating	N/A			
39	HIPSO Harmonized Indicators for Private Sector Operations	2008			
40	IFC Operating Principles for Impact Management	2019			
41	Impact Management Project (IMP) Norms and classes	2019			
42	Impact multiple of money (IMM)	2019			
43	Impact-Weighted Accounts	2020			
44	IRIS + (and IRIS)	2012			
45	ISO 14001	N/A			
46	ISO 26000	N/A			
47	LM3	2002			
48	London Stock Exchange Group ESG Disclosure score	2019			
49	LuxFLAG ESG Label	2014			
50	Methodology for impact analysis and assessment (Investing for Good)	2013			
51	Methodology for Standardizing and Comparing Impact Performance	2021			
52	NPC Impact Risk Classification (IRC)	2018			
53	NPC's charity analysis framework	2016			
54	OECD FDI Qualities Indicators	2019			
55	OECD Guidelines for Multinational Enterprises	2011			
56	OECD measurement of corporates' impact on well-being	2017			
57	OECD Proposed Impact Standards for Financing Sustainable Development	2021			
58	Outcome star	2003			
59	Poverty and Social Impact Analysis (PSIA)	2015			
60	Poverty probability Index	2005			
61	Practical quality assurance system for small organizations (PQASSO)	1997			
62	Product Social Impact Assessment - PRé Sustainability	2013			
63	Prove It! Toolkit	2009			
64	Public value scorecard	2013			
65	SASB Standard	2018			
66	SDG Impact Practice Standard	2019			
67	Social accounting and audit	2011			
68	Social Cost-Benefit Analysis (SCBA)	N/A			
69	Social enterprise balanced scorecard	2000			
70	Social enterprise mark	N/A			
71	Social Footpring	2015			
72	Social Impact Assessment (SIA)	2003			
73	Social Impact Measurement for Local Economies	2009			

	(SIMPLE)				
74	Social Impact Navigator	2017			
75	Social Life Cycle Assessment	N/A			
76	Social Performance Task Force Guidelines on Outcomes Management for Investors	N/A			
77	Social return on investment	2000			
78	Social Value International principles and standards	N/A			
79	Social Value Management Certificate	N/A			
80	Social Value Maturity Index	2013			
81	Social Value Self-Assessment Tool	N/A			
82	Standard Ethics Rating (SER)	2004			
83	Success measures data system	2014			
84	The Committee on Sustainability Assessment (COSA) Methodology	2011			
85	The FINCA client assessment tool	N/A			
86	The Impact Due Diligence Guide	2019			
87	Theory Of Change	N/A			
88	Total Impact Measurement & Management (TIMM)	2013			
89	Toward Common Metrics and Consistent Reporting of Sustainable Value Creation	2020			
90	UK social housing Sector Standard Approach for ESG Reporting	2020			
91	UN Global compact principles	N/A			
92	UNEP FI Impact Analysis Tool	2020			
93	UNEP FI Model Framework	2018			
94	UNEP FI The Impact Radar	2018			
95	Vital Capital's Impact Diamond	2011			
96	Volunteering impact assessment toolkit	2015			
97	WBA's benchmarks	2020			
98	WBCSD Measuring impact framework	2008			
99	Y Analytics	2019			

Table 5 - Approaches

The following figure (figure 5) shows a synthetic view of the main taxonomy variables described in the previous section (3): measurement *funcions*, *purposes*, *interested stakeholders* and *examples of approaches*.

		TAXONOMY		
		Proving sustainability	Aligning with societal grand challenges	Generating impact
OBJECTIVE		To be compliant with regulatory frameworks and to account the results	To demonstrate strategic engaged with societal grand challenges	To demonstrate transformations in society and world
IMPLICATIONS	Communication	Narrative approach with an informative scope, disclosing information mostly at output level and ex post	Strategic positioning, boosting the corporate sustainability credibility ensuring a link between the outputs and impacts	Strategic positioning, communicating impact results
	Identity	As a responsible entity, to enable its legitimacy, targeting external stakeholder	Ex ante integration of societal grand challenges strategies to align the organizational values as organizational identity oriented to sustainable development	Improving impact management and generation processes as a transformative actor in solving societal challenges
	Transaction	Negotiation based on the results reporting ex post	Negotiation based on ex-ante common goals and targets aligned to the performance measured ex post	Impact measurement practices fit interests of all actors involved, and are relational and non-transactional
FOR WHOM	Organization	Traditional for profit	Profit with purpose	Hybrid
	Finance for impact	Responsible finance ESG risk	Sustainable investing ESG performance	Impact investing ESG value
APPROACHES	Examples	GRI ESG (GRESB)	SDG Impact Practice Standard B Impact Assessment	Theory Of Change IMP SROI

Table 6 - Taxonomy; implications; interested stakeholders; approaches

This matrix attempts to systematize how each variable is declined according to the three blocks of sustainability and impact measurement and management taxonomy introduced: Proving Sustainability, Aligning with Societal Grand Challenges and Generating Impact.

As of measurement implications, organizations can use communication for: (i) solely disclosing information (Proving Sustainability); (ii) positioning themselves in a sustainable way (Aligning with Societal Grand Challenges); (iii) acknowledging their impact objectives and related results (Generating Impact). In terms of identity, organizations can prove to be: (i) responsible entities (Proving Sustainability); (ii) actors oriented toward sustainable development (Aligning with Societal Grand Challenges); (iii) transformative players able to solve societal challenges (Generating Impact). Finally, transactions between organizations' stakeholders can be regulated through: (i) ex-post reporting results (Proving Sustainability); (ii) matching ex-ante common goals and targets and ex-post results (Aligning with Societal Grand Challenges); (iii) relationships fitting the interests of all the actors involved in an organization (Generating Impact).

Regarding the main stakeholders interested in the measurement practice results, we can notice that the informative need of traditional for-profit organisations and responsible investors can be satisfied by approaches with proving sustainability purpose. Instead, actors that profit actors purpose and sustainable investors are guided by approaches aimed at aligning with social grand challenges. Finally, hybrid players and social impact investors adopt by approaches with the goal of generating impact.

Finally, a few examples of measurement approaches for each category of the taxonomy are reported in the last row of Figure 5.

5. Sustainability and impact management and measurement process

5.1 Process for companies

As seen throughout this chapter, sustainability and impact management and measurement is an important and complex theme, which involve various actors with different objectives in different contexts. In this context, to manage their impact, organizations need a structured process that is able to cover the different objectives and needs related to the generation of positive impact and the mitigation of negative effects. Recently, there has been considerable progress in developing measurement and evaluation methods, with numerous approaches being developed by practitioners, foundations and impact investors (Ebrahim and Rangan, 2014). These efforts have led to a great heterogeneity among sustainability and impact measurement models. Some models are focused more on one specific aspect of the sustainability and impact management and measurement process. For example, there are models that help an organization align impact with strategies or activities (e.g., IFC's Operating Principles for Impact Management, Principles for Responsible Investment and Principles for Responsible Banking, among others). Other models provide specific sectoral metrics to assess impact (e.g., IRIS+, GRI, SASB standards, among others), while some other models are focused on impact evaluation and communication (e.g., SROI, Impact Weighted Financial Account, among others). Nevertheless, several models (e.g., Dalberg Approach, EPIC's Long Term Value Framework, EY Total Value, Impact Multiple of Money, SDGs Compass, Social Impact Assessment, Social return of investment, among the others) have similarities and common points, which make it possible to define a generic process for the management and measurement of the impact. This process follows eight interrelated steps. Each step is briefly explained as follows.

Objective Definition: This is the first step of the process. The Organization should define the objective of the measurement (e.g. measure to communicate or measure to improve the impact generation), the unit of analysis (the organization should want to measure a specific project or strategy, or the impact generated by the enterprise as a whole) and the available resources in order to schedule a feasible plan of implementation.

Context and Materiality analysis: in this step the organization should analyse the social needs it wants to tackle and their relevance related to the context in which it operates. In doing so, the organisations should analyse its stakeholders and could also identify and map the current and potential high impact areas connected to its business.

Strategic Alignment: the organization define its sustainable or impact statement and mission, aligning its strategies and processes. In order to do so, the organization could refer to principle like the SDGs principles, the ESG principles, the Principle for Responsible finance or investment, etc.

Impact Pathways (Social value chain): in this phase there is the analysis of the value creation process. The organization should understand in which way it is generating impact for the society, how its activity and output can generate outcomes and impacts. The main tool used in this phase is the social value chain.

Indicators and metrics definition: here the organisation has to define in which way it is going to assess its impacts. Is it going to use custom or standard indicators, quantitative or qualitative, or a mix of the two? Is it going to monetize all the impact, or just a part of it, if none? Is it possible to define a control sample or is there a benchmark with which compare the results?

Data Collection and Analysis: with this step there is the definition of the sources of information and data required for the analysis of the indicator, the collection tool and the timing of the gathering activities. Once the data are collected, it is time for the analysis and the evaluation of the impact.

Assurance and Communication: in this phase the organization should consider the assurance of the results, how to ensure the validity of the entire evaluation process and the best communication strategy to disseminate the results.

Integrating in Operational and strategic process: last, but not least, in order to improve the impact generation, to manage it and to guarantee the endogenization of the impact, the organization should define an action plan to integrate the impact evaluation at a strategic level and in the organisation long term decision process.

PROCESS								
	Objective Definition	Context and Materiality analysis	Strategic Alignment	Impact Pathways (Social value chain)	Indicators and metrics definition	Data collection and analysis	Assurance and Communication	Integrating in operational and strategic process
Activities	Definition of the objective of the measurement, the unit of analysis and the available resources	Analysis of social needs and their relevance related to the context, analysis of organisation's stakeholders and mapping of current and potential high impact areas	Definition of a sustainable and/or impact statement and mission and alignment of organisation's strategy and processes	Understand how the organisation creates value through its activities. Identification of the value creation process (input/activities/output/outcome/impact)	Definition of the relevant indicators and their nature (quantitative or qualitative indicators, monetisation) and type of analysis (counterfactual analysis, difference in difference,...)	Definition of the data sources, collection instruments and timing. Analysis of the data gathered and evaluation of the results	Assurance of the validity of the process and reliability of the results. Internal and/or external communication of the evaluation.	Define action plan to improve the organisation's impact generation process. Integrate the evaluation flow in the organisational long term decision process
Examples of methods supporting the activities	WBCSD measuring impact framework,...	EY total value, IMP, SDG Impact Standards,...	SDG Impact Standards, OECD Guidelines, EY Total Value, UPNEP,...	Theory of change, IMP, SROI, SIA,...	GRI, IRIS+, SASB Standard, IMP,...	IMM, SROI, Impact weighted account,...	B Analytics, B impact, GRI,...	IMP, Impact weighted account, EY Total Value,...
IMPACT MANAGEMENT AND MEASUREMENT PROCESS								

Table 7 - Sustainability and impact management and measurement process for companies

It is important to bear in mind that this is an 'ideal' process for managing and measuring impact. This means that not all organisations would follow all the steps, because management and measurement models do not necessarily cover all these activities.

