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Unleashing Strategy for Sustainability

Integration of Corporate Strategy and Sustainability Methodologies to Enable Companies to Generate Financial, Environmental, and Social Value

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<u>**EXECUTIVE SUMMARY**</u>

UNLEASHING STRATEGY FOR SUSTAINABILITY: INTEGRATION OF CORPORATE STRATEGY AND SUSTAINABILITY METHODOLOGIES TO ENABLE COMPANIES TO GENERATE FINANCIAL, ENVIRONMENTAL, AND SOCIAL VALUE

by

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The disciplines of corporate strategy and corporate sustainability share many similarities, and the tools of each can be used to enhance the objectives of the other. Both involve aligning multiple stakeholders, making difficult trade-offs, analyzing metrics, and generating long-term value creation. However, traditional corporate strategy emphasizes competitive differentiation, while sustainability calls for collaboration and coordination. This project explored ways for strategy methodologies to better incorporate sustainability principles to achieve better outcomes for a firm and the natural environment. The first phase of the project narrowed down a wide range of possible tools to three frameworks that work best for generating long-term and sustainable value creation. The second phase then looked at applications of these three methodologies within “stronger” definitions of sustainability, i.e. more focused on ecological measures and outcomes. Ultimately, strategists and sustainability practitioners have similar goals, and this project shows how both can integrate the other field into their work to generate long-term value for society and the planet.

Approved

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Dr. Deborah Gallagher

4/24/2020

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INTRODUCTION

This project aims to provide a new set of tools in the age-old philosophical question of: how might humans best organize their choices, actions, and structures? This question is even more important today in an increasingly complex society where these choices have profound impacts on the environment around us. To narrow that scope, we look specifically at corporate strategists, the individuals who design and implement "corporate strategies," i.e., the choices, plans, and structures of companies. This project assumes that these companies are a primary organizing mechanism within free-market economic societies, and we assume that this socio-economic structure will continue to hold, including the current roles of governments and NGOs that make it an imperfectly "free" market. We also specifically look at the impacts of these companies on Earth's natural ecosystem, both positive and negative. This narrows our research question to: how might companies organize their choices, actions, and structures to improve human lives, with environmental impact as a primary concern. To answer this question, we draw on the fields of corporate strategy and corporate sustainability.

Corporate strategy and corporate sustainability are similar yet highly distinct disciplines. Much has been written about how to make firms more sustainable or to develop strategies for sustainability, but little has been written about firms' experience in integrating the two domains. Complicating the matter, the firms that have succeeded in this integration may be holding onto it as a proprietary competitive advantage.

This project involved two components – first an exploration of traditional corporate strategy methodologies and how they might be used to complement corporate sustainability by integrating with firm's strategies. This portion involved working with Sustainserv, a boutique corporate sustainability consulting firm based out of Boston and Zurich. The second phase expanded on these methodologies to include a broader definition of sustainability and looked at how strategists and corporate sustainability practitioners can prepare their organizations, clients, and customers, to handle any possible future.

DEFINITIONS

For this project, we define corporate strategy using Lafley & Martin's definition of "an integrated set of choices that uniquely positions the firm in its industry so as to create sustainable advantage and superior value relative to the competition" (Lafley & Martin, 2013). For corporate sustainability, we use the Oxfam Foundation "doughnut economics" definition of "a safe and just place for humanity" (Raworth, 2012). This safe place centered between a social justice foundation and an ecological ceiling, which is defined by nine planetary boundaries (Whiteman, Walker, & Perego, 2013). Unfortunately, the nine planetary boundaries are not fully established, and there is debate on whether the current boundaries are accurate. Additionally, given scope issues, this project focused primarily on environmental impact, but social issues are just as important. For example, human health is closely interlinked with planetary health, and the two need to be considered holistically, but we recommend this for further research (United Nations Global Compact, 2019).

The second phase of this project explicitly looks at corporate strategy through varying definitions of sustainability (Landrum, 2017). This means the definition of corporate strategy is much simpler than that of sustainability, largely since it is easier to prescribe recommendations for a single entity (a company) than for a large and complex system (the Earth's ecosystem). Because of this disparity, the goal of this project is to provide tools for companies to best align their choices and actions with the best interest of the system.

We then define the integration of corporate strategy and sustainability as "an integrated set of choices that uniquely positions the firm in the Earth's ecosystem and human society so as to create sustainable advantage and superior long-term value relative to alternative sets of choices."

PHASE ONE: Exploring Strategy Methodologies for Sustainserv

METHODOLOGY

The first phase of the project involved a literature review, development of assessment criteria, and an expert review by Sustainserv's leaders.

The literature review focused on classical academic strategy frameworks and publicly available frameworks from leading business thought leaders, primarily consultancies. A few sustainability oriented methodologies were chosen as well. The academic methodologies reviewed include: Stuart Hart's two frameworks on natural resource-based competitive advantage (Hart, A Natural-Resource-Based View of the Firm, 1995) (Hart & Milstein, Creating Sustainable Value, 2003), Kaplan and Norton's work to build out the Balanced Scorecard into a dynamic Strategy Map (Kaplan & Norton, 2000), and the reframing competition work of Red and Blue Ocean Strategy (Kim & Mauborgne, 2004). The corporate methodologies included: the "Playing to Win" strategy articulation (Strategic Choice Cascade) and development (Reverse Engineering Framework) methodology pioneered by the Monitor Group during their work at Proctor & Gamble (P&G) (Lafley & Martin, 2013), the EcoAdvantage Plays from *Green to Gold* (Esty & Winston, 2009), the simple one-page company articulation framework of the Business

Model Canvas (Osterwalder & Pigneur, 2010), McKinsey and General Electric's (GE) *Nine Box Matrix* (McKinsey & Company, 2008), Boston Consulting Group's (BCG) *Experience Curves* (Reeves, Stalk, & Pasini, BCG Classics Revisited: The Experience Curve, 2013), and Deloitte's *Enterprise Value Map* (Deloitte & Touche, 2004). Most of these methodologies, all except Hart's papers and *Green to Gold*, are rooted firmly in the traditional corporate strategy view of the world where profits and shareholder returns are both the starting points and desired outcomes.

The goal of identifying these methodologies was to find one suitable for Sustainserv to adopt and modify for its burgeoning corporate strategy offering. The firm was transitioning from solely a corporate sustainability provider, with more clients asking for a broader strategic view of sustainability. Furthermore, it was the view of the founders, as well as this author, that the two disciplines are highly interlinked, and each should be conducted with the perspectives and tools of the other, or even in a truly integrated way. Specifically, Sustainserv sought to help its client improve its business on its own version of the triple bottom line (Elkington, 1998): environmental impact, stakeholder impact, and long-term value creation.

With this goal in mind, the original project identified promising methodologies for Sustainserv, screened them for their suitability for Sustainserv's mission, analyzed the top six methodologies from the screen, and then developed detailed recommendations for the top three.

The initial screen of the methodologies from the literature review covered three large criteria: utility for sustainability issues, emphasis on long-term value creation, and implementation ease for Sustainserv (abbreviated hereafter as sustainability, value creation, and Sustainserv). Each criterion had specific sub-criteria, and a low, medium, or high assessment rating was given to each methodology, with high being the most preferable for Sustainserv, or ideally any entity seeking to develop a sustainable strategy, to use. The sub-questions for sustainability are: does the methodology contain existing sustainability questions, does it incorporate the perspective of multiple stakeholders, does it look at a long-term horizon, is it science-based, and is it comprehensible to traditional business practitioners? The sub-questions for value creation include: does the methodology directly consider financial, environmental, and social values, is it conducive to assigning and calculating value metrics, and is it action-oriented and prescriptive? Lastly, the sub-questions for Sustainserv are: does the methodology require rare technical skills, does it rely heavily on other methodologies, is it flexible in its delivery and execution, and how high is the spin-up cost (such as training)? Scores of one to three (low to high) for these thirteen sub-metrics were assigned for each of the methodologies, generating a weighted average score of one to three (see Exhibit 1). The top six scoring methodologies were vetted with Sustainserv to move onto a deeper review. One exception was made: Hart's *Sustainable Value* scored lower than his *Natural Resource-Based View*, but the newer theory was selected because it built on the previous work. The other five selected were the Strategic Choice Cascade, Green to Gold, Strategy Map, Business Model Canvas, and Blue Ocean Strategy.

