

# Operations of cost-effective charities: A qualitative study

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## Operations of cost-effective charities: A qualitative study

### Abstract

**Purpose** — People donate to charities with the aim of improving society. Yet, many charities fail to use donations efficiently or have ineffective interventions. We explore the strategic operational priorities and processes that enable charities to efficiently implement their interventions and have a positive impact on society.

**Design/methodology/approach** — We first review the literature on charities to gain a deeper understanding of the current state of knowledge on charity operations. We then employ the lens of paradox theory and perform a qualitative investigation of six case studies to explore various aspects of the operations of charities that are known for being cost-effective.

**Findings** — We reveal how the strategic operational decisions of charities, as well as the processes they implement, help them resolve the tensions arising from the cost-effectiveness paradox. We show that cost-effective charities make strategic operational decisions that help maintain two diverging priorities: prioritizing the status quo and prioritizing change in how they deliver value. Another set of strategic decisions helps balance these two diverging priorities. We then show how these charities create and then maintain cost-effective operations.

**Originality** — We address recent calls for research on non-profit organizations in the field of operations management. To our knowledge, it is the first in-depth study of exemplary charity operations. The results can be used by charity executives as a benchmarking tool when they develop and implement their charitable interventions and by government agencies and potential donors when they select charities for their donations. Finally, the results should have implications for other organizations trying to have a positive societal impact.

**Keywords** — Charity operations, Paradox theory, Social impact, Operations strategy

**Paper Type** — Research paper

## 1. Introduction

People donate to charities with the aim of improving society. For instance, in 2021 in the United States alone, charitable donations reached a record-high US\$484 billion despite the ongoing pandemic (National Philanthropic Trust, 2022). However, there is a growing concern that many charities are not *efficient* in utilizing the financial resources they receive from donors, and instead allocate a significant portion of donations to cover their overhead expenses (Charitywatch, 2014). Even more troubling, charitable interventions often seem to fall short in *effectiveness* – in that they fail to demonstrate a positive impact on society (GiveWell, 2019).

MacAskill (2015) provides an example of a charity that received a great deal of donor support and yet failed to demonstrate its effectiveness. PlayPumps International championed a novel solution for the lack of drinking water in developing countries: installing pumps that work like a merry-go-round, to fill up storage tanks with clean water, while children play on them. Despite receiving several awards, such as the World Bank Development Marketplace Award, and gaining support from numerous corporations and celebrities such as First Lady Laura Bush and Jay-Z, PlayPumps was a huge failure. An independent assessment of this charitable intervention revealed that PlayPumps were five times less efficient than regular hand pumps because they required a sustained force to operate properly when children were not playing on them. Yet, play frequency fell off quickly, and women had to take on the task that they found humiliating. As this example highlights, failed charitable interventions imply that donated financial resources are wasted and indicate opportunities for considerable improvements.

Achieving both effectiveness and efficiency can be challenging for charities. Overemphasizing efficiency may weaken a charity's infrastructure and curtail its ability to pursue its social cause, reducing its effectiveness (Mitchell and Calabrese, 2023). Conversely, prioritizing

effectiveness may result in higher overhead costs and the prospect of financial instability (Cutt and Murray, 2000). To reconcile these dual – and often competing – goals, charities must devise strategies and processes to manage the tensions that arise in their operations.

The field of operations management (OM) is, at its core, concerned with improving organizational capabilities that lead to more efficient use of resources and achieving outcomes desired by the organizations (Boyer and Lewis, 2002, Ward et al., 1998). Surprisingly, however, it has largely neglected the non-profit sector in general (e.g., Meqdadi et al., 2020, Pagell et al., 2018, Berenguer and Shen, 2020) and charities in particular. Furthermore, the management and non-profit literatures on charities do not adequately address the cost-effectiveness paradox in charity operations. In this research, we study the operations of cost-effective charities through the lens of paradox theory (Lewis, 2000) to answer the following research question: *How can charities efficiently use the financial resources they receive from donors to have a positive impact on society?* We use the term "cost-effectiveness" to describe the pursuit of the dual goals of efficiency and effectiveness and refer to charitable organizations that accomplish it as "cost-effective charities" throughout the remainder of this paper.

We first conduct a systematic review of the OM literature, followed by a thorough review of the general management and non-profit literatures to gain a deeper understanding of the current state of knowledge on charity operations. We then perform a qualitative investigation of multiple case studies to explore various aspects of the operations of charities that are known for being cost-effective. Specifically, we explore the operations of six exemplary charities by leveraging secondary qualitative data, which are publicly available from GiveWell (<https://www.givewell.org/>), a leading organization dedicated to identifying cost-effective charities. The outcome of our research is a comprehensive theoretical framework of cost-effective

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3 charity operations. This framework reveals how the strategic operational decisions of charities, as  
4 well as the processes they implement, help them resolve the tensions arising from the cost-  
5 effectiveness paradox.  
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## 10 **2. Literature Review**