5.2 Process for finance

Similar to companies, no consensus exists on what ideal process investors should follow to manage their impact. As such, the one presented here represents an ideal flow of an investment process designed to incorporate impact management and measurement from the very initial search for investment opportunities to the final divestment operations.

In general, investment processes (including *non-impact* ones too) are divided into phases that are, more or less, always the same when considering equity operations: initially, investment opportunities are sought in the sectors of interest to the investor, and then the most interesting ones are chosen through a screening phase; subsequently, there is a due diligence phase that ensures the eligibility of the operation and then the actual investment, which continues and is monitored for a certain period of time (usually years) until the investor exits the operation.

Ideally, in the case of impact investments, the investment process should be structured to go hand in hand with the impact management and measurement activities. All the investment phases should in fact be designed to keep track of and maximise the desired social and/or environmental impact, with the support of internationally recognised methods offering principles, frameworks, standards and metrics serving different purposes: defining expected impacts, outlining and aligning outcome and impact indicators, collecting data, and finally assessing impact in order to communicate it to the outside world.

The **origination** phase of the investment process is key to defining and incorporating impact principles into the investment strategy: the three key pillars forming the Impact Triad - intentionality, measurability and additionality - guide the search for investment opportunities, which are selected among those showing from the very beginning a potential effective contribution to one, or preferably more, SDGs.

The **screening** stage involves a preliminary feasibility analysis of the investment opportunities identified in the previous phase. Here, a preliminary analysis of the investment opportunities based on ESG criteria is performed to assess whether such investments can actually qualify as *sustainable*. More precisely, an ESG Acid Test is performed: this assesses, quantitatively, the degree to which the investment considers potential risks occurring across ESG criteria and makes a positive contribution to a number of macro-themes selected in the ESG area¹. If the ESG Acid Test is positive, the investment is eligible for generating value out of ESG criteria. To ensure this, it is verified that the principles of the Impact Triad are met and that the SDGs previously determined are consistently addressed.

For those investment opportunities that are considered worth pursuing, a specific assessment, the ***Social and Environmental Impact Due Diligence***, will be carried out to estimate and quantify the potential impact of the investment. Here, the design of the impact measurement and management takes the lead: the logic model of impact generation is built through a *Theory of Change*, which describes how and why a project is supposed to lead to a desired impact (environmental and/or social).

In the actual **investment** phase, it is fundamental to guarantee the full integration of impact criteria into the investment agreement. For this purpose, KPIs - at output, outcome and impact level – are defined, together with the related achievement targets. International frameworks such as, for example, GIIN's *IRIS Catalog of Metrics* and *IRIS+ Core Metrics Sets* are usually adopted during this phase to support standardisation and to ensure comparability in terms of communication of impact results.

The **monitoring** phase aims to track progress against previously determined impact targets (KPIs). This stage is also dedicated to supporting the verification of the achievement of impact objectives, highlighting any deviation between predetermined targets and actual results. Such verification can be carried out at different intervals: usually a period between six months and a year is chosen.

Finally, in the final stage of **divestment**, the impact results obtained through the investment are quantified, with a final Impact Report indicating whether the investment was successful or not. Since it is fundamental to consider that actual impact objectives, intended as the portion of the total outcome that occurred as a *direct* result of the intervention, are reachable and assessable only in the long term, it is important that the impactful activities initiated by the investment continue after its closure. For this purpose, the final Impact Report should include *mission-lock clauses* that guarantee the preservation of the social and/or environmental impact results of the initiative even after its disposal by the investor.

INVESTMENT PROCESS						
Phases	Origination	Screening	Due Diligence	Investment	Monitoring	Disinvestment
Activities	Definition of sectors of interest , favouring those investment opportunities whose characteristics contribute to the achievement of the SDGs Respect the principles of : intentionality, measurability, additionality.	Preliminary Negative Screening ESG Acid Test Screening based on the Impact Triad Principles Check for consistency with predetermined SDGs targets	Evaluation <i>ad hoc</i> of the investment's potential impact : (a) definition of the impact areas (b) construction of the logic model (Theory of Change) (c) development and analysis of the measurement process	Integration of impact objectives in the investment contract Identification of KPIs in terms of output, outcome and impact measures	Continuous monitoring of progress against predetermined impact targets: (a) monitoring of KPIs (b) periodic reporting (e.g. every 6 months, every year...)	Verification of the impact results obtained Final reporting: final impact report , including mission lock-in clauses aimed at preserving the generated impact
Examples of methods supporting the activities	UN PRI, UN SDGs, Sustainalytics ESG Scoring, MSCI ESG Scoring, SASB Materiality	UN PRI, UN SDGs, Sustainalytics ESG Scoring, MSCI ESG Scoring, SASB Materiality, SDG Impact Standards	IMP, SDG Impact Standards	GIIN's IRIS and IRIS+, SDG Impact Standards	GIIN's IRIS and IRIS+, Impact-Weighted Accounts Project, SDG Impact Standards	UN SDGs, GRI, GIIRS/B Analytics, Impact-Weighted Accounts Project

Table 8 - Sustainability and impact management and measurement process for finance

6. Impact measurement: methodological issues

As seen throughout this chapter, accounting for impact requires organizations to make strategic measurement choices. Whether attempting to prove their sustainability, align with societal grand challenges or generate impact, organizations that approach impact measurement models and standards inevitably embark on a research process, which can be **contentious** and debated (Scriven, 2013). Differently from more general applied research projects (e.g. exploratory studies), measuring impact is all about making **causal / attributional claims (i.e. causality or causation)** (Donaldson *et al.*, 2009). The robustness of causal claims has for long coincided with robustness of methods, with traditional social experiments being at the top of a **hierarchy of evidence** (Craig *et al.*, 2008; Shadish *et al.*, 2002). However, as social interventions are needing more compound explanations to respond to increasingly multifaceted social and environmental issues (McHugh *et al.*, 2017; O'Mara-Eves *et al.*, 2013), such hierarchy has been put into question (Nathanson, 2007; Petticrew, 2011), especially when applied to innovative organizations that operate in open society (Bertotti *et al.*, 2018; Caló *et al.*, 2019; Picciotto, 2012; Rifkin, 2014; Van Belle *et al.*, 2016).

The raising of concerns about the role of traditional experimentalism in measuring impact has shifted discourses about causality from being mono-paradigmatic instances to becoming pluralistic and methodological (Gates and Dyson, 2017). Approaching impact measurement and enacting approaches and standards now requires practitioners and academics to posit questions about (a) what reality is (**ontology**), (b) how to make sense of it (**epistemology** or what constitutes scientific knowledge), and the extent to which causal claims should be retained from a value viewpoint (**axiology**) (Cartwright, 2007). In the light of this heterogeneous understanding of causality, measuring impact now represents a plethora of possibilities, all of which with different understandings of causality that vary by **research paradigms**.

Research paradigms can be understood as a set of assumptions and beliefs from which causal claims about reality are generated. Paradigms guide the study of any phenomena. In the realm of impact studies, paradigms determine:

- researchers' ontological commitments to generalisable explanations of interventions (i.e., **theory**);
- how generalisable explanations are inferred (i.e., **inferential thinking** or **inference**);

- how inferred explanations are empirically substantiated (i.e., study **designs** and data collection and analysis **methods**).

There exist several paradigms in the realm of scientific research, but methodological literatures identify four main paradigmatic pillars: **historical positivism**, **social constructionism**, **post-positivism**, **critical realism**. These paradigms are outlined in the following figure and discussed in depth in the next section of this chapter, alongside their implications for impact measurement processes.

		Paradigms			
		Positivism	Post-positivism	Social constructivism	Realism
Methodological choices	Reality is ...	Stable and regular succession of events that follow a law-like logic	Regular succession of events subject to changes (i.e. not stable events)	Plural and made of subjective experiences	Stratified and composed of events/outcomes and deep causes (structures) that exert a real power over events/outcomes
	Causal claims are pursued through ...	Hypothesis verification: verify concurrence of two or more events (X follows Y, therefore every X follows Y) Induction	Hypothesis falsification: falsify concurrence of two or more events (X follows Y, therefore every X follows Y) Deduction	Subjective interpretations and meanings attribution Induction	Explanations of the tendencies between observable events/outcomes and non-observable causes Abduction
	Impact is assessed through ...	Randomized experiments or controlled trials (RCTs) – Counterfactual logic	Theory-driven social experimentation (RCTs; quasi-experiments; observational studies) – Counterfactual logic	Qualitative studies (single or multiple case studies or ethnographic journeys). Constant conjunction logic	Mixed-methods realist evaluation studies where theory and empirical data are mutually informative Generative logic
	Measurement consists of ...	Quantifiable data collected through e.g.: validated scales or objective measurements (e.g., blood samples, monitoring of physical activity, financial transactions)	Quantifiable data collected through e.g.: validated scales, objective measurements, new technologies such as digital diaries, big data	Non-quantifiable (qualitative) data collected through e.g.: unstructured or semi-structured (video) interviews, focus groups, observations, archival research and artifacts collection	Quantifiable and non-quantifiable (qualitative) data collected through different methods (scales, objective measurements, interviews, focus groups, observations and artifacts)
	Impact claims are verified through ...	Statistical analysis (e.g., t-tests, regression analysis)	Statistical analysis that is complex, theoretically supported and that can follow different types of inferences	Thematic and content analysis to organize evidence of impacts through meaningful categories and stakeholders' voices	Configurational analysis (<i>what works, for whom and why</i>) of quantitative (and qualitative) data to develop programme theories

Table 9 - Methodological issues to consider for sustainability and impact measurement

6.1 Historical positivism: verification, induction, randomised experiments

Historical positivism has its formal origin in the thinking and vision of science promoted by the French philosopher August Comte (1789-1857), as well as by David Hume (1711–1776) and his empiricist vision of scientific knowledge (Weinberg, 2013). This paradigm promotes a **successionist understanding of causality**, in that reality is seen as a stable and regular succession of events that follow a **law-like logic** and deterministically govern human actions (Bryman, 2012). At an epistemological level, positivism recognises that the truth about the world (and therefore interventions) can be pursued scientifically through **direct observations** of these regular empirical manifestations (Denzin, 2010). For historical positivists, causal explanation is however ontologically inaccessible *per se* (Pawson and Tilley, 1997). In historical positivists' view, **theory should hold true and value-free** only when direct observation of empirical events verifies the presence of a constant concurrence of two or more events (e.g. **X follows Y, therefore every X follows Y**) (Mohr, 2009). With theory being confined to the status of direct product of empirical scrutiny, positivists rely on **epistemic primacy** (i.e.,

reality is what we can observe) and **inductive inferential thinking** (i.e., theory verification from single empirical cases or a sequence thereof).