Exhibit 1: Methodology Scoring Matrix

	RECOMMENDED											
	Strategic Choice Cascade	Green to Gold	Strategy Map	Business Model Canvas	Sustainable Value	Blue Ocean Strategy	Balanced Scorecard	Natural Resource-Based-View	Reverse Engineering Framework	McKinsey Nine Box	BCG Experience Curves	Deloitte Enterprise Value Map
Sustainability	**2**	**2.25**	**2**	**2.25**	**2.5**	**1.75**	**1.5**	**2.5**	**1.75**	**1.75**	**1.5**	**1**
Existing Questions	1	3	1	2	3	1	1	3	1	1	1	1
Multiple Stakeholders	2	2	2	3	3	1	2	3	2	1	1	1
Time Dimension	2	1	2	1	2	3	1	2	2	2	3	1
Comprehension for Practitioners	3	3	3	3	2	2	2	2	2	3	1	1
Value Creation	**2**	**2**	**2.2**	**1.2**	**1.8**	**1.6**	**2**	**2**	**1.4**	**1.4**	**1.6**	**2**
Financial Value	2	3	3	2	2	2	3	2	2	2	3	3
Social Value	2	1	1	1	2	1	1	2	1	1	1	1
Environmental Value	1	3	1	1	2	1	1	3	1	1	1	1
Value Metrics	3	2	3	1	2	1	3	2	2	2	2	3
Action Orientation	2	1	3	1	1	3	2	1	1	1	1	2
Sustainserv	**2.5**	**2.25**	**2**	**2.5**	**1.5**	**2.25**	**2**	**1.25**	**2**	**1.5**	**1.25**	**1.25**
Technical Skills	2	2	2	3	2	2	2	1	2	1	1	1
Reliance on Other Methods	2	3	1	3	1	3	2	2	2	2	2	2
Delivery and Execution Flexibility	3	1	3	1	2	2	2	1	2	1	1	1
Spin Up Cost (Training, etc.)	3	3	2	3	1	2	2	1	2	2	1	1
TOTAL	**2.17**	**2.17**	**2.07**	**1.98**	**1.93**	**1.87**	**1.83**	**1.92**	**1.72**	**1.55**	**1.45**	**1.42**

These six were presented to Matt Gardner, CEO of Sustainserv, with additional detail on their scoring and applicability to sustainability and Sustainserv. From this short list, he selected three methodologies for a deep dive into recommendations on how he and his colleagues could use them: Strategic Choice Cascade, Strategy Map, and Business Model Canvas.

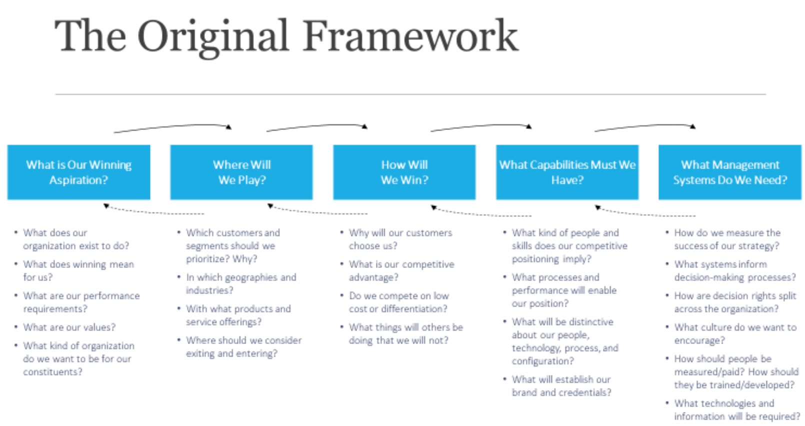
Since all three fell into the traditional corporate strategy domain, rather than sustainability, we decided to develop recommendations on how to modify the methodologies with sustainability and provide tactical steps on how Sustainserv could implement the methodology into its existing projects and practices. Three recommendations were developed for each methodology, in ascending order of integration and complexity, so the implementation guidelines are for the most complex format, recognizing that the steps could be toned down for a simpler application. These levels of complexity can be summarized as strategy for sustainability, bolt-on sustainability, and holistic integration.

RESULTS

Strategic Choice Cascade

This methodology comes primarily from the book *Playing to Win: How Strategy Really Works* by Roger Martin and A.G. Lafley. Roger Martin developed the methodology with his colleagues at Monitor, a consultancy now owned by Deloitte, and improved upon it with his work with Lafley at Proctor & Gamble. At its core, the Cascade involves answering five strategic questions through an iterative process: what is our winning aspiration, where will we play, how will we win, what capabilities must we have, and what management systems do we need? The Cascade is specifically useful for articulating a corporate strategy in a concise manner and developing options for new strategies for the company to consider (see Exhibit 2). The book goes into greater detail on how other complementary methodologies on how to systematically develop these options, but this project focused on the Cascade (Lafley & Martin, 2013).

Exhibit 2: Strategic Choice Cascade



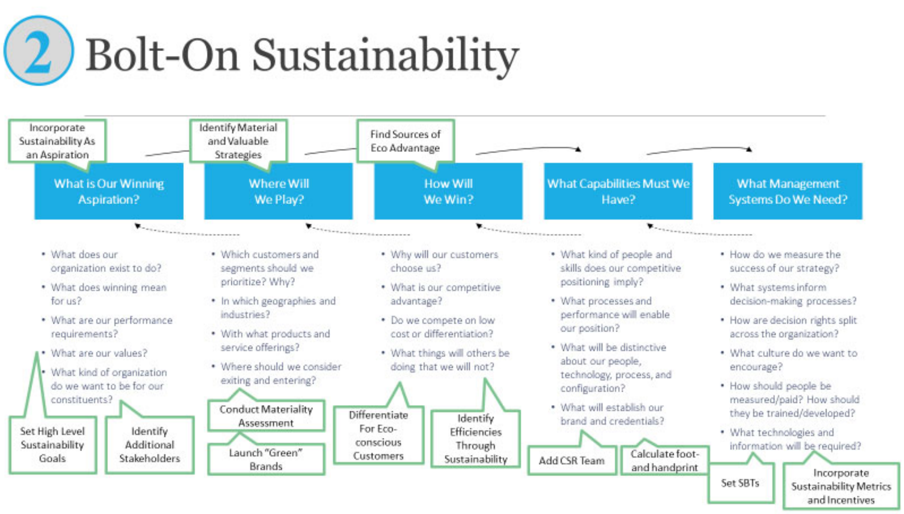
The three recommendations for the Cascade are: articulate a sustainability strategy through the framework of the Cascade, add sustainability bullet points to each of the five questions, and orient the cascade for long-term value and broader stakeholder collaboration.

