

Scaling sustainability from the organizational periphery to the strategic core: towards a practice-based framework of what practitioners “do”

Sarah Birrell Ivory, R. Bradley Mackay

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**SCALING SUSTAINABILITY FROM THE ORGANIZATIONAL PERIPHERY TO
THE STRATEGIC CORE: TOWARDS A PRACTICE-BASED FRAMEWORK OF
WHAT PRACTITIONERS ‘DO’**

Keywords: Sustainability, Scaling, Strategy, Micro-Strategy, Scaling Approach

Abstract

This paper explores what sustainability managers *do* when attempting to scale sustainability to a strategic level within their organization. Drawing on semi-structured interview data with 44 sustainability managers in private, for-profit companies, we identify three distinct scaling micro-strategies that individuals use when scaling sustainability. We label these conforming, leveraging, and shaping. Our analysis also finds that sustainability managers deploy combinations of these micro-strategies in three distinct approaches, which we call the assimilation approach, the mobilization approach, and the transition approach. Finally, we interrogate the degree to which employing these different approaches achieves a peripheral, intermediate, or strategic scale of sustainability within the organizations represented in the study. Our paper contributes to theory and practice at the interface of strategy and sustainability by developing a practice-based *Scaling Approach Framework*, whereby an assimilation approach is associated with organizations with sustainability at a peripheral scale, a mobilization approach is associated with an intermediate scale of sustainability, and a transition approach is associated with scaling sustainability to a strategic level. From these results we propose a *Scaling Progression Model* that reflects the phases that individuals progress through when scaling sustainability.

INTRODUCTION

It is widely accepted that many global environment and social issues are reaching crisis point (Whiteman et al, 2013; Raworth, 2017). There have been calls for widespread changes across society to transition towards a more sustainable future (Bansal et al., 2018; Hahn and Figge, 2011). Influential institutions such as business have been recognised, even by critical scholars, as crucial actors in such a change (Whiteman et al, 2013), given they form one of “the most powerful institutions in contemporary society” (Schneider, 2015, p. 529), and are central to “the current nexus of power and control” (Gray and Milne, 2004, p. 78). However, given the magnitude of such societal challenges (Whiteman et al, 2013), and the crucial role that business has in addressing them, increasing attention should focus not just on narrow CSR initiatives adopted by organizations (Sharp and Zaidman, 2010), but rather how sustainability infiltrates and alters, or fails to infiltrate and alter, an organization’s core strategy. While the concept of sustainability has defied a universal definition (see Montiel and Delgado-Ceballos, 2014), we draw on Bansal’s (2005) broad understanding of sustainability at the organizational level as its approach to, and impact on, environmental and social issues (see also Neugebauer et al., 2016). It is crucial that we understand how sustainability is scaled within organizations to become a key strategic imperative such that it is integrated into all levels of the organization (spatial scale) and reflects an ingrained and ongoing commitment into the future (temporal scale) (Bansal et al., 2018; Bowen et al., 2018).

Given the central role of individuals in introducing and integrating sustainability into organizations (Bansal et al., 2018; Cash et al., 2006; Corbett et al., 2018; Jay et al., 2019), our research focusses on the micro-strategies deployed by individuals involved in scaling sustainability. By scaling, we refer to the level of embeddedness and positioning of sustainability within organizations (cf. Spicer, 2006; Swyngedouw 1996, 2000). By micro-strategies, we mean the combination of activities and practices that individuals employ to

directly and indirectly shape the core organizational strategy (cf. Johnson et al., 2003; Jarzabkowski et al., 2007). The broad research question that we address is, therefore, what is it that sustainability managers ‘do’ to scale sustainability to the strategic core of the organization?

In this paper we present findings from an inductive, exploratory study of 44 sustainability managers based in large, for-profit organizations. Previous research has focused on specific micro-processes (e.g. Corbett et al., 2018), or more broadly on the logics employed by individuals (Dahlmann and Grosvold, 2017). The purpose of our paper is to build on and extend this nascent literature by directing attention – empirically, theoretical and practically – to the interface between scaling, strategy and sustainability. Our study thus makes three contributions to the theory and practice of scaling sustainability in for-profit organizations. First, our empirical study contributes to a more fine-grained understanding of what it is that sustainability managers ‘do’ in their attempts to scale sustainability within their organisation. Our study identifies three distinct *scaling micro-strategies* from the data that are deployed by individuals, which we label conforming, leveraging, and shaping. We go on to identify the combinations of micro-strategies that individuals deploy holistically and contemporaneously, defining this as their *scaling approach*. We find three distinct scaling approaches deployed by individuals in our data and label these an assimilation approach, a mobilization approach, and a transition approach. We also elucidate on the factors that inhibit or facilitate scaling approaches. Second, we extend the nascent literature at the interface of scaling, sustainability and strategy by drawing on the patterns identified in our empirical study to develop a practice-based, empirically grounded *Scaling Approach Framework* that conceptualises the different combinations of micro-strategies and scaling approaches, and the degree to which sustainability scale is achieved within organizations. Finally, by extrapolating from the empirical data, we contribute conceptually to the literature on scaling sustainability by posing

a *Scaling Progression Model*, which, we suggest, depicts the progressive nature of strategizing behaviors, particularly as it pertains to individual attempts to scale issues such as sustainability in large, for-profit organizations to a strategic level. This opens up a number of fruitful avenues for future research.

We begin with a brief conceptual examination of the extant literature at the interface of scaling and sustainability. Following an overview of our exploratory, inductive research design, we present our findings using a combination of data tables, narrative and short vignettes. Drawing on our analysis of our findings, we then respond to our research questions in our discussion, and conclude with an elaboration of the contributions that our paper makes to building on, and extending research on the role of the individual at the interface of scaling, sustainability and strategy.

CONCEPTUAL OVERVIEW

Organizations are increasingly reporting on sustainability initiatives and their impact (Higgins et al., 2018). The sustainability managers responsible for such initiatives are commonly part of the middle and top management teams (Strand, 2014). However, early predictions that sustainability would become a core strategic issue (Wheeler et al., 2003), and more recent proclamations that sustainability has “moved from the fringe to the centre” of organizations (Barnett et al, 2015) may be overstated. A 2019 UN Global Compact survey saw 94% of CEOs say sustainability issues are important to the future success of their business, but only 48% incorporating sustainability and the Sustainable Development Goals into their strategy (UN Global Compact, 2019). Another recent study found that while 90% of managers agree that having a sustainability strategy is important to their business, only 60% actually have any kind of approach, and even fewer have a comprehensive, integrated strategy (Kiron et al., 2017).

This failure of sustainability to be scaled to a core strategic issue across organizations may be because sustainability holds few of the properties traditionally associated with strategic organizational issues. Sustainability issues are multi-faceted and non-linear, they tend to lack immediacy or immanency, and risks are often poorly defined (Ferraro et al., 2015; Howard-Grenville et al., 2014). Indeed, such factors lead Neugebauer et al. (2016) to argue sustainability is “a complex, if not ‘wicked’ problem” (pg. 323) and conclude that such non-salient and wicked problems require less traditional approaches to strategy making. These issues have been synthesised into recent research which argues that sustainability issues are of a different spatial and temporal scale than businesses are used to attending to (Bansal et al., 2018). This makes action on sustainability issues difficult to achieve, and scaling sustainability to the strategic core of particularly, we argue, large, for-profit firms, challenging.

What do sustainability managers ‘do’?

In the strategy literature generally there has been growing scholarly interest in the ‘doings’ of strategy practitioners themselves (Jarzabkowski and Balogun, 2009; Whittington, 2006) born “out of a frustration” with the “lack of focus on individuals in much of strategic organization” (Felin and Foss, 2005, p. 141). This has resurrected interest in a deceptively simple, yet elegant question on the nature of managerial work first posed by Mintzberg (1973); *what is it that managers do?* While scholarly research has made significant progress advancing knowledge on this question in the strategic management literature generally (Johnson et al., 2003; Jarzabkowski et al., 2007), and sustainability scholars have considered this in relation to the examination either of specific initiatives, or factors which influence individuals (e.g. Andersson and Bateman, 2000; Bansal, 2003; Howard-Grenville, 2007; Sonenshein, 2006), there is no comprehensive study of the full range of micro-strategies that such individuals deploy, and in particular in relation to a more significant attempt to achieve *scale*.

Much of the extant literature addressing how organizations approach sustainability focuses on the strategy itself, with less focus on the individual responsible. For example, research has explored *what* sustainability strategies comprise (e.g. Hashmi et al., 2015) and *why* they are introduced (e.g. Schaltegger and Hoerisch, 2017). Other scholars have focused on *how* the sustainability strategy is developed (e.g. Borland et al., 2016) and implemented (e.g. Egels-Zanden and Rosen, 2015), including analyzing various tools (e.g. Higgins et al., 2018), or posited the likely approach to strategy making (Neugebauer et al., 2016). Moving away from the strategy, but remaining at the organizational-level, Grewatsch and Kleindienst (2018) explored organizational cognitive frames while Kennedy et al (2017) explored organizational-level practices. However, neither granularize this to the individual's actual practice.

