


RESEARCH ARTICLE

Weaving a strategy for a base-of-the-pyramid market: The case of Grundfos LIFELINK

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Abstract

This paper explores the development of strategies by multinational corporations (MNCs) for serving markets at the base of the economic pyramid (BoP). MNCs play an important role in meeting the Sustainable Development Goals (SDGs) formulated by the United Nations (UN), as they are responsible for one-third of the total economic output and the majority of world trade. However, little is known about how MNCs contribute to meeting the UN SDGs. Through an in-depth analysis of how Grundfos, a Danish MNC and a leading supplier of pumps, developed a solution for supplying fresh potable water to rural villages in Kenya, we investigate some challenges MNCs face and demonstrate the importance of intimate engagement with the context of strategic action. Tackling sustainable development issues in the context of BoP markets represents a distinctive challenge to MNCs, which often do not have a good understanding of BoP environments. Drawing on contrasting ideas of strategy as navigation or wayfaring, we highlight the dangers of trying to impose existing strategies and business practices in market contexts, which are fundamentally different from existing ones. We add to the existing research by exploring how such frameworks interact with strategizing processes in a novel environment for the operating firm. Specifically, we explore the interrelatedness between planned and emergent approaches to strategizing in BoP market environments.

KEYWORDS

SDG goals, strategizing, sustainability and MNCs

1 | INTRODUCTION

This paper explores the development of strategies for markets at the base of the economic pyramid (BoP) in developing countries. Prahalad and Hammond (2002) argued that multinational corporations (MNCs) could make a profit by selling to impoverished consumers at the BoP and, at the same time, help alleviate poverty. That a significant untapped opportunity for “doing well by doing good” exists (Prahalad, 2004; Prahalad & Hammond, 2002) is an alluring

proposition that has led to thousands of corporate initiatives (Hart, 2015). However, clear evidence that the BoP concept has delivered on its promise to either businesses (in the form of profits) or BoP participants (by alleviating poverty) is still lacking (Dembek, Sivasubramaniam, & Chmielewski, 2019).

Initially, the BoP approach focused on selling to the poor. This was seen as an opportunity to eradicate poverty and provide social benefits to low-income populations in a culturally sensitive and environmentally responsible manner (e.g., Hart & Milstein, 1999;

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Prahalad & Hart, 2002). There was severe criticism of this approach for, among other things, encouraging poor consumers to spend their limited funds on products that they might neither need nor be able to afford (e.g., Karnani, 2006), displacing local producers (Garrette & Karnani, 2010; Newell, 2008), obscuring unequal power relations and conflicting agendas (Arora & Romijn, 2011), and being based in Western ideals of growth and development (Landrum, 2007). A second iteration of the BoP approach focused more on cocreating value with the poor in ways that created value for all parties involved (Simanis & Hart, 2008). However, the initial criticism is also pertinent to the second iteration, and in recent years, the scope of the BoP approach has been widened further to a more bottom-up approach to poverty alleviation that explicitly addresses sustainable development issues (Cañeque & Hart, 2015; Dembek et al., 2019).

The attention of MNCs toward BoP markets is in alignment with several of the Sustainable Development Goals (SDGs) formulated by the United Nations (UN; Kolk, Kourula, & Pisani, 2017; United Nations, 2015). MNCs are posited as being essential for achieving the SDGs before 2030 as they are responsible for about one-third of the total output and the majority of world trade (Organisation for Economic Co-operation and Development, 2008), although this privatization of poverty alleviation and development to MNCs is not without detractors (Arora & Romijn, 2011; Karnani, 2007, 2011). Therefore, MNCs are under pressure to find ways to unlock opportunities for joint wealth creation in the poorest countries (Muusten, Rhyne, & Zheng, 2013), for instance, by using social intermediaries to help address institutional gaps between formal and informal markets and create mutual value by tackling the unique cultural, economic, and social issues in local communities (Heuer, Khalid, & Seuring, 2020).

We think that tackling poverty and development issues at the BoP presents a distinctive challenge for bridging what is known and unfamiliar across different strategic and operational contexts (Schrader, Freimann, & Seuring, 2012). Strategic teams in MNCs are often anchored in one strategy context while seeking to explore business opportunities in another (Hart, Sharma, & Halme, 2016).

BoP market contexts are often not well understood by MNCs. They are characterized by a “confluence of uncertainties” (Viswanathan, Sreekumar, & Gau, 2018), where environmental issues and the consequences of climate change intersect with political uncertainty, absence of stable institutional frameworks, and technological change. Trying to engage with them from a distance while working with people operating in local BoP contexts provides a double-edged problem for the strategizing efforts of MNC venture teams. Localized managers and managers at headquarters are involved in different sets of practices, and their understandings develop along different paths, putting a strain on the development of mutual understandings of strategic priorities and contexts (Kristensen & Zeitlin, 2005; Michailova et al., 2017). Distant managers risk overlooking what is particular and essential in these unfamiliar environments. This double-edged problem is quite common for MNCs operating in different contexts and seeking to align understandings and create shared patterns of actions. Hence, BoP

initiatives must be socially embedded and developed iteratively (Duke, 2016; Simanis & Hart, 2008). Thus, while many MNCs are intrigued by the apparent business opportunities at the BoP, they are increasingly aware of the complexity involved in exploring them (Karamchandani, Kubzansky, & Lalwani, 2011).

In this paper, we build on the notion that preexisting managerial frameworks in MNCs pose challenges for implementation (Halme, Lindeman, & Linna, 2012; Olsen & Boxenbaum, 2009). We add to the existing research by exploring in detail how such frameworks interact with strategizing processes in a BoP setting that is a novel context for operating firms. Specifically, we want to explore the interrelatedness between planned and emergent approaches to strategizing in BoP market environments, discussed as “building” and “dwelling” perspectives in the strategy literature (Chia & Holt, 2009).

To this end, we present a detailed case study of Danish pump manufacturer Grundfos's expansion into the business of selling fresh potable water in rural areas of Kenya. According to the UN (2019), “more efficient use and management of water are critical to addressing the growing demand for water, threats to water security and the increasing frequency and severity of droughts and floods resulting from climate change” (p. 12). Thus, providing access to safe drinking water is part of one of the SDGs (SDG6: Ensure Availability and Sustainability of Water Management and Sanitation for All), and it requires developing innovative and sustainable business models in transition and developing economies (Gebauer & Saul, 2014; Sousa-Zomer & Miguel, 2018). We explore how Grundfos initially designed the strategy of Grundfos LIFELINK and how it subsequently evolved as a consequence of the strategic intent of Grundfos and, significantly, the coping activities of different actors and interactions with stakeholders in Kenya.

This research makes theoretical and practical contributions. Theoretically, we suggest viewing strategizing in BoP contexts as a process of weaving, where engaging closely with the environment and different strategic materials (ideas and resources) forms identities and strategies. Metaphorically, rather than seeing strategy as a process of puzzle solving to create a fit between the firm and its perceived environment, strategizing becomes a continually evolving tapestry, where new aspects of the environment are acknowledged and change the operational order. This does not discard planned strategy approaches. The creative tension between navigators and dwellers is crucial for understanding the emergence of BoP strategies.

The remainder of this paper is structured as follows: first, we introduce a distinction between a building approach to strategy, in which actors consciously construct maps or models of the world and then act on them, and a dwelling approach, where actors in the process of everyday practical coping ingeniously make small local adaptations as they go along (Chia & Holt, 2009; Ingold, 2000). We then discuss our methodology and proceed by presenting the case of Grundfos LIFELINK to reflect and further develop on these issues. In the final part, we discuss the lessons learned from the case study concerning weaving sustainable strategies for BoP markets and their possible implications for management practice and theory in terms of strategizing in unfamiliar environments.

2 | NAVIGATING AND WAYFARING IN BOP STRATEGIZING

For MNCs accustomed to operating in mature and familiar environments, pursuing business opportunities, and addressing poverty issues in BoP markets, is a complex task (London & Hart, 2004; Sánchez & Ricart, 2010). Authors disagree about whether entering emerging markets requires the reinvention of firm strategies (e.g., London & Hart, 2004) or whether it can be accomplished by leveraging existing capabilities and business models to new markets (e.g., Seelos & Mair, 2007). The former perspective holds that business conditions differ significantly, and existing practices must be fundamentally changed (Rivera-Santos & Rufin, 2010). In addition, existing practices and tools for assessing business opportunities developed for a mature market context often fail when applied to a BoP context due to market-related barriers, barriers associated with the natural environment, insufficient physical infrastructure, and poor access to business services that are generally taken for granted (Halme et al., 2012). The latter perspective takes as a starting point the competitive and tested superiority of existing MNC business practices and strategies and assumes that MNCs can adjust these to the BoP context, essentially diminishing qualitative differences in the natural and socioeconomic environment (Acosta, Kim, Melzer, Mendoza, & Thelen, 2011; Prahalad, 2004).

With the above considerations, a key question for MNCs becomes what approach to follow when developing their strategies in uncharted territories (Winterhalter, Zeschky, & Gassmann, 2016). When thinking strategically, managers analyze their environments and portray their organization as it might be some time in the future; they then rationally judge the available means by which the organization can best move from its existing state to a desired one. Robert Chia and Robin Holt describe this as the *building* approach to strategy and contrast it with the *dwelling* approach (Chia & Holt, 2006, 2009; Chia & Rasche, 2010). This distinction bears resemblance to Mintzberg's distinction between crafting and planning approaches to strategic thinking (Mintzberg, 1987; Whittington & Cailluet, 2008).

