Sustainable business model innovation and ethics: a conceptual review from the institutional theory addressing (un)sustainability

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Abstract: Being this a period when human activities and creations profoundly alter many geological conditions and processes, here we conceptualise how the sustainable innovation of business models acts as yet another lever for the dissemination of human misbehaviours against the planet and its ecosystems. Departing from the Institutional Theory approach to entrepreneurship and sustainability, we identified institutional and ethical standards and norms that allow a better understanding of the institutional logic behind sustainable business model (SBM) innovation, how it is formed and its consequences in terms of inequity, oppression and exclusion. We have linked those standards with 12 constructs that can guide further empirical analyses; incubators, trainers, investors and policy makers could use them to support entrepreneurs avoid planet challenges and enhance human and non-human ecosystems.

Keywords: SBMs; sustainable innovation; sustainable business models; institutions; values; ethics; anthropocene; entrepreneurship; ecosystems; inequity; exclusion; planet boundaries.

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1 Introduction

We live in an Era where humans rival in influence with other natural forces (Bressan, 2011). We acknowledge the unprecedented damage and destructive, deprecated behaviours that are contrary to our own human best long-term interests. We agree with Wright and Nyberg (2013) and blame science and politics for the many missed opportunities to restore these damages. But also ethics should share its part of that blame, contributing with no fewer misbehaviours and suspect actions (Martí, 2018).

We believe the unethical behaviours and actions have a reflection on the way we have built businesses until now; these serve as very powerful levers for the diffusion of humanly-caused environmental damages.¹ Our successful entrepreneurs and innovators have hacked, and continue to do so, the environmental systems to their benefit. They have perpetuated organisations, ways and practices (Hoffman and Jennings, 2018) that are contributing to the environmental degradation of our Anthropocene era through their successful business models (Osterwalder, 2004).

But here we argue that sustainable innovation of business models, far from being the problem, inspires the strongest solutions to mend the wrongs we are living today. And this research contribution aims mainly at laying out different elements needed to concentrate those business models on ‘creating sustainability’ (Ehrenfeld, 2009, cited in Hoffman and Jennings, 2018).

1.1 Our contribution: the role of the institutional and ethical elements in sustainable business model innovation

Our main contribution with this theoretical paper then sits at the intersection of sustainability, ethics and business model innovation. We deepen in the most relevant elements sustainable business model innovation (SBMI) practices have identified from an institutional and ethical approach to analyse how they influence the inception and development of sustainable business models (SBMs).²

And our goal is to conceptually describe how institutional logic (Tolbert and Coles, 2018) and its associated ethical and behavioural processes act as conceptual mediators of the interactions of organisational constraints and precepts (institutions)³ and the creation of SBMs – able to alleviate or solve human environmental damages.
To address our research goal and conceptually introduce the institutional elements influencing SBMI, first we hypothesise that current incumbent organisations political myths (Wright and Nyberg, 2013) affect how founders develop and integrate regulative, normative and cognitive precepts in their new business models. These new organisations resemble conventional types and potentially reinforce conventional precepts and the consequent current environmental damages.

Second, we link those precepts to 12 constructs to understand how innovators use the tools at hand to develop their SBMs. Peralta et al. (2019b) formed this behavioural model that we can use to relate intangible concepts to concrete tools and practices for sustainable business innovation.

And finally, we explore the expected effect of sustainability ethics (Hessel, 2009; Hatcher, 2004) – present or absent. This set of norms is one of the subgroups of Normative precepts and includes common ethical variables like action, achievement, individualism, universalism, and pecuniary materialism (Messner and Rossenfeld, 2001, p.61 in Jun et al., 2004). (See Figure 1 for a summary of our framework.)

**Figure 1** The institutional logic inspires and regulates part of SBMI processes to design and develop SBMs and their positive and/or negative effects discussed in this paper (see online version for colours)

We state here that, contrarily to what could be expected, the current enactment of these variables leads sustainable businesses’ founders far away from new perceptions of value and benefits for the planet and its ecosystems. Education, rules of thumb and toolboxes of business practices and indicators might overload them with just the opposite to Planet goals.

We structured the rest of this paper as follows: We briefly review the literature on the consequences and impacts of the current effects of human activities in the planet’s history and our current geological time interval. We analyse then the double role of SBMs and their innovation as originators and reactions to those impacts in the planet boundaries. We continue with an analysis of SBMs and their innovation from the institutional theory, reviewing how their institutional logic is formed. We investigate then the relationship of sustainability ethics and eco-justice norms with SBMs. And we finalise with some remarks, implications and challenges.
Sustainable business model innovation in the Anthropocene era: a brief literature review

Geophysical societies are still debating about the formal recognition of our current era, whether it is still ‘Holocene’ or a new one. But they widely acknowledged the biophysical traces of the different role of humans in our planet’s history and health.