Where research has examined individuals it has focused on the role of leaders such as CEOs (Walls and Berrone, 2017), the impact on employees (Lamm et al., 2015), or individual's cognitive frames (Hahn et al., 2014). Other studies have explored 'micro-processes' deployed by environmental leaders at a project level (Corbett et al., 2018), the presence of sustainability in individual's decision-making (Le Roux and Pretorius, 2016), or the interconnection between the integrative and instrumental views of corporate sustainability between the individual and their organization (Joseph et al., 2019). Only a small number of studies focus on the individual *responsible for* sustainability strategy and scaling. For example, Peters and Romi (2014) examine the impact of the *presence* and *characteristics* of the Head of Sustainability on a specific sustainability issue; Carollo and Guerci (2018) examine tensions faced by sustainability managers in their identity work; Strand (2014) explores the effect of adding a sustainability role to the top management team; Etzion et al. (2017) argue that managers have used 'robust actions' to push for greater attention being directed at sustainability; and, Dahlmann and Grosvold (2017) found that some managers pursued market and environmental logics in parallel. And while nodding towards what it is that individuals actually *do*, none

explore this directly. Further, Boiral et al. (2015) suggest that the role of managers “in this institutionalization process of environmental practices has been largely neglected” and call for more research on “*how* initiatives are *emulated* inside of the organization” (p. 545, emphasis added), which raises questions about the scaling approaches to sustainability employed by individuals in organizations. Our review of the extant sustainability literature demonstrates a paucity of research into the strategy work or micro-strategies deployed by individuals attempting to scale sustainability within their organizations.

Scaling sustainability

Spicer (2006) identifies scale as pertaining to the level and positioning of an activity or issue, and the role of ‘actors’ in their attempts to ‘fix’ such scale (Spicer, 2006, p. 1470; also see Swyngedouw 1996, 2000). This focus on scale, in particular in keeping with Spicer’s level and positioning approach to scale, has received renewed attention recently, in particular in the sustainability field. Bowen et al. (2018) explore the extent to which collective actions effectively address environmental issues which are at different scales, while Bansal et al. (2018) argue that the scale properties of an issue explain why organizations fail to notice latent issues such as climate change, and Winn et al. (2011) explore the dimensions of climate impact on organizations in relation to temporal and spatial scale. However, to date scholars have not addressed Spicer’s (2006) focus on the role of ‘actors’ in their attempts to fix such scale, in relation to sustainability within an organization. For instance, Bansal et al. (2018) focus on scale in its physical manifestation and the scale of the issue. Taking a cue from MacKay and Chia (2013), they argue that sustainability issues often comprise either such large-scale processes (for example, climate change) that they require broad attentional extent or such small-scale processes (such as local variations in poverty) that they require fine attentional grain. As such, the scale of sustainability as an issue is outwith the typical scale of issues businesses are used to attending to. Our focus, then, is on the micro-strategies deployed by

individuals in their attempt to scale sustainability issues from peripheral organizational attention to a level where they are embedded in organizational strategy. In other words, where Bansal et al. (2018) focus on the scale attributes of sustainability, we focus on the way in which individuals attempt to scale sustainability, or the role of the actor in their attempts to ‘fix’ such scale at a strategic level that is central to organizational attention (cf. Spicer, 2006).

This goes well beyond simple practices to introduce a sustainability initiative across the organization, or even strategies to establish a large stand-alone sustainability programme. The former may have breadth, but lack depth, and the latter may have depth, but lack breadth. Neither are likely to ‘fix’ the scale of sustainability in such a way that embraces qualitative shifts in the dominant relationships (O’Neill and King, 1998). Scale does not mean size (Bansal et al. 2018; Bowen et al., 2018), and scaling, in this sense, does not mean simply making something ‘bigger and better’ as characterized in, for example, the social enterprise literature (see Seelos and Mair, 2013). That is, the scaling of sustainability (or any issue) requires fixing “the outer boundary” of a phenomenon (Gibson et al., 2000, p. 219) in relation to both spatial scale factors (its infiltration throughout the organization and ability to move between ‘levels’ within the firm) and temporal scale factors (its influence on near-term decisions and actions, as well as medium to long-term directions of the organization) (Bansal et al. 2018). As such, the scale of sustainability within a firm would remain peripheral where it fails to ‘fix’ across spatial or temporal aspects of core strategy. Or it could become strategic where it fixes to such spatial and temporal aspects and permeates different levels of hierarchy, involves a range of actors, influences existing operations and decision-making, and becomes core to the long-term strategic direction of the firm. This distinction of peripheral versus strategic scale of sustainability is reminiscent of work done by Aguinis and Glavas (2013), who draw on Laszlo & Zhexembayeva (2011), and distinguish between peripheral versus embedded CSR. However, while their interest is in organizational level distinctions between these concepts, our

interest is the role of the actor – the individual sustainability manager – and in what they *do* – particularly the micro-strategies they deploy – in their attempts to achieve such scale.

Scholars have recognized the benefits of sustainability achieving spatiotemporal scale within an organization. Barnett et al. (2015) argue that when sustainability reaches the strategic core of the organization it is less likely to be a ‘victim’ of cost cutting in constrained economic times. That is, achievement of spatial scale within the organization contributes to achievement of temporal scale. Bansal and DesJardine (2014) support this conclusion, arguing that in times of constraint, organizations are likely to eliminate peripheral activities but retain strategic activities. This emphasizes the importance of sustainability practitioners achieving spatiotemporal scale.

Given our focus on the role of the individual at the interface of sustainability, scaling, and strategy, our research posits four questions: (1) What are the distinct micro-strategies deployed to scale sustainability? (2) What combinations of micro-strategies do individuals deploy holistically and contemporaneously to form their scaling approach? (3) What factors inhibit or facilitate an individual’s scaling approach? (4) What patterns exist between individual’s scaling approaches and the scale of sustainability? In the following section, we give an overview of our exploratory, inductive research method that we adopt for this study, focused on what it is that individuals *do* to scale sustainability.

METHOD

We pursued an inductive research design to investigate qualitatively how individual’s scale sustainability within their organization. Such a research design is appropriate given the paucity of empirical research in this area, and thus, the exploratory nature of the study (e.g. Lincoln and Howard, 1985; Walsh and Bartunek, 2011).

Data collection

We adopted a theoretical sampling approach (Glaser and Strauss, 1967; Strauss and Corbin, 1998) by identifying individuals in senior managerial positions related to sustainability at for-profit organizations. This necessarily limited our sample to those organizations already engaging with sustainability to some degree (given they had at least one dedicated person to sustainability), but was justified based on our focus on what it is that individuals *do* to scale sustainability (cf. Spicer, 2006). We identified the most senior sustainability individual in the organization to ensure sufficient agency and influence, and to be better assured that the individual was aiming to scale sustainability. We identified potential individuals using a combination of the Fortune 500 list of companies and a ‘virtual snowball’ technique drawing on sustainability practitioner networks (e.g. Sharma and Vredenburg, 1998). We excluded individuals who had been in post for less than two years because scaling attempts have often not had time to mature and have impact. To balance sample consistency and breadth, we limited the sample to individuals operating in broadly similar organizational contexts based on size, location, and industry. We included only large organizations with more than 250 employees (European Commission, 2011) and avoided significantly different national, cultural or economic contextual influences by further limiting our focus to organizations in relatively homogenous advanced western economies (Australia, Canada, UK, USA, Western Europe). While we accept that such scope poses limitations, we weighed this against the exploratory nature of our research and our research objective of delving into what it is that individual’s ‘do’ to scale sustainability (cf. Johnson et al., 2003; Jarzabkowski et al., 2007). Finally, we ensured organizations represented broad industry coverage (cf. Lincoln and Guba, 1985), but excluded those working within highly regulated industries (such as oil and gas) where compliance with statutory requirements may have disproportionate influence on sustainability activities.

In total, we identified and contacted 122 individuals, each working as a senior sustainability manager in different organizations. Fifty-one (51) individuals agreed to participate. Following interviews, it became apparent that seven individuals did not meet sample parameters (being either less than two years in post or not from a ‘large’ organization), and so were excluded from the analysis. The final sample comprised 44 individuals who had been employed at their organizations for an average of 10 years (with a maximum of 33 years and a minimum of 2 years), and in their current senior sustainability position for an average of 4 years (with a maximum of 15 years and a minimum of 2 years). Table 1 provides anonymised information including individual’s job title, industry, and location.

Insert Table 1 about here

Primary data collection comprised semi-structured interviews with each individual, to ask specific questions about what they did in their attempts to scale sustainability within their organization, whilst allowing them freedom to take the discussion in different directions (Lincoln and Guba, 1985). For example, individuals were asked: “What do you do to get attention for sustainability in your organization?”; “How do you get the CEO or Board to embrace sustainability?”; “How do you attempt to influence future strategy development?”; “How do you disseminate sustainability *throughout* the organization?”; “What do you find helps?”; “What are the challenges?”; “What do you do to overcome these?”; “What do you do if there is a clash between sustainability and other objectives?”; “How do you convince people about sustainability?” Interviews lasted between 45 minutes and 1.5 hours, and were recorded, transcribed verbatim, and imported into Nvivo. The primary data amounted to almost 300,000 words of transcribed interview data.