The building approach to strategy is “exemplified by the agent-strategist consciously constructing mental representations and models of the world and only then acting upon them” (Chia & Holt, 2009, p. 133). In contrast, the dwelling mode “consists of local adaptations and ingenuity in everyday practical coping” (p. 159). We contend that the two approaches often coexist and interrelate. Moreover, when operating in BoP contexts, the approaches to follow and the open-endedness of potential outcomes, switching between these different modes through mapping and planning, become particularly challenging. As inhabitants of the worlds they live in, strategists participate “from within in the very process of the world's continual coming into being” (Ingold, 2007, p. 81). Participation is “a matter of intervening in the fields of force and flows of material wherein the forms of things arise and are sustained” (Ingold, 2011, p. 178). The creativity of strategists lies in the practice of strategizing itself, in their ability to work things out as they go along.

2.1 | Building and navigating

The building mode presents strategy as a navigational process involved in answering questions, such as “Where are we now?” and “Where do we want to go?” (Chia & Holt, 2009). Answering these questions involves the use of models, maps, and classifications that “represent the topology of the strategic terrain to be negotiated” (Chia & Holt, 2009, p. 160). Strategizers rely on mental models and explicit organizational knowledge to analyze, plan, and act purposefully toward predefined ends to maintain analytical scope and account for limited information processing capacity (Hockerts, 2015). This includes externalizing familiar forces of the environment, as these are assumed to be already accounted for. Maps help to capture or “freeze” a specific shared understanding in time (Weick & Quinn, 1999). It facilitates the idea of collectively moving in the same direction, justifies, imbues meaning to actions for stakeholders, and legitimates the business ideas for a broader constituency (Lounsbury & Glynn, 2001). Once strategizers have determined the current position and the desired destination, then plotted the route between them, it is assumed to be relatively straightforward to get from A to B.

2.2 | Dwelling and wayfaring

In contrast to the separation of strategic analysis and action that characterizes building and navigation approaches to strategy, the dwelling and wayfaring perspective assumes that strategizers constitute and codefine environments through complex responsive processes (Chia & Rasche, 2010; Ingold, 2000; Stacey, 2007). Managers experience a progressional ordering of reality along a path of travel, with objects falling into and out of sight as new vistas open up and others close (Ingold, 2007). What they are, or what they can be, is something that they continually shape through their interactions with the environment (Ingold, 2011). Thus, stability and social order in the mind of the manager are fundamentally about experience and movement. Rules and representations compare with the map of an unfamiliar environment; having learned to attend to the features of the landscape and position accordingly, this map can be discarded. According to Ingold (2000), “The map can be a help in beginning to know the country, but the aim is to learn the country, not the map” (p. 415). Hence, the dwelling perspective assumes an ability to account for unexpected events in the environment of the business strategist at the expense of more complex (and resource-consuming) information processing (Hockerts, 2015).

From a dwelling perspective, actions can be *purposive* without actors necessarily having an overall *purpose in mind* (Chia & Holt, 2006; Dreyfus, 1991). Acting purposively is attempting to resolve an immediate problem at hand or overcome an undesirable situation without seeing this as directed toward some overall goal in mind. This is in alignment with recommendations of MNCs crafting locally responsive strategy approaches to maintain fittingness with the local natural and sociocultural environments (Brozovic, 2020;

Duke, 2016). In contrast, to act with a purpose is to act according to a predefined desired outcome (like the building mode). Managers can relate their experiences to others through narration. The joints, splits, and interactions of the lines of the sketch map “indicate which paths to follow, and which paths can lead you astray, depending on where you want to go” (Ingold, 2007, p. 84). Sketch maps are not supposed to represent a particular territory and scarcely survive the immediate contexts of their products before they are discarded (Ingold, 2007; Wood, 1993a). What we seek to explore in the following is the interaction and possible trade-off between the building and dwelling modes as the BoP strategy process unfolds in an unfamiliar environment.

Whereas the building approach imbues strategizers with clarity of purpose and alignment to strategic vision and mission, the dwelling approach allows for emergence and local adjustment to the operational complexity of BoP environments, which is frequently underestimated by MNCs (London & Hart, 2004). There is a built-in tension between the approaches. The building perspective offers actionable simplicity at the expense of the dwelling perspective's ability to account for and coevolve with emergence and environmental complexity (Hockerts, 2015). There is a tendency to rank building and planning concerning their ability to cope with environmental complexity (Hockerts, 2015) or dismiss too formalistic approaches altogether in favor of emergence and learning (Mintzberg, 1991). Rather than seeing the perspectives as mutually exclusive, the assumption here is that they provide two horns of an emerging strategic dialogue within a complex organization, which more accurately portrays the processes of MNCs' strategic engagement in unfamiliar environments, such as BoP markets. In this case, strategists seek creative resolutions of the tensions on an ongoing basis rather than revert to one or the other (Angwin & Cummings, 2017; Cummings & Angwin, 2004).

3 | METHODOLOGY

This is an explorative single-case study of Grundfos LIFELINK. Case selection followed three criteria: (1) it should be an example of an MNC with active and committed involvement in fulfilling the SDG goals; (2) it should target BoP markets; and (3) it should offer the opportunity to study real-time strategizing processes. Grundfos LIFELINK meets all three criteria. First, Grundfos acknowledges the SDG targets in its vision statement. Together with a select group of MNCs, such as Nestle and Unilever, the firm was awarded the World Business and Development Award at the UN Conference for Sustainable Development, Rio + 20, in 2012. With LIFELINK, Grundfos has set an example that can inspire other firms seeking to include SDG targets in their strategic efforts. Second, Grundfos LIFELINK explicitly targets BoP markets. Studying Grundfos LIFELINK will provide insight into the processes and incidents that led to the formulation and implementation of a strategy for a BoP context. Finally, Grundfos has generously given us wide-ranging access, including allowing us to interview key informants and analyze all relevant internal documents. The transparency and openness of Grundfos have given us a unique

opportunity to study BoP strategizing efforts relevant to meeting SDG goals in an MNC.

We followed the development of the Grundfos LIFELINK initiative intensively from its inception until its operation stage as an intensive single-case study. Later, the LIFELINK project was rolled back for reasons related to the dynamics we uncover here, but this is beyond the scope of the present contribution.

Explorative in-depth single-case studies of organizations like Grundfos LIFELINK are useful for understanding the underlying processes of change and dynamics in unfolding events (Pettigrew, 1997; Yin, 2015). Furthermore, in-depth case studies are useful for producing the kind of concrete, context-dependent knowledge that is central to human learning and knowing (Flyvbjerg, 2006). The generalization of findings to a population of MNCs is not an option in a qualitative study like this. Instead, analytical generalization, continually comparing findings against the existing relevant discourses and findings reported in the literature, is used (Yin, 2015).

3.1 | Data sources

The case was developed from multiple data sources, including interviews and various documentary sources. The first author conducted 15 semi-structured interviews and collected other primary data through email conversations (see Table 1). Interlocutors were selected based on the themes and issues that emerged during the interview process, as well as to reflect different levels of influence and tasks in the organization. For the initial interviews, an interview guide was used, whereas follow-up interviews were more informal and based on

TABLE 1 Overview of persons interviewed

Position	Duration of interview (min)
Country Manager (Kenya)	30 (via Skype)
Managing Director, Grundfos LIFELINK	90
	20 (via phone)
	90
	60
	Email correspondence
New Business Developer, Grundfos	60
	60
	30
	Email correspondence
Head of Innovation, Grundfos	30
Technical Manager, Grundfos LIFELINK	60
	30
	30 (phone)
Grundfos LIFELINK CEO and Head of the New Business Division	70
	30
	30 (via phone)
Member of the Grundfos Board	Email correspondence

previous talks. Besides interviews with managers from Grundfos LIFELINK, we interviewed a marketing research manager operating in Kenya and a technical engineer who took part in the technical development of the LIFELINK system. Interviews were carried out in 2010, when it was still unclear whether LIFELINK would end up as a success or a failure, and again in 2013, when LIFELINK was widely recognized as a success in the global business media and internally in Grundfos. LIFELINK was, and still is, seen as a groundbreaking learning experience for building BoP market presence and achieving their SDG ambitions (BBC World News, 2012; Grundfos, 2020a). This is important as strategy processes are often studied retrospectively when the outcomes are known. Interviews were taped and transcribed, following the procedure of iterative transcription, reflection, and coding, as suggested by grounded theory (Strauss & Corbin, 1990). Initial interviews spurred us toward other informants, and in several cases, we conducted follow-up interviews to clarify issues or pursue leads that emerged during coding.

In addition to conducting interviews, we gathered and coded many documentary materials, including internal memos, company presentation materials, video footage from Kenyan villages, physical

objects, and intranet access to real-time data on pump site performance. We used the interview and documentary data materials to develop a baseline case, coauthored with one of the key informants from the company.