Following Crutzen and Stoermer (2000), Kolbert (2014) and Zalasiewicz et al. (2016) (all cited in Hoffman and Jennings, 2018), and aiming for a framework that can help us describe the current environment where new SBMs are being developed, we adhere to the ‘Anthropocene’ term to designate the geological time interval we live in: human activities and creations profoundly alter many geologically significant conditions and processes.

More specifically, three complementary descriptions of these alterations co-exist today. The ‘great acceleration’ (Hoffman and Jennings, 2018) reflects the declines in environmental and human health, happiness and social well-being of our societies and progressive and sustained increases of the degradation of the environment and inter and intra-country inequities. The ‘planet boundaries’ (Steffen et al., 2015) describe, as marks in a scale, the extent of humanly-caused changes in up to nine major types of impacts or proxies: biochemical flows, genetic diversity and climate change boundaries are well over or approaching their respective tipping points beyond which reversing their negative effects is uncertain. And the ‘ecosystems breakdowns’ (Hoffman and Jennings, 2018) explain the lack of linearity and complex relationships of our planet’s ecosystems – e.g., how erosion and sediment transport associated with human processes (colonisation, agriculture or urbanisation or global warming) breakdown local ecosystems – and how their negative consequences cascade to other domains and ecosystems.

The ecosystems breakdowns description also deals with the effects of our current economic systems as potential sources of Anthropocene problems (Wright and Nyberg, 2013). They declare that Schumpeterian ‘creative destruction’, so ingrained into our innovation efforts (e.g., Carrillo-Hermosilla et al., 2010; Zott, 2016), also involves the destruction of past forms of business generation and natural resources (Wright and Nyberg, 2013).

Given the nature of the issues and consequences addressed by the advocates of the Anthropocene, corporations and the rest of the economic agents have not remained still. Acknowledging that their actions could potentially harm their own developments and market positions, they evolved a series of myths to support their roles when confronting the challenges of this era. These (at times) fictions helped them develop remedies, mostly in the form of innovations, that do not necessarily point towards lessening the negative effects registered by the planet boundaries or the ecosystems breakdowns approaches.

The current trends of ‘green’, ‘organisational sustainability’ and even ‘economic circularity’ reflect the myths. They aim to balance economic growth and social and ecological well-being (the corporate environmentalism myth), to make corporations the best political levers to act on social and environmental needs (the corporate citizenship myth), and to persuade that corporations are the only viable option to solve those needs (the corporate omnipotence myth).

With the myths’ narratives and directions, the relevant economic agents assemble policies, strategies and tactics and design more creative forms of natural resources consumption and depletion, destroying older less effective consumption modes. New challengers, based on these interested forms of innovation, accelerate ‘de-facto’ the rate of ‘creative destruction’ (Schumpeter, 1942); they substitute incumbents’ businesses
and business models due to their diminishing efficacy to meet the myths’ propositions and consequently lower their market success.

The myths’ statements guide most corporations and economic agents’ adaptation to new constrains and perpetuate ‘business as usual’ to the point of ‘creative self-destruction’ (Wright and Nyberg, 2013): This occurs when the adapted forms of doing business succeed at the Schumpeterian substitution game (Schumpeter, 1942). Knowing about the planet boundaries and ecosystems breakdowns, the new businesses (both private and public) now win the market game playing not only on the economic battleground.

Today, businesses envelop their economic results with the rhetoric and demonstrations derived from a bizarre, wicked use of the apparent good in each myth (Wright and Nyberg, 2013). And innovation and sustainable innovation of businesses and their business models may then play a decisive role in the adaptations demanded by the rhetoric of the myths (Scherer and Palazzo, 2011, cited in Wright and Nyberg, 2013).

It is then through building business models – i.e., for-profit and non-for-profit organisations including public administrations – that humans also affect the planet ecosystems. And some are extremely successful, and propagate their impact wider, deeper and in more resilient ways that nearly no other human invention. And a new generation of business models for sustainability, SBMs, is making its way into our society. Next, we review them as a potential response to the concerns raised by the Anthropocene.

3 Human response to planet boundaries: new sustainable business models

The arguments supporting the myths and their implications for businesses allow us to propose here a review of the business model concept based on them: the SBM might return the corporate response to the Anthropogenic demands and ‘red lines’ drawn by planet boundaries and ecosystems breakdowns. Ours then is a complementary view of the well-known SBM (Evans et al., 2017; Lüdeke-Freund et al., 2018; Stubbs and Cocklin, 2008) as a business model aiming for the triple bottom line: economic, social and environmental (Elkington, 2013).

First, business models are a simplified visual representation (Stubbs and Cocklin, 2008) of their elements (Osterwalder and Pigneur, 2010), the interrelation of these elements, and the interactions of those elements with different stakeholders to induce a flow of value among them. That visualisation then helps understand how the business model produces, delivers and captures value (Osterwalder, 2004) for its success, measured through returns and growth rates. This representation serves well both conventional business models and SBMs.