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12 Charities are non-profit organizations that pursue social causes, which appeal to the public for  
13 support (Wunderink, 2002). They depend on donors to fund their interventions (Brody, 2006); the  
14 specific actions or programs they implement to address their social cause. Unlike other non-profit  
15 organizations, charities serve the public interest rather than the interests of their members or a  
16 select group of individuals (Kistruck et al., 2013, Lewis, 2001). In this research, we focus on  
17 charities that are exemplary in terms of cost-effectiveness – achieving both effectiveness and  
18 efficiency in their interventions. Efficiency is defined as the ability of a charity to optimize the use  
19 of its resources (including time, funds, and labour) to accomplish its social cause, while  
20 effectiveness is about the charity's ability to have a positive impact on society. Charities can  
21 improve their efficiency if they reduce administrative and fundraising expenses and instead divert  
22 them toward their interventions (Bradley et al., 2003). Moreover, some social causes are cheaper  
23 to pursue than others (MacAskill, 2015). Effectiveness is expressed either as the quantified impact  
24 of a charity's intervention or the perceived value gained by beneficiaries, donors, and other  
25 relevant stakeholders (García et al., 2013, Herman and Renz, 1999).  
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45 In the context of charities, the relationship between efficiency and effectiveness is complex.  
46 Even though both measures are promoted, some scholars argue that the continued funding and  
47 survival of charities depend more on their efficiency rather than effectiveness (Nunnenkamp et al.,  
48 2013). For instance, Balsam & Harris (2018) found that executive bonuses, which are considered  
49 part of administrative costs, can have a negative impact on future donations. Yet, this emphasis on  
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3 efficiency sometimes leads to a negative phenomenon, where donor expectations for low  
4 administrative costs put pressure on charities to reduce their overhead spending or underreport it,  
5 ultimately reducing donors' future donations while further increasing their expectations (Gregory  
6 and Howard, 2009). In fact, some argue that overhead expenses are crucial for charities to build  
7 capacity and ultimately enhance their effectiveness and better serve their beneficiaries (Altamimi  
8 and Liu, 2022).

### 16 17 *2.1. OM Literature on Charities*

19 To better understand how charities should structure their operations to navigate the intricate  
20 relationship between effectiveness and efficiency and to identify the areas where we could inform  
21 the scholarly debate on cost-effective charities, we conducted a systematic review of the articles  
22 published in 20 main English language peer-reviewed OM journals during the 1990-2023 period.  
23 The papers were collected through a full-text search for “charity”, “charities”, “charitable”  
24 keywords using the Scopus database and search engine ([www.scopus.com](http://www.scopus.com)). The initial search  
25 yielded a total of 399 papers. After a thorough review of the abstracts and in line with our study  
26 objectives, we screened out the papers which were not relevant at all or did not fall within the  
27 scope of our study (i.e., papers focused on social enterprises, disaster relief operations, and papers  
28 that considered charities as part of a for-profit organization). The decision to include or exclude a  
29 paper in the sample was discussed between the two researchers.

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33 Following this content screening, we thoroughly reviewed each of the 47 remaining papers  
34 and extracted their main themes and constructs. Twenty-four articles focused on the fundraising  
35 aspect of charity operations while the remaining 23 papers fell within the scope of our study and  
36 focused on the operations of charities' intervention or explored the overlap between fundraising  
37 and intervention operations. While there are a few papers that provide a broad comparison of  
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3 charity operations and supply chains with those of for-profit organizations (Rivera et al., 2023,  
4 Berenguer and Shen, 2020), most of the OM research has focused on exploring the practices that  
5 can help charities overcome the operational constraints and navigate the uncertainties associated  
6 with charity operations.  
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### 12 *2.1.1. Resource allocation*

14 Charity operations are constrained by limited funds that come from external donations. These  
15 donations are often uncertain in terms of both timing and amount, and may be conditional in that  
16 they can only be allocated as per donor preferences (Berenguer and Shen, 2020). To overcome this  
17 constraint, charities must determine how to utilize their limited and uncertain resources. Several  
18 OM studies have developed optimization models for resource allocation and offered potential  
19 solutions for navigating funding uncertainty. For example, Devalkar et al. (2017) suggest that  
20 when charities possess a small amount of initial funds, they can deliver substantially higher  
21 benefits by using these initial funds to implement early phases of the intervention, create “results-  
22 certificates” from the completed phases, and invite donors to purchase those certificates to fund  
23 the remaining phases. Keshvari Fard et al. (2022) argue that charities are better off when they  
24 receive unconditional funding and when donors allow them to allocate unused donations to other  
25 interventions or beneficiaries. For some charities, optimal resource utilization leads to a decision  
26 on whether to operate as a direct service provider or as a grant provider to organizations that offer  
27 services to beneficiaries. Charities are more likely to choose the latter scenario when donors  
28 prioritize their operational efficiency over effectiveness (Arya and Mittendorf, 2016).  
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49 Charities may also engage with external stakeholders to enable their interventions or  
50 overcome their funding uncertainty. For instance, charities that seek to alleviate hunger often rely  
51 on the private sector to obtain food supplies (Baron et al., 2018) and those addressing refugee  
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3 crises need to rely on local organizations where the crisis is occurring (Moxham and Boaden,  
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5 2007). However, some charities hesitate to collaborate and share resources with other charities  
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7 because it can reduce media attention and, subsequently, future donations from individual donors  
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10 (Eftekhar et al., 2017).

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12 In addition to funding uncertainty, charity operations are also affected by the heterogeneity of  
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14 the target population of their interventions. Early models proposed funding numerous interventions  
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16 to maximize the efficiency of charitable operations (Lai and Xue, 1999). However, more recent  
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18 studies (e.g., Ma et al., 2023, Zhang et al., 2022) suggest that charities can provide partially-  
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20 complete products or services to the target population when the population's needs are highly  
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22 heterogeneous.  
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### 25 26 *2.1.2. Workforce management*