Sustainability Strategy Cascade: The simplest approach is to articulate the firm's sustainability strategy with the Cascade framework. The focal unit of analysis shifts from the overall firm to the sustainability (or CSR) functional organization (see Exhibit 3). Highlights from this model include adding Elkington's "triple bottom line" to winning aspirations (Elkington, 1998), finding the "low hanging fruit" in how to win choices, and preventing "greenwashing" in capabilities. This works particularly well for companies that use the Cascade as their primary strategy tool, but it should be a temporary measure. The Cascade is not designed to be used for a particular function, like finance, marketing, or sustainability. Over time, the sustainability Cascade should merge with the overall corporate strategy and cascade down to business units and functions appropriately.

Exhibit 3: Sustainability Strategy Cascade

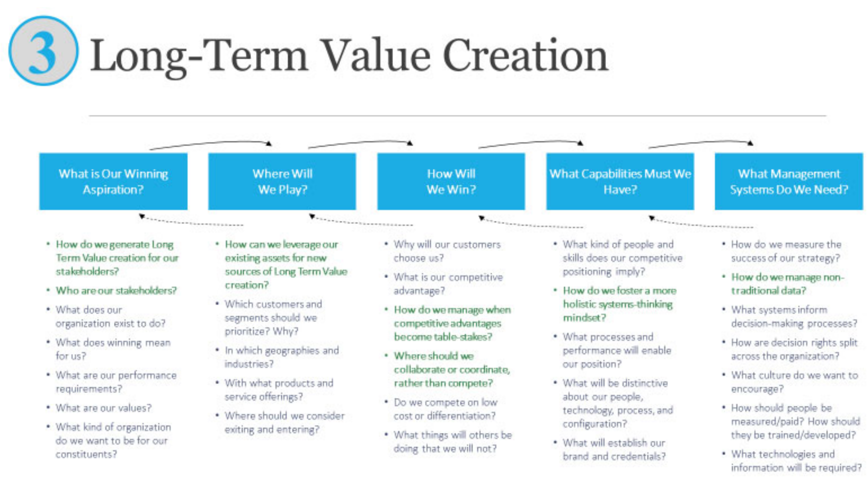
Bolt-on Sustainability: A slightly more complex application involves no modification of the Cascade framework, but it encourages reviewing each question with a sustainability lens (see Exhibit 4). For example, sustainability can be included as a winning aspiration, materiality assessments can inform where to play choices, and new sustainability metrics can be set up with incentives in management systems. This is a "checklist" approach that enables sustainability staff to make sur nothing is missed in the company's strategy, but it makes sustainability more of an afterthought. Over time, these sustainability factors may become second-nature for strategists and middle managers, but it is still not a fully integrated approach.

Exhibit 4: Bolt-on Sustainability



Long-Term Value Creation: Lafley and Martin indicate that the Cascade balances both long- and short-term success, and the Cascade even mentions "constituents," which could be a synonym for stakeholders (Lafley & Martin, 2013). However, compared to many advanced sustainability methodologies and perspectives that operate on planetary systems and ecological timescales, the Cascade is still insufficient. Fortunately, it is dynamic enough to incorporate long-range systems thinking (see Exhibit 5). This version of the Cascade explicitly calls long-term value creation for stakeholders to the forefront in winning aspirations, directly asks for sources of collaboration and coordination in how to win, encourages systems thinking in capabilities, and requires non-traditional data in management systems. This approach differs from "bolt-on" because that approach treats sustainability as an after-thought to apply to an existing corporate strategy, whereas this long-term orientation places sustainability as the starting point from which strategy is developed and designed.

Exhibit 5: Long-Term Value Creation



Regardless of the level of ambition for implementing sustainability with the Cascade, companies should follow the below steps, while keeping in mind that they are focused on the most advanced "long-term" method.

1. Articulate current state strategy (corporate, sustainability, or other) with the Cascade
    1. Seek input from internal and external stakeholders through interviews and brainstorming workshops
    2. Optional: Develop nested business unit or product line strategies
2. Develop potential future states and gaps from current state
    1. Utilize scenario analysis or other planning methods to explore future states

    2. Explore strategic tensions between trade-offs and extreme versions of aspirations
3. Identify gaps and necessary strategic decisions utilizing the Strategic Choice Structuring process and iterate as needed
4. Select top potential future state Strategies
5. Articulate future state Strategies with Strategic Choice Cascade
    1. Communicate with internal and external stakeholders and invite feedback
    2. *Optional: Develop nested business unit strategies*

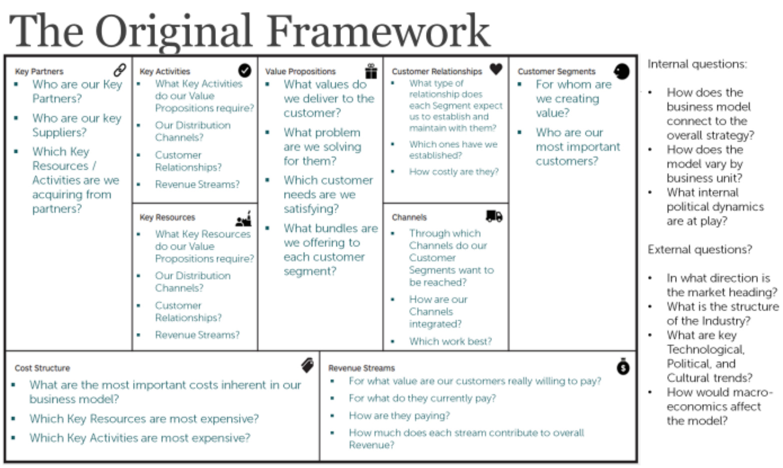
Additionally, the company should take the following aspects of the Cascade into consideration:

- ❑ Requires training and practice with Playing to Win methodologies and techniques
- ❑ Cannot be done in a single-day workshop – requires multiple meetings and sufficient background information
- ❑ Critical to have proper client engagement
    - ❑ Helpful if they are already familiar with methodology
    - ❑ Requires careful consideration of client's time to digest and react to the material
- ❑ Typical development involves:
    - ❑ Research on the company through previous internal and external documents, as well as stakeholder interviews
    - ❑ Brainstorming workshops, both for current and future-state cascades
    - ❑ Drafting of Cascades and supporting materials by junior staff on project team
    - ❑ Iterative review cycles of the Cascades with senior managers on project team and client team
- ❑ Best done in conjunction with Strategic Choice Structuring® process
- ❑ Significant value is in the creation process, not in the final product

Business Model Canvas

The Business Model Canvas is an excellent way to summarize on one page how a business organizes its value creation and capture mechanisms, or in other words, how it makes money. It was designed by Alexander Osterwalder and Yves Pigneur, and they sourced input from 470 practitioners from around the world to perfect the model (Osterwalder & Pigneur, 2010). It is also heavily promoted by Steve Blank and Bob Dorf in their Lean Start Up methodologies because of its simplicity (Blank & Dorf, 2012). Anecdotally, the founding leader of Deloitte's Consulting practice once told this author that every consultant at the firm should know this framework. Similar to the Cascade, it is a simple way to articulate a strategy, but the Canvas is more static and descriptive (see Exhibit 6). It breaks out a business model into nine parts: customer segments, customer relationships, channels, revenue streams, value propositions, cost structure, key activities, key resources, and key partners. Like the Cascade, it can be constructed for the entire company or for individual business units. The authors describe how the Canvas can be integrated with more strategic questions, but these are not as in-depth as the Cascade (Osterwalder & Pigneur, 2010).