3.2 | Analysis

Our analytical approach used “sequential mapping” to grasp processes in their contexts (Halinen, Medlin, & Törnroos, 2012). We focus on how the strategy of Grundfos LIFELINK developed in emergent processes of interaction between Grundfos LIFELINK and other parts of the Grundfos organization and its environment.

The analysis of the empirical material has developed iteratively. We ordered events chronologically as a sequence of events and activities that occur over time to identify changes in interpretations and their effect on the negotiations of meaning. We identified several important events and activities in the development of Grundfos LIFELINK (see Figure 1), beginning with the decision to set up a temporary task force. It became increasingly clear that the New Business

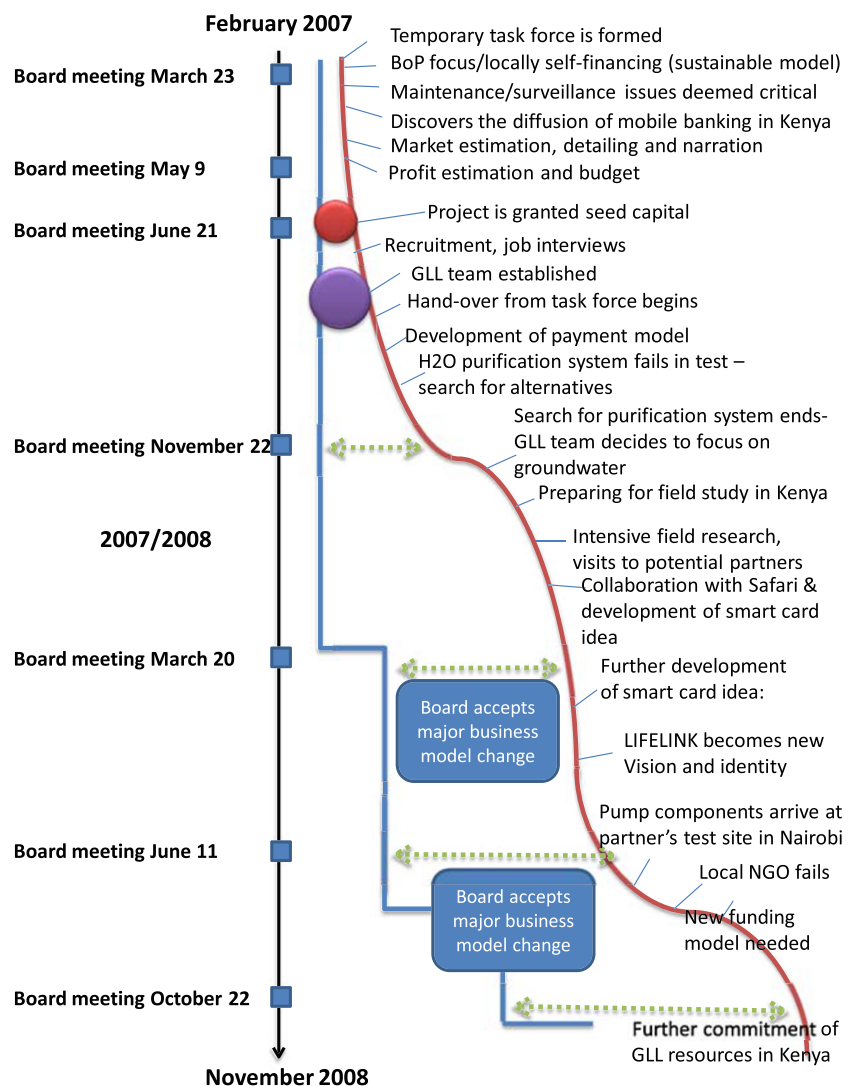


FIGURE 1 Overview of the wayfaring process [Colour figure can be viewed at wileyonlinelibrary.com]

Board (represented by the blue line) and the operational team in Grundfos LIFELINK (represented by the red line) viewed the progress differently. Furthermore, we could attribute this to the operational team's different experiences with developing the business model and on the ground in Kenya. To make sense of these differences, our attention turned to the strategy as practice literature with the distinction between the building and dwelling modes to the strategy being particularly useful.

We have coded all data and data-triangulated interviews with the documentary materials; we have followed the procedure of open coding and constant comparison, as suggested by Strauss and Corbin (1990), building from initial descriptive codes. In alignment with Kaplan's (2011) notion of PowerPoint presentations as a central device in the epistemic machinery of strategy making in organizations, a key focus in the analysis was to carefully examine PowerPoint presentations at internal board meetings as critical events in the development of the Grundfos LIFELINK strategy and use these in the coding. There were seven such meetings in 20 months (2007–2008), as shown on the left-hand side of Figure 1. We gathered decision notes and PowerPoint slides from these meetings, as well as several internal memos, exchanged among participants to identify discussions. We analyzed the interviews and matched the managers' recollection of the events with the PowerPoint slides and notes presented. We used the issues from the PowerPoint slides, analyzed the interviews, and matched the managers' recollection of the events with the PowerPoint slides presented.

We took inspiration from the stepwise procedure for developing a data structure suggested by Corley and Gioia (2004). We searched for first-order concepts and merged them into second-order themes through a process of iteration and recombinations, paying heed to the time dimension in the dataset, as concepts

from previous meetings and memos layered and reappeared in new conversations.

We examined the identified themes, looking for the PowerPoint author's framing of particular issues, to convey particular meanings and maintain legitimacy despite diversions from the original map. We identified 14 themes, of which three are seen as encompassing several of the other issues and as particularly critical for understanding the role of bridging between "the wayfarers" and "the people who stayed behind." These themes are as follows: (i) changing the water source, (ii) developing the payment system, and (iii) Grundfos LIFELINK's role in the market.

Iterating between our data and the BoP and strategy literature suggested to us that the tension between strategy as wayfaring and navigating was the most useful device for understanding the unfolding strategy process (see Figure 2). Hence, this concept became central in our study on this topic. We subsequently used this to zoom in and unfold the strategizing processes in Grundfos.

4 | FINDING THE WAY: THE GRUNDFOS LIFELINK PROJECT

4.1 | Inception

The CEO of Grundfos developed the idea of what would become Grundfos LIFELINK during a visit to a charity program in Thailand. As he visited sponsor projects in the rural areas of Thailand in 2007, he was struck by what he saw as a paradox: drinking water was a scarce resource, but at the same time, many villages were situated near a freshwater reserve, for example, a river. It seemed that a simple solution was evident, where well-known technologies could be combined

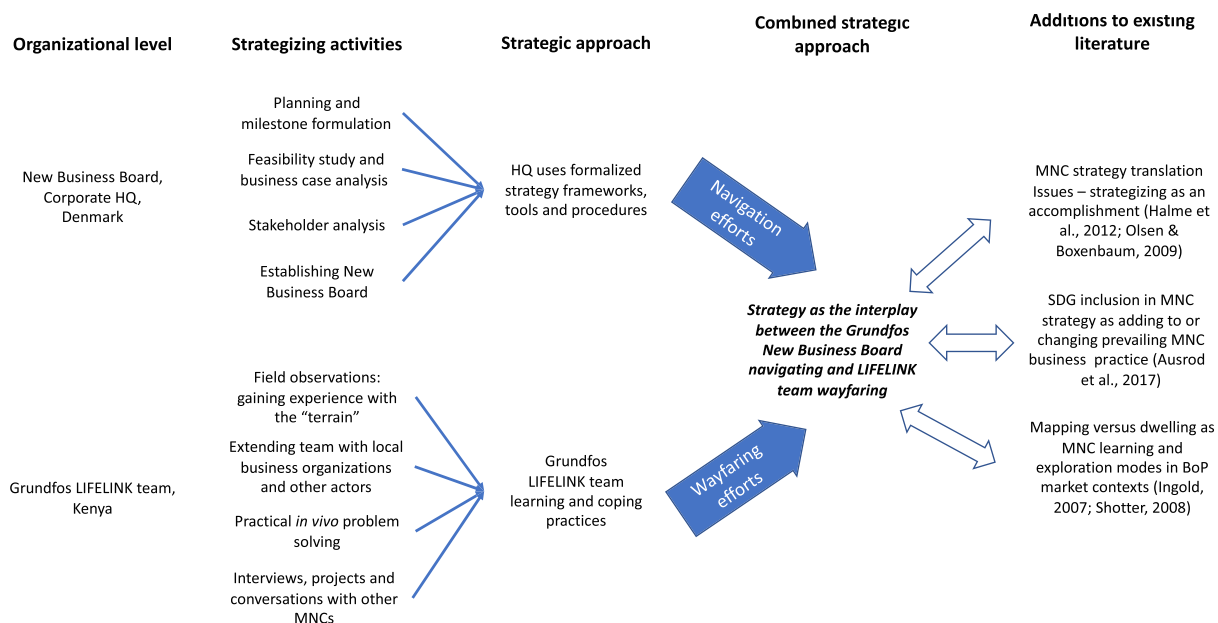


FIGURE 2 Interpretive scheme: linking parallel strategic activities and approaches in the development of strategy [Colour figure can be viewed at wileyonlinelibrary.com]

to pump and purify water from the river. He emailed the head of the New Business Development (NBD) division of Grundfos, asking him to explore commercial possibilities for providing a solution based on combining existing elements. This division was established 2 years before generating new ideas and concepts for system solutions, central for Grundfos's strategy to become the leading provider of sustainable water technology systems. The head of NBD's immediate response was that this was certainly doable. Such a system could be organized around standard components available on the market. In addition, he considered that there were synergies to other product development projects that Grundfos was working with at the time. Organizing a user interface and a feasible way to profit from a business model around the service and maintenance of the system in a developing country context was the real challenge. He wrote to the Grundfos CEO: "The market is created and organized by NGOs [non-governmental organizations], national aid programs and other actors. We work with them already, but we still have a lot to learn." The NBD head pointed out that he had contacts with a relevant supplier of the water purification unit. The CEO replied, "Fine. Please provide a plan."