3.1 The conventional business model concept and its evolution towards sustainability: the sustainable business model

The difference between the two types of business models lies in that SBMs build on the triple bottom-line approach (Elkington, 2013; Stubbs and Cocklin, 2008). This more complex bottom-line defines their purpose and helps measure their performance along three dimensions: the conventional economic dimension, the social dimension and the environmental dimension.
SBMs success is then measured by the value they provide to conventional economic stakeholders, the environment and society. A SMB seeks to group the interests, wants and needs of all stakeholder groups, prioritising them according to their relevance for its ‘sustainable’ success and growth along the three dimensions.

In other words, SBMs produce, deliver and capture economic, social and environmental values from and for a wider range of stakeholders (Bocken et al., 2013). And the literature profusely describes the benefits of deciding for such type of business models: improved efficiency, greater resilience to external shocks, better relationship with employees and communities, and higher profitability.

But given that triple bottom-line, how do SBMs integrate innovation? As with conventional business models, SBMs face the need for change, particularly as new scientific insights related to the Anthropocene unfold. And the myths guide their adaptation, confronting similar challenges to those of conventional business models. But SBMs differ in their approach: their innovation is either a “fundamental shift in the purpose of business and almost every aspect of how it is conducted” (Bocken et al., 2013) or a “required change through re-conceptualising the purpose of the firm and the value creating logic, and rethinking perceptions of value”.

The advisable tactic for SBMs then is to find ways of innovating their business model through a systematic, on-going experimental creation of new business models that aim for sustainability (Schaltegger et al., 2012) – sustainable business model innovations (SBMI) – with the potential to create positive (or reduced negative) impacts for the business, the environment and the society. Each SBMI practice embed these impacts through internal and external changes and creates, delivers and captures sustainable value usually producing more than one SBM (Bocken et al., 2014).

Whether incumbent or challenger, the corporate world is increasingly using SBMI similarly to conventional business innovation: They viciously integrate the constrains and requests of the political myths – Planet Boundaries and Ecosystems Breakdowns – and keep doing business as usual (Allee, 2011, cited in Bocken et al., 2013) merely updating the existing value propositions.

In practice, we are seeing new forms of user value and other intangibles driving the updates of the existing value-creation proposals: in business to consumer products-services, improving functionality or user experience; and in Business to Business products-services, providing higher speed, more convenience or better fit for the job-to-be-done. Alternatively, some firms succeed at innovating their value-capture proposal with stockholders rather than with their product’s users.

Among academics, theoretical approaches to SBMI (Evans et al., 2014) are rare. They mostly “focus only on individual phases of the innovation process or specific types [of value propositions] such as the Product Service Systems (PSS)” (Geissdoerfer et al., 2016). Evans et al. (2014) provided a “first, conceptual attempt for a SBMI process that covers all phases to implementation”. But theirs (the Cambridge Business Model Innovation Process: Geissdoerfer et al., 2016) is an approach that again integrates sustainability only into the value proposition.

Another framework guiding the SBMI process is the Lean Startup and its toolbox: business model design (Osterwalder and Pigneur, 2010), customer development (Blank and Dorf, 2012), and agile development. While Lean Startup is being successfully applied on many domains – development of innovation strategies, creation of new business models and organisational structures, we found few attempts to describe it for SMBI (Peralta et al., 2018; Peralta and Castellote, 2018).
Lean Startup helps to bridge the design-implementation gap (Geissdoerfer et al., 2016) although from a different perspective to that of the Cambridge process: the latter resembles the new product development process (McGrath, 2010). It consistently guides the innovators to benefit from any opportunity in the market in a stage-gate process. But if actual opportunities are scarce and extreme uncertainty, ambiguity, complexity and/or volatility plagued the actual innovation process, the stage-gate like processes might not be advisable (Blank, 2009; Peralta et al., 2019a, 2019b). And Lean Startup, in such situations, promotes a relentless testing process eliciting customer/relevant valueholder feedback and proves to be more effective – the Customer Development, along four repetitive steps, validates initial hypotheses about all the elements of the SBM through iterations and pivots.

Both types of practices help innovators design and develop SBMs to address the concerns of all stakeholders and valueholders. But which logic do they follow to avoid reaching the planet boundaries and ecosystems breakdowns? To answer this question, we turned to institutional theory in the following section.

4 New sustainable business models and their institutional logic

Although institutional theory is prominent in contemporary organisational studies, ours is one of the rare approaches to the intersection of new business models and sustainability; here we chose to follow the works of Tolbert and Coles (2018), Jennings and Hoffman (2018) and Bazerman and Hoffman (2000). They adhere to the notion of an institution (Scott and Meyer, 1992, cited in Bazerman and Hoffman, 2000) as the set of cultural and contextual constraints that shapes behavioural patterns, justifies certain behaviours and rejects others.