Secondary data collection involved systematically collecting each individual's organization's most recent annual report and sustainability report. In total, we collected 44 annual reports, and 41 sustainability reports. For the three organizations that did not have a formal sustainability report, we collected relevant website information, publicly available press releases, and newspaper articles related to sustainability.

Data analysis

Coding approach. In keeping with well-established methods and rigor for analysing qualitative data (Gioia et al., 2013; Van Maanen, 1979), our data analysis proceeded inductively, iteratively and systematically between data collection and emerging patterns (Gioia et al., 2013; Strauss and Corbin, 1990). Moreover, we drew in relevant concepts and theory in both the sustainability and strategy literatures (e.g. Tost, 2011) to continually hone themes emerging inductively from the data. We analysed the data using data procedures recommended by Miles and Huberman (1994), Strauss and Corbin (1990), and Gioia et al. (2013), comparing themes emerging inductively with the nascent model resulting from ongoing analysis, an approach recommended for studying novel phenomena (Locke, 2001). Towards the end of this repeated and iterative interview-analysis cycle we reached data saturation, with few new first order codes appearing in the final interviews (Glaser and Strauss, 1967). Similar data analysis approaches have been used in recent sustainability research (e.g. see Boiral et al., 2019; Kabongo and Boiral, 2017; and Tisch and Galbreath, 2018). The four steps in our analytical approach used to address our research questions are as follows:

Step one: Scaling micro-strategies. Using an inductive approach, we coded all instances where individuals described how they had attempted to scale sustainability within their organization (Research Question 1). After coding all transcripts, an empirically-driven and respondent-centred schedule of first order concepts was developed. We then revised and arranged the first-order concepts using axial coding into more coherent lists, paying particular

attention to repetitions and overlaps to ensure each code was distinct. To verify the trustworthiness of our coding, we provided a researcher not familiar with our study with the schedule of our first-order concepts of distinct scaling micro-strategies. In randomly selected transcripts, we asked the coder to identify instances of these first-order concepts. Our overall agreement rate was 96% for scaling micro-strategies. We ended up with eight first-order concepts drawn from respondents, which we grouped into three second-order empirical categories, before drawing on the literature to label each with a third-order theoretical dimension. This data identified distinct scaling micro-strategies.

Step two: Scaling approach. Step two required further analysis of the data coded and presented in Step one. We took this data and overlaid the respondent number of each individual in our study onto each scaling micro-strategy. That is, we categorised each individual in our sample based on the combinations of micro-strategies they had reported deploying holistically and contemporaneously. In doing so, we were able to develop a picture of each individual's *scaling approach* (Research Question 2): or their combinations of micro-strategies. From here, we were able to group all individuals deploying the same combinations of micro-strategies (that is, those deploying the same scaling approach). The result was a categorisation of our sample grouping all individuals with the same scaling approaches.

Step three: Inhibitors and Facilitators. We returned to the primary data and coded all instances where individuals identified factors which facilitated or inhibited their approach to scaling sustainability. Again, we revised and arranged first-order concepts using axial coding techniques. We provided the same researcher unfamiliar with our study with the schedule of our first-order concepts of facilitators and inhibitors. In randomly selected transcripts, the agreement rate was 84%, which we made adjustments for. As a result, we identified ten first-order concepts of inhibitors and nine of facilitators. We refined these into five second-order empirical categories of inhibitors and three second-order empirical categories of facilitators.

We then overlaid the facilitators and inhibitors identified by specific individuals with their scaling approach uncovered in step two. In doing so, we were able to attribute the factors inhibiting individuals from adopting other scaling approaches, and the factors facilitating individuals in their current scaling approach.

At this stage, we had identified the distinct micro-strategies deployed to scale sustainability, the combinations of micro-strategies which formed individual's scaling approach, and the factors which facilitated or inhibited individuals in their scaling approach. The final step was to determine whether there were any patterns between an individual's scaling approach, and the scale of sustainability evident in that individual's organization.

Step four: Patterns between scaling approach and sustainability scale. In order to determine patterns between scaling approach and sustainability scale, it was first necessary to categorize the existing scale of sustainability within each individual's organization. For this we used each organization's sustainability and annual reports (for the three organizations without formal sustainability reports, we substituted relevant website information, press releases, and publicly available data). In order to systematically categorize each individual's organization, we developed four criteria for coding sustainability scale, which we applied equally to the organizations in our sample. Drawing on the scale theory which formed the basis of our research (e.g. Spicer, 2006), two criteria acted as indicators of spatial scale. That is, the reach or infiltration of sustainability throughout the organization. The spatial scale criteria were: the distance of the most senior sustainability manager from the CEO, and the reach and integration of sustainability throughout and across multiple departments and functions of the organization. Two criteria also acted as indicators of temporal scale. The temporal scale criteria were: time since introduction of sustainability, and the number and extent of sustainability commitments going forward. Each of these criteria is detailed in Table 2 with further discussion about the application of these criteria in the process of categorisation below.

 Insert Table 2 about here

Having established these four criteria, relevant information and evidence relating to each organization was extracted from the secondary data and matched to each criteria. Both researchers then independently graded each organization for each criteria scoring them 1 (evidence of low scale achieved), 2 (evidence of medium scale achieved), or 3 (evidence of high scale achieved). Note that the criteria distance removed from CEO was considered in the context of the firm's size: an 'executive' level sustainability post at a smaller firm, may be akin to a level below the executive at a very large firm. Discrepancies between researchers were discussed and resolved. Two academic colleagues independently verified the coding protocols to add an additional level of rigor. Table 3 provides a sample of an organization coded against each of the four criteria.

 Insert Table 3 about here

Three clear clusters of organizations emerged from this categorization. We labelled organizations in the lower cluster *peripheral scale*, where sustainability was generally disparate, isolated from core business strategy, and not led at a senior level. Organizations in the middle cluster were labelled *intermediate scale*, where sustainability was evident to some extent in core strategy, dispersed across a range, but not all key operations, and led at a senior, but not executive level. Finally, organizations in the higher cluster were labelled *strategic*

scale, where sustainability was integrated within core business strategy, dispersed across all key operations, central to the future direction of the firm and likely led at an executive level.

While our scale clusters emerged inductively from our data analysis, a confirmatory pattern with the extant literature emerged. For example, early work by Schaefer and Harvey (1998) attempting to evaluate ‘stage’ models of corporate greening, Kolk and Mauser’s (2002) models in the environmental management sphere, and Sharp and Zaidman’s (2010) embryonic, developing, and strategic stages (although this focuses on CSR as ‘add-on’ volunteerism than changes to the strategy of the firm). Our final step of data analysis was to map each individual’s scaling approach (assimilation, mobilization, transition) onto their organization’s sustainability scale (peripheral, intermediate, strategic).

In the following section, we present our findings starting with distinct scaling micro-strategies, followed by our analysis of individual’s scaling approaches (combinations of micro-strategies), before turning to facilitators and inhibitors to these approaches and ending with the scale of sustainability mapped onto each scaling approach.

FINDINGS

In this section, we report on our findings in line with our four research questions. They can be summarised as distinct scaling micro-strategies (RQ1), individual’s scaling approaches (combination of micro-strategies) (RQ2), facilitators and inhibitors to scaling approaches (RQ3), and patterns between scaling approach and scale (RQ4).

Scaling micro-strategies

Three scaling micro-strategies were identified through our analysis of the data: conforming, leveraging, and shaping micro-strategies. Table 4 depicts these micro-strategies as third-order theoretical dimensions, each of which builds from first-order concepts and second-order empirical categories. We also include indicative quotes from the primary data.

 Insert Table 4 about here

A *conforming* micro-strategy comprises ‘focus on profit’ and ‘focus on cost’, summarised as *meeting existing norms of economic returns*, in order to scale sustainability. As one senior sustainability manager summed up: “[I] pushed stuff that had a core economic benefit”(12)¹. This micro-strategy focuses on highlighting the economic credentials of sustainability, overlooking wider environmental and social aspects by either only proposing sustainability where it fits directly with such economic credentials, or by marginalising these broader aspects. Evidence of this could be seen in individuals stating that “*money is king*”(7) and developing only projects “*targeted at driving costs out of our system*”(4), and explicitly articulating that “*environmental efficiencies lead to cost savings ... which have a clear business benefit*”(3).