NBD conducted an initial feasibility study that could provide some background and a plan for further investments into the project. From its inception, the project was meant to be a joint venture between Grundfos and the manufacturer of the water purification system. The report concluded that the task was well within the competences of Grundfos and their possible partners. Most components were already available. For instance, a water purification system that was able to handle large volumes of water was available from H2O—a start-up firm that had earlier showcased a system for water purification. However, the commercial aspects of the project were uncharted territory and would be needing most of the exploration and conceptualization work.

The team presented their work at a meeting of the New Business Board on March 23, 2007. In the presentation, several ambitions and elements were identified that became the strategic themes directing the further search process and the ensuing strategic process. First, the theme concerning the project and potential value streams was couched in BoP rhetoric. From the BoP perspective, Grundfos saw a huge market potential. As stated in the PowerPoint presentation to the New Business Board:

[Our Aim is] to raise conditions of life for the rural population—bring growth to consumers and earn money ... target the BoP (people with less than \$2 a day).

Furthermore, keeping development costs to a minimum by using as many existing components as possible was discussed. The first meeting clarified that several issues remained to be investigated and discussed with the New Business Board.

Another strategic theme identified at the first meeting concerned the operation and maintenance issue. In the initial mail correspondence, the head of NBD and CEO saw this issue as a potential risk factor that had to be taken care of in the project. In

the first meeting, the project aimed to "establish a value chain that includes supervision and training of local operators, bi-annual exchange of units, monitoring water quality." One way of doing this was to black-box technology. Black-boxing would ensure that it could not be tampered with by unauthorized persons. At the same time, the team discussed how to establish satellite-based surveillance of the system so that a local team of skilled persons would be able to fix the system using proper (i.e., Grundfos) components. The presentation was an initial attempt to develop a proposal reflecting Grundfos's strategy and describing the logic of the proposed venture, the way it was to operate, and how it was supposed to create value for its stakeholders. Discussing this phase in the development process in an interview, the head of NBD later reflected: "You can only ask questions based on what you 'know' you don't know. You are blind to the issues that you 'don't know' you don't know."

The next meeting with the New Business Board was held 2 months after the first one. Here, the research team provided a more precise market estimate of the market potential:

In five years, we aim to have 100,000 units running, with 30 million transactions and a daily turnover of DKK 24 million.

This number reflected two important aspects of the context, which were as follows: Grundfos's ambitious growth plans and the explosive growth in the number of mobile phones used as payment devices in Africa. Collecting the local payments for water credits presented a critical challenge. Therefore, in this second board meeting, the development of a payment system based on mobile phones became an important theme. It was realized that such a system would call for some development efforts. The team had browsed the Internet and had accidentally determined that Safari.com, a mobile phone operator based in Kenya, had a successful mobile banking solution for micropayments—the M-Pesa payment system. A large proportion of the poorest part of the population in Kenya owned or had access to a mobile phone and used it for a broad range of purposes. The team considered that, if they used M-Pesa for water payments and linked the local water kiosks in the villages to the Internet to monitor water use, it would be possible to match usage with the payments made:

The use of mobile phones in Kenya was advanced beyond any mobile payment system we knew. We learned that farmers use mobile phones to find the best market prices for their cattle. We were not aware that such a thing existed. This kind of idea often does not surface from a thorough analytical process but is the consequence of frustration, pondering, luck, and coincidence. (Head of NBD)

Using the M-Pesa system would reduce the perceived risk greatly and help Grundfos identify a viable business partner in their target market. A PowerPoint slide from the second board meeting explains

the concept and further fleshes out the business model and Grundfos's role in the value creation process:

Grundfos assembles units and supplies units to a local organization in the country ... [the] local organization trains all levels of operators ... units are hooked up by local operator or Grundfos BoP Water Staff ... mobile operators administer the accounts ... Mobile operator supplies data to Grundfos.

The background for this early draft of a business model was to be found in the team's work. It was becoming clear that the individual payments for water would be relatively small and hard to collect and transfer.

4.2 | The Grundfos LIFELINK team is established

The New Business Board finally provided a “go” for the system at a meeting in June 2007. The plan was that 10 units should be in operation for field-testing in the period of 2007–2008 and then to scale up to 100 units in 2009. Once the test period was over, 20,000 units should be put into operation each year thereafter, following the penetration of mobile phones in other African countries. With the board's support, New Business started hiring people to implement the system and establish what later was renamed *Grundfos LIFELINK* as a legal entity and spin-off. The new team comprised three people: An operations manager was recruited internally and had extensive experience working in Africa with the charity operations of Grundfos, whereas two others were hired from external positions, including a general manager and a technical manager.

The members of the LIFELINK team worked on developing the business model. They traveled to Kenya and met with local and global partners, and so on. The development team started handing over the project to the new team. The process of taking over the project and fleshing it out represented a separate journey. This process of making sense of the initial plans and building on these plans marks the initiation of the wayfaring team's journey, as they started to inhabit the space and make it their own.

4.3 | Challenging the purification system

After reviewing the tests that had been conducted, the new LIFELINK team realized that the purification system was not performing as intended. The performance problems were related to the state of the water source. African river water is considerably dirtier than Danish surface water is; it carries with it a lot of particles, as well as antibiotic sediments. In addition, larger pieces of wood, debris, and different types of sediments are prone to wreck the purification system, calling for constant maintenance. As an effect, the system clotted constantly and did not live up to the “minimal local maintenance” notion formulated in the original strategy document. Although other water sources,

such as groundwater, were available, purifying surface water was seen as a key element in the original business idea. After much discussion and argumentation across the Grundfos LIFELINK board, it was decided to continue the development of the LIFELINK project internally and use groundwater as the water source. At the board meeting in November 2007, this was presented by the Grundfos LIFELINK team together with a slight but important suggestion for a shift in the vision statement—from focusing on water purification to providing clean drinking water to the rural population. A purification unit was to be added to the pump later, when a feasible solution was found; this would possibly be internally developed. For the team, this meant that resources could be focused elsewhere:

Even though this deviated from our original plan, we still saw it as a feasible strategy, as we could develop the project and learn from using groundwater. We had to convince some members of the board, though. (Head of NBD)

In 2008, LIFELINK moved further away from purification as the main source. Based on a study of current technologies for water purification, the following conclusion was presented during a meeting in August 2008:

Adding purification modules to Grundfos LIFELINK products adds complexity and cost to the water supply system in terms of initial cost, additives and maintenance – [The first] choice of water source must always be non-polluted groundwater and to protect the groundwater source from being contaminated – [The second] choice must be investigating the opportunities to drill a new borehole containing non-polluted groundwater – In areas with water scarcity, polluted ground and surface water might be the only and third choice with the need of adding purification modules to the water supply unit.

4.4 | Developing the payment system

Another pressing problem was how to further develop a workable payment system from the ideas provided by the feasibility study. The original idea involved M-Pesa, the mobile phone-based money transfer and payment system. M-Pesa users can use their account to deposit and withdraw money from a network of banking agents. These agents include airtime resellers and various retail outlets in local communities. At the time, the M-Pesa system was estimated to process as much as 10% of Kenya's gross domestic product (GDP). There were several problems with M-Pesa. For instance, it was not clear how delays in receiving a short message service (SMS) text would affect the system and in what way it could sort out how to transfer water-drawing credits to a user. The technical manager interviewed local providers of e-banking solutions in Kenya. He learned that an

important cost driver was the “infomediaries” standing between the user and the phone companies, and they were responsible for sorting out SMS text messages from users and connecting them to mobile operators. The development team contacted Safari.com, which was interested in discussing the development of a dedicated payment system for LIFELINK. Safari.com saw interesting perspectives in codesigning this system because of the potential volume of data traffic, as well as for participating in its design, which could be useful for developing a new service to be sold to other utility service providers, such as electricity companies. However, also seeing the commercial potential of this system, the LIFELINK team decided that they also wanted a part of it. Therefore, LIFELINK involved more of Grundfos's internal engineering and development capacity. Consequently, they back-sourced large parts of the development tasks.