These constraints are grounded in beliefs and understandings, technical underpinnings, social rules and laws, best practices and business-as-usual methods that together assemble ‘the institutional logic’ (Tolbert and Coles, 2018). From this perspective, the institutional logic justifies and gives meaning to goals, activities, challenges and perceptions. But it also alters individual and collective perspectives and shapes how individuals construct business models and their value flows (Jennings and Hoffman, 2018).

How is that logic formed in the case of new organisations and how it influences the creation of a new SBM? One accepted source of institutional logic is the culture and norms influencing the founders (Bock et al., 2012; Jun et al., 2004; Tolbert and Coles, 2018); they configure the acceptance and desire of such individuals to embark in a new business model. Time and location add to culture and norms and altogether produce what Bazerman and Hoffman (2000) called Regulative Institutions.

New SBMs, influenced by Regulative Institutions, are products of legal precepts and coercive sanctions, threats of lawsuits, and political lobbying. Successful new business models resulting from following the local legal standards and constraints are a powerful way of perpetuating their sub-optimal outcomes: They let social and environmental interests static or fixed and, unless demanded by new regulations, sanctions or lobbyists, do not properly evolve with the risks associated to the planet boundaries or ecosystems breakdowns.
Under the influence of these precepts, decision makers and founders create new institutions that do not violate or challenge them due to their coercive power. The precepts integrate in the apprenticeship mode (Tolbert and Coles, 2018): acquiring knowledge on the precepts, including language and habits; building experience on how to succeed within their limitations; and forming personal networks required to launch new SBMs.

This mode is common among Chinese, Korean, Cuban, Indian, and other immigrant groups (Raijman and Tienda, 2000, cited in Tolbert and Coles, 2018) but also in spinoffs from incumbents. The new organisations’ founders retain the knowledge of the legal and coercive precepts of their population group or the incumbents they come from. And they face the same limitations, rigid rules, contradictions of self-interests and societal interests that produce unintended actions by ‘just following the rules’ or intentional ‘beat the system’ sort of mentality (Bazerman and Hoffman, 2000).

Regulations and legal standards aside, Normative Institutions (a second type of institutions: Bazerman and Hoffman (2000)) yield an institutional logic consisting of managerial rules of thumb, written and unwritten procedures, educational programs, ethical and religious prescriptions and bondages, and the common economic and business key indicators (Bazerman and Hoffman, 2000).

Normative institutions generate new SBMs under educational assumptions of incompatibility between economic and environmental goals, ethical and religious warnings against unlimited economic growth and productivity, and the usual efficiency indicators of processes. These SBMs and their breakthroughs are mostly related to technical and process developments that better or faster or cheaper control nature, society and individuals (Christensen, 1997).

SBMs following Normative Institutions comply with the political myths – favouring environmental protection, pollution prevention, and ethical warnings against environmental and social dysfunctional behaviours – as long as myths’ requirements do not contradict their market and economic incentive structures (e.g., ‘stand-by’ mode in TV sets and penalties for architects if they opt for more efficient, comfortable designs eliminating air-conditioning, in Bazerman and Hoffman, 2000, p.21).

Current dominating educational and ethical standards contribute to this type of SBMs conveying the idea that societies and organisations must develop economically before adopting environmental or social measures. Neo-liberal and Marxist alike think economy-first (Hessel, 2009) and, following their prescriptions, new SBMs have usually overlooked other forms of value – missed, uncaptured, destroyed, or shared (Bocken et al., 2013; Martí, 2018; Yang et al., 2017). They could even be regarded as business models for oppression or depletion and exclusion (Martí, 2018).

Corporate economic and financial success discriminate the types of micro and meso indicators of the SBMs influenced by Normative Institutions. Senior managers and investors favour economic reports due to the nearly impossible translation of environmental and social risks and opportunities into indicators and actionable tactics – e.g., confusing definitions of natural and social capital assets and their financing sources, difficult valuation of natural or social resources usually resolved with allocations outside of real control or application plans. Simply put, economic indicators are easier to understand and manage, and allow for quicker comparisons of competing SBMs; whatever is not measured (intentionally or not) is not managed.
Regulative and normative institutions are widely common in our society and influence the innovation of the majority of new SBMs. But cognitive institutions, a third type, also plays a role. It is less propagated through new business models, merely because they die soon. With all probability, a new SBM is doomed if its founders only consider established behaviours – unquestioned or taken for granted. Still, Bazerman and Hoffman (2000) state that these institutions are very pervasive and resistant to change, even in the face of business model failure.

For example, building a new SBM from the value proposal technical requirements is a first cause of SBM disaster (Blank, 2009). Still, founders repeatedly show this behaviour: The Apprenticeship Mode identifies those requirements grounding them in past beliefs and behaviours that remain unquestioned, like the view of nature as an infinite source of resources or society as a potential source of unlimited clients, employees or skills.