In applied impact research, this thinking has been historically guided mainly through **randomized experiments or controlled trials (RCTs)**. RCTs are experimental designs through which researchers control for any external sources of variations that may confound interventions' impacts on study units such people, animals, institutions. Interventions' impacts are isolated from external disturbance via randomization, whereby different conditions (i.e., different interventions and lack thereof) are assigned to study units by chance (e.g. by coin toss or table of random numbers) to create groups that are comparable at baseline (i.e. before an intervention) but that undergo different conditions (Shadish *et al.*, 2002). Then, conditions are contrasted by calculating the differences between impact study units' outcome responses (i.e., **counterfactual inference** - what would happen if the intervention was not there). More precisely, any differences between the groups that are observed once the impact study is completed are then likely to be attributed to the intervention of interest and not to confounding effects (Banerjee *et al.*, 2015). In such a vein, RCT researchers verify the effectiveness of an intervention by suppressing any contextual variation regardless of its theoretical importance.

RCTs require **data that are quantifiable**. These are mostly collected through universally **validated scales or objective measurements** (e.g., blood samples, monitoring of physical activity, financial transactions) of outcomes of interest and, less frequently, through researchers' own scales. Scales and objective measurements generate quantifiable information that undergo **statistical analysis** through techniques such as **t-tests** and forms of **multilevel regression analyses** to account for subgroup differences.

Forms of impact measurement that are purely underpinned by tenets of historical positivism are nowadays very rare (Bonell *et al.*, 2018). There is evidence that historical positivism plays a redundant role in recent forms of impact measurement that uses new forms of social experimentation, including more theoretically-driven RCTs (Corry *et al.*, 2019). The role of historical positivism has however been critical for the development of other logics of enquiry that have guided impact measurement and causality attribution. These include social constructivist, postpositivist and critical realist responses to (or critiques of) historical positivism.

6.2 Post-positivism: falsification, deduction, new social experimentations

Historical positivism has been highly critiqued for its internal inconsistencies. These critiques have been moved by authors that the literature labels as empirical post-positivists (Corry *et al.*, 2019). Among these authors, the philosopher of science Karl Popper (1902-1994) conceptualised historical positivism's inconsistencies as lying in the false assumption that knowledge is an inductive and empirical process of hypothesis verification (Popper, 2005). The main challenge Popper presented to historical positivists' statements about causality was that if any observed successions of regular events is held as verified theory, then science will never be able to offer generalisable explanations (Popper, 2005). In Popper's view, the process of verification implies uncritical acceptance of theories because sensory information remains decontextualised (i.e. the questions scientists ask, how the world is observed and measured) and, thus, subject to external validity issues (Popper, 2013).

By placing importance on the context of empirical observation, Popper advocated for a **theory-laden science**, whereby observations and experimentation can only come after thorough consideration of what theories tell us about the world, so that tested theories can be externally valid (Popper, 2013). In Popper's view, causality is pursued via **falsification and deductive reasoning**, whereby **hypotheses** are constructed **via careful evidenced-based theorizing** and, then, tested through observations and social experimentation (Popper, 2014). In such an approach, Popper recognized that ontological empiricism, value-free knowledge and empirical facts are contingent upon researchers' action (Corry *et al.*, 2019), and that the constant conjunctions between facts can no longer be the starting point to explain interventions (Bonell *et al.*, 2012).

Popper's rejection of historical positivism's sensory primacy and recognition that science needs authorial scrutiny and appraisal of context (i.e., questioning how reality is observed and theories falsified) had important implications for contemporary impact assessment research. In the wake of Popper's thoughts, impact studies have witnessed new **complex forms for social experimentation** which, for being considered particularly suitable to explain complex and innovative interventions, finds now plain legitimacy in policy (Bonell *et al.*, 2012). These forms of theory-engaged social experimentation include new-generation:

- **RCTs** using theories of change and qualitative study components;
- **quasi-experiments** (including natural experiments);
- **nonexperimental** or **observational** studies.

All these types of studies, differently from historical positivist RCTs, rely on the principle of falsification, and make use of extensive theory to rule out as many as alternative explanations as possible instead of confirming just one hypothesis (Shadish *et al.*, 2002).

RCTs which respond to post-positivist tenets nowadays widely used in impact studies. These new-generation RCTs, which preserve most of the underpinning features of historical positivist randomized experiments (i.e., randomization, control over units' exposure to interventions; suppression of confounding effects), have been re-examined by scholars and adapted to more complex forms of interventions that operate across different contextual conditions and that can have multiple explanations. RCTs of this kind, for example those promoted by the UK Medical Research Council (MRC), are guided by initial **theories of change**, and are supported through qualitative data to identify all the contextual conditions that may account for variation of impact across conditions of interest (Craig *et al.*, 2008). In other words, these types RCTs aim to falsify, theoretically, all the potential explanations of impacts before measuring and isolating the actual impacts of interventions.

Quasi-experiments are impact measurement design features that, similar to RCTs, seek to follow a counterfactual logic, but they lack randomization. More intuitively, quasi-experiments deal with **self-selection** or **natural occurring contrasts between conditions** (e.g. before and after covid), in that units that do (not) undergo a specific condition can be compared, alternatively:

- within the same group (**before and after quasi-experiments**);
- between groups (**controlled quasi-experiments**);
- within and between groups (**before and after controlled quasi-experiments**)

In quasi-experiments, researchers can either partially manipulate an interventional condition to force it to occur or hypothesize its effects before it naturally occurs. However, because they cannot exercise full control on conditions, quasi-experiment researchers need to account for disturbance at baseline (i.e., before an intervention occurs) and control for this over the whole study period. Quasi-experiments can do this through theoretically informed **design controls**. For example, researchers can add supplementary control groups by identifying, through theory, what type of conditions would otherwise lead to the impacts that are similar to those hypothesized for the intervention of interest. Alternatively, or in conjunction with multiple control groups, researchers can also add multiple points of observations of specific proxies of interest before an intervention occurs or is chosen by the units. This is usually done when theory suggests that, for example, specific interventions can occur or a chosen by units cyclically. Examples of quasi-experiments with this kind of multiple design controls are **controlled interrupted time series**. In these quasi-experimental designs, the units of analysis are assessed multiple times against the main impact proxies before and after an intervention occurs, and between different interventional conditions. By relying of multiple pre and post observations across different conditions, quasi-experimenters may be able to exclude different alternative hypotheses and isolate the effectiveness of a specific intervention, while informing the impacts of other types of conditions. Quasi-experiment researchers can also further control for any self-selection or natural occurring bias by means of **statistical controls**. By means of theoretically informed variables, quasi-experiment researchers can also

account for any confounding effects at a proxy level, thus ruling out any potential emerging associations between units' exposure to an intervention and non-interventional factors. However, compared to design controls, statistical controls are less supportive of causal claims because they operate at observational level and not at units of observation level.

Nonexperimental designs are, as their name suggests, impact studies that lack both randomization and elements of design controls. As such, they do not support counterfactual inference. More precisely, these designs do not allow researchers to exercise control over interventions and/or conditions, and therefore they are commonly defined as **observational studies**. These studies can take several design features such as, for example, **cohort studies**, **case-control studies** and **cross-sectional studies**. Compared to RCTs and quasi-experiments, nonexperimental designs firstly identify units' exposure to an intervention or an event of interest, and then they observe whether and when the impact occurs with or without comparators. As such, nonexperimental studies have a temporal framework to assess causality (Song and Chung, 2010).

RCTs, quasi-experiments and nonexperimental impact studies require **data that are quantifiable**. Although these studies may be supported by theory and a qualitative component (e.g. Theory of Change), they always assess impacts quantitatively. Data are usually collected through **validated scales**, **objective measurements** (e.g., blood samples, monitoring of physical activity, financial transactions) and also through newly designed instruments for data collection (e.g. new technologies such as digital quantitative diaries, big data). Scales and objective measurements generate quantifiable information that undergo **statistical analysis** that is complex, theoretically supported and that can follow different types of inferences (e.g., frequentist versus Bayesian inference).

6.3 Social constructivism: pluralism, induction, qualitative methods

Social constructivism is generally defined as a paradigmatic umbrella of approaches to science that jointly reject historical positivism's ideas of a unique truth made of regular succession of events (Bryman, 2012). Social constructivism recognises that **social reality has no intrinsic properties**, because it is mostly the understanding of the world and the common sense that form around it via **subjective experiences** (Berger and Luckmann, 2011). For this reason, social constructivists are epistemologically engaged with **subjective interpretations** and **meanings attribution**, which are derived from **personal, cultural and temporal experiences of phenomena** (Guba and Lincoln, 1989).

Social constructivism does not convey a unique epistemic recipe (i.e. what validates their knowledge), because made of several approaches (i.e. **phenomenology**, **hermeneutics**, **critical theory**, and **postmodern deconstructionism**, among others) that acquire and justify their understanding of social constructions to different degrees and depth (Marques, 2017). To mention a few of these approaches, phenomenological endeavours framed within Edmund Husserl's (1887–1938) transcendental idealism focus on the 'intentionality of human consciousness' (Spiegelberg, 2013, p. 107). According to this approach, the actual content of human experiences is the only validated unit of knowledge, because researchers remain unable to capture the mental processes that stand behind such content production (Lynch and Peyrot, 1992). Hermeneutical research enterprises (e.g. objective and alethic, among several others) push further phenomenologists' efforts, and dedicate themselves to the dialectic between meanings and their historical contextualisation (Mann and Schweiger, 2009). Informed by neoidealist tenets grounded in Martin Heidegger's (1917–1976) and Hans-Georg Gadamer's (1900–2002) thinking, hermeneutics aims to reconstruct the subtle meanings through the systematic study of language and its context of application (Wagenaar, 2007). On a more complex level, critical theory and its emancipatory pull inherited from Karl Marx's (1818–1883) historical materialism aim to expose the oppressive power of structures (e.g. inequalities) through individuals' experiences and meaning making (Klecun and Cornford, 2005). Compared to phenomenologists and hermeneutists, critical theorists add complexity to social constructionism's epistemic efforts, because they understand that experiences ought to

be validated by the appraisal of unconscious mental processes deriving from “ideologies, power relations, and other oppressions” (Alvesson and Skoldberg, 2017, p. 218). Finally, postmodern-poststructuralist turns posit questions on the validity of phenomenological, hermeneutical and critical constructions; they do it by deconstructing constructions via reflexive practices (Rosenau *et al.*, 1992). Drawing upon a sentiment of insecurity, scepticism and relativism following the Second World War, postmodernists and poststructuralists recognise the importance of meaning and experience as valid units of knowledge, but their interpretation remains to be considered as the product of an elaborated process of sense making that is filtered through researchers’ experiences (Rosenau, 2015).