A *leveraging* micro-strategy sees an individual ‘target receptive groups’, ‘target receptive individuals’, or ‘target strategic projects’, summarised as *targeting conducive sub-environments*. As a senior sustainability manager expressed, “*what you really have to do is find receptors ... [and then] ... try to sell it into other businesses*” (4). The individual was strategic and proactive about environmental and social aspects, but on a selective basis. Individuals identify other individuals, groups, or projects which may have a tacit or explicit predilection for sustainability. For example, targeting geographic locations: “*the team in Europe was more open than other locations*”(27); strategic projects: “[I] tagged this project as the pilot sustainability project, that all of a sudden gave people the opportunity”(38); or functional teams such as product designers and R&D departments. One manager described her R&D team as predisposed to sustainability because of their innovation and solution-oriented

¹ Respondent number presented in brackets.

focus. Individual decision-makers were also commonly leveraged, with a manager explaining “*you have to talk to the right people to get things done and you have to persuade the right people*”(47). Inherent in the leveraging micro-strategy is the assumption that, as another sustainability manager states, “*we are very much still in the stage where we treat most conversations on a case-by-case level*”(24).

A *shaping* micro-strategy comprises ‘influence recruitment’, ‘drive company-wide training’ and ‘promote company-wide communications’, summarised as *changing policies, processes, and attitudes*. This micro-strategy sees the individual being overt in relation to sustainability, and proactive in attempts to change aspects of the firm in order to achieve scale, for example through proactive recruitment, and employee and executive education and training, aimed at changing the make-up and attitude of the workforce. One participant explained, “... *employees learn about sustainability ... through an e-learning game*”(16), while another had established a steering group comprising “*all of our senior executive and get them across the whole sustainability agenda, and then to go back into each of their areas, whether it be risk and governance, whether it be HR and employee well-being, or supply chain procurement*”(36) in order to reach a company-wide audience. To influence recruitment, another manager highlighted his approach to “*Recruit on Attitude*” so that “*if people have the wrong attitude ... not taking [sustainability] seriously, they don’t get a job in the first place, or if they get a job and they don’t live our values then they usually leave quite quickly*”(18).

In summary, our findings highlight three distinct micro-strategies individuals deploy in attempting to scale sustainability within their organization: conforming, leveraging, and shaping. We now turn our attention to the individual, and the combinations of distinct micro-strategies that they deploy holistically and contemporaneously, to form their scaling approach.

Scaling approaches

An individual's scaling approach comprises the combination of micro-strategies they deploy. Despite the many possible combinations of conforming, leveraging, and shaping micro-strategies that could be deployed by one individual, just three combinations were present in the data: individuals only deploying a conforming micro-strategy; individuals combining conforming and leveraging micro-strategies; and finally, individuals combining conforming, leveraging and shaping micro-strategies. All other potential combinations of scaling micro-strategies were absent. This section briefly summarises each scaling approach, and provides an indicative vignette of an individual's approach that is representative.

Conforming-only micro-strategy: Assimilation Approach. One grouping of individuals only deployed a conforming micro-strategy. That is, their only attempt to scale sustainability comprised meeting existing norms of economic returns. There were six individuals in this grouping (Respondents 7, 12, 13, 28, 31, 43). We label this the Assimilation Approach.

Vignette A: Assimilation Approach. The Sustainability Manager at AlphaCo (43), an FMCG wholesaler describes sustainability as not “*at the forefront of [the Board's] minds on a daily basis*” and does not “*influence business decision making*”. She competes for the same pool of capital as all other projects and must meet the same payback requirements. As such, she only focuses on “*best value for money projects for our company, and if I don't then I'm not seen as an economic rationalist ... [but] ... If I'm talking about cost savings, cost reductions, what that means in equivalent sales, then I seem to get some cut through.*”

The AlphaCo example depicts an individual only deploying a conforming micro-strategy in order to get ‘cut through’ in a context dominated by existing norms of economic returns. The sustainability projects that she chooses, and indeed, the language she adopts to present them as she competes with other projects for scarce resources are those that offer an

attractive return on investment, cost savings or sales boost for the firm. This represents an assimilation approach to scaling sustainability.

Conforming and leveraging micro-strategies: Mobilization Approach. A second grouping comprises individuals deploying both a conforming micro-strategy and a leveraging micro-strategy. Their approach to scaling sustainability is to both conform to existing norms while *simultaneously* leveraging other elements. There were twenty individuals in this grouping (Respondents 8, 14, 15, 20, 21, 22, 23, 24, 25, 26, 27, 32, 33, 37, 38, 41, 44, 47, 49, 50). We label this combination of conforming and leveraging micro-strategies the Mobilization Approach.

Vignette B: Mobilization Approach. The Sustainability Manager of BetaCo (27), a micro-electronics firm, was focused on a conforming micro-strategy linked to energy efficiency because she described the culture as “*so very short termist, financially in crisis, most of the organization is not interested in doing anything new, they just want to fix the old thing rather than go for the new*”. However, even in such context she set about leveraging interest in sustainability from the team in Europe (absent in both the US and Asian teams) to start a scenario analysis planning project exploring “*new service models, really progressive stuff around product take back schemes, new business models around service provision*”. To facilitate this she also leveraged an individual decision-maker, the Chief Technology Officer (CTO), who “*over the course of a couple of years I warmed up, I could see the opportunity [for sustainability], so I warmed him up got him involved ... [in the project and] he began to see the potential as well.*”

The BetaCo illustration depicts an individual deploying a foundational conforming micro-strategy that sought to align with the short-term focus in the company on financial considerations, while also deploying *multiple* leveraging micro-strategies (the European team and the CTO) involving the development of innovative business models with a sustainability

dimension, and enrolling key influencers in their projects. This represents a mobilization approach to scaling sustainability.

Conforming, leveraging, and shaping micro-strategies: Transition Approach. A final grouping comprises individuals deploying all three micro-strategies: conforming, leveraging, and shaping. While they aim to alter the organization to fit with the sustainability strategy, they do not abandon all conforming or leveraging micro-strategies. In this third grouping there were eighteen individuals (Respondents 2, 3, 4, 5, 6, 9, 10, 11, 16, 17, 18, 19, 35, 36, 40, 42, 48, 51). We label this deployment of all three micro-strategies the transition approach.

Vignette C: Transition Approach. The Chief Sustainability Officer of GammaCo (9), a building materials company, reported “*using this [sustainability] as a competitive advantage in many, many ways, to drive out cost and increase penetration of the existing products*” focused on conforming to expectations of returns. He then talked about a leveraging micro-strategy focusing on key players: “*I began to enrol our CEO ... in the idea that we could have a much bigger impact ... if we kind of looked ... through this lens of sustainability*”. Finally, he also discussed a shaping micro-strategy of driving firm-wide goals in relation to sustainability measures, granularized to plant level “*just like their productivity goal or their safety goal*”, and communicating to a company-wide audience across all manufacturing facilities with “*networking calls once a month and whenever a plant does something kind of innovative [in relation to sustainability] ... then they would present to the other plants kind of what they did and how they did it, and what the impact was.*”

The GammaCo illustration reflects a micro-strategy, which is overtly and proactively attempting to shape the organization towards sustainability. This can be seen with his attempt to initiate firm-wide goals and communications. However, this is built from a leveraging micro-strategy of convincing the CEO of the impact the company can have by adopting a

sustainability, as well as more foundational conforming, such as attempts to incorporate and champion sustainability innovations, particularly those that help with further market penetration of their products, and those that drive out cost. This, therefore, represents a transition approach to scaling sustainability.

Scaling Approach Inhibitors and Facilitators

Our analysis also uncovered the factors identified by participants in the study, which impacted their deployment of different scaling micro-strategies and, therefore, the adoption of their specific scaling approach. Within the empirical data, we clustered these factors into five categories of inhibitors and three categories of facilitators. Associating these inhibitors and facilitators with different scaling approaches enabled a more fine-grained analysis of, specifically, where these factors were having impact. That is, we are able to identify what helps and what hinders individuals in deployment of scaling approaches.

Inhibitors to scaling approaches. Inhibitors impacting an individual’s scaling approach were grouped into five third-order theoretical dimensions. They include leadership, internal environment, monetisation, internal policies, and internal resourcing. By mapping individual’s reports of inhibitors and their scaling approach, we were able to ascribe inhibitors reported by individual’s pursuing each of the scaling approaches. Only individuals adopting an assimilation approach or mobilization approach reported inhibitors. None of the individual’ adopting a transition approach reported any inhibitors. Of those reported, only one inhibitor was common to both approaches: internal environment. Results are presented in Table 5.

Insert Table 5 about here

Internal environment was an inhibitor reported by those adopting an assimilation approach and those adopting a mobilization approach. This inhibitor included existing

company mindset being resistant, as well as a general focus on short-termism. Additionally, those adopting an assimilation approach also reported *leadership* as an inhibitor, specifically a lack of leadership support precipitated by different objectives or lack of awareness. Those adopting a mobilization approach report three further inhibitors. First, *monetisation* comprises challenges with calculating intangible value and financial returns: that is the measurement and monetisation of aspects of sustainability. Moreover, *internal policies* were identified as an inhibitor, in particular in relation to capital investment expectations and policies, and the rewards and bonus systems which either treat sustainability as equivalent to other issues or ignore it completely. Finally, individuals reporting a mobilization approach identified *internal resourcing* as an inhibitor linked to the time and resourcing provided to themselves enabling them to pay requisite attention, as well as the limited time available for key managers. This raises important operational and prioritisation questions.