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28 Charitable operations are often constrained by their workforce, which usually consists of  
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30 volunteers and workers with distinct cultural backgrounds. Relying on volunteers creates  
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32 uncertainty because they tend to vary in terms of their experience and availability. To navigate this  
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34 uncertainty, several OM studies have examined strategies for enhancing volunteer satisfaction and  
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36 retention or proposed scheduling solutions. For example, Urrea et al. (2019) developed an agent-  
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38 based simulation model to explore strategies for pairing inexperienced and experienced volunteers.  
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40 Lacetera et al. (2014) suggest that volunteers tend to feel content when they receive a flexible  
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42 schedule, training, rewards and recognition. More satisfied volunteers tend to contribute more time  
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44 to their charities and encourage others to volunteer (Wisner et al., 2005). Online volunteering  
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46 platforms are among the innovative solutions that enable charities to scale up their volunteer force  
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48 (Manshadi and Rodilitz, 2022, Urrea and Yoo, 2023). Lastly, Salem et al. (2019) highlight the  
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50 importance of managing relational conflicts between subgroups of field-level workers, including  
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3 local and expatriate employees, with different cultural backgrounds and argue that charities should  
4 facilitate workers becoming more united within their subgroups.  
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### 6 7 8 *2.1.3. Performance assessment* 9

10 At the core of the OM literature on charity operations is performance assessment. Charities can  
11 gain more funding by assessing their performance and showcasing their impact (Moxham and  
12 Boaden, 2007). Yet, charity operations are often difficult to assess because of the complexity of  
13 their interventions, diverse funding sources, and the involvement of multiple stakeholders (Taylor  
14 and Taylor, 2014). Moreover, assessment is challenging because of the need to establish a close  
15 alignment between the charity's cause and its assessment system and demonstrate the both  
16 measures of efficiency and effectiveness (Medina-Borja and Triantis, 2014). Moxham and Boaden  
17 (2007) note that charities generally struggle to accurately assess their effectiveness, particularly  
18 due to the confidentiality barriers involved in tracking their stakeholders and beneficiaries. They  
19 may be able to overcome these challenges by using criteria established by regulators, funders, and  
20 the charities themselves (Moxham, 2009). If they succeed, they can continuously improve their  
21 operations and enhance their effectiveness and efficiency (Taylor and Taylor, 2014).  
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### 37 38 *2.1.4. Accountability* 39

40 An essential part of charity operations is managing relationships with a multitude of external  
41 stakeholders. To assure their financial viability and sustain their interventions, charities need to  
42 maintain public trust by enhancing the transparency of their operations and incorporating  
43 accountability measures (Moxham, 2009, Moxham and Boaden, 2007). This is crucial because the  
44 amount of donations they receive is often linked to their disclosed spending ratio, which presents  
45 their efficiency, as well as the extent and quality of their governance practices, including oversight  
46 committees and audits (Parsa et al., 2022, Zhuang et al., 2014). These governance practices also  
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3 help improve efficiency in charity operations, especially when donations are contingent upon  
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5 evidence of charity effectiveness (Privett and Erhun, 2011).  
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## 7 8 *2.2. Non-profit and Management Literatures on Charities*

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10 Given the scarce OM literature on charitable operations, we expanded our literature review to  
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12 examine relevant studies published in FT50 journals and major non-profit management journals.  
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15 Three themes that inform our research, emerged from this search.

### 16 17 *2.2.1. Partnerships*

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19 Charities often maintain their financial viability by forming collaborative partnerships with for-  
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21 profit organizations (Martínez, 2003, Andreasen, 1996, Laasonen et al., 2012, Ahmadsimab and  
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23 Chowdhury, 2021) or governments (Cortis and Lee, 2019). Both types of partnerships increase  
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25 certain risks for charities. While partnerships with for-profit organizations rely heavily on  
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27 relational factors such as mutual trust and commitment (Liu et al., 2018), they may compromise  
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29 charities' autonomy and attract greater public scrutiny (Baur and Schmitz, 2012, Kim et al., 2012).  
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31 Similarly, partnering with governments may expose charities to increased competition, austerity  
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33 measures, and higher demand for services, thereby elevating financial risks, especially if the  
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35 charities have insufficient funds (Cortis and Lee, 2019).  
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### 39 40 *2.2.2. Diversification*

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42 As charities grow, they may be incentivized to diversify either by expanding their presence to new  
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44 locations or engaging in new interventions that help address their social causes. Yet, intervening  
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46 in new locations and engaging in new interventions can be costly (Kistruck et al., 2013). Hence,  
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48 the relationship between diversification and efficiency is not straightforward. Kistruck et al. (2013)  
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50 show a U-shaped relationship between location diversification and efficiency and an inverted U-  
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52 shaped relationship between intervention diversification and efficiency. Mendoza-Abarca & Gras  
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3 (2019) argue that although intervention diversification may undermine charity efficiency, it may  
4 contribute to their long-term survival.  
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### 6 7 8 *2.2.3. Public scrutiny and governance* 9

10 This theme overlaps with the accountability theme discussed in the OM literature. Public scrutiny  
11 of charities has been on the rise (Chapman et al., 2021) and many charities have been criticized  
12 for having agency problems, such as high top management salaries (Core et al., 2006). Yet,  
13 regulatory attempts to improve the governance of charities have been largely unsuccessful (Dhole  
14 et al., 2015). Instead, voluntary governance mechanisms have proven more effective in  
15 establishing charities' trustworthiness and reducing the risk of fraud and conflicts of interest  
16 (MacDonald et al., 2002, Aggarwal et al., 2012). These mechanisms include monitoring by debt  
17 holders and government grantors, audits, board reviews, and the presence of restricted donations  
18 (Harris et al., 2017).  
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31 In addition, charities are increasingly adopting financial efficiency-based measures and  
32 publicly disclosing them to gain public trust and secure funding (Dawson, 1998, Carvalho et al.,  
33 2020). These disclosures, however, can undermine crucial long-term infrastructure investments  
34 (Arya and Mittendorf, 2015) or limit the ability of charities to pursue their social causes, potentially  
35 reducing their effectiveness over time (Mitchell and Calabrese, 2023). As a result, some  
36 disclosures may lack authenticity (Dhanani and Connolly, 2015).  
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45 Our extensive literature review highlights that while previous studies in OM and other  
46 management fields have provided insights into critical aspects of charity operations that can  
47 enhance either their effectiveness or efficiency, we lack a comprehensive understanding of how  
48 charities achieve both goals simultaneously.  
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### 3. Theoretical Lens: Paradox Theory