Another example: Neophytes usually import behaviours and beliefs from other industries, which may even be disastrous in cases where incumbents have reached a delicate balance – activating an accelerated creative self-destruction process. They build their proposals considering a small, known array of stakeholders systematically excluding fringe, salient stakeholders (Crane and Ruebottom, 2011; Hart and Sharma, 2004; Martí, 2018; Mitchell et al., 1997) and dynamic valueholders (Peralta et al., 2018). These novel designers of SBMs pretend to be separated and even superior to nature and the rest of stakeholders, and erroneously think of them as “inert, infinitely divisible and moved by external rather than internal forces” (Gladwin et al., 1995, cited in Bazerman and Hoffman, 2000).

Considering the three types of institutions and their potential effects, Peralta et al. (2019b) described several behavioural constructs defining founders’ usage of the practices and tools to create new SBMs, which we reproduce in Table 1.

<table>
<thead>
<tr>
<th>Cognitive construct</th>
<th>Description</th>
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<tbody>
<tr>
<td>Behavioural intention (BI) and</td>
<td>Following the original contribution of the UTAUT-SBMI model (Peralta et al., 2019b) BI and US describe the relationship between an individual’s intention to use a practice or technology and the dependent final usage (Venkatesh et al., 2003, p.427). See Figure 2 for the Peralta et al. model of the relationships between BI, US and the rest of their model’s constructs</td>
</tr>
<tr>
<td>usage (US)</td>
<td></td>
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<tr>
<td>Performance expectancy (PE)</td>
<td>Measures the entrepreneur’s expectations to successfully innovate a sustainable business model using a SBMI practice and according to its “perceived usefulness (in terms of triple bottom line goals), extrinsic motivation (e.g., building business models ‘for’ or ‘of’ sustainability), job-fit (e.g. individual-skills based jobs), relative advantage (e.g., improved economics thanks to reduced environmental and social costs), and outcome expectations (e.g., “reduce the environmental impact caused by consumption and production activities”)” (Peralta et al., 2019b)</td>
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<td></td>
<td>PE must account for Cognitive Institutions, too</td>
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Table 1  Behavioural constructs (independent and dependent) driving the usage of sustainable business model development tools and practices and their relationships with regulative, normative and cognitive institutions (based on Peralta et al., 2019a, 2019b) (continued)

<table>
<thead>
<tr>
<th>Cognitive construct</th>
<th>Description</th>
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<tbody>
<tr>
<td>Effort expectancy (EE)</td>
<td>Captures the feeling and experience of seasoned entrepreneurs about the use of a SBMI practice according to its “perceived ease of use, complexity, and ease of use [to bridge the] complex and often ambiguous design-implementation gap (Geissdoerfer et al., 2016).” (Peralta et al., 2019b) EE must account for Normative Institutions, too</td>
</tr>
<tr>
<td>Social influence (SI)</td>
<td>Reflects the spread and dynamism of stakeholders, and the influence they have over a new venture. This collects information on the subjective norms, social factors, and image and also on 19 stakeholder groups, with potential to influence the entrepreneur’s behaviour SI must account for Regulative, Normative and Cognitive Institutions</td>
</tr>
<tr>
<td>Facilitating conditions (FC)</td>
<td>Measures the degree to which an individual believes that an organisational and technical infrastructure exists to support use of the SBMI practice according to “perceived behavioural control, facilitating conditions, and compatibility” (Peralta et al., 2019b) FC must account for regulative institutions, too</td>
</tr>
<tr>
<td>Hedonic motivation (HM)</td>
<td>Relates to the ‘perceived enjoyment’ of the entrepreneur in using a SBMI practice. It is an intrinsic construct from motivational theory that complements the earlier (extrinsic) constructs We have found only indirect connections of the Institutions with this construct</td>
</tr>
<tr>
<td>Costs/price (CO)</td>
<td>Measures the effect of bearing the cost and economic burden of the SBMI process by the entrepreneurs. This affects the individual’s intention and behaviour of the practice to use. Peralta et al. (2019b) controlled “the pricing of the applications to effectively use each practice or tool, the costs associated to use the same SBMI practice by the founding team and the costs associated to fulfilling the requirements of each practice’s stages”</td>
</tr>
<tr>
<td>Habit (HT)</td>
<td>Controls for prior behaviour and the extent to which an individual believes the behaviour is automatic</td>
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<tr>
<td>Speed (SP)</td>
<td>Measures “fast, fearless decision-making, cycle time, speed and tempo” (Blank and Dorf, 2012) and it is affected by adaptation and improvisation, commitment, tempo and timely knowledge acquisition. According to the authors, these abilities “might help to cope with situations of no-referents, time-pressed, and complex, where multilinear paths require different degrees of attention” (Peralta et al., 2019b). SP must account for normative institutions, too</td>
</tr>
<tr>
<td>Funding (FU)</td>
<td>Captures “the need for money to start and scale any venture” according to the SBMI practice’s financial strategic management, competitiveness and control and growth/scaling goals FU must account for cognitive institutions, too</td>
</tr>
<tr>
<td>Security (SE)</td>
<td>Relates to the “probabilistic prediction of economic uncertainty that affects decision making of individuals” and it reflects the SBMI practice capability of creating knowledge, reviewing goals, actions and heuristics. It measures how individuals predict their future and, therefore their security – usually in economic terms SE must account for cognitive institutions, too</td>
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</table>
Reviewing the definitions of the 12 constructs with our description of the effects of regulative, normative and cognitive institutions, we could refine some of these constructs to highlight the relevance and influence of these institutions through the use of SBMI practices – e.g., the Cambridge process or Lean Startup. According to our criteria, Regulative precepts might influence FC and SI, Normative precepts might influence EE, SP and SI, and Cognitive precepts might influence PE, FU, SE and SI.