Facilitators of scaling approaches. Facilitators enabling an individual’s scaling approach emerged in three third-order theoretical dimensions. They include external environment, leadership, and internal policies. By mapping individual’s reports of facilitators and their scaling approach, we were able to ascribe facilitators to each of the scaling approaches. Only individuals adopting a mobilization approach or a transition approach or reported facilitators. None of the individuals adopting an assimilation approach reported any facilitators. Of those reported, only one facilitator was common to both approaches: leadership. Results are presented in Table 6.

Insert Table 6 about here

Leadership was identified as a facilitator by those adopting a mobilization approach as well as those adopting a transition approach. This included a range of aspects of leadership demonstrating not only the role of leadership support in the present, but also the potential for leaders to have an ongoing and deeply embedded impact throughout their firms. Moreover, the juxtaposition of leadership (or lack of it) as an inhibitor for those pursuing an assimilation approach, with that of leadership as a facilitator for those pursuing a mobilization and a transition approach points to this as a key factor in determining an individual's options for their approach to scaling sustainability. In addition, individuals adopting a mobilization approach also report the *external environment* as a facilitator comprising competitors, stakeholder relationships, and customers. Finally, individuals adopting a transition approach reported one further facilitator: *internal policies*. Internal policies comprise specific alterations in investment expectations and inclusion in the reward and bonus system.

Before moving on to RQ4 which draws on our secondary data, we present the empirical results of our primary data visually. We offer Figure 1 as an empirically-derived *Scaling Approach Framework*.

 Insert Figure 1 about here

The *Scaling Approach Framework* depicts statically and independently the three scaling approaches evident in our primary data – assimilation approach, mobilization approach and transition approach. It includes the combination of micro-strategies which are employed by individuals adopting each approach – conforming, leveraging, and shaping micro-strategies. It also depicts the facilitators and inhibitors which contributes to individuals adopting specific scaling approaches to sustainability. This figure summarises the empirical contribution of our paper from the primary data in our research.

Patterns in Scaling Approach and Scale of Sustainability

The final section of our findings maps the individual’s scaling approach (assimilation, mobilization, transition) onto their organization’s scale of sustainability, categorized as peripheral, intermediate, and strategic, as discussed in the methods section. Table 7 provides a sample of individuals pursuing each of the three scaling approaches, and their corresponding organization’s scale of sustainability. It includes evidence from secondary data relating to categorizations of scale, and from the primary data relating to individual’s scaling approach.

Insert Table 7 about here

Mapping the results of individual’s scaling approach and their organization’s scale of sustainability reveals an interesting pattern. All individuals adopting an assimilation strategy were in organizations with sustainability at peripheral scale (Respondents 7, 12, 13, 28, 31, 43). Of those individuals adopting a mobilization approach, the vast majority were in organizations with sustainability at intermediate scale (8, 14, 15, 20, 21, 22, 23, 24, 25, 26, 32, 33, 37, 38, 44, 47, 49, 50), with a small minority at peripheral scale (27, 41). None of these individuals were in organizations with sustainability at a strategic scale. Finally, of those individuals adopting a transition approach, the majority were in organizations with sustainability at a strategic scale (2, 3, 5, 6, 9, 10, 17, 36, 40, 48), with a large minority at an intermediate scale (4, 11, 16, 18, 19, 35, 42, 51). Table 8 reveals the number of individuals and organizations for each of these categories.

Insert Table 8 about here

These findings suggests a potential link between an individual's scaling approach and the scale sustainability has achieved within their organization. Indeed, the 'step' pattern to these results supports the notion of a progression underlying individual's approach to scaling sustainability. The identification of this pattern raises questions about whether the individual's scaling approach has contributed to the scale achieved or whether existing scale curtails the individual's approach. Either way, it implies a complex relationship between these two explanations with other phenomena also influencing such a progression.

In sum, we find three micro-strategies (conforming, leveraging, shaping) which individuals deploy in three combinations for form their scaling approach (assimilation approach, mobilization approach, transition approach). We also identify the facilitators and inhibitors to deploying such approaches. Finally, we find assimilation most commonly associated with peripheral scale of sustainability, mobilization with intermediate scale of sustainability, and transition with strategic scale of sustainability, suggesting the potential for a progressive pattern when individuals scale sustainability. In the following section, we contextualise our findings in relation to our research questions and the extant literature, and outline our conclusions and the contributions that our paper makes to the theory and practice of sustainability management.

DISCUSSION

Our study examines individuals scaling sustainability within their organization. The four research questions that we have sought to address are: (1) What are the distinct micro-strategies deployed to scale sustainability? (2) What combinations of micro-strategies do individuals deploy holistically and contemporaneously to form their scaling approach? (3) What factors inhibit or facilitate an individual's scaling approach? (4) What patterns exist

between individual's scaling approaches and scale of sustainability? In addressing these research questions, we have also returned to the more general, but critically important question of 'what managers do' first posed by Mintzberg (1973; also see Chia and Mackay, 2007; MacKay and Chia, 2013) to provide a more comprehensive understanding of these individuals and their attempts to scale sustainability in large, for-profit firms. The data reveals three distinct micro-strategies deployed to scale sustainability: conforming, leveraging, and shaping. Moreover, three different combinations of micro-strategies are evident, depicting individuals pursuing one of three scaling approaches: an assimilation approach (only a conforming micro-strategy), a mobilization approach (both a conforming and a leveraging micro-strategy), or a transition approach (comprising all three micro-strategies: conforming, leveraging and shaping).

The assimilation approach, deploying only a conforming micro-strategy, is likely used because it permeates acceptance and prevents challenge or questioning as it is "not subjected to active evaluations but, instead, is passively accepted and unquestioned" (Tost, 2011, p. 693). Resonant of Bansal et al.'s (2018) focus on the physical manifestation of scale, the assimilation approach may reflect the stage at which sustainability is not yet an 'issue' (c.f. Ocasio, 1997 and Dutton and Dukerich, 1991). However, as posited here, we explore the agency of the practitioner in making it so (i.e. what they can 'do') as well as the factors which facilitate the progression beyond assimilation. As such, our paper adds further evidence for, and extends Bansal et al.'s (2018) perspective on the attentional grain as well as the extent of processes of different scales by positing ways in which individuals can act to make their issue an 'issue' and then nudge it towards the strategic core. That is, we provide a 'work around' for the complex problem of sustainability (Neugebauer et al. 2016) being often at an inconvenient 'scale' to elicit strategic integration, by starting with the focus being on the individual, not the issue. That is, conforming may provide the individual with the opportunity to assimilate, or to become an

‘insider’ (Aier and Weir, 2012), thereby boosting the chances of subsequently introducing new ideas or perspectives: newcomers must ‘fit in’ and respect the current environment before they can initiate scaling (Markowitz et al., 2012). While the assimilation approach may *appear* relatively passive and static, we argue that it may also represent the beginning of a more dynamic progression, especially given the complex scale attributes of sustainability (Bansal et al., 2018). Indeed, a conforming micro-strategy was foundational in all three scaling approaches; while other scaling micro-strategies may build on conforming, they do not replace it. This suggests that the assimilation approach may be the start of a process to “boost the chances of introducing new, [firm]-transforming ideas as opposed to approaches stating (too) directly how things should be done better” (Aier and Weir, 2012, p. 1081). Indeed, Corbett et al. (2018) call for researchers to consider sustainability individuals “as not only existing within a defined and static role, but rather consider more broadly how [their behaviour] can emerge and grow” (p. 283). However, the authors also caution that “conformity with existing practices or structures may create constraints on the way in which problems are defined and the potential pool of solutions available” (Corbett et al., 2018, p. 282). This raises the questions about how, why and when a *progression* beyond the assimilation approach to achieving scale can be achieved, some of which we address below.

The mobilization approach sees the addition of a leveraging micro-strategy to the conforming micro-strategy. Leveraging has a more subtle and nuanced role uncovered in the data where individuals corral others in strategic, but informal and disparate ways, in preparation for more overt scaling in a later stage (cf. Spicer, 2006). The addition of leveraging may also be considered a ‘test-run’, where individuals selectively introduce projects into friendly or conducive environments before tackling the more difficult task of the wider firm. In other words, from a scaling perspective, they may be selectively and incrementally ‘inching’ the outer boundary of the issue (Spicer, 2006). This is supported, in particular, by the legitimacy

literature (e.g. Suchman, 1995), which argues that initiatives or approaches introduced in one part of the firm provide both initial lessons as well as leverage leading to diffusion across further parts of the firm. Again, reflecting on Bansal et al. (2018) this involves the proactive attempts to target those in the firm who may be more likely to accept and embrace the ‘inconvenient’ attentional grain of sustainability issues. By combining a conforming and leveraging micro-strategy, individuals aim to mobilize the support of key individuals within the firm, and establish ‘success stories’ to engender a groundswell of support. Evidence of such approaches in the literature can be found, for example, relating to climate change, where emission mitigation may lead to short term economic returns, but wider initiatives with uncertain impacts and costs may appeal to R&D departments who value innovation, or risk departments when grappling with resilience (Howard-Grenville et al., 2014). Such a scaling approach selectively and repeatedly targets different activities, levels, and positions to ‘inch’ the outer boundary of the issue (see Spicer, 2006).