Paradox theory offers a useful theoretical lens for situations when organizations deal with multiple desirable goals that can be interdependent and, at times, conflicting, leading to tensions (Schad et al., 2016, Smith and Lewis, 2011). The notion of persistent tensions in paradox theory transitions organizations away from “either/or” thinking towards “both/and” thinking (Lewis, 2000, Schad and Bansal, 2018). The theory highlights that stressing one aspect of a paradox can actually intensify the need for the opposing aspect (Sundaramurthy and Lewis, 2003). This insight suggests that a contingency approach based on fixed trade-offs between goals may not be effective in complex situations. Instead, paradox theory focuses on management strategies that help embrace, cope with, and thrive through the tensions to achieve positive outcomes (Lewis and Smith, 2014).

Paradox theory has increased our understanding of how for-profit organizations pursue competing sustainability goals (e.g., Van der Byl and Slawinski, 2015) and social enterprises balance providing a social good and making a profit (e.g., Mason and Doherty, 2016). The paradox perspective has also garnered attention in OM research (e.g., Matthews et al., 2016, Zehendner et al., 2021). Davies et al. (2021) employ paradox theory to explore tensions rooted in efficiency and flexibility in service operations. Matos et al. (2020) posit that paradox theory can be useful to understand various tensions, including tensions that arise because of competing economic, environmental, and social goals. Longoni et al. (2019) rely on paradox theory to study tensions in a social enterprise that pursued the social goal of immigrant integration while simultaneously seeking to satisfy the needs of its paying customers.

Charities do not have to satisfy customers. Yet, those striving to be cost-effective face the dual – and often competing – goals of having a positive impact on society and efficiently using the financial resources they receive from donors (Litrico and Besharov, 2019, Gras and Mendoza-

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3 Abarca, 2014, Foster and Bradach, 2005, Lee and Bourne, 2017). The pursuit of this dual goal is  
4 likely to give rise to tensions (Smith and Lewis, 2011) in the strategic and tactical decisions made  
5 by charities. Therefore, paradox theory provided valuable insights into the operations of cost-  
6 effective charities and informed aspects of our research design such as case selection and analysis.  
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#### 12 **4. Methodology**

14 We conducted an inductive qualitative study of cost-effective charities to determine how they  
15 manage their operations. The ultimate aim of the research was to develop a comprehensive  
16 theoretical framework of cost-effective charity operations. Social scientists often use qualitative  
17 methods to address emergent topics such as cost-effective charities (Yin, 2017). Specifically,  
18 qualitative methods allow researchers to gain rich insights into an under-studied phenomenon and  
19 gain an in-depth understanding of organizational practices (Pagell et al., 2014, Eisenhardt, 1989).  
20 While a variety of qualitative methodologies are available, we used multiple case studies as this  
21 qualitative approach can help attain more generalizable findings (Barratt et al., 2011).  
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33 However, unlike most case studies which rely mainly on primary data, we rely on secondary  
34 qualitative data from GiveWell (<https://www.givewell.org/>), a leading organization dedicated to  
35 identifying cost-effective charities. Using secondary data for this study offered several advantages.  
36 First, it assured that the data were collected by different people than those who subsequently coded  
37 and analysed the data, allowing for less biased results. Second, the secondary data source we  
38 leveraged was longitudinal and captured operational changes in the sampled charities over time.  
39 Third, using open-source secondary data enables future replications and extensions, which is not  
40 possible with primary data<sup>1</sup>.  
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55 <sup>1</sup> The data collected for this research is available from the first author upon request.  
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#### 4.1. Data Collection

We used a combination of the reputational sampling strategy recommended by Miles et al. (2018) when cases are “chosen on the recommendation of an expert” (p. 28) and exemplar sampling used by Pagell and Wu (2009). This approach helped us identify and credibly verify charities that successfully navigate tensions to achieve their dual goal of cost-effectiveness.

In Summer 2021, we identified a pool of charities that had been assessed by GiveWell as being highly cost-effective. GiveWell conducts in-depth investigations of a large pool of charities, assesses whether they have been effective at alleviating their target social cause while keeping their interventions low cost, and establishes a list of the top cost-effective charities. While GiveWell’s list of the most cost-effective charities is relatively stable, GiveWell regularly reassesses charities and updates the list. Our sample contained the six charities that GiveWell ranked as highest among the top cost-effective charities. We further validated our sampling strategy by confirming that these six charities were also recommended by The Life You Can Save (<https://www.thelifeyoucansave.org/>), an organization with a similar purpose to GiveWell (Singer, 2015). GiveWell is committed to transparency and maintains a publicly accessible database of the vast documentation it uses to assess and establish the cost-effectiveness of the top charities it recommends (GiveWell, 2022). The core of our data came from these documents.