Social constructivist impact studies mostly focuses on the ‘experienced’ (i.e. multiple realities) when it comes to the appraisal of interventions (Clarke and Dawson, 1999). The sense making of such experiences is usually theory-laden, such that grand theories (e.g. broad and very abstract theoretical frameworks such as, for example, ‘integration’) are used to frame the construction of individual experiences of interventions (Barnes *et al.*, 2003). However, in social constructivist traditions, theories are never conceived as the ultimate and true explanatory models for programmes; rather, new knowledge constantly enriches theories with new constructions (Alvesson and Skoldberg, 2017). With theory being never conducive to actual knowledge production, social constructivists rely on **inductive inference** and **value-engaged research**; they make use of these strategies to report on processes of sense making across programme stakeholders (i.e. multiple realities) without pronouncing “which set of perceptions was ‘right’ or more ‘true’ or more ‘real’” (Patton, 2014, p. 98).

In practice, impact measurement studies that embrace social constructivist traditions materialize mostly as **qualitative studies**. These studies explore, in-depth, the lived experiences of interventions’ stakeholders (e.g., organizations’ managers, clients, funders, regulators). They require impact evaluators immersing themselves in the real dynamics of interventions and/or organizations. Therefore, these studies can be particularly time consuming. These studies are generally designed as **single** or **multiple case studies** or **ethnographic journeys**. They employ data collection methods that are of discursive nature. For example: **unstructured** or **semi-structured (video) interviews**, **focus groups**, **observations**, **archival research** (Bryman, 2012) and **artifacts collection**, among others. These studies require researchers to engage with textual/visual data and make sense of interventions’ impacts through stakeholders’ words or artifacts. Common forms of analysis of qualitative data that are typical of these impact studies are inductive **thematic** and **content analysis**, which allow researchers to organize evidence of interventions’ impacts through meaningful categories and stakeholders’ voices (Vaismoradi *et al.*, 2013).

6.4 Critical realism: generative causation, abduction, mixed methods

Critical realism is a paradigm that opposes positivist and social constructionist understanding of reality and reduction of causal explanation to the social acquisition of knowledge (Bhaskar, 1975). Critical realism pursues ontological depth, that is to say it questions **reality as existent and objective, emergent, independent from human knowledge and never** reducible to scientific statements, which are always open to review and therefore fallible (Sayer, 2000). Critical realism sees reality as stratified and composed of experiences, events/outcomes and deep structures that exert a real power over events/outcomes (Bhaskar, 1975). More precisely, critical realism states that the world is hierarchically ordered (Archer, 1995) and made of real, actual and empirical domains, where:

- the **real domain** comprises structures and their causal potential or power (i.e. mechanisms) that cannot be directly observed;
- the **actual domain**, which is a subset of the real domain, contains events that are actualised (i.e. generated by real mechanisms) and that embody change (i.e. produce effects) that can be experienced;

- the **empirical domain**, which a subset of both the real and actual domains, contains actors' experiences of the actualised events from the real domain and they can be directly observed (Mingers *et al.*, 2013).

For example, the effects of inequalities can be directly observed by interviewing/survey people to appraise whether they believe they have experienced/perceived any outcomes due to avoidable factors (e.g. people believe their asthma worsened due to lack of money to heat and de-humidify their house; people believe their pension is too low due to long-term unemployment and early retirement). The actual level represents people's right to specific inequalities being fulfilled or neglected. Such right is ultimately explainable at the real level, where the unobservable power factors such as, for example, age and social class are fixed.

Critical realism states that knowledge construction and, therefore, science should be engaging with explaining the real domain and how it relates to the actual and empirical domains (Alvesson and Sköldbberg, 2017). For being engaged with explaining something that cannot be directly observed (i.e. the real domain), critical realist concept of causality shifts from being the product of a direct observation of events, to being inferred from a more complex analysis of tendencies (i.e. relationships) between the different domains of reality (Lawson, 1989). These tendencies, in realists' view, are never fully predictable and universal, because they are complex or, according to Danermark *et al.*'s (2002, p. 21); they are the result of what "we experience, what actually happens, and the underlying mechanisms that produce the events in the world". More precisely, these tendencies are seen as demi-regular, and they are the product of the interaction of certain causal powers in the real domain which Bhaskar name as 'generative mechanisms' (Alvesson and Sköldbberg, 2017).

To explain how generative mechanisms are activated and lead to actualised events and individual experiences, critical realists rely on the concepts of analytical dualism and temporality (Archer, 1995). Through analytical dualism, critical realism conceptualises structures and agency as independent entities that have different but related ontological properties (Sayer, 2000). By structure critical realists mean institutions and roles; by agency they mean a stratification of sense of self, personal identity and social identity through time and contexts (Archer, 1995; Westaway *et al.*, 2019). Critical realists assume that structures operate independently from agency, but they are also dependent on although not reducible to them (Archer, 2015). This separation attempts to uncover the process of how structures shape agency and, in turn, how agency contributes to either a new structuring or order of the world (i.e. morphogenesis), or a reproduction of the preceding structures or order (i.e. morphostasis) via, respectively, the activation of generative mechanisms or lack thereof (Archer, 1995). This process is conceived by critical realist as time dependent, whereby "(i) structure necessarily predate the action(s) of agents that transform it; and (ii) that structure necessarily postdates those actions" (Archer, 1995, p. 168).

Supporters of critical realism see the research process as necessarily engaged with such complex dynamics between structures and agency and, therefore, they disregard both "methodological individualism (a focus on the actors level) and holism (a focus on the collective level)" (Alvesson and Sköldbberg, 2017, p. 52). Critical realists believe that "we do not uncover real structures by interviewing people in-depth about them" (Archer, 1998, p. 199). Critical realists recognise that structures and their interplays with agency need more sophisticated explanations, in which theory plays a fundamental role to: (a) make sense of and abstract from how people experience (i.e. empirical data) their structural conditions; (b) explain how generative mechanisms change the social order and lead to impact (Bhaskar, 1998).

By considering theory and empirical data as mutually informative and essential to advance causal explanation of how real mechanisms can change the social order, critical realist researchers operate through abductive and retroductive inferential thinking (Danermark *et al.*, 2002). Abductive inference, formally conceptualised by the philosopher Charles Sanders Peirce (Peirce, 1932), is understood by realist researchers as a performative way to make sense of data that do not fall under *apriori* theorizing and, thus, to complement the fallible nature of human knowledge production (i.e. preceding theories) (Laurier Decoteau, 2017). More precisely, abduction looks at how new empirical evidence can enrich informative theories and broaden and

review pre-existing understanding of how real mechanisms (do not) lead to a new social order (Fletcher, 2017). Retroduction, on the other hand, is conceived by critical realists as an inferential exercise that follows abduction. It reconciles new abductive discovery with pre-existing knowledge to form new advanced theories about reality, so to complement the fallible nature of human knowledge production (i.e. in this case empirically-driven knowledge) (Bhaskar, 1998). In more accurate terms, retroduction represents a conceptualising endeavour that entails researchers engaging with advancing statements about reality by identifying the conditions in which something cannot exist (Danermark *et al.*, 2002). Practically, this is done by “moving backward and forward among empirical data, research literature, and emergent theory” (Dey and Teasdale, 2013, p. 255).

Despite widely adopted in the realm of science (Clark *et al.*, 2007), critical realism generally remains “a philosophy for and not about science” and, thus, it “does not engage with methodological matters much” (Alvesson and Sköldbberg, 2017, p. 53). However, in recent years, critical realist stances have fruitfully informed impact measurements (McEvoy and Richards, 2006). Critical realism has informed a specific theory-driven approach to impact evaluation: realist evaluation (Pawson and Tilley, 1997).

Realist evaluation is a relatively recent but widely accepted approach to impact evaluation that has been employed by researchers and public policy evaluators (Marchal *et al.*, 2010; Mukumbang *et al.*, 2018; Pawson, 2016). Realist evaluation was conceptualised by Pawson and Tilley (1997) and it draws on Bhaskar’s critical realist critique of positivist and constructivist traditions (Bhaskar, 1975). Realist evaluation acknowledges the epistemic idea of overabundance of explanatory possibilities in the social world, and it rejects the idea that empirical endeavour requires closed systems (i.e. historical positivist RCTs) (Pawson, 2006). In realist evaluation terms, the objects of science (i.e. interventions) are partially closed, because they operate in complex contexts (i.e. society) and not in laboratories (Pawson, 2013). Interventions, even when they have the same format or are part of the same family, will always respond to the context in which they operate and, thus, they will never behave the same way (Pawson, 2006). The reason for this is that interventions are social systems and, thus, made of individuals and institutions, micro and macro processes that interact and complement each other (Pawson and Tilley 1997).

Realist evaluation appreciates that **interventions or organizations are theories incarnate**, that is to say they are compound and underlying assumptions or hypotheses that account for how and why activities are delivered in certain ways to create impacts, for whom and under what circumstances (Pawson, 2013). In realist evaluation terms, these assumptions are not always explicit, because the ingredients of interventions are multiple and complex, sometimes hidden, and therefore in need of compound unpacking (Pawson, 2006). The duty of realist evaluation is, therefore, to make sense of such ingredients and make interventions’ underlying assumptions explicit.