A new problem surfaced for payments. As the individual minimum transaction for buying water credits was kept relatively low so that people could afford to buy water in small quantities, the individual SMS charge was substantial in comparison. Initially, the SMS price was KES50 for transferring KES100 of water credits. The LIFELINK team and Safari.com agreed to lower the price to KES15 per SMS. The development team decided to add a layer to the system so that bulk purchases of water credits could be conducted through the M-Pesa system but could then be banked at the Grundfos server and transferred to users in smaller amounts by loading a key fob (a small hardware device with built-in authentication mechanisms and memory) with credits. Another reason for this additional layer was to ensure access to the system for users who did not own mobile phones. Although mobile phones are widely distributed in Kenya, not everyone would necessarily own one. This new layer would allow users to buy water credits collectively, paying only one SMS fee. Later, payment could be divided among the users:

At that time, we saw it as a rocket launcher system, where the purpose of the M-Pesa-based system was to carry our extension of the system to the local users. We are now using this system to develop an alternative that can be used when we enter new markets where mobile ownership is less common. (Project manager)

This system later developed into AQtap, a stand-alone service system marketed toward infrastructure providers as a water ATM.

4.5 | Changing Grundfos' role in the market

In June 2008, a plane left Denmark for Kenya with supplies for building 20 water kiosks. LIFELINK was using Grundfos's existing distributor in Kenya as a partner for field testing the equipment. Grundfos had formed an agreement with a small local NGO with local knowledge and several local operations in rural Kenya. In the original plan for the rollout, the NGO's task was to find suitable villages and negotiate the terms with local authorities using its established goodwill.

Grundfos and a local dealer would be responsible for constructing the site once an agreement was reached.

Grundfos planned for LIFELINK to work with five different market segments, which were as follows: farms and game reserves, small-scale agriculture, small rural centers, semi-pastoralists, and pastoralists. The team planned to expand to Tanzania and Uganda in 2009 and to Zambia, Malawi, and South Africa in 2010. However, over the next 8 months, little happened. At the board meeting in June 2008, it was decided to change the name of the company to LIFELINK. Changing the name and linking LIFELINK specifically to Grundfos in the visual presentation of the LIFELINK logo reflected the strategic progress made on two accounts. First, the process led to the realization that the payment system was the most promising aspect of the project. As stated at the board meeting memos, having the project “associated with a range of future business possibilities—not just sun and water” had become important. Second, explicating the association with a respected company was given priority—with the realization that the water kiosks needed additional external funding if they were to become a success.

The second decision was to outpace a local operations manager Kenya for 6 months to further push the testing and rollout process. His job was to find 20 suitable sites and finalize agreements with local communities. Although the NGO had developed a list of villages it thought were suitable, closer inspection showed that most of the villages suggested were not fit candidates for the program. Thus, this was a period of frustration for both LIFELINK management and Grundfos. Grundfos LIFELINK management had to acknowledge that several of the assumptions they had built their strategy on were inaccurate. In particular, they had miscalculated the interests of the NGO in the process. The NGO was primarily concerned with its aid programs; they saw Grundfos as a potential contributor to these programs rather than the other way around. They had already established programs in some villages, and their choice of potential villages for the Grundfos LIFELINK project was strongly biased by their current operations. These rural villages or even whole areas often lacked the basics needed for operating the system. Some had no capital flows or mobile telephones, and they had insufficient cattle holding or agricultural activity in need of a water supply. Furthermore, these villages often lacked a borehole.

4.6 | A change of approach in strategizing efforts

By November 2008, Grundfos LIFELINK management had no operating sites in any villages, only several failed negotiations with villages that were not suited for the project. The LIFELINK managers realized that they needed to take a more active role in the location of sites and the negotiation of the agreements with the local villages:

Teaming up with a local NGO was a great mistake from our side. We knew very little about BoP markets and had no concepts to grasp the local market conditions in rural areas, but we believed that our knowledge

from servicing hotels and other more economically advanced customers in Kenya would be useful to us. Like everybody else from our part of the world, we teamed up with the local NGO experts and explained our purpose—to erect 20 commercially operated test sites—and then left it to them. ... We learned that there are many agendas and that a clear division of work between us and the NGO was not possible. We learned that, as a BoP operator, you need to control all activities and enroll people in your design, rather than linking to existing systems, as they seldom serve your interests. (General manager, LIFELINK)

A new approach was needed. Extending control over activities like sales, lease agreements, and negotiations with the local telecom operator necessitated a subsidiary in Kenya. Grundfos LIFELINK had established a subsidiary, and with it, a new sales organization, situated in Nairobi and headed by a newly appointed manager. His job was to focus directly on the regional water boards to find a suitable partner. The water boards had funding to support water supply initiatives in the local villages. A second source of funding was the Danish Embassy in Nairobi. LIFELINK also decided to replace the NGO as the go-between to the villages and, instead, hired two anthropologists to conduct research in the villages to understand consumption patterns better; they would offer insights to help Grundfos profile the potential customer villages:

The big problem that LIFELINK experienced at the time was identifying the relevant villages and how to approach them. This was primarily the headache of our CEO and our local community consultant. From what we learned in Katitika, however, we soon discovered another serious challenge: The agreed price for water was simply too high, and it was unlikely that village inhabitants would ever pay 5 shillings per jerry can, since the perceived 'normal' price for water in a public 'water kiosk' is 2–3 Kenyan shillings per jerry can. Furthermore, the water consumption was much less than what had previously been expected. (New Business Developer)

This made it clear to the LIFELINK team that the commercial funding model would never be the primary one. Instead, LIFELINK management saw a different perspective for establishing their water kiosk. An important lesson learned was that it was necessary to alter the financing scheme. Rather than looking for prospective customers for LIFELINK, they needed to think of the water kiosk as an entrepreneurial project. Rather than thinking about how to bring the kiosk to the village and make users pay for their current consumption, their focus should be on how the kiosk could generate local growth once there. With the new approach, LIFELINK could be seen as a community development platform that could attract other organizations and NGOs. In this sense, the focus had drifted away from the original idea,

but it was still aligned with the notion of Grundfos as a system and service provider connected to water technology and the NBD division as the innovative explorer of such possibilities.

From the onset, the business contract was imagined and constructed as an agreement with the local community. The surplus generated from the daily payments for water was supposed to finance a loan taken out by the community. Once it was realized that five shillings was an unrealistic price, it was also clear that this model would fail. Other sources of revenue needed to be looked for to finance at least the initial investment, to complement what became labeled as the "commercial model." One new model developed was based on donations: NGOs, humanitarian organizations, and others could finance the system, and only the service contracting costs would be paid through the user fee. A second model was a semi-commercial model that mixed community user fees with donations from donors, such as government, regional development banks, or the World Bank. With the semi-commercial model and donation model, Grundfos again changed their focus. It became increasingly important to attract funds from donors with interest in developing countries, as well as to raise funds through other means. Notes from the board meeting in June and the extraordinary meeting in August 2008 reflect this. Documentation of the sustainability of LIFELINK became even more critical than before. It was now at the core in raising more capital for the water kiosks. The local consultants developed a procedure for negotiating with the local communities and evaluating the impact of the water kiosks. Following this procedure, a baseline study was conducted, starting with an overall assessment of the local village, which has become a standard procedure in Grundfos LIFELINK's business opportunity assessment activities. This study was to be followed up by an impact study after 18 months of operation and used as documentation and potential validation of the health effects of establishing a water kiosk.

Eventually, as the complexity around initiating and managing operations grew, activities did not scale up as intended, and following a change in top management at Grundfos, they discontinued the LIFELINK project. NBD management had reached the conclusion that, although LIFELINK was showing signs of making an operating profit, it was becoming comprehensive in scope and too far removed from Grundfos's other business activities. This would make scaling of the business model extremely difficult. During an interview, one manager pointed out that marketing LIFELINK in other countries would call for a reorganization of the subsidiaries in Grundfos, given the very different approaches, incentive models, timelines, and milestones needed for successful rollout in the organization.

5 | ANALYSIS AND INTERPRETATION

The case of Grundfos LIFELINK demonstrates that entering a BoP market represents a challenge for the strategic planning and management activities of MNCs. With the LIFELINK project, Grundfos set out to "do good" by delivering safe, fresh water to poor rural communities—and hoped to "do well" in the process of tapping into

the opportunity it saw at the BoP (Prahalad, 2004). However, as many other MNCs have also found (Hart et al., 2016), “doing well by doing good” was not as straightforward as Grundfos initially expected. The realization that Grundfos was moving into entirely new business areas with correspondingly new demands for capabilities and skillsets eventually led to the discontinuation of LIFELINK as an independent business unit. This conclusion plays into the ongoing discussion concerning whether MNCs must reinvent themselves and engage in cocreating the market space to successfully integrate SDG targets into their strategizing efforts toward BoP contexts (Ausrød, Sinha, & Widding, 2017). Kolk and Pinkse (2008, pp. 1359–1360) write:

The extent to which MNEs [multinational enterprises] are also taking the responsibility to become agents of global change that tackle sustainability issues is still highly debated. ... But do MNEs also take the effort to invest in sustainable technologies, and if so how far are they willing to go, if this also means moving away from technologies they are familiar with?

Although the SDGs had not been formulated when the Grundfos LIFELINK project was launched, Grundfos linked the LIFELINK project to the SDG goals. LIFELINK contributes to the target of achieving universal and equitable access to safe and affordable drinking water for all by 2030 (SDG target 6.1). Initially, Grundfos tried to solve the problem of providing safe drinking water to local communities by building on familiar technologies, working with established business partners, and collaborating with an NGO to help identify suitable villages and negotiate terms with local authorities. Using civic sector organizations as intermediaries is common in BoP environments, as it can help bridge institutional voids (Gold, Chowdhury, Huq, & Heinemann, 2019; Heuer et al., 2020; Schuster & Holtbrügge, 2014), but Grundfos's experience underscores that companies should think carefully about which civic sector organizations they collaborate with.