**Figure 2** Measurement model connecting formative (blue) and reflective (green) constructs built out of the institutions influencing SBMs founders (from Peralta et al., 2019a, 2019b) (see online version for colours)

![Measurement model](image)

**Note:** PE: Performance expectancy; EE: Effort expectancy; SI: Social influence; FC: Facilitating conditions; HM: Hedonic motivation; BI: Behavioural intention; HT: Habit; SP: Speed; FU: Funding; SE: Security; US: Usage

Next, after connecting the types of institutions and institutional logics that inspire the innovation of SBMs, we deepen on how sustainability ethics – Normative Institutions – are delivering prescriptions and practical assumptions for SBMs and their effects.

### 5 Ethics and (un)sustainable business model innovation

Literature and practice have connected sustainability and ethics for a long time (Hessel, 2009; Horn, 2013) with expressions like *Earth-keeping* or eco-justice action (Fernández, 2012). And the United Nations Conferences and the Earth Charter prompted four basic
ecological justice norms that clearly address the connection: solidarity, sustainability, sufficiency, and participation (Hessel, 2009).

Using the eco-justice norms, advocates of this connection present the need for a supportive ethos that respects diversity of life, justice for everyone and compromise with future generations: solidarity. And this ethical sensibility drives the development of products, services, processes and business models setting obligations towards social, ecological and economic needs: sustainability. Then, business models organise consumption of resources and foster sharing mechanisms to avoid reaching over the planet boundaries: sufficiency. And collaboration and co-creation of solutions might be a powerful organisational and governance alternative over those business models to reinforce that supportive ethos: participation.

The eco-justice norms can guide the relationship between ethics, sustainability and business model innovation to address the grand challenges posed by those norms. But, to the best of our knowledge, few scholarly proposals (Bocken et al., 2014; Hart, 2005; Hessel, 2009; Martí, 2018) venture to say how business model innovation might help incumbents and challengers respect the planet boundaries or prevent the Ecosystems Breakdowns using those norms: new designs (SBMs) considering a widening base of stakeholders, human and not; and new goals to transform quality of life and present and future conditions by incorporating sustainability ethics precepts yet from the initial business modelling.

But these new SBMs designs may fall into new forms of ‘corporate imperialism’ (Prahalad and Lieberthal, 1998, cited in Martí, 2018), adverse footprints and compliance with political myths if they do not deeply learn about the stakeholders’ lives and situations. As we have described here, this is the case of new SBMs engaging relevant stakeholders for cost reduction, differentiation, legitimacy building, innovation, or local knowledge generation (Hart, 1997; Schaltegger et al., 2012), excluding others like planet boundaries or ecosystems breakdowns or fringe stakeholders – minorities.

To positively use sustainability ethics and the eco-justice norms – or reduce the non-compliance with them, and following Martí (2018), Ferraro et al. (2015) and others, we list here critical design elements of SBMs. First, these authors call for a participatory architecture – the participation eco-justice norm – or “a structure and rules of engagement that allow diverse and heterogeneous actors to interact constructively over prolonged timespans” (Ferraro et al., 2015, p.374, cited in Martí, 2018). Founders of SBMs must save spaces for co-creation, negotiation and agreement among several stakeholders with different salience or relative importance along time and readiness of each SBM.

Second, Martí (2018) demands Multivocal Inscription to “combine all opposing perspectives to get a better idea of what problems exist, what their nature is, and how to tackle them”. This element, mostly related to the solidarity norm, helps land the SBM goals integrating the priorities and demands of all those affected by the SBM. Founders and stakeholders start cycles of experimentation, intense learning, and deep and con-joint analyses. The analyses end in simultaneous SBM developments to address different demands with different lifespans.