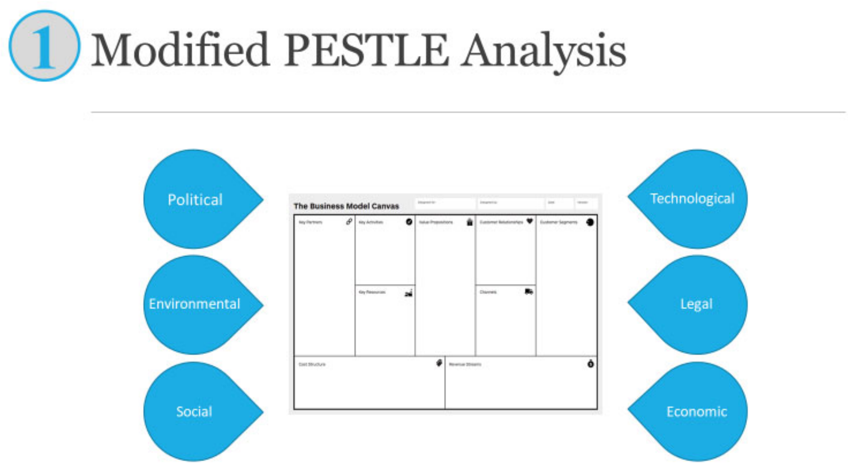
Exhibit 6: Business Model Canvas



To utilize the Business Model Canvas for sustainability, practitioners could run a PESTLE analysis on the company's existing canvas, "bolt on" sustainability to each section of the Canvas, or flesh out a sustainability initiative to integrate with the full business model.

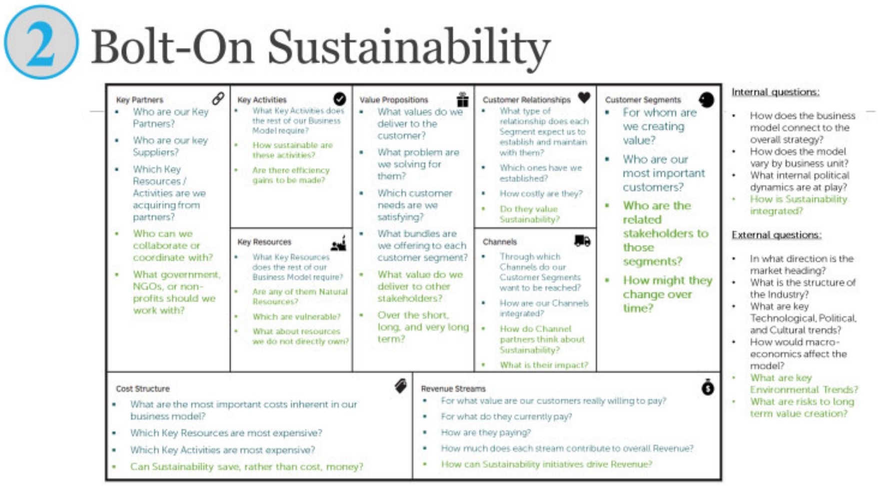
PESTLE Analysis: The simplest option for the Canvas is to create it with additional considerations of external factors, even those that are not directly related to their industry, and these are typically categorized as political, environmental, social, technological, legal, and economic (creating the acronym PESTLE – see Exhibit 7) (CIPD, 2009). Environmental is the obvious analysis for sustainability purposes, with recent improvements in tracking business impacts in the environment, notably GHG emissions affecting climate change. The nine planetary boundaries are this author's preferred all-encompassing model (Whiteman, Walker, & Perego, 2013), but the science based target initiative for GHG emissions is perhaps the best example of this so far (Science Based Targets, 2019).However, the other factors can be just as important for sustainability, especially under definitions that include Social Impact in the triple bottom line (Elkington, 1998). Political and legal factors are important for regulations, social issues such as access and equity should drive sustainability and profitability decisions, new technologies present new ways to save or make money by reducing environmental impact, and macroeconomic forces often make sustainability more or less feasible. These analyses can quickly become overwhelming, so companies need to focus on the questions that most impact their unique business model.

Exhibit 7: PESTLE Analysis



Bolt-on Sustainability: Similar to the Cascade, sustainability practitioners can force-fit their criteria onto this strategy framework. Exhibit 8 shows a starting list of questions, but many more may exist based on the business model and the company's context. The key additions for any Business Model Canvas should be an expanded stakeholder list in key partners, a broader and longer-term definition of value in value propositions, and a deeper dive into the value chain in key resources and channels. Like the "bolt on" recommendations for the Cascade, this checklist approach can become an afterthought if not implemented properly. Companies can avoid this risk by adapting to the "long term orientation" method applied to the Cascade. This method is not broken out separately for the Canvas, because it is not as unique.

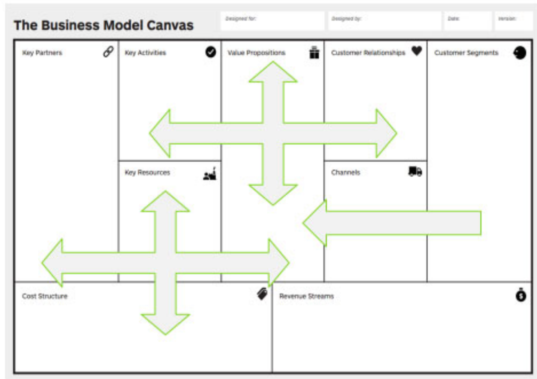
Exhibit 8: Bolt-on Sustainability



Sustainability Initiative Canvas: Many sustainability issues originate from a specific part of the business, and the Canvas can help expound upon that idea so that it is integrated with the rest of the business model (see Exhibit 9). For example, if Marketing develops an idea for a green product line, the Canvas can help quickly map out the follow-on implications throughout the company's channels, resources, and cost structure. This tool becomes most powerful when value propositions at the core of the business change beyond financial value to include ideas such as ecological and social value. Value propositions are intentionally centrally located in the Canvas, and changes here reverberate throughout the business model, so companies should focus ideas here for the highest possible impact. Ideally, sustainability ideas will permeate across all sections of the Canvas, and companies will also use the principles of the "bolt-on" method to expand the decision-making criteria in each section, even for business decisions that do not have sustainability as their genesis.

Exhibit 9: Sustainability Initiative Canvas

3 Sustainable Business Model Canvas



To implement, companies should follow these steps:

1. Create current state Canvas
    1. Start with value proposition
    2. Draft the rest of the Canvas
    3. Re-evaluate value proposition
    4. Iterate
    5. *Optional: Cascade down to business units or product lines*
2. Develop potential future state Canvases
    1. Alter one aspect of the Canvas
    2. Alter remaining aspects accordingly
    3. Continue to make changes as each section changes
    4. *Optional: Cascade down to business units or product lines*
3. Connect to strategy and dynamic forces
    1. Test each component against strategic analyses
    2. Develop multiple options for future states
    3. Iterate and refine with stakeholders

Additionally, the company should take the following aspects of the Canvas into consideration:

- ❑ Can be done in small workshop settings or expanded into a larger project
- ❑ More of a diagnostic tool, unless included in a full-fledged strategy project
- ❑ Easy to understand and create, but nuances can be tricky
    - ❑ Key resources and key activities can easily overlap
    - ❑ Key partners, customer segments, and channels can all overlap

- ❑ Book and website have good recommendations on exercises for completing the Canvas
- ❑ Not accommodating to metrics and performance monitoring
- ❑ Does not require specialized staff or skillsets

Strategy Maps

Strategy Maps build on the popular framework of Balanced Scorecards to tie together widespread objectives across a company into a cohesive strategy (Kaplan & Norton, 2000). The core framework calls for strategists to track four "perspectives" in a hierarchical manner, from learning and growth to internal business processes to customer to financial. Within each perspective, companies develop metric-based objectives that define success for that particular perspective. The framework specifically requires the user to draw clear arrows between objectives within and across perspectives, thereby ensuring that all business objectives ultimately end up in producing financial returns for shareholders (see Exhibit 10).