The initial step of our research was to ensure the following about the GiveWell data. First, we confirmed that there was sufficient evidence of cost-effectiveness for each sampled charity. Second, we confirmed that we would be able to identify the operational priorities and processes that enabled the charities to be cost-effective and therefore answer our research question. Even though we relied on secondary data, a case study protocol (Yin, 2017) was used when collecting the data and building the database to guarantee the same data were collected for each case and

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3 ensure reliability.  
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5 Our database was built from multiple sources that GiveWell collected over the years. These  
6 included interview transcripts with some of the sampled charities when GiveWell initially started  
7 collecting data (2010-2012) as well as subsequent detailed interview notes from multiple  
8 interviews over multiple years with all the charities in the sample. GiveWell typically interviewed  
9 high-ranking managers at these charities, such as their president, director, or COO. We also used  
10 GiveWell's detailed site visit notes, charity reports, and documents. In addition, GiveWell's  
11 detailed assessment reports were part of our database. These reports cover various aspects of the  
12 charities' operations and evidence of cost-effectiveness including academic empirical research on  
13 the effectiveness of the charities' interventions. These reports were important to confirm that each  
14 charity's intervention was effective at alleviating its target cause. We complemented data from the  
15 GiveWell's database with information collected from each charity's website<sup>2</sup>.  
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31 When designing a multiple-case study, Eisenhardt (1989) recommends collecting between  
32 four to ten cases to obtain generalizable results. But the actual number of cases should be  
33 determined by theoretical saturation, a point in the data collection efforts when researchers no  
34 longer learn anything substantially new by collecting additional data. We achieved the point of  
35 theoretical saturation while coding the fifth case where we observed themes and constructs that  
36 were also present in the first four cases. Nonetheless, we included the sixth top charity in our  
37 sample to confirm theoretical saturation.  
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47 Table I provides an overview of the six charities in our sample, their charitable cause, the  
48 intervention they use to address their cause, and the number of documents collected and coded for  
49 each case. All charities focus on causes that are (1) large-scale, (2) can be addressed via an  
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56 <sup>2</sup> The complete dataset is available upon request from the lead author.  
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3 intervention, and (3) exist in numerous, geographically clustered locations. These charities focus  
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5 on interventions which academic research has demonstrated are effective at addressing their target  
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7 cause. In the next section, we provide a more detailed overview of each case.  
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10 --- Insert Table I about here ---  
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## 12 *4.2. Case Descriptions: Charitable Causes and Interventions*

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### 14 *4.2.1. Give Directly*

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16 Give Directly (GD) focuses on eliminating extreme poverty. It operates in countries with large  
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18 populations of extremely poor households that can be reached through electronic payment systems.  
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20 These households lack money to spend on essential needs such as household goods, an iron roof,  
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22 and agricultural supplies.  
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26 GD provides these households with one-time unconditional wealth transfers – approximately  
27  
28 US\$1000 – via mobile payment services. GD sizes its wealth transfers to be analogous to the  
29  
30 annual household consumption level. GD’s transfers are unconditional both because they want  
31  
32 beneficiaries to make their own financial decisions and imposing conditions on how beneficiaries  
33  
34 spend the funds would require expensive monitoring measures. Since these are wealth – and not  
35  
36 periodic income – transfers, households are only eligible to receive them once.  
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### 39 *4.2.2. Deworm the World*

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41  
42 Deworm the World (DtW) combats two parasitic worm infections – schistosomiasis and soil-  
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44 transmitted helminthiases – in countries with high infection rates, focusing mostly on the latter  
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46 infection. These infections spread primarily in poor communities, disproportionately affecting  
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48 millions of school-aged children, potentially interfering with their nutrient uptake and  
49  
50 development, and ultimately threatening their future quality of life. Regular treatment with an  
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52 inexpensive medication has shown to be effective at treating these infections.  
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DtW leverages the existing governmental infrastructure and complements them by offering technical assistance to monitor the programs' cost-effectiveness and funding their monitoring and research components. DtW works with local governments to establish mass and systematic school-based deworming programs by (1) advocating for deworming programs, (2) evaluating infection prevalence, (3) helping with strategic decisions and planning, (4) assisting with drug procurement, (5) preparing training material, (6) supporting community sensitization efforts, and (7) monitoring the programs. DtW supports programs that aim to treat the entire target population whether or not they are infected.

#### 4.2.3. *Against Malaria Foundation*

Against Malaria Foundation's (AMF) cause is to protect people from malaria in malaria-endemic regions in developing countries. Transmitted by infected mosquitos, malaria is one of the leading causes of child deaths in Africa. In addition to being a large-scale humanitarian issue, malaria also has a significant negative economic impact on regions where it is prevalent.

According to World Health Organization (WHO), one of the most effective means of preventing malaria is sleeping under a mosquito net, specifically, a long-lasting insecticide-treated net. AMF aims to fill the existing gaps in funding and distribution of nets to achieve universal bed coverage in malaria-endemic regions. The charity funds and then distributes nets in sub-Saharan countries via its local partners. AMF's responsibilities include (1) identifying countries that need nets, (2) selecting local distribution partners and establishing monitoring requirements, (3) purchasing and delivering nets, (4) engaging independent partners to oversee the intervention and collecting distribution data, and (5) engaging independent partners to conduct follow-up assessment.

#### 4.2.4. *Malaria Consortium*

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3 Malaria Consortium (MC) works on preventing, controlling, treating, and ultimately eliminating  
4 malaria in Africa and Southeast Asia. Unlike AMF which distributes nets, MC focuses on  
5 preventing malaria infections by supporting national malaria campaigns to implement seasonal  
6 malaria chemoprevention programs. In these programs, community distributors, usually  
7 community health workers, distribute anti-malarial drugs to young children. MC's typical  
8 programs comprise four monthly cycles of four-day distribution periods during the high-  
9 transmission, rainy seasons. MC's ultimate goal is not to reduce transmission (like AMF), but  
10 rather to work towards malaria elimination. MC's role is to (1) manage drug sourcing and shipping,  
11 (2) fund distribution operations, (3) provide technical and logistical assistance, (4) offer support  
12 for financial management, (5) develop and organize training, (6) advocate for the programs, and  
13 (7) evaluate the programs.  
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#### 28 *4.2.5. Schistosomiasis Control Initiative Foundation*