Once it became clear that the initial approach was not sufficient, Grundfos looked beyond familiar technologies and partners and was able to develop a novel business model. However, this turned out to be too radical for the rest of the organization. Although not a commercial success when viewed in isolation, the LIFELINK project has nevertheless contributed to Grundfos's ongoing transformation and supports the journey toward being a contributor to the SDG goals, as also explained by the current CEO of Grundfos, Mads Nipper, when addressing the UN leaders' summit (<https://youtu.be/HEIFEBcDDWI>). In this sense, Grundfos fits the character of an MNC “trailblazer” in relation to its environmental efforts (Shah & Arjoon, 2015). The case study suggests that the development of value creation practices in BoP contexts involving local stakeholders, for example, in the shape of payment systems, must also consider alignment with global value creation practices toward other stakeholders, such as funding agencies. In this sense, our case suggests that the shaping of markets also entails alignment and interconnection of market actors.

With the LIFELINK project, Grundfos entered uncharted territory. In line with the building approach to strategizing (Chia & Holt, 2009),

Grundfos started by defining a destination and tried to make a map containing navigational details in the shape of project milestones and other signposts intended to signal the progress made. Grundfos's standard approach to strategizing is one of careful strategic planning and control, and in line with the company, it initially developed a plan that reflected best practices of the planning and design school within strategic management (Mintzberg, Ahlstrand, & Lampel, 1998). The process began after Grundfos CEO Niels Due Jensen identified a potential opportunity for creating a profitable business delivering safe freshwater in BoP markets, although the opportunity identification occurred somewhat serendipitously. Grundfos's New Business division then began a navigational process where they tried to analyze the market potential and develop an economically viable strategy for providing safe drinking water to small communities. The market analysis was based on maps representing the “topology” of the environment to be mastered. Thus, Grundfos had a clear purpose in mind for its activities. The clarity of purpose and the restricted tolerance toward deviation from established procedures when facing uncontested strategic terrain reflects the inherent MNC problems of translating between strategy implementation and strategy formulation in complicated organizational settings, as discussed by Olsen and Boxenbaum (2009) and expanded on in this work. The New Business Board engaged in a dialogue and successfully transitioned from a narrow conception of business opportunities into a broader one, developing several innovative solutions to the problems encountered. Some of these have turned into generic skills, such as the AQtap, a water ATM usage monitoring and payment system that is now marketed by Grundfos as a standalone solution for ensuring transparent payment systems. However, in doing so, they also participated in gradually transforming the operational model of Grundfos LIFELINK to the extent that it no longer fit with the rest of the Grundfos organization.

Having designed a strategy, Grundfos LIFELINK set about implementing it. However, as the LIFELINK wayfaring team began to engage with their environment and interacted with other actors in it, the building approach fell short. Among other things, the planned route for arriving at the destination proved treacherous because the NGO with which Grundfos had become entangled did not perform as hoped. Therefore, Grundfos disengaged from the NGO and began to explore other ways of going forward, acting purposively rather than with a clear purpose in mind (Chia & Holt, 2009). As the project champions responsible for the implementation of the strategy engaged with the local environment in Kenya, they stopped being travelers going from A to B and instead became wayfarers who actively engaged with their environment. In the process, the activities of the Grundfos LIFELINK team began to diverge from the original plan, and they ended up obscuring the original target. Consequently, their perspectives and aspirations regarding the project began to differ from those communicated initially and held by their superiors on the New Business Board. As a consequence, a new dynamic unfolded between the Grundfos LIFELINK team experiencing and exploring the possibilities of the tricky terrain first-hand and the New Business Board, which remained remote and asynchronous in time and space. The

LIFELINK team rethought and represented the strategic intent to stakeholders in a manner that tied in with the original purpose, and thus, legitimized project continuation. At the same time, they worked to modify it so what constituted success or failure was changed and aligned with their ongoing experiences. This process of strategic coping through alignment over time is an exciting addition to the discussion of wayfaring.

As illustrated above, Grundfos LIFELINK has followed a long and complicated route from initiation to realization; thus, it provides an excellent empirical backdrop for investigating the strategy work involved in the interaction between the activities related to designing, planning, and implementing a strategy in a BoP context. Individuals come to know others in their social worlds by being attentive and responsive to the subtle cues that reveal the nuances of their relationships toward them (Ingold, 1993). Learning is less about developing schemas for constructing the environment than engaging with its various constituents (Ingold, 2000).

Although Grundfos LIFELINK started out using a building approach to strategy, it abandoned this and instead embarked on strategic wayfaring, trying to gain experience with the terrain and working more closely with other actors. The change in direction was not the result of a conscious, strategic decision, but rather occurred incrementally as key personnel developed experience with the environment through their everyday coping efforts. To facilitate this wayfaring process, Grundfos hired an anthropologist to help the firm develop a good understanding of what the target market wanted and was willing to pay for safe water. Thus, members of the wayfaring team demonstrated a willingness to experience and be exposed to the environment, to feel unguided and to step beyond the comforts of established plans and safe environments.

That the building approach fell short created tensions and challenges that lasted throughout the period studied, which the LIFELINK team tried to resolve through recurring sketch mapping efforts (Ingold, 2007; Wood, 1993a,b). The LIFELINK team succeeded in convincing the LIFELINK board to change the strategic approach; thus, they were able to morph into a dwelling mode where the initial aspirations and milestones used to evaluate the soundness of the project were downgraded compared with the learning and development possibilities that emerged.

The case demonstrates that understanding the environment and developing an appropriate strategy is inherently social, as actors tell stories about their experiences to each other and develop a shared, transitory understanding of the territory and determine how to go on (Shotter, 2008). The Grundfos LIFELINK team together with the New Business Board weaved a strategy that allowed them to develop a strategic direction that reflected the experience Grundfos LIFELINK employees gained through active engagement with the environment more than Grundfos's initial intentions. We think that it was the ability to link these new experiences with the original aims of the project that helped this transition take place, as well as having the support from the board throughout the transformation. There is no detached view from which to view the environment—it can only be experienced from within, by being thrown into the thick of it.

Another important observation is acknowledging the starting point of the journey, in our case, the role of the initial map in creating rigidity for the wayfaring process. The ideas initially sketched and the detailing of milestones differ in importance and quality for the people involved in the wayfaring process (the Grundfos LIFELINK team and particularly the people that went to Kenya) and those staying behind (specifically the New Business Board). For the latter group, the initial ideas remained essential reference points and were used to understand the means-ends logic of the steps taken to reach the destination originally envisioned and to evaluate the progress of the project. However, for the former group, the milestones changed in meaning as they experienced and molded the environment through which they were traveling. Some aspects of the strategy were discarded outright, whereas other aspects changed in meaning. The changes included what the objective should be, who should be involved, and how value should be created. To convince the New Business Board, the LIFELINK team resorted to using existing internal measurements and objectives in the Grundfos new business strategy focus to justify the project and avoid project closure (Halme et al., 2012; Olsen & Boxenbaum, 2009).

In the case of Grundfos LIFELINK, the board of the parent company and the managers directly involved set out with a plan for how to enter the market, but the managers who developed direct experience with the environment soon realized that the assumptions on which this plan was founded were seriously flawed. They began a process of readjustment or reweaving of the strategy in practical engagement with the environment they were now part of. At the same time, they had to secure continued support from a CEO and board that did not have this experience. Strategy praxis has an element of a performance, where actors have to perform to be persuasive. Comparing PowerPoint presentations from the board meetings over time provides an interesting dimension to the journey and the attempts to bridge the diverging path that the local LIFELINK team took. The LIFELINK team did not place new information into an overall classificatory scheme, but instead, a scheme emerged from the stories they told. It was through the crafting of the narratives that the managers in control of resources were convinced. The PowerPoint presentations are consistent and address milestones and concerns of the initial group, but they were used to highlight newly discovered opportunities rather than ponder failed or missed milestones. In this sense, they also testify to the divergences of the route made and discontinuous breaks from presentation to presentation that were not made explicit to the board.

6 | DISCUSSION AND CONCLUSION

Little is known about how MNCs contribute to meeting the UN's SDGs (Witte & Dilyard, 2017). This explorative study of Grundfos LIFELINK demonstrates the importance of intimate engagement with the context of strategic action and the dangers for MNCs of trying to replicate or impose an existing business model when entering new and radically different markets in BoP contexts to

address a key sustainable development issue—providing access to safe drinking water.

If Grundfos had followed the approach suggested by Seelos and Mair (2007) with LIFELINK and tried to leverage its existing resources and competences, it would have continued to focus on water pumps and adjacent services. By abandoning a formalistic approach to strategic planning and management, developing the Grundfos LIFELINK business model represents a purposive practical accomplishment that has contributed to providing access to clean drinking water for nearly 100,000 people in local communities in Kenya (Grundfos, 2020b). The managers and board of Grundfos set out with what they saw as a clear understanding (or map) of the territory to be navigated. The making of this map was rooted in the parent firm's core understandings of pump technology application in the economically mature economy. It consistently underplayed the differences related to the natural and sociocultural environment. The managers involved soon discovered that their map was of little use to them because it was impossible to travel forward along the road that it suggested. Instead, they began to explore the natural and social environment that they were now part of. Rather than try to repair a faulty map or make a new map, they were *mapping* (Ingold, 2000). This is crucial, as *mapping* draws meaning from the communicative contexts of its enactment and changes direction accordingly, whereas *map making* is an inscriptive practice of engaging with the environment. Mapping also suggests a broadened awareness, where issues (e.g., the state of the water quality and the boreholes, the road infrastructure, Wi-Fi connections, and other aspects of the environment) enter into the strategy maker's consideration.