Finally, the transition approach sees individuals deploying all three scaling micro-strategies. In particular, the addition of a shaping micro-strategy is reminiscent of Neilson and Rao’s (1987) description of individuals aiming to achieve “new levels of awareness ... by introducing ideas that resonate with the sentiments of the audience in ways that generate psychological closure or new avenues of thinking” (p. 527). While conforming or leveraging may be easier scaling micro-strategies to adopt (Aier and Weir, 2012; Spicer, 2006; Suchman, 1995), our study shows that these may be *necessary*, but not *sufficient* preconditions when the existing context prevents sustainability from scaling to a strategic level. By adding shaping scaling micro-strategies, individuals aim to transition the firm to a new, strategic state of acceptance of sustainability. It is here, therefore, that we see the most significant ‘qualitative shifts’ in dominant relationships (O’Neill and King, 1998), but also that we see sustainability not as now bigger in terms of size, but as having assumed “temporal and spatial properties with

correlated processes” (Bansal et al., 2018, p. 233). This addresses the concern that in times of constraint, organizations are likely to eliminate peripheral activities, but retain strategic activities (Bansal and DesJardine, 2014).

A shaping micro-strategy such as employee engagement has been found in other studies to support the success of eco-initiatives within organizations (e.g. see Law et al., 2017 and Ramus and Steger, 2000). It is possible to conceive of this micro-strategy not only as more comprehensive, but in their attempts to change existing schemata they are also attempting to “*fix* the outer boundary” (Spicer, 2006 emphasis added). That is, to become temporally ingrained – or permanent. Moreover, Etzion et al.’s (2017) findings that managers have used ‘robust actions’ in relation to sustainability echoes some of our shaping scaling micro-strategies, while Dahlmann and Grosvold’s (2017) environmental managers pursuing market logic in parallel with environmental logic seems to have anticipated the multiple distinct micro-strategies deployed by many of our respondents.

In relation to factors which inhibit or facilitate scaling approaches, there is widespread acknowledgement of the importance of leadership in relation to sustainability (Le Roux and Pretorius, 2016) as well as in related areas such as CSR and environmental management. For example, Aguinis and Glavas (2012) identified leadership commitment as a predictor of CSR as well as a mediator of positive outcomes of CSR. Moreover, Young et al (2015) find that the “attitude and direct personal involvement of top management and line managers and their ability to articulate why environmental sustainability is helpful to the organization is also vital” (p. 697), concluding that “employees are more likely to take responsibility for environmental sustainability practices if they get sufficient support from above” (p. 697). Our study provides further evidence of this because of its reported importance as an inhibitor (when absent) and a facilitator (when present).

In addition, the factor of internal policies holds similar characteristics, as does internal resourcing. These are factors which appear to enable an individual to shift from a mobilization to a transition approach. The importance of policy design is recognised by other scholars who argue that organizations “can reinforce desired behavior by redesigning policies to embody the principles of economic, social, and environmental sustainability” (Le Roux and Pretorius, 2016, p. 16) further supported by Dahlmann et al (2017) who find managerial incentives contribute to the reduction of greenhouse gas emissions. Moreover, resourcing (both tangible and intangible) is found by Aguinis and Glavas (2012) to be a key mediator and moderator in CSR outcomes.

We can also compare the inhibitor of internal environment identified for both the assimilation and mobilization approaches, with the facilitator of external environment for the mobilization approach. The former embraces the early and influential business case agenda (see for example Dyllick and Hockerts, 2002 or Hahn and Figge, 2011) focused on sustainability fitting into the existing internal environment and scaling being impacted by this environment. However, the latter importance of the external environment as a key facilitator has also been found in other studies, for example, which find empirical evidence for the importance of gaining external legitimacy in the adoption of popular management concepts (Wilhelm and Bort, 2013), or to reflect competitors’ positioning (Deephouse, 1999). Moreover, a number of studies in the sustainability area echo this importance of the external environment in influencing such issues within organizations, including Boiral et al. (2015) whose empirical findings support the influence of external factors on organizational citizenship behaviours for the environment, Shnayder and Van Rijnsoever (2018) who find that “firms feel the pressure of institutions and stakeholders” (p. 1700) influencing their approaches to and investment in such issues, and Aguinis and Glavas (2012) who identify a number of external factors as both mediators and moderators of CSR outcomes. However, considering that those adopting a

mobilization approach report the external environment as a facilitator, but those adopting a transition approach *do not*, may suggest that this latter group are acting as first movers or leaders and so do not ‘react’ to others.

Monetisation as an inhibitor for those adopting a mobilization approach provides additional insight into some form of progression. It comprises a step beyond ‘pure’ and direct monetary returns, with a recognition of the greater complexity of ‘value’ in relation to sustainability. However, there is still an expectation through measurement and monetisation that such ‘value’ can and should be shoe-horned into existing financial parameters and expectations, reminiscent of Corbett et al.’s (2018) finding of ‘proving value’ as an enabling micro-process.

Scaling Progression Model

Our empirical findings, which we have drawn on to conceptualize a *Scaling Approach Framework*, as well as our review of the extant literature, support the idea that a pattern or progression underpins an individual’s scaling approach. Moreover, this gains further support from the pattern identified between scaling approaches and scale. In the remainder of this section, we draw on our empirical findings and the extant literature to propose a conceptual *Scaling Progression Model* that may offer a useful direction for further research. Our findings suggest that there is a generalizable pattern whereby the approaches to scaling sustainability that individuals deploy, particularly in cases where sustainability has been scaled to a level where it is embedded in, or is influencing the overall strategy of the organization, progresses through phases beginning with an assimilation approach, through to a mobilization approach and finally to a transition approach. In our findings, an assimilation approach was present in all organizations with sustainability at peripheral scales, where sustainability was at an intermediate scale in organizations a majority of individuals were pursuing mobilization approaches, and where we found sustainability to have been scaled to a strategic level, the

majority of individuals were found to be pursuing transition approaches. We can infer that this indicates some form of progressive process through context and time underpinning the scaling phenomena (cf. Pettigrew, 1997). The assimilation approach is posited as the first stage of an individual's scaling progression, assimilating sustainability within the existing environment and allowing the individual to become an insider. In the second phase, the individual adds the leveraging micro-strategy to progress to a mobilization scaling approach, both to build a support base and to test potential wider infiltration in attempts to achieve scale. In the final phase, the individual adds a shaping micro-strategy, progressing to a transition approach in order to shift or transition the firm and achieve strategic scale of sustainability.

We do not suggest, however, that all individuals will necessarily move through all stages. Indeed, some may remain at the first stage either because they are unwilling or unable to progress. The inhibitors and facilitators provide further support not only for such a progression, but also uncover factors which may advance (or fail to advance) this progression. Rather than being inhibitors or facilitators to each independent scaling approach statically, they appear to act as such to a *progression* between scaling approaches. In particular, without leadership support, individuals fail to advance from assimilation to a mobilization approach, given leadership was an inhibitor identified by those pursuing an assimilation approach, but a facilitator for those pursuing both the other scaling approaches. Moreover, without internal policies, individuals fail to advance from mobilization to a transition approach, given this was identified as an inhibitor by those adopting a mobilization approach, but a facilitator by those adopting a transition approach. Further, individuals must wait for (or proactively ensure and/or leverage) an external environment (a facilitator for those pursuing a mobilization approach), which can overcome existing internal environment (an inhibitor for those pursuing an assimilation approach) to progress from assimilation to mobilization. All these elements explained above are presented in our *Scaling Progression Model* (see Figure 2).

Insert Figure 2 about here

In summary, we postulate that scaling of sustainability is achieved by individuals deploying and progressing through increasingly complex scaling approaches with leadership, the internal environment, the external environment, and internal policies some of the factors affecting their progression.

CONCLUSION

Sustainability represents, for many, one of “the largest collective action problem[s] that humanity has ever faced” (Jamieson, 2014, p. 99) and a ‘grand challenge’ (Ferraro *et al.*, 2015). Indeed, the impact that humanity is having on natural systems has seen leading scientists argue that the world is now moving into a new geological epoch, from ‘Holocene’ into ‘Anthropocene’, which is marked by the disappearance of entire biomes, increased acidification of oceans and rapid climate change at rates measurable within individual human lifetimes (e.g. Crutzen, 2002; Waters *et al.*, 2016). Given the urgent need to address sustainability challenges (Whiteman *et al.*, 2013), a fine-grained understanding of how sustainability becomes scaled in organizations is of critical importance.

Contributions To Theory And Practice

Our study contributes to this wider endeavour of connecting the global problem of sustainability with the micro-strategies that individuals undertake within firms, or what it is that they *do*. In so doing, our paper makes several specific contributions to both extant theory and practice.