Exhibit 10: Strategy Map

To bolster Strategy Maps with sustainability, practitioners can utilize a Map to develop a sustainability strategy, bolt on sustainability to each perspective, or add sustainability as a perspective on the corporate Strategy Map.

Sustainability Strategy Map: Similar to using the Cascade to develop a sustainability or CSR strategy, this is a short-term solution. It can help sustainability practitioners think in a more traditional strategic mindset, or it can help frame initiatives in the language of the broader business (see Exhibit 11). Also similar to the other two methodologies, practitioners can figure out where a sustainability initiative focuses on the map, and then build precedent and antecedent objectives. For example, employee engagement would fall under learning and growth, impact data collection systems fit under internal business process, green brands would be an important consideration for the customer, and eco-efficiency cost savings belong in the financial perspective.

Exhibit 11: Sustainability Strategy Map

Bolt-on Sustainability: Like the other "bolt-on" options, this recommendation has sustainability as an afterthought to a pre-existing corporate strategy. For this use of the methodology, sustainability objectives fit into the existing four perspectives alongside other business objectives (see Exhibit 12). This helps ensure they receive equal consideration, and they can be mutually reinforcing with the other goals. There need not be a sustainability objective in each perspective, but they should be included to the maximum extent possible. In particular, the method is most useful when there are many linkages to other objectives so that sustainability is enmeshed in the strategy, i.e., the sustainability objectives should be connected to other objectives, not just to each other.

Exhibit 12: Bolt-on Sustainability

Sustainability as a Perspective: The last and most powerful way to incorporate sustainability into the Strategy Map is to include it as an additional perspective, ideally as the highest in the hierarchy (see Exhibit 13). Pulling sustainability out from objectives broadens the company's view of its stakeholders and its time horizon to generate aspirational objectives in line with the "long-term orientation" for the Cascade. Sustainability objectives should still exist within the other perspectives, but they now serve as both ends and means – a topic explored in the second phase of the project. Matt Gardner from Sustainserv also recommended rephrasing the financial perspective as value creation, to help incorporate additional definitions of value, such as environmental and social.

Exhibit 13: Sustainability as a Perspective

In order to implement these strategy Maps in the organization, practitioners can follow these tactical steps:

1. Create Balanced Scorecard
    1. Consult relevant internal and external stakeholders
    2. Determine possible objectives for each perspective
    3. Prioritize perspectives
    4. Understand baseline metrics for each objective
    5. Develop target metrics for each objective
2. Create Strategy Map
    1. Determine linkages between objectives
    2. Uncover missing objectives and performance gaps
    3. Share with internal and external stakeholders
3. Iterate on Balanced Scorecard and Strategy Map
4. Communicate down to department heads and managers to determine their tactical objectives and related performance metrics
5. Adjust plans based on feedback up and down the organizational structure

Additionally, practitioners should take the following considerations into account:

- ❑ Requires significant time to generate objective options and to prioritize
- ❑ Ownership of perspectives should be across all departments, e.g., customer should not be siloed within marketing
- ❑ Linking strategic objectives to tactical actions and performance is critical
- ❑ Can be completed in a series of small workshops or as a large strategy project
- ❑ Metrics must be carefully set to avoid manipulation or unintended consequences
- ❑ Significant value is in the creation process, not in the final product

Discussion

Additionally, several higher order conclusions were synthesized from the project, and these formed the basis of the next phase of the project. The Strategic Choice Cascade and the Strategy Map articulate essentially the same thing – a set of objectives and choices to focus on. However, the Strategic Choice Cascade may be better suited for the process of integrating strategy and sustainability. The Business Model Canvas is more effective for developing all of the supporting pieces of a sustainable and long-term value proposition, and it can be used to examine all of the necessary objectives and choices a firm must make when setting a strategy. All of the methodologies require significant iteration and perspectives from a wide variety of stakeholders to be most effective. Furthermore, these methodologies use different terminologies to say many of the same things, so aligning on language and terms is critical for any project. Most importantly, these methodologies all need to consider sustainability up-front and holistically, so that it can be embedded throughout the considerations and processes. However, it is a part of the trade-offs inherent within strategy, rather than a means to resolve those trade-offs in a coordinated way. All of the above recommendations, to varying degrees, help manage these trade-offs to generate sustained, i.e., "enduring" in the parlance of corporate strategy, and sustainable, i.e., socially and environmentally responsible, competitive advantage.

With these tools, Sustainserv can be one step closer to help its clients develop "an integrated set of choices that uniquely positions the firm in the Earth's ecosystem and human society so as to create sustainable advantage and superior long-term value relative to alternative sets of choices."

PHASE TWO: Applying Stronger Definitions of Sustainability

While the first phase of the project looked at integrating sustainability into specific existing corporate strategy methodologies, the second phase tackled a more ambitious issue. We looked at the three top corporate strategy frameworks through the lenses of more recent trends in strategy and sustainability. Companies today are also at widely different stages on their sustainability journeys, not to mention having vastly different definitions, goals, and tracking mechanisms. No organization will follow the exact same process or even principles, but this work shows the general principles that corporate strategists should follow as their company progresses in its sustainability journey.

PHASE II LITERATURE REVIEW

A second round of literature review looked at the general history and underpinnings of the two discipline and a broader set of corporate strategy and sustainability methodologies, particularly newer thinking. Four themes emerged from this review: adaptability as the new competitive advantage, new business definitions for purpose and value, the difficulty of selecting sustainability issues to focus on, and the progression of sustainability ambition within companies.

Adaptability is the new competitive advantage

In the field of corporate strategy, much of the recent thinking deals with approaches for dynamic and uncertain industries and competition, and adaptability is widely hailed as the best source of competitive advantage in these conditions (Grant, 2019). BCG assessed the major theories and methodologies in corporate strategy, and this analysis the underpinning of the "strategy palette" in the appropriately titled “Your Strategy Needs a strategy” (Reeves, Haanaes, & Sinha, Your Strategy Needs a Strategy: How to Choose and Execute the Right Approach, 2015). The “palette” provides five archetypes for designing a strategy – classical, adaptive, visionary, orchestration, and renewal, depending on the predictability, malleability, and harshness of a firm’s operating environment. The biggest growth has come from the adaptive field, and this matches the dynamic nature that many industries now face with the rise of digital and global business. The Chief Strategy Officer and Head of Innovation for Deloitte similarly emphasize “minimally viable moves” in their book “Detonate” (Tuff & Goldbach, 2018) as a new means of strategic planning compared to the stereotypical annual review (Vancil & Lorange, 1975). This thinking borrows from the lean and agile development fields, and it aligns with Steve Blank’s “lean startup” approach (Blank & Dorf, 2012). It should be noted that Goldbach is a disciple of Martin and Lafley’s Strategic Choice Cascade, and Steve Blank is a vocal proponent of the Business Model Canvas. This makes these authors important to understand how these methodologies have evolved recently, and their recommendations of speed and adaptability match many of the other recent changes in the field.

Rethinking purpose and value

We also a see a growing shift in the purpose of business and definitions of value. Michael Porter, the prominent corporate strategy thinker and founder of the Monitor Group, outlines a new definition of “shared value” that broadens the mandate of business activities to think about needs beyond the traditional set of their customers, suppliers, and communities (Porter & Kramer, 2011). This view blends traditional focus on shareholder value with permission for companies to think beyond the short-term metrics that often take up most of their time. This idea manifests further in the statement from the Business Roundtable, a consortium of large company CEOs, that firms should incorporate a broader purpose along with their fiduciary duty to stakeholders (Business Roundtable, 2019). This purpose is a responsibility to society and the planet, and, while vague in its recommendations, it is a step towards integrated sustainable strategy. A way for businesses to act on these ideas is through the legal structure of a benefit corporation, which allows for environmental and social values to carry the same weight as financial obligations (Honeyman, 2014). This combination of strategic thinking, big business support, and legal structure provides an excellent underpinning for the integration of sustainability and strategy.