Third, the sustainability norm requires Scaffolding: The ability to build “adaptive structures between the organisation and the local social system when considering, designing, and implementing solutions (even if fragmentary or temporal) to grand challenges” (Mair et al., 2016). Scaffolding highlights inequality in and among human communities and individuals, and between humans and non-human ecosystems.
It advocates for mechanisms to release blockages and social entrenchments and solutions to complex social and ecological issues. This element challenges founders to design and implement SBMs that experiment, listen and constantly deepen on each grand challenge posed by the Anthropocene. And, as their learning and knowledge unfold, they adapt founding institutions and build complementary SBMs.

Proximity refers to the “attitudes of organizational managers and leaders – specifically, an ethic of care and concern for the ‘other’” (Levinas, 1985, cited in Martí, 2018). This complies with sufficiency and solidarity and highlights that founders, managers, and the rest of SBM designers are barely operating under any moral restrictions; as if by merely creating a new venture today, they would have created a future ethics-free zone, or worse, a vicious zone: oppression, humiliation, and discrimination are too abundant among new ventures and SBMs.

We argue that founders and early managers of SBMs calculate this anomie (or weakening of the norms or restrictions) along SBMI processes (Thorne and Saunders, 2002) and link it to the founders and early managers of SBMs justification of their ethically suspect acts. In absence of proximity attitudes, deviances rise – in institutions and cultural values within these vicious SBMs – emphasising materialistic and economic goals over the elimination of inequities or pollution or exclusion or abuse of individuals or groups of fringe stakeholders (see Fernández Fernández, 2016, for an extended description).

Five attitudes are contrary to the proximity element (Emami and Nazari, 2012; Messner and Rossenfeld, 2001, p.61, cited in Jun et al., 2004): action, achievement, individualism, universalism, and pecuniary materialism. But founders and managers can replace them with collaboration, ascription, collectiveness, particularism and group welfare to make their SBMs compliant with the eco-justice norms and the sustainability ethics.

6 Conclusions

Following Martí (2018) and his call to research on business models in ways that matter to the environments in which we live, we have conceptually addressed here the development of SBMs (Lüdeke-Freund et al., 2018; Ritala et al., 2018; Stubbs and Cocklin, 2008) to achieve economic, social and environmental ends.

To study such development, we firstly have described the challenges and current conceptions of our Anthropocene era; this is characterised by the impact, and in many cases, aggressions of humans and human artefacts to Nature and human and non-human ecosystems. Many authors, managers, politicians and SBM founders have long ago decided to make things different. They have pushed in new alternatives, policies and ultimately business models using practices known as sustainable business model innovation (SBMI). But the all-good intentions have resulted in what Wright and Nyberg (2013) named as political myths, or commonly used narratives to address adverse political conditions or criticism related to such aggressions.

In this paper, we advocated that SBMI is arguably a powerful lever to fix the aggressions to the planet boundaries and mend the environmental breakdowns. But this process and the SBMs it generates must confront the same challenges conventional business model innovation faces: A “fundamental shift in the purpose of business and almost every aspect of how it is conducted” (Bocken et al., 2013). More specifically,
SBMI must strongly re-conceptualise the purpose of any new business, its value creating logic, and more profoundly, its perceptions of value (Bocken et al., 2013; Geissdoerfer et al., 2018).

Our answer to this call came from the institutional theory, as we adhere to the proposal of Tolbert and Coles (2018). Our work considered Bazerman and Hoffman (2000), to connect institutions, new businesses and sustainability. From this intersection, our concept of a new SBM blends regulative, normative and cognitive institutions (Scott and Meyer, 1992, cited in Bazerman and Hoffman, 2000). They shape the SBM founders’ behavioural patterns and justify certain behaviours, rejecting others. Those institutions shape the constructs described in Peralta et al. (2019b) and drive SBMI: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, behavioural intention, habit, speed, funding, security, and usage.

Following Hessel (2009) and Martí (2018) among others, we have studied the implications of ethics (Normative Institutions), and more specifically, eco-justice norms in the development of new SBMs. We believe this connection is important as SBMs need a supportive ethos that respects diversity of life; promotes justice for everyone and a compromise with future generations; highlights humans’ obligations towards social, ecological and economic needs; facilitates consumption patterns of resources to avoid planet boundaries; and encourages participation in decisions and co-creation of solutions for the benefit of all.

We have described the devastating effects of SBMs as ethics-free zones, with the right to justify suspect or illegitimate acts against human and non-human environments based on cultural values like action, achievement, individualism, universalism, and pecuniary materialism. Eco-justice norms and the sustainability ethics contradict them with collaboration, ascription, collectiveness, particularism and group welfare (Jun et al., 2004), which we propose for new SBMs.

6.1 Implications and challenges sustainable business models face

The most important implication of our conceptual work here is about the design of new SBMs. We acknowledge that finding a way to enable any firm to capture economic value through delivering social and environmental benefits (Schaltegger et al., 2012) is not trivial. This context puts new SBMs at a difficult stake: They compete with conventional BMs and pressure is high to show results (expressed in ‘number of zeroes’, as one top executive put it) and to balance them with social and environmental values.