Theories are the core of realist evaluation, and these are constructed via iterative conceptualisation, empirical data collection, analysis and conceptual refinements (Mukumbang *et al.*, 2018). To guide the construction and testing of a programme theory of an intervention, realist researchers rely on clear ontological assumptions. For realist evaluators, knowledge construction is the best match researchers can do between actually-existing mechanisms of society (i.e. ontological argument) and the mechanisms they propose to account for interventions’ impacts (Williams, 2018). Realist evaluation is therefore method neutral and can be seen as a pragmatic way to mix quantitative and qualitative methods and multiple study designs. Choices of methods are essentially underpinned by what an intervention aims to do and how and for whom it is hypothesized to work and produce an impact in a specific context (Pawson and Tilley, 1997).

Realist evaluation explains interventions through programme theories that describe how context activates (or fires or triggers) the mechanisms that lead to outcomes. This is done by realist evaluators through the categorical formula or heuristics: **Context + Mechanisms = Outcomes** (CMOs or CMO configurations) (Pawson, 2013). Thus, programme theories are not limited to describing causal direction between interventions’

components (Chen, 2014). Rather, they stand as either prospective or retrospective hypotheses that seek to describe the social world and its mechanisms under certain conditions and through the interactions of several components. These components may include an interventions' design, objectives, resources and actors (Goodridge *et al.*, 2015).

Realist programme theories can be constructed and tested in several ways by mixing different study designs (e.g. qualitative case studies, ethnographies, quasi-experiments, nonexperimental studies) and employing different data collection methods. Lately, some scholars have also conceptualised realist RCTs (Bonell *et al.*, 2012). However, realist evaluations are never conducted through only quantitative approaches, because generative mechanisms are hidden and can only be theorized. Overall, choosing from three main approaches is usually recommended to conduct realist evaluation. These approaches are recommended by existing reporting standards for realist evaluation (Wong *et al.*, 2016). The first approach includes: (a) advancing programme theories through existing literature; (b) testing programme theories through qualitative methods. The second approach to the formulation of a programme theory includes building and testing programme theories through primary research (i.e. data collection from the field). This approach mainly relies on stakeholders' assumptions about a programme, as well as on researchers' embeddedness in the intervention or their experience and professional knowledge in the field (Shearn *et al.*, 2017). The third approach to programme theory construction, testing and refinement combines the two previous approaches. For example, Mukumbang *et al.* (2018) have developed a programme theory of an antiretroviral treatment adherence club intervention in South Africa using three methods. First, they conducted a scoping review to identify explanatory theories (and underlying generative mechanisms) underpinning antiretroviral therapy adherence club interventions. Second, they conducted a qualitative study to explore programme designers' and managers' assumptions of the intervention and advance preliminary programme theories. Finally, through a mixed-method study (interviews plus a cohort design), they tested their programme theories and refined them.

Realist evaluations can make use of different analytical strategies to make sense of both quantitative and qualitative data collected through different types of instruments (e.g. interviews, observations, focus groups, scales and objective measurements, archival research). Therefore, there is no single recipe for realist evaluators.

Annexes

GRI sustainability reporting framework

The **Global Reporting Initiative (GRI)** is an international independent organization that helps businesses, governments and other organizations understand and communicate their impact on critical sustainability issues such as climate change, human rights, corruption and many others. Its main objective is to make sustainability reporting a routine for all organisations, similar to financial reporting. By using the GRI Guidelines, reporting organizations disclose their most critical impacts – either positive or negative – on environment, society and economy. They can generate reliable, relevant and standardized information with which to assess opportunities and risks, and enable more informed decision-making – both within the organisations and among their stakeholders.

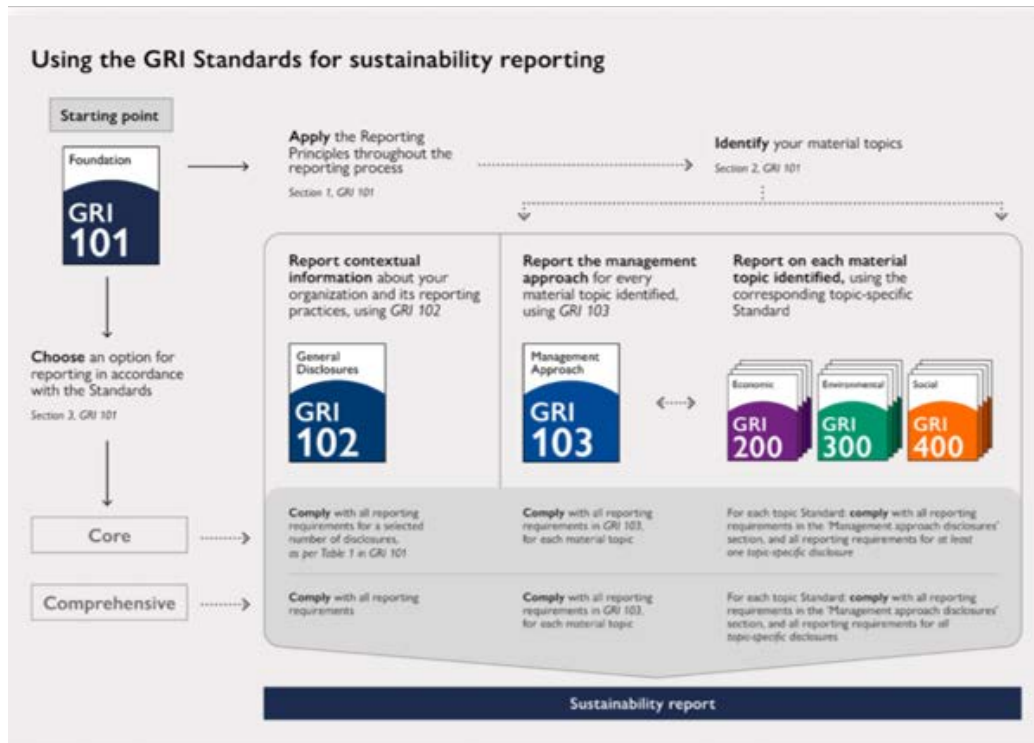
GRI's core product are the **Sustainability Reporting Standards** which are made available as a free public good. GRI Standards are the first and most widely adopted global standards for sustainability reporting and they have been continuously developed over 20 years. The Standards are designed as an easy-to-use modular set, starting with the universal Standards. Topic Standards are then selected, based on the organization's material topics – economic, environmental or social. This process ensures that the sustainability report provides an inclusive picture of material topics, their related impacts, and how they are managed.

In particular, GRI defined the Reporting Principles, which can be divided into two groups:

1. **Principles for defining report content.** To help organizations decide what content to include in the report. This includes an analysis of the organization's activities and impacts and the real interests and expectations of its stakeholders:
 - a. *Stakeholders inclusivity*, It will be necessary to identify who are the stakeholders of the organization, their expectations and interests and how the company intends to deal with them (Stakeholders Analysis);
 - b. *Sustainability context*, the information must be communicated by contextualizing the sustainability context in which they occurred;
 - c. *Materiality*, the report must contain information on the aspects that: reflect the significant economic, social and environmental impacts of the organization and that influence the decisions and assessments of stakeholders (Materiality Analysis);
 - d. *Completeness*, the information presented in the report must be sufficient to reflect the economic, social and environmental impacts and to allow stakeholders to adequately assess performance
2. **Principles for defining report quality.** To guide choices to ensure the quality of information in a sustainability report, including its adequate presentation:
 - a. *Accuracy*, the information reported must be sufficiently accurate and detailed to be able to evaluate the performance of the organization;
 - b. *Balance*, the report must contain both positive and negative information regarding the performance of the organization;
 - c. *Clarity*, the information reported must be clear, therefore presented in an understandable and accessible way to all users of the report;
 - d. *Comparability*, the information reported must allow comparative analyzes to be carried out with reference to performance over time and with respect to other organizations;
 - e. *Reliability*, It will have to communicate about the processes implemented to collect, compile, analyze and communicate the information reported to allow users to verify the quality and materiality of the information;

- f. *Timeliness*, the preparation of the report must take place on a regular basis, furthermore the performances must refer to a homogeneous period

GRI Sustainability Reporting Standards do not only include the guidelines for sustainability reporting. Alongside these, there is also an implementation manual, which specifies the protocols of the indicators and the technical protocols for the application of the principles, and the sector supplements.



Using the GRI Standards for sustainability reporting (Source: GRI 2018)

ESG performance ratings



Overs 1.000 ESG ratings and indices exist globally as of 2018 and they continue to grow. Traditional rating players have entered the market, with some recent important operations such as Moody's acquisition of a majority stake in Vigeo Eiris as well as S&P Global's purchase of the ESG business of RobecoSAM. The most used and trusted ESG ratings results to be MSCI and Sustainalytics for their broad coverage. MSCI is particularly appreciated for its quality research, transparency and data quality, while Sustainalytics has been mentioned for its broad coverage, recent SABS alignment and transparency. CDP and ISS are also widely used, mainly for their quality and usefulness. ESG research industry is made up of a growing set of companies that collect and analyse data related to a diverse array of ESG issues. The ESG research ecosystem is characterized by:

- Standards setters help structure and prioritize ESG reporting and disclosures.
- Data aggregators: provide extensive sets of structured data culled from publicly available sources.
- Specialized data: some firms focus on specialized data related to particular ESG issues.
- Rating agencies: ratings offer a composite environmental, social and governance perspective, enabling investors to compare and rank companies relative to their industry peers.



The ESG research ecosystem

(Source: <https://www.ishares.com/us/literature/whitepaper/an-evolution-in-esg-indexing.pdf>)

Even if this market expansion is contributing to let the ESG ratings and rankings entering the mainstream finance, some concerns on data quality and integration with traditional financial reporting and research are still concerning main players:

- There is little consensus about which ESG issues and information are material.
- There is still a lack of reporting standards that are universally accepted.
- Company level ESG ratings from different rating agencies show low correlations due to differences in their methodologies

SDG Impact Standards

The aim of the SDG Impact Standards (hereafter “the Standards”) is to introduce a clear framework for integrating impacts on SDGs into business and investment decision making. Thus, the Standards provide a set of practices for (1) **private equity funds**, (2) **bonds** and (3) **enterprises**, that help them align their activities with the SDGs and facilitate mobilising resources towards the SDGs. The Standards are not only standards for reporting, but they provide a **common language** and **best-practice guidance** for integrating impact management into internal management and decision-making (aligning with the Impact Management Project’s (IMP) Five Dimensions of Impact and ABC Impact Classifications, which provide a shared language of impact and a consistent approach).

The **foundational elements** of the Standards are:

- contributing positively to sustainable development and achieving the SDGs;
- a minimum level to be achieved by demonstrating respect human rights and other responsible business practices (as set out in the UN Guiding Principles for Business and Human Rights, and the Ten Principles of the UN Global Compact);
- effective impact management and decision-making.