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30 Like DtW, Schistosomiasis Control Initiative Foundation (SCI) works on treating schistosomiasis  
31 and soil-transmitted helminthiasis diseases. SCI's long-term goal is to eliminate these diseases  
32 with a specific focus on poorer sub-Saharan countries that face higher infection risks because of  
33 their weaker healthcare systems, lack of clean water, and inadequate sanitation infrastructure. SCI  
34 partners with local governments to create or scale up deworming programs for school-aged  
35 children and other high-risk communities, such as fishers. SCI's specific responsibilities in the  
36 mass drug administration (MDA) programs include (1) advocating for the benefits of deworming,  
37 (2) assisting local governments with planning, (3) delivering drugs, (4) offering financial and  
38 technical support, and (5) evaluating programs.  
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#### 51 *4.2.6. Helen Keller International*

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54 Helen Keller International (HKI) focuses on vitamin A deficiency which can cause stunting,  
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3 anaemia, blindness, increased severity of infections, and even death. HKI operates in African and  
4 South-East Asian countries where vitamin A deficiency is prevalent among young children who  
5 are most severely affected by the deficiency. The WHO recommends that these children receive a  
6 vitamin A supplement twice a year.  
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12 HKI supports government-run Vitamin A supplementation programs for preschool-aged  
13 children through mass distribution campaigns or routine delivery. These campaigns are either  
14 door-to-door where community health workers deliver and administer the supplements at homes  
15 or fixed-site campaigns where caregivers bring children to health facilities or outreach posts to  
16 receive the supplements. Specifically, HKI (1) advocates for Vitamin A supplementation programs  
17 to governments, (2) engages in social mobilization for these programs; (3) provides technical  
18 assistance such as monitoring, evaluation, and training, and (4) contributes funding to cover some  
19 program implementation costs.  
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### 30 31 *4.3. Data Coding and Analysis*

32 We compiled our database in the NVivo software which was used to code the qualitative data for  
33 each case. The goal of coding was to identify key theoretical constructs (Miles et al., 2018). Coding  
34 was an iterative process that began with an initial set of codes based on the existing literature.  
35 Specifically, we leveraged both the results of the literature review and research from the relevant  
36 fields including humanitarian logistics (Kovács and Spens, 2007, Van Wassenhove, 2006), project  
37 management (Westerveld, 2003) and supply chain management (Cao and Zhang, 2011) to  
38 construct the initial coding framework.  
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49 Two researchers independently coded each case, revisiting the coding until they reconciled all  
50 differences in their coding and reached 100% agreement. During the coding processes' numerous  
51 iterations, we made substantial changes to the set of codes. We refined the initial codes to better  
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3 reflect the empirical context, removed some of the initial codes that were not present in the data  
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5 and added new codes as new constructs emerged from the data. For instance, our initial coding  
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7 scheme contained a code 'intervention preparation' to capture the groundwork charities do to get  
8  
9 ready for their interventions. We ultimately divided this code into six different constructs (see the  
10  
11 upper part of Table IV), including 'using pilot projects' to capture the fact that cost-effective  
12  
13 charities start with small interventions and scale them up only if they are successful.  
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16  
17 After completing the coding process, we began the within-case analysis by condensing the  
18  
19 case data into a detailed summary of each case. Then, we wrote an analytic text outlining key  
20  
21 constructs in each case and constructed a context chart to provide a graphic representation of the  
22  
23 case and display the key theoretical constructs (Miles et al., 2018). We performed the steps of  
24  
25 writing the analytic text and constructing the context chart in parallel. As a result, these steps  
26  
27 affected each other. As is typical for qualitative research, completing within-case analysis required  
28  
29 several iterations. As our understanding of the cases deepened, we refined the key constructs. The  
30  
31 outcome of the within-case analysis was a description of two groups of key constructs that were  
32  
33 identified in each cost-effective charity (Table II). The first group covered the strategic operational  
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35 choices the charities made about the nature of their interventions. The second group was related to  
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37 the specific operational processes that allowed charities to implement and then maintain their  
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39 interventions in the locations where they operated.  
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45 The last step was cross-case analysis (Miles et al., 2018), which aims to describe the themes  
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47 and patterns that were common across the cases. This involved constructing figures and tables  
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49 based on the constructs identified during the within-case analysis. We first structured the data as a  
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51 meta-matrix (Miles et al., 2018), which was useful for case comparison and identifying  
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53 commonalities and differences in the collected sample. Following Pagell and Wu (2009), we  
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3 identified the extent that a construct was present in each case. Specifically, we coded whether  
4 evidence existed that a charity engaged in the activity significantly (coded as Yes); did not engage  
5 in the activity (coded as No); or had limited engagement in the activity (coded as Limited). Table  
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10 II demonstrates the results of this process.

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12 During the cross-case analysis, we iteratively re-arranged case data in a construct-oriented  
13 format, which helped us group key constructs into bundles. We first noticed that some constructs  
14 were at the level of strategic operational decisions made by charities about their interventions,  
15 while others were about processes implemented in each location to enable those strategic  
16 decisions. We, therefore, divided constructs into two groups: operations strategy constructs and  
17 operations process constructs. When looking for patterns within the group of constructs related to  
18 operations strategy, we discovered that some of the strategic decisions captured in the related  
19 constructs were oriented towards maintaining focus on the status quo; on what had been working  
20 well for the sampled charities. Other strategic decisions kept the charities open to change in their  
21 operations. The remaining strategic constructs helped balance these two diverging strategic  
22 priorities. We then grouped the constructs related to the charity's operational processes into two  
23 broad categories – creating cost-effective operations and maintaining cost-effective operations –  
24 and then, conducted a more detailed bundling of process constructs.

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## 44 **5. Results**

### 45 *5.1. Operations Strategy Bundles*

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47 The analysis uncovered the existence of three bundles of constructs related to strategic operational  
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53 decisions that are summarized in Table III.