Selecting sustainability issues

Looking to the field of sustainability, we see a deepening understanding of the myriad of sustainability issues, and their complexity can be overwhelming for most companies. Regardless of a company’s current or desired stage of sustainability, it will need to decide what sustainability issues to monitor and act on. We propose that these issues will progress from liabilities to opportunities to responsibilities. However, the first step is identification and prioritization.

As noted in the Definitions section, Oxfam's "Safe Place for Humanity" is a simple and comprehensive framework for considering sustainability issues, and it is an excellent starting point (Raworth, 2012). It shows the upper and lower limits of activities within the shape of a "donut," where the ceiling is formed from the Nine Planetary Boundaries and the floor is an equitable standard of living for all humans. The resulting "safe place for humanity" shows how environmental issues are interlinked with social issues, and we treat this as our definition of sustainability for this project. Future work in integrating sustainability and strategy should apply similar principles to a detailed look at social issues. However, given scope limitations, we primarily focus on the environmental issues presented by the Nine Planetary Boundaries (Whiteman, Walker, & Perego, 2013)

The Nine Planetary Boundaries consist of climate change, ocean acidification, stratospheric ozone depletion, nitrogen and phosphorous cycles, freshwater use, land use change, biodiversity loss, atmospheric aerosol loading, and chemical pollution (Whiteman, Walker, & Perego, 2013). These represent proposed scientific thresholds of anthropogenic activity to prevent disruptions to Earth's natural biogeochemical, ecological, and climactic variations. Rooted in science and quantification, they are an excellent starting point for those seeking to establish data-ready metrics and science-based targets. Several of the boundaries do not have prescriptive limits set yet, but companies should still take these areas into consideration as science progresses. If a company is contributing to an overshoot of these boundaries, then their activities are a liability for themselves and for all of society.

Each Boundary contains many subordinate issues, and companies need to prioritize from this long list. Materiality Assessments are a common tool to help sustainability practitioners narrow the focus for colleagues while bringing in non-traditional perspectives, usually in the form of stakeholders like the environment, communities, and value chain players. They have their roots in reporting, so the most basic form looks at two axes – importance to stakeholders and impact on business. These tools are excellent for their simplicity, but that is also their downfall. More advanced materiality assessments may look at significance of economic, environmental, and social impacts or ability to influence or control (Overall, 2017). These two lenses still help bring in broader stakeholder views, but they become much more useful for strategists by emphasizing value (impact) and resources (capability).

This simple shift in assessing issues already starts to transform sustainability from a liability to an opportunity, but thinking about handprint analysis takes the next leap. Developed by Greg Norris at Harvard, it looks at the Net Positive Impact of organizations (Norris, 2015). It typically focuses on social issues in his applications, but firms can also adapt if for environmental sustainability (or ideally both). Before getting to handprint, a firm must recognize its footprint. A footprint is a calculation of a firm's negative environmental impact, while its handprint is its positive impact minus that footprint. A company can improve its handprint by "doing less bad" or by "doing more good." In this way, a firm can continue to deliver products and services that improve all aspects of the triple bottom line. This approach aligns with the revenue and forward-looking pieces of Hart's Sustainable Value framework and EcoAdvantage playbook (Hart & Milstein, Creating Sustainable Value, 2003) (Esty & Winston, 2009). Taking this idea further, handprint analysis can provide concrete metrics and create quantifiable opportunities for environmental and social value.

This approach is exemplified by efforts such as the UN's SDG's, We Mean Business, the Science Based Targets Initiative, and SASB. The UN's Sustainable Development Goals (SDGs) are a set of objectives that all countries, organizations, and individuals can use to guide their plans and actions. They represent the most comprehensive set of goals to create a flourishing global society (United Nations, 2015). We Mean Business is a coalition of companies that seek to align government policies and corporate action to achieve a zero-carbon future. Entry to the coalition involves making concrete commitments and actions to contribute to this transition (We Mean Business, 2020). Similarly, the Science Based Targets Initiative is working across industries to develop appropriate metrics for companies to reduce their GHG emissions. The key differentiation with these targets is that they are based on equitable distribution of the responsibility of emissions reduction (Science Based Targets, 2019). The Sustainability Accounting Standards Board (SASB) focuses on provide a clear set of rules and metrics for reporting and tracking a company's environmental impact. Their aim is to provide a standard set of rules similar to financial accounting so that we can compare and contrast companies' performances (Sustainability Accounting Standards Board, 2020). Most importantly, these are all system-level efforts that helping set the "rules of the game" so that companies can help orchestrate responses to sustainability issues in a coordinated and efficient way. In these instances, sustainability then also becomes a responsibility once decisions and commitments are made, since other actors are dependent on each other to meet overall goals.

With a clearer view of the myriad sustainability issues in terms of a company's liability, opportunity, and responsibility, strategists can determine where their company can make the most impact and deliver the most value. We are still far from a system as sophisticated as the current financial system, but we are making promising progress.

Sustainability as a growing aspiration

Corporate sustainability has also seen much change in the field, and many scholars link the overall progression of the field to the progression of individual companies. Hoffman and Bansal describe three "waves" of sustainability since 1960, with transitions from regulatory compliances in the 70s to strategic environmentalism in the 90s to sustainability in the 2010s (Hoffman & Bansal, 2011). Winston argues for a "big pivot" in his eponymous summary of how firms can become more environmentally friendly and while comprehensive of the actions firms can take to become more sustainable, it does not show a true integration with overall corporate strategy (Winston, 2014). This approach is similar to other works such as Patagonia's "Responsible Company" and even "The B Corp Handbook," which operate more as checklists, like "bolt-on sustainability" options from phase one, than as corporate strategies (Chouinard & Stanley, 2012) (Honeyman, 2014). These are excellent and comprehensive methodologies, but they do not show a true integration with overarching strategy. Many of these methodologies can become tools and tactics for a company with an integrated sustainable strategy, but they cannot articulate it holistically.

Understanding a firm's sustainability ambition level is then incredibly important in figuring out how to best integrate sustainability with strategy. Goals and objectives have been a key part of corporate Strategic Planning for a long time (Vancil & Lorange, 1975). Looking at the top methodologies from the first phase, objectives form the core of the Strategy Map (Kaplan & Norton, 1992), and "what is our winning aspiration?" is the first question in the Strategic Choice Cascade (Lafley & Martin, 2013). Along with these traditional strategy ambitions, companies must figure out their sustainability ambition. Landrum identified six stages of sustainability in a meta-analysis of this theme, and we use these for our project: non-participatory, compliance, business-centered, systemic, regenerative, and coevolutionary (Landrum 2017).

Overarching over these stages are two broad views on sustainability: "weak" and "strong." "Weak" sustainability can be characterized by traditional views as a field of compliance and mitigation with financial metrics still the dominant objective, while "strong" definitions emphasize scientific indicators of ecological health and overall human flourishing as the dominant objective. Put another way, "weak" sustainability typically involves using the systems and constructs of today to solve environmental issues, much like the "bolt-on" recommendations of the first phase, while "strong" sustainability re-imagines systems and the roles of companies. The most advanced recommendations for strategy methodologies start to enter this realm, and this second phase explores their applicability across various "nuanced" stages of sustainability.

METHODOLOGY

From these themes of adaptability, redefined value, issue selection, and ambition, we realized that the modifications of the three corporate strategy methodologies in the first phase were insufficient for "strong" sustainability. We determined we should examine corporate strategy within each of these stages, and then continue to modify the frameworks to meet the "strong" standards.