To face this challenge, founders must learn about the institutions involved in SBMI to properly connect them, design SBMs and avoid planet boundaries and exploitation and oppression modes. Arguably, linear SBMI development practices are not adequate for this complex task – at least, they need revision under this light. And most current educational programs for entrepreneurs and founders also need a profound review to integrate the eco-justice norms, their interactions and a multilinear or non-linear SBMI process.

A second implication relates to the cultural, organisational effects of SBMI. Strategic flexibility is the ability to spot opportunities and create SBMs to take advantage of these opportunities or improvements (Worren et al., 2002, cited in Bock et al., 2012). It is one key feature for managers and founders to help them adapt their businesses in complex, uncertain environments. Seeking strategic flexibility, many organisations are using SBMI to change their cultures, as culture is related to it (Bock et al., 2012). And we have linked
flexibility to the sustainability eco-justice norm. But we have also presented the risk of anomie: flexibility should not be a wildcard to relax eco-justice norms nor to propagate new forms of economic dominance. Senior management must enforce the ethical values of collaboration, ascription, collectiveness, particularism and group welfare and use SBMI to activate sustainability ethics in their new SBMs.

References


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Notes

1The three stated study approaches to these damages refer to our Era as the Anthropocene, and are: the ‘great acceleration’; the ‘planetary boundaries’ (Steffen et al., 2015); and the ‘ecosystems breakdowns’ (Wright and Nyberg, 2013).

2As an example, the ‘Laudato Si Encyclical Letter’ and its proposed social order (Tatay, 2017) is an example of a religious text that might open the discussion on the moral and ethical precepts behind how business models created by Christian-influenced societies have contributed to environmental damages (Emami and Nazari, 2012).

3Bazerman and Hoffman (2000) list these institutions as regulative, normative and cognitive.

4Steffen et al. (2015) enumerated the nine planet boundaries: (1) rapid climate change, (2) high rates of novel entity introduction, (3) ozone depletion, (4) aerosol loading, (5) ocean acidification, (6) biogeochemical flows (nitrogen and phosphorus), (7) high freshwater use, (8) extensive land-system change, and (9) biosphere disintegration.

5Wright and Nyberg (2013) describe myths as “particular narratives that answer a need for significance’ and, more specifically, as the work of common narratives that address political conditions or criticism facing a society”.

6Even failing, any business model produces planet impacts, positive and negative.

7The static stakeholder concept can be further advanced by a more dynamic salient stakeholder concept (Mitchell et al., 1997) coupled with the valueholder concept (Peralta et al., 2018).

8Relevant valueholders for a Lean Startup SBM refer not to all stakeholder groups that could be affected by a new business model, but only those that impact the validation/rejection of BMC hypotheses, which vary along the CustDev steps from early adopters (Blank and Dorf, 2012) to late majority and laggards (Moore, 1991).

9Martí (2018) describes models purposively designed to marginalise the poor and other human stakeholders (for oppression), or to deplete and exploit certain communities or resources, not necessarily human (for depletion).

10Although cognitive biases referring to ways of starting a new SBM affect it both formally and in its content, they second legal and organisational precepts: Once the SBM meets these two latter then cognitive biases might influence the SBMI process.

11Hatcher (2004) refers to this connection as environmental ethics: “ethic that enhances sustainability of individuals, organisations [ ] and supports moves beyond the instrumentality of business ethics”. For matters of coherence, we call this ethic ‘sustainability ethics’.

12The grand challenges include durable poverty, environmental degradation, exploitative labour, and endemic violent conflict, among others (Ferraro et al., 2015, cited in Martí, 2018).

13Durkheim (1893/1964, 1897/1966), Merton (1968), or Messner and Rosenfeld (1997, 2001) (all cited in Jun et al., 2004) developed the institutional anomie theory. It was later updated to explain crime, deviant (Lilly et al., 2002, cited in Jun et al., 2004) or illegitimate (Sánchez, 1999; Emami and Nazari, 2012) behaviours of managers, and to study to which degree those managers believed their acts were ethically justifiable (Jun et al., 2004).

14‘Managers’ [founders’] willingness to justify ethically suspect behaviours” (Jun et al., 2004).
Although many corporate ethics programs have been reported as control systems for compliance and legitimacy, the relativeness of the environmental, eco-justice or planet boundaries’ demands and norms makes room for negotiation and unclear limits in the face of other precepts, goals or constraints in an new SBM (Weaver et al., 1999), and quite reasonably the effect are these deviances.

Whether these pairs of values (see full description in Jun et al., 2004, pp.412–413) can be deemed simplistic, they certainly depict a framework for identification of the ethical stand of founders and their justifications and willingness to accept suspect non-sustainable behaviours when developing their new SBMs.