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56 --- Insert Table III about here ---  
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### 5.1.1. Strategy bundle #1: Prioritizing status quo

Charities in our sample demonstrated a consistent ability to implement interventions that successfully target salient social issues at a low cost. Several of their key strategic decisions, therefore, focus on maintaining this competitive status quo. First, all charities target neglected intervention gaps that are likely to remain unaddressed without their interventions. For instance, both SCI and DtW focus on treating worms, for which, according to the WHO, “*there appears to be a substantial unmet need for ... treatment globally*” (2020 GiveWell Assessment Report of DtW). These charities support established systematic deworming programs in multiple countries. Similarly, AMF “*is confident, at least in the areas in which it currently works, that it is distributing nets that would not otherwise be provided*” (2015-06-02 Interview Notes). Addressing these large-scale intervention gaps requires significant effort on the part of the charities providing a rationale for their long-term commitment.

Second, once these charities establish that a certain variation of their interventions is cost-effective, they continue implementing it. The effectiveness of their interventions is backed by academic research and by the past success they have been able to demonstrate. The focus on their current intervention appears to be crucial for remaining cost-effective. For instance, AMF notes: “*We aim to be highly cost-effective at using donor funds to prevent illness and avoid deaths from malaria. We do [so by having] a clear focus on a specific intervention, anti-malaria bednets, and particularly long-lasting insecticidal nets (LLINs)*” (2021 AMF Website). Interestingly, however, focusing on the same intervention over the long run may harm the charities’ ability to secure funding. For instance, HKI noted that despite its effectiveness, interest in Vitamin A supplementation may decline because donors may become less interested in this intervention.

Third, all charities in our sample maintain their presence in locations where they have been

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2  
3 successful because establishing and scaling up the operations of a successful intervention has  
4 significant upfront costs. For example, Kenya was one of the first countries that GD targeted in  
5 2009, yet it remains active there despite expanding to other African countries. Furthermore, the  
6 charities tend to focus on poorer countries where their target social causes will take significant  
7 time to be fully resolved, allowing them to establish and scale up their operations. As GD  
8 explains, “[GD] does not see expansion to other countries as a priority. There remain large  
9 populations of the extreme poor in the countries in which [GD] already operates. [GD] therefore  
10 believes it is more cost efficient to serve more of the poor there than to incur the added expenses  
11 of setting up additional country operations” (2016-08-12 Interview Notes). Cost-effective  
12 charities tend to prioritize their ongoing operations over expanding to new locations.  
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#### 15 5.1.2. Strategy bundle #2: Prioritizing change

16 While focused, these charities are also willing and able to embrace change, when necessary. First,  
17 they allocate resources to experiment with their interventions to explore potential ways to make  
18 them more cost-effective. For instance, AMF transitioned from distributing nets in small quantities  
19 towards large-scale national programs, which necessitated changing its partnership strategy: “a  
20 change in partners from mainly non-governmental organizations toward government programs,  
21 and a change in model in that AMF nets complement those of other donors in programs that are  
22 collectively planned over much longer time frames” (2013-10-22 Interview Notes).  
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25 Second, their ability to change is enhanced by operating in a portfolio of locations which gives  
26 them the flexibility to allocate their funds where they are most appropriate. It is also noteworthy  
27 that the level of commitment made by these charities often differs from location to location. For  
28 instance, when putting together a portfolio of locations in Africa, SCI categorizes deworming  
29 needs in these locations as relatively certain or less certain to materialize. When a need does not  
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3 materialize, SCI shifts to other countries in its portfolio. Furthermore, funding affects how SCI  
4 manages its portfolio of locations: *"If SCI raises more funding than expected, it would likely enter*  
5 *smaller countries such as Chad. If SCI does not meet its fundraising goals, it would eliminate its*  
6 *new Nigeria program first"* (2015-10-02 Interview Notes).  
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12 Third – and related to the previous point – these charities terminate operations in locations  
13 when necessary. For instance, AMF will stop distributing nets in a location because of new  
14 evidence indicating lower malaria levels. They also terminate operations where the country is not  
15 committed to AMF's monitoring standards, needs distribution too soon for AMF to plan its  
16 operations with due diligence, or *"if AMF fails to receive timely responses from the country*  
17 *because of e.g. bureaucratic slowdowns"* (2018-06-14 Interview Notes). Similarly, GD  
18 deprioritized its cash transfer programs in urban areas or to sex workers and ceases operations in  
19 locations with high refusal rates from the target population to be enrolled in the program:  
20 *"GiveDirectly is flexible enough that it can pivot to new areas when refusals are high"* (2018  
21 GiveWell Assessment Report of GD).  
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### 35 5.1.3. Strategy bundle #3: Balancing two diverging operational priorities

36 These charities make several strategic operational decisions that help them navigate the tension  
37 between prioritizing the status quo and change. First, when they commit to change in terms of  
38 expanding their operations to new locations, they do so cautiously with a significant amount of  
39 groundwork to ensure that their past success is replicated in the new locations. For example, when  
40 considering potential new locations, SCI examines such factors as disease prevalence, drug  
41 availability, and local infrastructure to prioritize locations with a lower cost-per-treatment. Hence,  
42 while they appreciated that there were other countries with no national programs in place that were  
43 in great need, SCI expanded to Mozambique in 2015 because the country had an established  
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3 *"national scale program, so there is a lower cost per treatment in the country"* (2014-04-09  
4 Interview Notes). Equally, they roll out their interventions gradually to ensure they understand the  
5 specifics of the operations in the new location and that the location provides the necessary support  
6 and commitment to their interventions. For example, *"[E]very time [DtW] enters a new country,*  
7 *it must gain a full understanding of the operating and legal environment, go through a new*  
8 *registration process, meet new legal requirements, and do new safety and security planning"*  
9 (2018-12-18 Interview Notes).