First, it contributes both empirically and theoretically to the question of what managers actually do (Mintzberg, 1973), and importantly contextualises this within the parameters of relevant facilitators and inhibitors. As such, we make a contribution to the strategy literature (Jarzabkowski and Balogun, 2009; Whittington, 2006) which is increasingly interested in what strategy practitioners *do*, by providing empirical evidence and a theoretical model of the *doings* of one group of practitioners. Second, our research contributes to the extant sustainability literature by offering an empirically-driven *Scaling Approach Framework* depicting an assimilation approach, a mobilization approach, and a transition approach distinguished by different combinations of scaling micro-strategies which is one of the first cohesive and comprehensive descriptions of such a phenomenon (cf. Corbett et al., 2018; Dahlmann and Grosvold, 2017). Third, we contribute to theory by offering a *Scaling Progression Model* which posits an underpinning longitudinal element of the phenomena. Finally, our work provides an applied contribution for sustainability practitioners who are attempting to scale sustainability. It does so by identifying the scaling micro-strategies available to them, and the combinations deployed by others to form a holistic scaling approach. We identify what it is that practitioners *do* when scaling sustainability (cf. Mintzberg, 1973). We also provide empirical evidence of the inhibitors and facilitators that influence the scaling approaches deployed, which individuals can address as part of their strategizing to successfully scale sustainability to the strategic core of their organization. Finally, our *Scaling Progression Model*, extends existing theorizing and the extant literature by providing what we believe to be a useful conceptual lens through which practitioners may contemplate their approach *over time*. Such ideas may allow individuals to look more tactically at their long-term scaling plan.

Future Research Agenda

Our study, and the limitations stemming from its research design, offer a number of fruitful directions for future research. The first relates to exploring the longitudinal pattern we

posit existing in individual's approaches to scaling sustainability. Understanding such a progressive pattern for scaling sustainability, for example using a longitudinal case-based approach, would complement the exploratory, inductive findings presented here. In addition to this, research scope precluded us from a more granular examination of the individual's cognitive and psychological foundations which may take a number of perspectives such as linking with existing work in the sustainability field on cognitive framing (e.g. Hahn et al., 2014) and identity work (e.g. Carollo and Guerci, 2018), examinations of individual's institutional and integrative views of sustainability (e.g. Joseph et al., 2019), or even neuroscientific studies (e.g. McDonald, 2018). Third, there is also the opportunity of incorporating an ethical lens in response to Elms et al.'s (2010) calls for "scholars to explore ... the role played by (implicit or explicit) social/moral norms in ... justifying actual practices" (p. 410). While our study focusses on what individuals *do* (or are constrained in *doing*), useful research might also explore how such choices of what to do are influenced by such factors. Finally, important questions arise about the applicability of our findings in areas *beyond* sustainability strategy. Undertaking similar research in different contexts would provide further evidence of the generalisability of the Scaling Approach Framework and the progressive Scaling Progression Model developed here beyond sustainability, and to explanations of individuals scaling approaches more widely. While there are numerous directions future research can take, the importance of business in addressing such global challenges as sustainability, and as part of that endeavor, deepening our understanding of strategies for scaling sustainability, cannot be understated.

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TABLES AND FIGURES

Table 1: Respondent Sample Detail

CODE	JOB TITLE	INDUSTRY	LOCATION
2	Head of Sustainability, EMEA	Construction	UK
3	Director of Global Sustainability	FMCG	UK
4	Sustainability Director	FMCG	USA
5	Head of Environment Sustainability	FMCG	Western Europe
6	VP, Corporate Sustainability	Telecommunications	Western Europe
7	Head of Sustainability	Transport	UK
8	Head of Sustainability	Telecommunications	Western Europe
9	Chief Sustainability Officer	Building Materials	USA
10	Global Director, Sustainability	Pharmaceutical	USA
11	Corporate Director Sustainability	Chemical	Western Europe
12	Director of Sustainability	Construction	UK
13	Director of Sustainability	Professional Services	UK
14	Head of Sustainability, EMEA	FMCG	UK
15	VP Sustainability	Pharmaceutical	UK
16	Group Head of Sustainability	Construction	UK
17	Sustainability Manager, UK & Ireland	Manufacturing	UK
18	SVP, Sustainability and Green Support	Construction	Western Europe
19	Director, Sustainability	Chemical	USA
20	Global Head of Sustainability Management	Banking	Western Europe
21	Global Head of Sustainability	Manufacturing	UK
22	Manager, Corporate Responsibility	Transport	Western Europe
23	Head of Corporate Sustainability	Telecommunications	UK
24	Head of Sustainability, Africa	Food and Beverage	UK
25	SVP, Sustainability	Retail	USA
26	Head of Corporate Sustainability	Retail	UK
27	General Manager, Sustainability	Technology	UK
28	Director of Sustainability	Manufacturing	USA
31	Director, Group Sustainability	Packaging	Australia

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32	Head of Sustainability	Technology	Australia
33	Group Sustainability Manager	Building Materials	Australia
35	Head of Sustainability Strategy	Banking	Australia
36	General Manager, Corporate Responsibility and Sustainability	Property Management	Australia
37	Director of Sustainability, Australia	Property Management	Australia
38	Group Sustainability Manager	Construction	Australia
40	Global Chief Sustainability Officer	Technology	Australia
41	National Sustainability Manager	Property Management	Australia
42	Director of Sustainable Construction	Building Materials	UK
43	Group Sustainability Manager	FMCG	Australia
44	Sustainability Director	Construction	UK
47	Senior Manager Sustainable Supply	Food and Beverage	UK
48	Senior Sustainability Manager	Professional Services	Australia
49	Corporate Responsibility and Sustainability Director	Professional Services	UK
50	Vice President, Sustainability	FMCG	UK
51	Sustainability Manager	Technology	UK

Table 2: Four Criteria for Scale of Sustainability

Spatial Scale Indicators		Temporal Scale Indicators	
Criteria 1	Criteria 2	Criteria 3	Criteria 4
Distance removed from CEO	Reach of strategy	Time since introduction	Extent of commitments
>3 levels	Strategy in early development phase within sustainability unit. Sustainability treated as 'add-on' in disparate parts of organization	0-5 years	No stated commitments, or very limited vague commitments with no detail or monitoring
2-3 levels	Formal strategy exists and is operationalised in some parts of the organization	5-10 years	Some stated commitments, but not comprehensive. Evidence of some monitoring, but unclear on rigour. Shorter time horizon.
1 level (direct report)	Strategy formalised with Board level approval, operationalised throughout organization	10 years +	Stated, public, monitored commitments (e.g. Global Reporting Initiative [GRI]) covering breadth of organization. Longer time horizon.

Table 3: Sample of three organizations coding against Scale of Sustainability criteria

Organization (Respondent Code)	Distance removed from CEO	Reach of strategy	Time since introduction	Extent of commitments	Scale Cluster
31	3 levels	Public environmental statement, social responsibility review, but no formal annual strategy or sustainability report	5 years	No stated commitments, other than commentary about carbon reductions achieved	Peripheral
14	2 levels	Formal strategy approved at board level, comprising depth in some areas (e.g. operations), but lack of evidence in other areas (e.g. products)	18 years	GRI based monitored commitments in some areas, but insufficient evidence of commitments across organization	Intermediate
05	2 levels	Formal strategy approved at board level comprising all organizational areas (operational, product, life cycle etc.)	21 years	GRI based monitored commitments across all areas of the organization	Strategic

Table 4: Sustainability Scaling Micro-Strategies

Indicative Quote	First-Order Concepts	Second-Order Empirical Themes	Third-Order Theoretical Dimensions
<i>“how do we turn either the positive that someone can gain out of our using our products OR minimising the negative, how do we turn that into euros?”(8)</i>	Focus on profit	Meeting existing norms of economic returns	Conforming
<i>“cost is a big factor: it drives a lot”(47)</i>	Focus on cost		
<i>“85% of our R&D goes towards solutions that fit into those three [sustainability] spaces so I see us having transformed from being very footprint focused to solving the world’s problems”(19)</i>	Target receptive groups	Targeting conducive sub-environments	Leveraging
<i>“the OpCos [operating companies] that do best definitely are those where you’ve got an MD that’s bought into the whole idea, with 22 MDs you know, some are, some aren’t”(16)</i>	Target receptive individuals		
<i>“[the pilot sustainable technologies building was] was done purely from the fact that it would keep ourselves at the forefront [of sustainability]”(36)</i>	Target strategic projects		
<i>“the people that we get to come and work at [company], they want to come and work for a company that can make a difference, and they see sustainability as one of the ways that they can do that”(10)</i>	Influence recruitment	Changing policies, processes, and attitudes	Shaping
<i>“everybody in the organization understands what sustainability is, [allowing] intelligent conversations at every level [because] 80% of our 55,000 staff have been through sustainability e-learning”(16)</i>	Drive company-wide training		
<i>“[established sustainability council comprising] twelve core members ... representatives from corporate communications, public policy, legal, environmental compliance ... the key internal stakeholders”(4)</i>	Promote company-wide communications		