To integrate corporate strategy and sustainability, company leaders need to know where they are on this spectrum and, more importantly, where they want to be. Progressing through the stages involves increasing amounts of dedicated staff, non-financial metrics, exterior collaboration, and integrations with strategy and operations. Given the iterative nature of corporate strategy, this integration grows in importance as the company moves through the stages. Below is a summary of the six stages and how they generally relate to corporate strategy.

Non-participatory: This is actually not even considered a stage by Landrum, so the strategy component is nonexistent or, at best, accidental. Most companies in the 1960s prior to the first wave of sustainability would fall in this bucket, but few would today. Indeed, 86% of S&P 500 companies published a sustainability report in 2018 (Makower & al., 2020).

Compliance: For this stage, sustainability is seen as a hurdle or check-box in the strategy development process. This is the start of environmental impact entering the conversation, but it is likely delegated to a specific department or to middle management to figure out, rather than being addressed at the strategic level. A small dedicated team is often used to make sure bare minimum regulations are met and environmental impact assessments are filled out, but they likely work in a risk or compliance department. This makes their work a "brake" on the company's core growth strategy rather than a driver of it.

Business-centered: This stage is likely the most common today, and it puts sustainability on an even playing field with other business initiatives. From a strategy standpoint, sustainability either exists as its own set of projects, with financial ROI still as the primary decision variable, or as a decision variable for all projects. The Green to Gold EcoAdvantage Plays and the majority of Hart's Sustainable Value framework both exemplify how companies can think about sustainability in the language of business, specifically through competitive advantages (Esty & Winston, 2009) (Hart & Milstein, Creating Sustainable Value, 2003). However, this stage still looks at sustainability as an input to strategy and economics, and it therefore is still in the "weak" category, although it is the "strongest" relative to others.

Systemic: At this stage, we see the shift from "weak" to "strong" sustainability. More companies are beginning to embrace this higher stage, realizing that vertical value chains and horizontal alliances can have more impact than individual organizations. This follows strategy ideas of pre-competitive behavior (Winston, 2014) and Shared Value (Porter & Kramer, 2011). In terms of the Strategy Palette, this matches a Shaping approach for the lead orchestrating firms and an Adaptive mindset for other firms trying to figure out their role in the system (Reeves, Haanaes, & Sinha, Your Strategy Needs a Strategy: How to Choose and Execute the Right Approach, 2015). The participants in the We Mean Business coalition and Science Based Target initiative are excellent examples of companies coming together to tackle bigger system problems (We Mean Business, 2020) (Science Based Targets, 2019). Governments or NGOs might also take the role of the orchestrator, as demonstrated by the SDGs or SASB (United Nations, 2015) (Sustainability Accounting Standards Board, 2020). The importance of competitive advantage becomes less clear as collaboration trumps competition, but it is still important for companies to figure out how they can most efficiently organize resources to deliver value to their stakeholders, meaning corporate strategies can still be effective.

Regenerative: This stage is unmarked territory for most businesses. It upends the bases of most traditional corporate strategy frameworks, by changing the goals from profits, growth, and consumption to scientific metrics and objectives. Under its definition, it emphasizes the environmental component of sustainability, but these are likely impossible, and unwanted, if social aspects are not met. It implies regrowth in environmental measures without significant growth on financial indicators and without loss on social measures. Companies can still use strategy frameworks to guide their actions, but the definitions of value, and the stakeholders to whom it is delivered, change drastically. Importantly, this stage builds on the previous stage, because these new objectives need to be grounded in a shared understanding of the right metrics to use. SASB and science-based targets are prime examples of this, and companies will need to have trust in these institutions from these previous stage before the Regenerative stage can truly take off (Sustainability Accounting Standards Board, 2020) (Science Based Targets, 2019).

Co-Evolutionary: This is the least understood, and least practiced, stage. It essentially implies growth in environmental and social measures without growth in financial measures. While this may be heretical or anti-capitalist, it is still possible for corporate strategy to play a role. This stage also requires a reframing of purpose and value in line with some trends we have seen, but its call for “flourishing” of all planetary and human systems is not well described. Companies have an opportunity to shape this, and the adaptive approach to corporate strategy can help companies experiment as we figure this stage out collectively as a society.

Results: Integration of Methodologies with Stages

This final piece of the project took the three frameworks from the first phase and how they might be adapted for more ambitious stages of sustainability. The first phase of the project resulted in methodologies that could work well for “weak” sustainability, and we hypothesized that they could do the same for “strong” sustainability. At a minimum, they can start to form the bridges to later stages and highlight the gaps that new frameworks could fill. The relevant stages for this analysis are Systemic, Regenerative, and Co-Evolutionary. If we think of business and economics’ role as providing the best benefits to society with the lowest extraction of resources, these business strategy frameworks make promising candidates for firms that aspire to move through the sustainability stages.

Strategic Choice Cascade

This first framework lends itself well to “stronger” stages of sustainability because of its generic framing of aspirations, resources and capabilities, and management systems. However, the breakdowns become more apparent in the notions of “playing” and “winning.” Across all three of these later stages, “participating and flourishing” may be more apt descriptors.

Systemic: The Long-Term Orientation Model from the first phase of the project fits well into this intermediate sustainability stage. It broadens the view of winning to a wider set of stakeholders, and it explicitly calls for collaboration and coordination in how to win and systems-thinking in capability choices. To take the idea further, the Cascade can be brought up a level to the system, or partnership / alliance / ecosystem, just as the Cascade can be coordinated with lower-level business unit Cascades. This would mean that aspirations need to be set by many stakeholders in the system, which would take significant time, and then the capabilities from various organizations would need to be organized to best work with one another. Many companies already have to do this with their global value chains, so they would be well positioned to include additional environmental and social considerations. The key difference is that these should be on par with financial aspirations.

Regenerative: The flexibility of the Cascade holds up well to the paradigm shift to true “strong” sustainability. While the traditional Cascade framework itself should not prescribe aspirations, one for all companies in this stage should be environmental regeneration. The primary changes to the framework come in the “where to play” choices, because firms will need to look beyond products and markets. This echoes the first tenet of Porter’s Shared Value, and for sustainability and strategy practitioners, this specifically means natural ecosystems (Porter & Kramer, 2011). This major shift in where to play choices has large impacts throughout the rest of the choices. A Handprint analysis becomes particularly useful here to unlock the opportunities that a firm’s current positioning and capabilities provide (Norris, 2015). Handprint and Footprint analyses can provide starting points for these, but there is little consensus on where firms can start today in preparing for this. Efforts such as science-based targets and SASB are excellent starting points as far back as the Compliance stage (Science Based Targets, 2019) (Sustainability Accounting Standards Board, 2020), and firms should aim for these to be core competencies well before the Regenerative stage.

Co-evolutionary: Since this stage is the least concrete, the Cascade’s flexibility works well here. Aspiration choices will move beyond ecological restoration and social justice to the “flourishing” of all systems on the planet. In this brave new world, an adaptive approach from the strategy Palette should work best, and sustainability strategists should build in significant “blank spaces” into Cascades to emphasize that this stage may provoke new questions as more firms begin to approach it (Reeves, Haanaes, & Sinha, Your Strategy Needs a Strategy: How to Choose and Execute the Right Approach, 2015). Capability and management system choices therefore need to include exploratory mechanisms that practice “Minimally Viable Moves” in this new frontier (Tuff & Goldbach, 2018). Relying on the partnerships built in the Systemic stage will also be incredibly important, because different stakeholders will have different definitions of “flourishing.”