These concerns echo previous debates over strategy processes. The learning school of strategic management discarded the overly rationalistic assumptions of the so-called strategic planning school long ago (Mintzberg et al., 1998), and instead, envisaged strategy formation as an emerging process (Mintzberg & Waters, 1985). According to this perspective, realized strategies (understood as consistency in action over time) can emerge unintentionally in response to an evolving situation. Emergence implies learning what works, as one step is taken at a time in search of a viable pattern of action (Mintzberg & Waters, 1985). However, the learning school is not clear about the specific processes through which strategies emerge. We think that the strategy-as-wayfaring perspective developed here provides a framework addressing the processes through which strategic intent and experience converge into realized strategic actions—particularly when many environmental elements are alien to the organization.

There is a growing interest in the micro-foundations of strategy making (e.g., Hendry, 2000; Whittington, 1996). Researchers strive to be closer to the world of practitioners and their concrete activities while acknowledging that strategy work and the outcomes of the resulting strategies rely on broader organizational and institutional practices (Vaara & Whittington, 2012). Practices often include strategic documents, such as strategy plans, but rather than assuming these plans to control and guide actions, some stakeholders use them in their attempt to legitimize their actions and to discipline particular actions of other stakeholders (Mantere & Vaara, 2008). The study

contributes to the BoP strategy literature by demonstrating the interrelationship between different levels of analysis, the individual manager, the firm (micro-context), and the environment (macro-context). Second, our paper deals with contextual emergence, which Vaara and Whittington (2012) identified as an essential topic for strategy research. Thus, the paper provides empirical support to the notion that strategies are not designed to meet the needs of BoP environments but must be weaved in a cocreative process mobilizing and involving the local context if they are to succeed. In this sense, the case supports the notion that business activities imposed on a complex or even “hostile” environment must not be too rigid in its demands to this context. Instead, it must maintain elements of adaptability, flexibility, and responsiveness.

The importance of engaging with both the natural and social environment is clear from the case of Grundfos LIFELINK. It is through active engagement with the environment that MNCs can test, discard, adopt, and develop strategies, and through this, firms change.

There are limitations to our study as well. It is based on a single case, primarily seen from the perspective of the MNC and one specific BoP context. This fact restrains the empirical generalizability of our findings. As already pointed out, explorative case studies are made for different purposes. They detailed understandings on how and why issues, rather than questions about how much and how many (Yin, 2015). In our case, we think that a detailed view into the decision-making processes of strategy teams engaged in BoP strategizing is useful for practice and research.

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REFERENCES

- Acosta, P., Kim, N., Melzer, I., Mendoza, R. U., & Thelen, N. (2011). Business and human development in the base of the pyramid: Exploring challenges and opportunities with market heat maps. *Journal of World Business, 46*(1), 50–60. <https://doi.org/10.1016/j.jwb.2010.05.017>
- Angwin, D., & Cummings, S. (2017). *The strategy pathfinder: Core concepts and live cases*. Chichester, West Sussex, United Kingdom: John Wiley & Sons.
- Arora, S., & Romijn, H. (2011). The empty rhetoric of poverty reduction at the base of the pyramid. *Organization, 19*(4), 481–505.
- Ausrød, V. L., Sinha, V., & Widding, Ø. (2017). Business model design at the base of the pyramid. *Journal of Cleaner Production, 162*, 982–966. <https://doi.org/10.1016/j.jclepro.2017.06.014>
- BBC World News. (2012). BBC World News Horizons examines how rural communities are using low-technology to resolve water scarcity. <https://www.bbc.co.uk/mediacentre/worldnews/240412horizonss3e6.html> (accessed 11 June 2020).
- Brozovic, D. (2020). Business model based on strong sustainability: Insights from an empirical study. *Business Strategy and the Environment, 29*(2), 763–778. <https://doi.org/10.1002/bse.2440>
- Chia, R., & Holt, R. (2006). Strategy as practical coping: A Heideggerian perspective. *Organization Studies, 27*(5), 635–655. <https://doi.org/10.1177/0170840606064102>
- Chia, R., & Holt, R. (2009). *Strategy without design: The silent efficacy of indirect action*. Cambridge: Cambridge University Press.
- Chia, R., & Rasche, A. (2010). Epistemological alternatives for researching strategy as practice: Building and dwelling worldviews. In D. Golsorkhi,

- L. Rouleau, D. Seidl, & E. Vaara (Eds.), *Cambridge handbook of strategy as practice* (pp. 34–46). Cambridge University Press.
- Corley, K. G., & Gioia, D. A. (2004). Identity ambiguity and change in the wake of a corporate spin-off. *Administrative Science Quarterly*, 49(2), 173–208.
- Cummings, S., & Angwin, D. (2004). The future shape of strategy: Lemmings or chimeras? *Academy of Management Perspectives*, 18(2), 21–36. <https://doi.org/10.5465/ame.2004.13837454>
- Dembek, K., Sivasubramaniam, N., & Chmielewski, D. A. (2019). A systematic review of the bottom/base of the pyramid literature: Cumulative evidence and future directions. *Journal of Business Ethics*, 1–18. <https://doi.org/10.1007/s10551-019-04105-y>
- Dreyfus, H. L. (1991). *Being-in-the-world: A commentary on Heidegger's being and time, Division I*. Cambridge: MIT Press.
- Duke, D. (2016). Why don't BoP ventures solve the environmental problems they initially set out to address? *Organization & Environment*, 29(4), 508–528. <https://doi.org/10.1177/1086026616663271>
- Flyvbjerg, B. (2006). Five misunderstandings about case-based research. *Qualitative Inquiry*, 12, 219–245. <https://doi.org/10.1177/1077800405284363>
- Garrette, B., & Karnani, A. (2010). Challenges in marketing socially useful goods to the poor. *California Management Review*, 52(4), 29–47. <https://doi.org/10.1525/cmr.2010.52.4.29>
- Gebauer, H., & Saul, C. J. (2014). Business model innovation in the water sector in developing countries. *Science of the Total Environment*, 488–489, 512–520.
- Gold, S., Chowdhury, I. N., Huq, F. A., & Heinemann, K. (2019). Social business collaboration at the bottom of the pyramid: The case of orchestration. *Business Strategy and the Environment*, 29(1), 262–275.
- Grundfos. (2020a). Innovation and cooperation bring sustainable water supply to rural Kenya. <https://www.grundfos.com/cases/find-case/innovation-and-cooperation-bring-sustainable-water-supply-to-rural-kenya.html>
- Grundfos. (2020b). Grundfos LIFELINK projects in Kenya—Connecting the link to sustainable water supply. <https://www.grundfos.com/cases/find-case/grundfos-lifelink-projects-in-kenya.html>
- Halinen, A., Medlin, C., & Törnroos, J.-Å. (2012). Time and process in business network research. *Industrial Marketing Management*, 41(2), 215–223. <https://doi.org/10.1016/j.indmarman.2012.01.006>
- Halme, M., Lindeman, S., & Linna, P. (2012). Innovation for inclusive business: Intrapreneurial bricolage in multinational corporations. *Journal of Management Studies*, 49(4), 743–784. <https://doi.org/10.1111/j.1467-6486.2012.01045.x>
- Hart, S., Sharma, S., & Halme, M. (2016). Poverty, business strategy, and sustainable development. *Organization & Environment*, 29(4), 401–415. <https://doi.org/10.1177/1086026616677170>
- Hart, S. L. (2015). Prologue: Defining the path towards a BoP 3.0. In F. C. Canaque, & S. L. Hart (Eds.), *Base of the pyramid 3.0: Sustainable development through innovation and entrepreneurship* (pp. 1–4). Greenleaf.
- Hart, S. L., & Milstein, M. B. (1999). Global sustainability and the creative destruction of industries. *Sloan Management Review*, 41(1), 23–33.
- Hendry, J. (2000). Strategic decision making, discourse, and strategy as social practice. *Journal of Management Studies*, 37(7), 955–978. <https://doi.org/10.1111/1467-6486.00212>
- Heuer, M. A., Khalid, U., & Seuring, S. (2020). Bottoms up: Delivering sustainable value in the base of the pyramid. *Business Strategy and the Environment*, 29(3), 1605–1616. <https://doi.org/10.1002/bse.2465>
- Hockerts, K. (2015). A cognitive perspective on the business case for corporate sustainability. *Business Strategy and the Environment*, 24(2), 102–122. <https://doi.org/10.1002/bse.1813>
- Ingold, T. (1993). The art of translation in a continuous world. In G. Pálsson (Ed.), *Beyond boundaries: Understanding, translation and anthropological discourse* (pp. 210–230). Berg.
- Ingold, T. (2000). *The perception of the environment: Essays in livelihood, dwelling and skill*. London: Routledge.
- Ingold, T. (2007). *Lines: A brief history*. Routledge.
- Ingold, T. (2011). *Being alive: Essays on movement, knowledge and description*. London: Routledge.
- Kaplan, S. (2011). Strategy and PowerPoint: An inquiry into the epistemic culture and machinery of strategy making. *Organization Science*, 22(2), 320–346. <https://doi.org/10.1287/orsc.1100.0531>
- Karamchandani, A., Kubzansky, M., & Lalwani, N. (2011). Is the bottom of the pyramid really for you. *Harvard Business Review*, 89(3), 107–111.
- Karnani, A. (2006). Misfortune at the bottom of the pyramid. *Greener Management International*, 51, 99–110.
- Karnani, A. (2007). The mirage of marketing to the bottom of the pyramid: How the private sector can help alleviate poverty. *California Management Review*, 49(4), 90–111. <https://doi.org/10.2307/41166407>
- Karnani, A. (2011). Doing well by doing good: The grand illusion. *California Management Review*, 53(2), 69–86. <https://doi.org/10.1525/cmr.2011.53.2.69>
- Kolk, A., Kourula, A., & Pisani, N. (2017). Multinational enterprises and the Sustainable Development Goals: What do we know and how to proceed? *Transnational Corporations*, 24(3), 9–32. <https://doi.org/10.18356/6f5fab5e-en>
- Kolk, A., & Pinkse, J. (2008). A perspective on multinational enterprises and climate change: Learning from an inconvenient truth? *Journal of International Business Studies*, 39(8), 1359–1378. <https://doi.org/10.1057/jibs.2008.61>
- Kristensen, P. H., & Zeitlin, J. (2005). *Local players in global games: The strategic constitution of a multinational corporation*. Oxford, Oxford University Press on Demand.
- Landrum, N. E. (2007). Advancing the “base of the pyramid” debate. *Strategic Management Review*, 1(1), 1–12.
- London, T., & Hart, S. L. (2004). Reinventing strategies for emerging markets: Beyond the transnational model. *Journal of International Business Studies*, 35(5), 350–370. <https://doi.org/10.1057/palgrave.jibs.8400099>
- Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: Stories, legitimacy and the acquisition of resources. *Strategic Management Journal*, 22, 545–564. <https://doi.org/10.1002/smj.188>
- Mantere, S., & Vaara, E. (2008). On the problem of participation in strategy: A critical discursive perspective. *Organization Science*, 19(2), 341–358. <https://doi.org/10.1287/orsc.1070.0296>
- Michailova, S., Piekkari, R., Storgaard, M., & Tienari, J. (2017). Rethinking ethnocentrism in international business research. *Global Strategy Journal*, 7(4), 335–353. <https://doi.org/10.1002/gsj.1159>
- Mintzberg, H. (1987). *Crafting strategy* (pp. 66–75). Boston, MA: Harvard Business School Press.
- Mintzberg, H. (1991). Learning 1, planning 0 reply to Igor Ansoff. *Strategic Management Journal*, 12(6), 463–466. <https://doi.org/10.1002/smj.4250120606>
- Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). *Strategy safari: A guided tour through the wilds of strategic management*. Free Press.
- Mintzberg, H., & Waters, J. A. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, 6, 257–272. <https://doi.org/10.1002/smj.4250060306>
- Muusten, M., Rhyne, L., & Zheng, C. (2013). Asset or constraint: Corporate reputation and MNCs involvement in the least developed countries. *Journal of World Business*, 48(3), 321–328. <https://doi.org/10.1016/j.jwb.2012.07.016>
- Newell, P. (2008). CSR and the limits of capital. *Development and Change*, 39(6), 1063–1078. <https://doi.org/10.1111/j.1467-7660.2008.00530.x>
- Olsen, M., & Boxenbaum, E. (2009). Bottom-of-the-pyramid: Organizational barriers to implementation. *California Management Review*, 51(4), 100–125. <https://doi.org/10.2307/41166507>