The Standards fit with existing principles, frameworks and tools, since they are grounded in high level principles and provide context for integrating other tools and frameworks into decision-making.

The Standards comprise four Standards, one for each of the four themes – strategy, management approach, transparency and governance.



Levels of SDG Impact Standards

(Source: <https://sdgimpact.undp.org/private-equity.html>)

Standard 1 (Strategy): Embedding foundational elements into purpose and strategy

Standard 2 (Management Approach): Integrating foundational elements into operations and management approach

Standard 3 (Transparency): Disclosing how foundational elements are integrated into purpose, strategy, management approach and governance, and reporting on performance

Standard 4 (Governance): Reinforcing commitment to foundational elements through governance practices

To better explain how the Standards work we focus here on the example of how they can be applied to Private Equity Funds.

In this case, the Standards aim at **closing the gap** for achieving the SDGs by 2030, **encouraging** Funds to move their activities towards economic, social and environmental challenges; **generating** trusted, credible and actionable impact information that informs investment decisions; **promoting** impact integrity and avoiding impact washing; and **embedding** review and feedback loops to support continuous improvement and learning. The Standards can be applied by Private Equity funds, as well as by private debt and venture capital funds, regardless of size, geography and sector of the funds.

Standard 1 (Strategy): The Fund embeds contributing positively to sustainable development and achieving the SDGs in its purpose and strategy.

The Fund:

- **develops an impact thesis** (or theses), links its purpose and strategy to this thesis and determines how it intends to contribute positively to the SDGs, including the target SDG areas, the type of impact it intends to achieve and sets in context of its impact risk appetite and tolerance.
- **sets realistic portfolio-level impact goals** aligned with its purpose, impact thesis and investment strategy, and considers the potential for unintended negative or perverse outcomes.
- **periodically revises and refines the impact thesis**, investment strategy and portfolio level impact goals to ensure they are aligned with the purpose over the Fund lifecycle and changes in the sustainable development context.

Standard 2 (Management Approach): The Fund integrates impact management and contributing positively to sustainable development and achieving the SDGs into its operations and management approach.

The Fund:

- **embeds in its policies and practices** the compliance with human rights, other responsible practices and local and international laws and regulations (UN Guiding Principles for Business and Human Rights and Ten Principles of the UN Global), striving to comply with the highest possible level of industry best practice.
- **implements effective mechanisms** and processes:
 - to proactively **monitor its performance and conformance** with its responsible business and impact management policies and practices, and embeds a culture of continuous improvement;
 - to **identify Stakeholders materially affected** (or likely to be affected) by its and its Investees' activities;
 - to **collect, manage and use its impact data**;
 - to ensure its **impact management practices** remain fit for purpose.
- **establishes pre-screening criteria** for potential investments to assess alignment with its purpose and strategy, including its impact thesis and impact goals.
- **conducts ex ante impact assessments** of potential investments to assess relevant and material impacts (positive, negative, intended, and unintended impacts – see IMP) and the Investee's mitigation

strategy for all negative material impacts it exposes, and to determine the Fund's expected contributions to the impact performance of each investment.

- **engages with potential Investees** during the due diligence and investment structuring phase, to agree on how to **embed impact considerations within the investment terms**, and so optimize future impact performance.
- **systematically monitors and manages its ongoing impact performance** overall and for each investment and acts to optimize impact (including managing unexpected outcomes).
- **proactively manages its exits** from investments to optimize impact.

Standard 3 (Transparency): The Fund discloses how it integrates contributing positively to sustainable development and achieving the SDGs into its strategy, management approach, governance and decision making, and reports (at least annually) on its performance.

The Fund:

- **discloses relevant information** about the Fund in its legal and offering documentation to enable potential Investees, limited partners and Stakeholders to make informed decisions.
- **reports publicly** at least annually on the Fund's impact performance **at the portfolio level** against the Fund's impact thesis and portfolio level impact goals; and **at the investment level** (where feasible), performance against investment level impact targets.

Standard 4 (Governance): The Fund's commitment to contributing positively to sustainable development and achieving the SDGs is reinforced through governance practices of the Fund and the Fund Manager.

The Fund:

- **has governing bodies** that have competencies concerning sustainable development issues and impact management.
- **has active oversight** from its governing bodies on:
 - its policies on respect for human rights and other responsible business and impact management policies;
 - process of Stakeholder identification and involvement in decision making;
 - its purpose and approach to creating sustainable long-term value, portfolio level impact goals and investment strategy;
 - the compatibility of its impact thesis performance and conformance with its impact management policies and practices;
 - progress against its portfolio level impact goals;
 - sustainable development related disclosures and external reporting.

Impact Management Project

The Impact Management Project (IMP) is a global network of standard-setting organizations that aim to accelerate widespread adoption of impact measurement and management. IMP provides a forum for building global consensus on how to measure, manage and report impacts on sustainability, and convenes a community of over 2000 practitioner to share best practice, understand technical issue and identify areas where is required to build further consensus in impact measurement and management. IMP provides a common logic to help enterprises and investors to better understand and manage their effects on people and the planet, in order to reduce the negative and increase the positive.

Impact Management project defines **five dimensions (What, Who, How Much, Contribution, Risk)** through which evaluate each effect (intended or unintended, positive or negative) on people or planet. These dimensions help the enterprise to identify the outcome it is contributing to, which stakeholders are experiencing the outcome and its importance for them, the dimension of the outcome (e.g. number of stakeholders, degree of change), its attribution, the likelihood that actual impact will be different than expected and other information.






In order to operationalize these dimensions, IMP introduces 15 impact data categories (see figure below). The objective of the impact categories is not to replace existing framework and standards but to integrate with them. Indeed, according to the IMP, data categories should be seen as building blocks that can be used as a guideline to create the enterprise impact management framework or as a checklist to ensure that the enterprise is not missing any important piece for managing impact.

According to their own motivation (for example, comply with regulatory norm or generate positive impact), the investors' and enterprises' intentions can range from a broad commitment to mitigate risk or to leave a positive mark on the world, to more detailed objectives related to a specific group of people, place or outcome, or to a specific social or environmental challenge.

These different intentions lead to the three types of impact defined by the IMP:

- **A: Act to avoid harm.** This is the minimum level, the investors or the enterprises comply with regulatory requirements, or adopt a responsible behaviour
- **B: Benefit to stakeholders.** Enterprises and investors act with specific objective of generating positive effect on the world to sustain their long-term financial performance, or they can aim to create a world where the business try to have a positive effect on society.
- **C. Contribute to the solutions.** Enterprises and investors can use their capabilities to solve or focus the attention to pressing social or environmental problems in specific social or geographical area.

Adopting these three impact categories, enterprises can benchmark their performances across the five dimensions against other enterprises.

Impact dimension	Impact data category	Description
 What	1. Outcome level in period	The level of outcome experienced by the stakeholder when engaging with the enterprise. The outcome can be positive or negative, intended or unintended.
	2. Outcome threshold	The level of outcome that the stakeholder considers to be a positive outcome. Anything below this level is considered a negative outcome. The outcome threshold can be a nationally or internationally-agreed standard.
	3. Importance of outcome to stakeholder	The stakeholder's view of whether the outcome they experience is important (relevant to other outcomes). Where possible, the people experiencing the outcome provides this data, although third party research may also be considered. For the environment, scientific research provides this view.
	4. SDG or other global goal	The Sustainable Development Goal target or other global goal that the outcome relates to. An outcome might relate to more than one goal.
 Who	5. Stakeholder	The type of stakeholder experiencing the outcome.
	6. Geographical boundary	The geographical location where the stakeholder experiences the social and/or environmental outcome.
	7. Outcome level at baseline	The level of outcome being experienced by the stakeholder prior to engaging with, or otherwise being affected by, the enterprise
	8. Stakeholder characteristics	Socio-demographic and/or behavioural characteristics and/or ecosystem characteristics of the stakeholder to enable segmentation
 How Much	9. Scale	The number of individuals experiencing the outcome. When the planet is the stakeholder, this category is not relevant.
	10. Depth	The degree of change experienced by the stakeholder. Depth is calculated by analysing the change that has occurred between the "Outcome level at baseline" (Who) and the "Outcome level in period" (What).
	11. Duration	The time period for which the stakeholder experiences the outcome
 Contribution	12. Depth counterfactual	The estimated degree of change that would have happened anyway - without engaging with, or being affected by, the enterprise. Performance of peer enterprises, industry or local benchmarks, and/or stakeholder feedback are examples of counterfactuals that can be used to estimate the degree of change likely to occur anyway for the stakeholder.
	13. Duration counterfactual	The estimated time period that the outcome would have lasted for anyway - without engaging with, or being affected by, the enterprise. Performance of peer enterprises, industry or local benchmarks, and/or stakeholder feedback are examples of counterfactuals that can be used to estimate the duration likely to occur anyway for the stakeholder.
 Risk	14. Risk type	The type of risk that may undermine the delivery of the expected impact for people and/or the planet. There are nine types of impact risk.
	15. Risk level	The level of risk, assessed by combining the likelihood of the risk occurring, and the severity of the consequences for people and/or the planet if it does.

IMP Five Impact Dimensions and the 15 Impact Data Categories

(Source: <https://impactmanagementproject.com/impact-management/impact-management-norms/#anchor3>)

IMP identifies different strategies that an investor can use to contribute to impact. These strategies are not mutually exclusive, but they are often used in combination. The investors' contributions are the following:

1. **Signal that measurable impact matters:** this is a sort of value alignment of the investors, which express their values. However, alone it is not very useful to progress on societal issues.
2. **Engage actively:** engagement can vary from dialogue with companies, to creation of industry standards, to investors that use their own team or consultants to provide impact management support to the investee. This strategy involves a significant proactive effort to improve impact.
3. **Grow new or undersupplied capital markets:** investments "grow new or undersupplied capital markets" if they enable the enterprise to deliver impact that would likely not otherwise occur, or, if they pressure the enterprise to increase its impact generation and/or rewards it for doing so (for example, changing the price of enterprise's securities).
4. **Provide flexible capital:** the investors recognize that certain types of enterprises require lower risk adjusted financial return to generate specific impacts.

Bringing together the impact of the underlying enterprises/assets in the portfolio (the "ABC" impact) and the above-mentioned contribution, the IMP defines the Investor's Impact Matrix, which is composed by 12 boxes – the "Impact classes" – that classifies the impact of a portfolio. The impact classes can be useful to understand

if an investment opportunity is aligned with the investor's impact intentions. The matrix is therefore a tool that help investors to describe and communicate the impact characteristic of an investment opportunity.