Business Model Canvas

The Canvas is slightly less suited than the Cascade for Strong sustainability because, as the name implies, it centers around value in terms of revenues and costs, which makes it a prime example of a Business-Centered stage framework. Fortunately, as Porter and Winston elucidate, value can be redefined in ways besides financial profits (Porter & Kramer, 2011) (Winston, 2014). Indeed, the Canvas can also be adapted for social enterprises, and there is a blurring of lines between these entities and traditional corporations as organizations move through the stages (Burkett, 2016).

Systemic: A combination of the “bolt-on” and “sustainability initiative” approaches from the first phase serves as the best bridge to “stronger” sustainability stages. The key partners block becomes of utmost importance, and companies also could look at broadening possibilities within channels, i.e., the value chain, and customers to include new stakeholders and system players. Furthermore, customers can be broadly redefined as beneficiaries, with the Canvas showing how the business model delivers value to them (Burkett, 2016). Similar to the Cascade’s approach for this stage, it also could be possible to create a Canvas for the whole system. Non-financial metrics are still lacking from this framework, and that issue needs to be resolved in the transition to the next stage.

Regenerative: Value propositions are the keystones of the Canvas, and they must be reconfigured for a company to succeed at the first true strong sustainability stage. Hart, Esty, and Winston again provide excellent redefinitions of value with sustainability objectives (Hart & Milstein, Creating Sustainable Value, 2003) (Esty & Winston, 2009). However, this stage calls for true science-based ecological value, which can be found in Planetary Boundaries or in science-based targets (Whiteman, Walker, & Perego, 2013) (Science Based Targets, 2019). With any of these drastic changes in value definition, revenue and cost become inadequate as the foundation of the canvas, and we suggest the terms “benefits” and “resources”. From an articulation standpoint, this could become overwhelming across the broad swath of sustainability issues, so an indexed or aggregated approach could suffice for one-page Canvases. Lastly, since value propositions are delivered to customers, the definition of customer could change to include nature or the planet, and this could help simplify the value proposition box.

Co-Evolutionary: The flexibility of the Cascade is better suited to handle the ambiguity of this “very strong” sustainability stage, but the Canvas still has some uses. This stage would explicitly call for society to be a customer of a business model, in addition to nature. Value proposition components will need to be further refined for this stage. However, the core outline of the Canvas as an articulation of how an entity transforms resources, delivers value to beneficiaries, and extracts a portion of that value to enable future transformations should still hold. Most importantly, firms will need to experiment with different canvases to prepare for this stage. The simplicity and adaptability that Blank emphasizes for start-ups will be critical for all companies as we learn more about the best way to enable all human and planetary systems to flourish (Blank & Dorf, 2012).

Strategy Map

This last framework will change the most in "stronger" stages of sustainability. With its roots in the Balanced Scorecard, which came out of the business language of accounting, and the primacy of financial returns to shareholders, the Strategy Map does not adjust easily beyond the Business-centered stage (Kaplan & Norton, 1992). However, its simple structure of overarching perspectives with interconnected goals can still provide a useful framework for "strong" sustainability practitioners. Additionally, its linking of the static Scorecard and the dynamic Map give it an advantage over the static Canvas and the dynamic Cascade on their own.

Systemic: Not even the most advanced modification from the first phase, with sustainability as a perspective, is sufficient for companies at the Systemic stage. Like the Cascade and Canvas, Strategy Maps here will need to blend across company boundaries to create and achieve system-wide objectives. Sustainability should continue to be its own perspective for this stage, and it should have its own objectives interwoven with traditional business objectives. The big leap for this stage will be that objectives will connect from other companies to ensure a smooth-functioning system. Internal business processes and learning perspectives will become shared and open, in line with Porter's Shared Value (Porter & Kramer, 2011). Customer, financial, and sustainability perspectives will also be shared, but this means figuring out to whom the value and rewards accrue will be difficult. Governments may need to step in here to set the new rules of the game, or perhaps NGOs such as the United Nations or We Mean Business (United Nations, 2015) (We Mean Business, 2020).

Regenerative: For the Regenerative stage, companies need to consider sustainability as its own perspective, and it needs to be the top of the hierarchy. Like the other frameworks, environmental considerations are the most important here, but the social aspects of sustainability need to be considered as key cogs in the system. Similar to the Canvas, the customer may also be recast as planet or society, or that perspective may be bypassed for some objectives. The new definitions of value that the modified canvas requires will also be useful here, especially since Strategy Maps rely heavily on metric-based objectives. Additionally, a recursive arrow should be drawn from sustainability back to learning and growth, since the science of environmental impact will continue to change as it draws more attention. Firm's Strategy Maps will need to be more adaptive in this stage as the science evolves.

Coevolutionary: In the "strongest" sustainability stage, firms should widen the sustainability perspective to include the social aspect on equal (or greater) footing. Additionally, it may be possible to merge with the long-term value perspective, since value defined in ecological and societal terms would be the desired end state. The learning and growth perspective becomes the most important because of the many unknowns in this stage and this perspective's place as the starting point for a strategy. This stage will require significant learning and iteration, and all of the dependent objectives will need to change accordingly.

DISCUSSION

Looking across the three methodologies and three stages, we see a few common themes emerge. Within the Systemic stage, companies need to develop their strategies within their systems. This requires the tools of systems thinking, specifically drawing their system. This can be difficult because of the complexity of global value chains and natural ecosystems, but it is imperative to achieve success. Within the Regenerative stage, nature must be a primary stakeholder in the business. The need for accurate science and data becomes even more important, especially as natural value replaces financial value, which is easy to track and transfer. If trust in partnerships and systems is established in the systemic stage, this becomes easier to accomplish. Lastly, in the Co-Evolutionary stage, companies need to rely on the adaptive strategy tools and techniques that are emerging, because "flourishing" is an ambiguous concept that has not yet been properly institutionalized. More companies need to explore the benefit corporation option, and we need to learn as a society how these function to help the whole planetary system without losing the benefits of the current system.

OVERALL CONCLUSION

Corporate strategy is a critical function for optimizing our current socio-economic systems, and it needs to be updated for trends in sustainability. This project explored which methodologies could fit a new integrated definition of sustainable strategy: "an integrated set of choices that uniquely positions the firm in the Earth's ecosystem and human society so as to create sustainable advantage and superior long-term value relative to alternative sets of choices." We learned that not all strategy methodologies are equally suited for this task, and strategists should embrace those that prepare their companies and clients for a growing emphasis on environmental and social values. Companies can still deliver financial value within these constructs, but they need to find a balance within their plans and actions of the three priorities. This balance becomes harder to strike in "stronger" definitions of sustainability, and even the best strategy methodologies need to be adaptable to dynamic demands from the planet and all of its inhabitants. This project has highlighted what those methods and modification could be, and we are excited to watch how they evolve.

FURTHER RESEARCH

For those looking to build upon this project, we recommend some immediate next steps and a few larger philosophical questions. Firstly, this project over-indexes on "pure" environmental issues, when in reality they are deeply entwined with social issues, as demonstrated in the "doughnut economics" definition we use. Much more work can be done on the social foundation for corporate strategy. Additionally, much of this research is US-centric, so a more global lens could be applied to much of the thinking here.

Thinking more broadly, three big questions emerge from the research: How do we harness the ability of profits and financial metrics to communicate and exchange value for environmental and social value? How do we harness the power of aligning the best interests of individuals, corporations, and systems without using greed and/or profits? How do we harness the powers of competition, collaboration, and central planning altogether? The answers likely lie in experimental strategies from companies that are pushing towards the stronger stages of sustainability. The frameworks highlighted here can help organize and assess those experiments so that strategy can truly integrate with sustainability.

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