- Organisation for Economic Co-operation and Development. (2008). Multi-national enterprises in the global economy—Heavily debated but hardly measured [Policy note]. <https://www.oecd.org/industry/ind/MNEs-in-the-global-economy-policy-note.pdf>
- Pettigrew, A. M. (1997). What is a processual analysis? *Scandinavian Journal of Management*, 13(4), 337–348. [https://doi.org/10.1016/S0956-5221\(97\)00020-1](https://doi.org/10.1016/S0956-5221(97)00020-1)
- Prahalad, C. K. (2004). *The fortune at the bottom of the pyramid: Eradicating poverty through profits*. Wharton School Publishing.
- Prahalad, C. K., & Hammond, A. (2002). Serving the world's poor profitably. *Business Review*, 80(9), 48–57.
- Prahalad, C. K., & Hart, S. L. (2002). The fortune at the bottom of the pyramid. *Strategy and Business*, 26, 54–67.
- Rivera-Santos, M., & Rufin, C. (2010). Global village vs. small town: Understanding networks at the base of the pyramid. *International Business Review*, 19(2), 126–139. <https://doi.org/10.1016/j.ibusrev.2009.07.001>
- Sánchez, P., & Ricart, J. E. (2010). Business model innovation and sources of value creation in low-income markets. *European Management Review*, 7(3), 138–154. <https://doi.org/10.1057/emr.2010.16>
- Schrader, C., Freimann, J., & Seuring, S. (2012). Business strategy at the base of the pyramid. *Business Strategy and the Environment*, 21(5), 281–298. <https://doi.org/10.1002/bse.727>
- Schuster, T., & Holtbrügge, D. (2014). Benefits of cross-sector partnerships in markets at the base of the pyramid. *Business Strategy and the Environment*, 23(3), 188–203. <https://doi.org/10.1002/bse.1780>
- Seelos, C., & Mair, J. (2007). Profitable business models and market creation in the context of deep poverty: A strategic view. *Academy of Management Perspectives*, 21(4), 49–63. <https://doi.org/10.5465/amp.2007.27895339>
- Shah, K. U., & Arjoon, S. (2015). Through thick and thin? How self-determination drives the corporate sustainability initiatives of multinational subsidiaries. *Business Strategy and the Environment*, 24(6), 565–582. <https://doi.org/10.1002/bse.1838>
- Shotter, J. (2008). *Conversational realities revisited*. Taos Institute.
- Simanis, E., & Hart, S. (2008). *The base of the pyramid protocol: Toward next generation BoP strategy (Version 2.0)*. Cornell University.
- Sousa-Zomer, T. T., & Miguel, P. A. C. (2018). Sustainable business models as an innovation strategy in the water sector: An empirical investigation of a sustainable product-service system. *Journal of Cleaner Production*, 171, S119–S129. <https://doi.org/10.1016/j.jclepro.2016.07.063>
- Stacey, R. D. (2007). *Strategic management and organisational dynamics*. Prentice Hall.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research—Grounded theory procedures and techniques*. Sage Publications.
- United Nations. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 25 September 2015*. United Nations: General Assembly.
- United Nations. (2019). *Special edition: Progress towards the Sustainable Development Goals. E/2019/68*. United Nations: Economic and Social Council.
- Vaara, E., & Whittington, R. (2012). Strategy-as-practice: Taking social practices seriously. *Academy of Management Annals*, 6(1), 285–336. <https://doi.org/10.5465/19416520.2012.672039>
- Viswanathan, M., Sreekumar, A., & Gau, R. (2018). Evolving and expanding marketing to address challenges and opportunities in BoP markets: Looking back and forward. In R. Singh (Ed.), *Bottom of the pyramid marketing: Making, shaping and developing BoP markets* (pp. 3–27). Emerald.
- Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. *Annual Review of Psychology*, 50(1), 361–386. <https://doi.org/10.1146/annurev.psych.50.1.361>
- Whittington, R. (1996). Strategy as practice. *Long Range Planning*, 29, 731–735. [https://doi.org/10.1016/0024-6301\(96\)00068-4](https://doi.org/10.1016/0024-6301(96)00068-4)
- Whittington, R., & Cailluet, L. (2008). The crafts of strategy. *Long Range Planning*, 41(3), 241–247. <https://doi.org/10.1016/j.lrp.2008.03.003>
- Winterhalter, S., Zeschky, M. B., & Gassmann, O. (2016). Managing dual business models in emerging markets: An ambidexterity perspective. *R&D Management*, 46(3), 464–479. <https://doi.org/10.1111/radm.12151>
- Witte, C., & Dilyard, J. (2017). Guest editors' introduction to the special issue: The contribution of multinational enterprises to the Sustainable Development Goals. *Transnational Corporations*, 24(3), 1–8. <https://doi.org/10.18356/799ae8b0-en>
- Wood, D. (1993a). What makes a map a map? *Cartographica*, 30(2–3), 81–86. <https://doi.org/10.3138/E4K6-P241-184J-6452>
- Wood, D. (1993b). The fine line between mapping and mapmaking. *Cartographica*, 30(4), 50–60. <https://doi.org/10.3138/N70Q-OR5X-694T-7868>
- Yin, R. K. (2015). *Case study research—Design and methods* (6th ed.). Thousand Oaks, CA: Sage.

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