The figure below shows an example of investor's impact matrix, populated with examples of investment archetypes.

		Impact of underlying assets / enterprises			
		A ct to avoid harm	B enefit stakeholders		
				C ontribute to solutions	
Investor's contribution	Signal that impact matters + Engage actively + Grow new/undersupplied capital markets + Provide flexibility on risk-adjusted return	1	E.g. Ethical bond fund	E.g. Positively-screened / best-in-class ESG fund	E.g. Sovereign-backed bonds (secondary market) funding vaccine delivery to underserved people or renewable energy projects
	Signal that impact matters + Engage actively + Grow new/undersupplied capital markets + Provide flexibility on risk-adjusted return	2	E.g. Shareholder activist fund	E.g. Positively-screened / best-in-class ESG fund using deep shareholder engagement to improve performance	E.g. Public or private equity fund selecting and engaging with businesses that have a significant effect on education and health for underserved people
	Signal that impact matters + Engage actively + Grow new/undersupplied capital markets + Provide flexibility on risk-adjusted return	3	E.g. Anchor investment in a negatively-screened real estate fund in a frontier market	E.g. Positively-screened infrastructure fund in a frontier market	E.g. Bond fund anchoring primary issuances by businesses that have a significant effect on environmental sustainability, access to clean water and sanitation
	Signal that impact matters + Engage actively + Grow new/undersupplied capital markets + Provide flexibility on risk-adjusted return	4	<i>Investment archetype not widely observed</i>	E.g. Positively-screened private equity fund making anchor investments in frontier markets	E.g. Private equity fund making anchor investments in businesses that have a significant effect on income and employment for underserved people
	Signal that impact matters + Engage actively + Grow new/undersupplied capital markets + Provide flexibility on risk-adjusted return	5	<i>Investment archetype not widely observed</i>	<i>Investment archetype not widely observed</i>	E.g. Below-market charity bonds, or an unsecured debt fund focused on businesses that have a significant effect on employment for underserved people
	Signal that impact matters + Engage actively + Grow new/undersupplied capital markets + Provide flexibility on risk-adjusted return	6	<i>Investment archetype not widely observed</i>	<i>Investment archetype not widely observed</i>	E.g. Patient VC fund providing anchor investment and active engagement to businesses that have a significant effect on energy access for underserved people

Example of the Impact Classes Matrix

(Source: <https://impactmanagementproject.com/impact-management/how-investors-manage-impact>)

Impact Weighted Accounts

Developed by The Impact-Weighted Account Initiative (IWAI), a research-led joint effort by the Global Steering Group (GSG) and the IMP, incubated at Harvard Business School, the mission of the Impact-Weighted Accounts Project is to lead the creation of financial accounts that reflect a company's financial, social and environmental performance.

This initiative is based on four main principles:

1. Impact can be measured and compared
2. Impact should be measured within an accounting framework with the aim of harnessing the economy to improve society and planet
3. Transformational change require that impact measurement be scalable
4. To be scalable it needs to be actionable and cost effective is a tool aimed to drive the creation of financial accounts that reflect a company's financial, social, and environmental performance. It is developed by Harvard Business School (2019).

Thus, the purpose is to create and define an intuitive measurement unit (translates impact into comparable units that business managers and investor understand), comparable and aggregated (meaningful aggregation and comparison), and an existing assessment tools (allows for the use of existing financial and business analysis tools to assess performance).

The ambition of the IWAI is to drive companies towards an integrated vision of performance that enables investors and managers to make informed decisions based not only on monetized private gains or losses, but also on the broader impact (i.e. social and environmental) that a company generates.

Within this vision, Impact-weighted accounts are line items on a financial statement, as an income statement or a balance sheet, that are added to integrate the health and financial performance report, reflecting a company's positive and negative impacts on employees, customers, environment and the wider society

Based on the Theory of Change, the IWAI has developed its research activities and the development of standardized measurement framework according to three main research pillars:

1. Employment impact of organizations on their employees
2. Environment: impact from organization's operations
3. Product: impact on society and environment from product use

The objective of IWAI is not to create a new, standalone standard for companies to report against, rather to support efforts to produce a singular standard for Environmental, Social and Governance reporting, ensuring that those initiatives include metrics, which can be used to effectively measure impact.

For this reason, the frameworks developed during the years are integrated with the existing standards and frameworks, seeking to leverage metrics that are already been captured.

Even if not of all the metrics included in common ESG standards are suitable for translation into impact measures, by highlighting the suitable ones, IWAI aim to educated standard setters, investors and corporates, on the type of information required for measuring organizational impact in monetary terms.

IWAI produces monetized impact values to assess an organization's environment, employee, and product impacts. These impacts are reproducible as the IWAI impact measurement methodologies are all publicly available. By creating transparent and comparable measures of impact, IWAI empowers organizations to integrate these measures into their own analyses, enhancing trade-off assessments and materiality assessments.

IWAI similarly seeks to quantify the externalities and has taken an approach which is scalable and can be applied using data available in the public domain today. Where some monetization efforts focus on uncaptured costs of highly specific products, IWAI measures the impacts of organization's operational decisions.

Social Return on investment

Social Return on Investment (SROI) is an outcomes-based measurement tool that helps organizations to understand and quantify the social, environmental and economic value they are creating. The SROI is used to capture and monetize the social value created by the activities of the organization. An SROI analysis produces a narrative of how an organization creates and destroys value in the course of making change in the world, and a ratio that states how much social value (in £) is created for every £1 of investment (NEF, 2007).

Carrying out an SROI analysis involves six stages:

1. Establishing scope and identifying key stakeholders. It is important to have clear boundaries about what your SROI analysis will cover, who will be involved in the process and how.
2. Mapping outcomes. Through engaging with your stakeholders you will develop an impact map, or theory of change, which shows the relationship between inputs, outputs and outcomes.
3. Evidencing outcomes and giving them a value. This stage involves finding data to show whether outcomes have happened and then valuing them.
4. Establishing impact. Having collected evidence on outcomes and monetised them, those aspects of change that would have happened anyway or are a result of other factors are eliminated from consideration.
5. Calculating the SROI. This stage involves adding up all the benefits, subtracting any negatives and comparing the result to the investment. This is also where the sensitivity of the results can be tested.
6. Reporting, using and embedding. Easily forgotten, this vital last step involves sharing findings with stakeholders and responding to them, embedding good outcomes processes and verification of the report.

SROI is based on seven principles:

1. Involve stakeholders: actors who are affected by the activities carried out, they may define the social value produced (positive or not) and identify appropriate indicators for measuring the social impact.
2. Understand what changes: measuring outcomes to make explicit changes.
3. Value the things that matter: monetize using financial proxy for measuring outcomes.
4. Only include what is material: relevant and pertinent.
5. Do not over-claim: define what would have happened anyway and what has been realized thanks to the contribution and participation of other subjects.
6. Be transparent: to declare and support how stakeholders, outcomes, indicators and benchmarks were identified; the information-gathering mode.
7. Verify the result: to involve an independent third party.

SROI offers the following potential benefits:

- It can help organisations understand what social value an activity creates in a robust and rigorous way and so manage its activities and relationships to maximise that value.
- The process opens up a dialogue with stakeholders, helping to assess the degree to which activities are meeting their needs and expectations.
- SROI puts social impact into the language of 'return on investment', which is widely understood by investors, commissioners and lenders. There is increasing interest in SROI as a way to demonstrate or measure the social value of investment, beyond the standard financial measurement.
- Where it is not being used already, SROI may be helpful in showing potential customers (for example, public bodies or other large purchasers) that they can develop new ways to define what they want out of contracts, by taking account of social and environmental impacts.
- SROI can also be used in strategic management. The monetised indicators can help management analyse what might happen if they change their strategy, as well as allow them to evaluate the

suitability of that strategy to generating social returns, or whether there may be better means of using their resources.

- Assurance and verification is available through a number of bodies, including The SROI Network.
- While the potential limitations are:
- If there are not already good outcomes data collection systems in place, it can be time-consuming to conduct an evaluative SROI analysis first time around.
- There is a danger of focusing narrowly on the ratio. The ratio is only meaningful within the wider narrative about the organisations. Just as an astute investor would not make a financial decision based on just one number, the same practice applies to this social measurement tool. For this reason, comparisons between organisations just based on the ratio are not recommended.
- SROI is an outcome, rather than a process evaluation. The dialogue with stakeholders yields some insight into what works and what doesn't and why, but there may be instances where a more specific process evaluation would be useful.
- SROI requires a diverse skill set – from stakeholder engagement to working with Excel spreadsheets. This can be hard to find in one person.
- SROI was developed initially for use in the third sector. It has now been used by a range of public and third sector organisations of varying sizes.

Glossary

APPROACH (in the chapter we also used the terms **FRAMEWORK**, **METHOD**, **MODEL** as synonymous)

- Approaches to Impact Measurement are the range of methods that exist (*Adapted from So, I., & Staskevicius, A. (2015). Measuring the 'impact' in impact investing. Harvard Business School*)
- The measurement approach is the method that is used to evaluate the impact generated by an organization (*Adapted from igi-global dictionary*)

METRIC (or **INDICATORS**)

- A set of metrics is a group of indicators organized around a specific program or activity (*Adapted from Sopact*)
- Metric is a particular way of attaching to outcomes and impacts (*Adapted from Proposed approaches to social impact measurement – European Commission*)

PRINCIPLE - Principles are fundamental rules or ideas that guide thought or behaviour, and constitute a frame of reference for achieving the common good within a society. Principles align investors and business with broader objectives of society (*Adapted from UN - Global compact*)

STANDARD - Standard is a model, a method, a framework, an approach, a metric globally accepted to which all products and processes, all activities and services of the same series must conform or comply with.