Table 5: Inhibitors to Scaling Approach

Indicative Quote	First-Order Concepts	Second-Order Empirical Themes	Third-Order Theoretical Dimensions	Scaling Approach
<i>“people who are making those decisions, working out whether the [sustainability] trade-off is worth it, I don’t believe that ... they’re educated enough in the wider things that they have to think about” (7)</i>	Decision-maker awareness	Lack of Leadership Support	Leadership	ASSIMILATION
<i>“main partner objective is finance: how do you make the most money?” (13)</i>	Partner objectives			
<i>“[Company] have a very manufacturing mindset which is ‘this is what we do and this is how we do it’” (31)</i>	Mindset	Internal Resistance	Internal Environment	
<i>“short termism is ... the single biggest barrier to the long term value of sustainability” (32)</i>	Short-termism			
<i>“some of the value which it creates is intangible, if you’re looking for a hard number, it’s a bit difficult to get to” (14)</i>	Intangible value	Measurement and Monetisation	Monetisation	MOBILIZATION
<i>“[brand and employee engagement benefits] need to be turned into a consumer or a customer benefit and then typically you should be able to measure it in financial terms, and that very often is very tricky” (8)</i>	Measure in financial terms			
<i>“repositioning needs to happen in terms of some of the finance areas ... what is an acceptable payback period? Perhaps moving away from more traditional expectations of a fairly rapid payback period” (49)</i>	Investment expectations	Overlooked in Company Policies	Internal Policies	
<i>“unless [sustainability] has been embedded into the [job] evaluation in all levels, it becomes ... quite hard” (33)</i>	Absent from bonus system			
<i>“cutting through all of the other requirements on mid-level managers to actually think about sustainability ... there’s many new processes ... HR practices ... compliance training ... trade practices training ... safety training ... so they’re bombarded” (38)</i>	Management overload	Time and Resourcing	Internal Resourcing	

“there’s 12-13 of us in the sustainability group, and we’ve got advocates and practitioners so we’ve got about 500-600 people involved, but still that’s out of 100,000. We need 10,000 to be really effective” (15)

Lack of head count



Table 6: Facilitators of Scaling Approach

Indicative Quotes	First-Order Concepts	Second-Order Empirical Themes	Third-Order Theoretical Dimensions	Scaling Approach
<i>“recognition that we were going to fall behind our peers and competitors if we didn’t do it.”(14)</i>	Competitor-driven			MOBILIZATION
<i>“Relationship building with architects and designers, relationship building with government, so they can see how [sustainable design] works for houses”(33)</i>	Stakeholder Relationship-driven	Using External Drivers	External Environment	
<i>“a customer flags an interest to do something... you basically then use that as an opportunity to get some success inside the business”(32)</i>	Customer-driven			
<i>“[it was] mandated from the CEO downwards, taking away some of the challenge with some people”(49)</i>	Existing leadership mandate			TRANSITION
<i>"Japanese president in the 1990's ... believed the purpose of the company was to benefit society ... this is the legacy of his leadership”(32)</i>	Leadership legacy	Leveraging Leadership Support	Leadership	
<i>“Our President ... believes that everything that [Company] is and does should be for the environment or for society ... to make a better world for people”(40)</i>	Leadership altruism			
<i>“the environment ... established by the new CEO [has] driven a framework of achievement and ambition ... that has been quite transformational”(48)</i>	Change of leadership			
<i>“an internal rate of return ... lower than what our commercial partners have to achieve in their projects”(10)</i>	Factored into investment expectations	Embedded in Company Policies	Internal Policies	
<i>“management is rewarded according to their performance and ... his bonus or part of it is linked to achievement regarding environmental performance improvements and sustainable sourcing”(5)</i>	Included in bonus system			

Table 7: Sample of Individuals in each Scaling Approach coded into Scale of Sustainability clusters

Scaling Approach	Assimilation	Mobilization	Transition
Comprising Scaling Micro-Strategies	Conforming	Conforming Leveraging	Conforming Leveraging Shaping
Example of Scaling Micro-Strategies	<p>Australian-based packaging organization (31): Conforming: “[sustainability is] mostly about compliance” Conforming: “you really can’t get them to commit to anything unless they can see the value of doing it”</p>	<p>UK-based FMCG organization (14): Conforming: “[they say] yeah we should definitely do [sustainability] ... but at the end of the day they [say we’re] pushed by quarterly, half-yearly and yearly results.” Leveraging: “it’s actually different for different people. Sometimes people are just really driven by a really positive story ... classic NGO type arguments.” Leveraging: “the marketing department in Europe have about 15 people actively looking for greener within our categories.”</p>	<p>US-based building materials organization (9): Conforming: “on using this [sustainability] as a competitive advantage in many many ways, to drive out cost and increase penetration of the existing products” Leveraging: “I began to enrol our CEO ... in the idea that we could have a much bigger impact ... if we kind of looked a little bit differently ... through this lens of sustainability” Shaping: “leaders have networking calls once a month and whenever a plant does something kind of innovative ... what they did and how they did it, and what the impact was, and so there’s a whole best practice sharing network”</p>
Evidence for Scale Categorization	<p>Lack of organizational support at all levels Lack of opportunities to attempt leveraging Focus on short-term financial returns or reliability of service based on historic expectations</p>	<p>Lack of overt organizational support for sustainability at senior levels where it impacts returns Opportunities within individuals and groups as they show interest Focus on short term but elements of long term introduced, surfaced as acceptable</p>	<p>Leadership support for longer term, wider impacts Targeted groups and individuals leveraged Proactive formalised actions and processes to change other individuals and groups across organization</p>
Scale of Sustainability	Peripheral	Intermediate	Strategic

Table 8: Mapping Individual's scaling approach and organization's scale of sustainability

Individual's scaling approach \ Organization's scale of sustainability	Peripheral scale	Intermediate scale	Strategic scale	Total
Assimilation approach	6	0	0	6
Mobilization approach	2	18	0	20
Transition approach	0	8	10	18
Total	8	26	10	44

Figure 1: Scaling Approach Framework

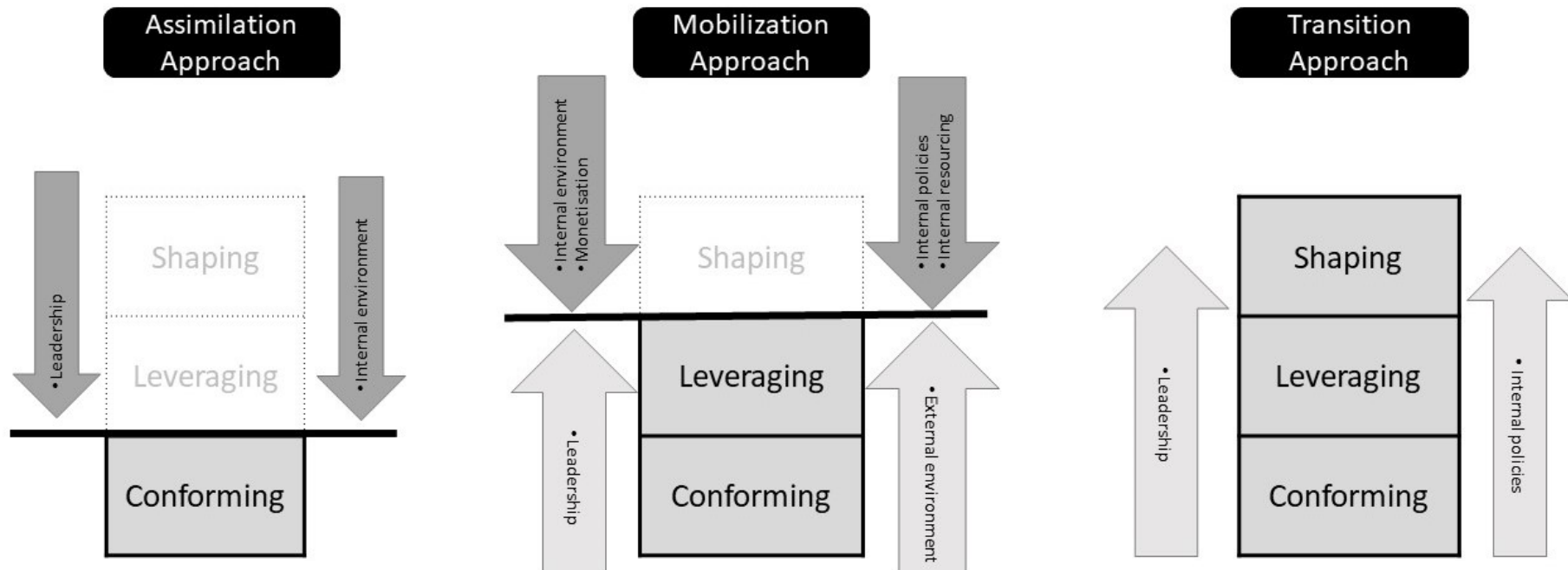


Figure 2: Scaling Progression Model