TAXONOMY

- Taxonomy is the practice and science of classification of things or concepts, including the principles that underlie such classification (*Adapted from igi-global dictionary*)
- Taxonomy provides a shared language for describing, assessing, communicating, and ultimately comparing impact performance (*Adapted from The IRIS+ Thematic Taxonomy document*)

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Online resources on sustainability and impact management and measurement approaches

ID	Approach	Source
1	AA1000AP	https://www.accountability.org/standards/
2	Acumen Lean Data	https://acumen.org/lean-data/
3	Aeris Impact Management Assessment	https://www.aerisinsight.com/wp-content/uploads/2019/10/Aeris_Impact_Management_Assessment_and_Certification.pdf
4	Anticipated Impact Measurement and Monitoring	https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/development+impact/aimm
5	Atkisson compass assessment for investors	http://www.atkisson.com/wwd_tools.php
6	B Impact Assessment	https://bimpactassessment.net
7	Best available charitable option (BACO)	https://acumen.org/wp-content/uploads/2013/03/BACO-Concept-Paper-final.pdf
8	Bridges Ventures Impact Radar	https://www.bridgesfundmanagement.com/wp-content/uploads/2017/08/Bridges-2013-Impact-Report-screen.pdf
9	Business Reporting on the SDGs: An Analysis of the Goals and Targets	https://www.unglobalcompact.org/library/5361
10	CDC Impact Grid/Impact Framework	https://d3s6ftg26lsiet.cloudfront.net/wp-content/uploads/2018/07/06125405/Development-Impact-Grid.pdf
11	CERISE ALigning Investors due-diligence and reporting with the Universal Standards	https://cerise-spm.org/en/alinus/
12	CERISE Impact-Driven Investor Assessment	https://cerise-spm.org/en/idia/
13	CERISE MetODD-SDG	https://cerise-spm.org/en/metodd-sdg/
14	CERISE Social Business Scorecard	https://cerise-spm.org/en/sbs/
15	CERISE SPI4	https://cerise-spm.org/en/spi4/
16	Client-Centric Approach: Impact Evaluation that Creates Value for Participants	https://rootcapital.org/resources/client-centric-approach-impact-evaluation-creates-value-participants/
17	Cradle to cradle certification	https://www.c2ccertified.org/get-certified/product-certification
18	Dalberg Approach	Olsen et al. (2008). Catalog of approaches to impact measurement.
19	DCED Standard for Measuring Results in Private Sector Development	https://www.enterprise-development.org/wp-content/uploads/DCED_Standard_VersionVIII_Apr17.pdf
20	DTA Fit for purpose	https://www.nefconsulting.com/our-services/evaluation-impact-assessment/prove-and-improve-toolkits/fit-for-purpose
21	Eco-mapping	https://www.ecotoolkit.eu/ecomapping.php
22	EPIC Long Term Value Framework	https://www.coalitionforinclusivecapitalism.com/wp-content/uploads/2021/01/coalition-epic-report.pdf
23	Equator Principles	https://equator-principles.com/
24	EU Ecomanagement and Audit Scheme (EMAS)	https://ec.europa.eu/environment/emas/index_en.htm
25	EU Technical Expert Group – sustainable finance taxonomy	https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en
26	European Foundation for Quality Management Excellence Model	https://www.efqm.org/efqm-model
27	EVPA and SVI Impact Management Principles	https://evpa.eu.com/uploads/publications/Impact_Management_Principles_2019.pdf
28	Expected return (Hewlett Foundation)	https://www.hewlett.org/wp-content/uploads/2016/08/CalculatedImpact.pdf
29	EY Total Value	https://tca2f.org/wp-content/uploads/2019/09/ey-total-value-impact-valuation-to-support-decision-making.pdf
30	Fitch Ratings ESG Relevance Scores	https://assets.ctfassets.net/03fbs7oah13w/3V2AzfV7BlcxRjCWETf7cS/9b7db041ea76918f44f8873bd39f3cbe/ESG_FAQs.pdf
31	FMO ESG Toolkits	https://www.fmo.nl/esg-toolkit
32	GECEs Five-step process to impact measurement and management	https://evpa.eu.com/knowledge-centre/publications/measuring-and-managing-impact-a-practical-guide
33	GIIRS Fund Ratings Methodology	https://b-analytics.net/content/giirs-fund-rating-methodology
34	Gold Standard Certification	https://www.goldstandard.org/project-developers/standard-documents
35	GRESB Infrastructure Fund Assessment	https://gresb.com/infrastructure-fund-assessment/
36	GRESB Real Estate Assessment	https://gresb.com/gresb-real-estate-assessment/#more
37	GRI sustainability reporting framework	https://www.globalreporting.org/standards/
38	HIP Rating	https://hipinvestor.com/wp-content/uploads/HIPCheck-SustainabilityScorecard-EvaluationTool-v2012january1.pdf
39	HIPSO Harmonized Indicators for Private Sector Operations	https://indicators.ifpartnership.org/indicators/
40	IFC Operating Principles for Impact Management	https://www.impactprinciples.org/sites/default/files/2019-06/Impact%20Investing_Principles_FINAL_4-25-19_footnote%20change_web.pdf
41	Impact Management Project (IMP) Norms and classes	https://impactmanagementproject.com/
42	Impact multiple of money (IMM)	https://hbr.org/2019/01/calculating-the-value-of-impact-investing
43	Impact-Weighted Accounts	https://www.hbs.edu/impact-weighted-accounts/Pages/default.aspx
44	IRIS + (and IRIS)	https://iris.thegiin.org/metrics/

45	ISO 14001	N/A
46	ISO 26000	N/A
47	LM3	https://nefconsulting.com/wp-content/uploads/2017/05/TheMoneyTrail.pdf
48	London Stock Exchange Group ESG Disclosure score	https://www2.lseg.com/sustainablefinance/ESGdisclosure-assessment
49	LuxFLAG ESG Label	https://www.luxflag.org/labels/esg/
50	Methodology for impact analysis and assessment (Investing for Good)	https://static1.squarespace.com/static/581726a4725e25ba06320e8c/t/58444a9b20099e10cb77c7ad/1480870564808/thegoodinvestor.pdf
51	Methodology for Standardizing and Comparing Impact Performance	https://thegiin.org/research/publication/methodology-for-standardizing-and-comparing-impact-performance
52	NPC Impact Risk Classification (IRC)	https://www.thinknpc.org/resource-hub/assessing-the-impact-practices-of-impact-investments/#:~:text=The%20NPC's%20Impact%20Risk%20Classification,some%20degree%20of%20impact%20focus.&text=It%20can%20be%20completed%20in%201%2D2%20hours%20per%20organisation.
53	NPC's charity analysis framework	https://www.thinknpc.org/resource-hub/what-makes-a-good-charity/
54	OECD FDI Qualities Indicators	https://www.oecd.org/fr/investissement/fdi-qualities-indicators.htm
55	OECD Guidelines for Multinational Enterprises	http://mneguidelines.oecd.org/guidelines/
56	OECD measurement of corporates' impact on well-being	https://www.oecd.org/statistics/Measuring-impacts-of-business-on-well-being.pdf
57	OECD Proposed Impact Standards for Financing Sustainable Development	https://one.oecd.org/document/DCD/DAC(2021)6/FINAL/en/pdf
58	Outcome star	https://www.outcomesstar.org.uk/about-the-star/what-is-the-outcomes-star/
59	Poverty and Social Impact Analysis (PSIA)	https://www.worldbank.org/en/topic/poverty/brief/poverty-and-social-impact-analysis-psia
60	Poverty probability Index	https://www.povertyindex.org/get-started-ppi
61	Practical quality assurance system for small organizations (PQASSO)	https://www.ncvo.org.uk/practical-support/quality-and-standards/trusted-charity
62	Product Social Impact Assessment - PRÉ Sustainability	https://product-social-impact-assessment.com/handbook/
63	Prove It! Toolkit	https://www.nefconsulting.com/our-services/evaluation-impact-assessment/prove-and-improve-toolkits/prove-it/
64	Public value scorecard	Moore (2013). Recognizing Public Value, Harvard University Press.
65	SASB Standard	https://www.sasb.org/
66	SDG Impact Practice Standard	https://sdgimpact.undp.org/practice-standards.html
67	Social accounting and audit	http://www.socialauditnetwork.org.uk/getting-started/new-guide-to-social-accounting-and-audit/
68	Social Cost-Benefit Analysis (SCBA)	https://www.nefconsulting.com/wp-content/uploads/2014/10/Briefing-on-SROI-and-CBA.pdf
69	Social enterprise balanced scorecard	www.sel.org.uk/Balanced-scorecard.aspx
70	Social enterprise mark	https://www.socialenterprisemark.org.uk/
71	Social Footpring	https://www.sustainableorganizations.org/McElroy-Social-Footprint-Chapter.pdf
72	Social Impact Assessment (SIA)	Vancly, F. 2003. International Principles for Social Impact Assessment. Impact Assessment & Project Appraisal 21(1): 5-11
73	Social Impact Measurement for Local Economies (SIMPLE)	McLoughlin et al., 2009. A strategic approach to social impact measurement of social enterprises: The SIMPLE methodology. Social Enterprise Journal 5(2):154-178
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77	Guidelines on Outcomes Management for Investors	
78	Social return on investment	
79	Social Value International principles and standards	https://socialvalueint.org/social-value/standards-and-guidance/
80	Social Value Management Certificate	https://socialvalueint.org/assurance/the-social-value-certificate/
81	Social Value Maturity Index	https://www.salfordsocialvalue.org.uk/wp-content/uploads/2016/06/Social-Value-Maturity-Index-Public-Sector-Tool-1.1.xlsx
82	Social Value Self-Assessment Tool	https://socialvalueuk.org/what-is-social-value/sroi-self-assessment-tool/
83	Standard Ethics Rating (SER)	https://www.standardethics.eu/
84	Success measures data system	https://successmeasures.org/#:~:text=Success%20Measures%20is%20an%20outcome,related%20organizations%2C%20intermediaries%20and%20funders.&text=Using%20a%20participatory%20approach%20Success,demonstrate%20results%20and%20communicate%20success.
85	The Committee on Sustainability Assessment (COSA) Methodology	https://thecosa.org/master-list/
86	The FINCA client assessment tool	https://results.finsa.org/approach-social-performance/methodology/
87	The Impact Due Diligence Guide	http://www.pacificcommunityventures.org/wp-content/uploads/sites/6/FINAL_PCV_ImpactDueDiligenceGuide_web.pdf
88	Theory Of Change	https://www.theoryofchange.org/what-is-theory-of-change/
89	Total Impact Measurement & Management (TIMM)	https://www.pwc.com/gx/en/services/sustainability/total-impact-measurement-management.html

89	Toward Common Metrics and Consistent Reporting of Sustainable Value Creation UK social housing	https://www.weforum.org/whitepapers/toward-common-metrics-and-consistent-reporting-of-sustainable-value-creation https://esgsocialhousing.co.uk/
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92	UNEP FI Impact Analysis Tool	https://www.unepfi.org/positive-impact/unep-fi-impact-analysis-tools/
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95	Vital Capital's Impact Diamond	https://www.vital-capital.com/impact/
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