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Second, despite focusing on their ongoing operations, these charities allocate resources to  
learn from failures and low performance. For instance, the four charities in our sample that focus  
on distributing medication – DtW, MC, SCI, and HKI – collect data to see whether their  
interventions have achieved a sufficiently high coverage rate and reached most of the targeted  
populations. MC notes in one of the interviews: *"We are rigorous in our use of monitoring and*  
*evaluation and research. We are not afraid of analyzing, reviewing, or establishing whether our*  
*interventions work, or how they could have been done better. We aim to establish best practices"*  
(2012-05-12 Interview Notes). Sufficient coverage rates provide evidence for the success of their  
interventions, while low coverage rates undermine the effectiveness of their interventions and are  
a signal to improve their interventions to reach a higher percentage of the target population.

Third – and related to the previous point – their willingness to invite scrutiny from external  
stakeholders complements their interest in tracking possible intervention failures. GD emphasizes,  
*"We report the results of our evaluations and also announce studies in progress before the data*  
*are in, so that we can be held accountable for the results"* (2021 GD Website). Similarly, AMF  
points out: *"We list all donations received and link each to a specific distribution. Donors see*  
*exactly where the nets they fund are distributed... We publish all information and data associated*

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3 *with a distribution.*” (2021 AMF Website). Inviting external scrutiny to publicize both successes  
4  
5 and failures is a reinforcement mechanism for balancing the status quo and change.  
6

## 7 8 5.2. Operations Process Bundles 9

10 The analysis uncovered the existence of four bundles of constructs related to operational processes  
11  
12 that are summarized in Table IV.  
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14  
15 --- Insert Table IV about here ---  
16

### 17 5.2.1. Process bundle #1: Assuring fit between the intervention and the location 18

19 The sampled charities invest significant resources to ensure their interventions and their  
20  
21 operational requirements fit the context of the locations where they operate. First, they conduct  
22  
23 thorough data collection before intervention implementation to confirm that there are indeed  
24  
25 significant intervention gaps and that their interventions are needed. For instance, GD collects  
26  
27 regional data to determine high-poverty areas, collects household data to create a census of all  
28  
29 households, and then registers beneficiaries for its wealth transfer program: *“We aim to find the  
30  
31 poorest possible recipients while using criteria that are simple, fair, cost effective, and difficult to  
32  
33 game. Currently, our default is to locate extremely poor villages using poverty data from national  
34  
35 surveys, and then enroll all households in the village”* (2021 GD Website).  
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40 Second, four charities in our sample – DtW, MC, SCI, and HKI – calibrate their interventions  
41  
42 to make sure they align with a location’s specific conditions. These charities all rely on local  
43  
44 infrastructure to implement their interventions. For instance, HKI’s vitamin supplement programs  
45  
46 vary depending on a location’s situation: *“Until recently, Burkina Faso used polio vaccination  
47  
48 campaigns to administer VAS. In most of the country, VAS is now delivered via fixed-site  
49  
50 distributions. In large urban areas, it is distributed door-to-door, and at the village level it is  
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52 delivered by community health workers (CHWs), though people are still invited to come to the  
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3 *health center*” (2017-10-09 Site Visit Notes). Similarly, DtW sees itself as a triage organization:  
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6 *“For each country program we assess what type of assistance is needed to launch and/or sustain*  
7  
8 *an effective school-based deworming program, and we work with partners to develop and fulfill*  
9  
10 *an appropriate support package based on these needs”* (2010-06-17 Interview).

11  
12 Third, all sampled charities begin with a small pilot, not a full large-scale intervention. For  
13  
14 instance, AMF starts the distribution of malaria nets in limited geographical areas. Interestingly,  
15  
16 AMF uses pilot projects even though they may initially delay net distribution activities: *“After*  
17  
18 *nets have been obtained, it takes several months to put in place all the logistics and in-country*  
19  
20 *planning that go into carrying out a multimillion-net campaign, including running a small-scale*  
21  
22 *pilot”* (2018-12-17 Interview Notes).

#### 23 24 25 26 5.2.2. *Process bundle #2: Assuring preparedness for the intervention*

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28 The charities make significant efforts to verify every location is prepared for the intervention. First,  
29  
30 they engage local leaders and communities to gain their support for their interventions and ensure  
31  
32 that they would welcome and assist with the implementation. For instance, MC organizes mass  
33  
34 campaigns and relies on various means, including meeting local leaders and running  
35  
36 announcements on local radio stations, to ensure that the local communities understand the need  
37  
38 for its seasonal malaria programs: *“An essential element of our work at community level is to*  
39  
40 *create awareness ... among the target populations”* (2021 MC Website).

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45 Second, the charities organize the training of local hires to ensure their competency for  
46  
47 efficient and effective implementation of the intervention. For instance, both DtW and MC help  
48  
49 governments develop cascading training plans, which start training the learners at the national level  
50  
51 and then each tier of learners subsequently trains the next lower tier. As DtW notes in one of the  
52  
53 interviews: *“There is also the training for the deworming program through the cascade system.*

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3 *This process trains teachers, health workers and government officials on how to implement the*  
4 *program” (2012-04-23 Interview Notes).*  
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7  
8 Third, cost-effective charities that rely significantly on local infrastructure also make efforts  
9  
10 to enhance the capabilities of local stakeholders. The charities take steps to assist local partners  
11  
12 with strategic decisions and planning to make sure they know what is supposed to happen during  
13  
14 the intervention. For example, DtW assists governments with creating an overall deworming  
15  
16 strategy, planning the distribution of deworming drugs, and developing protocols for adverse  
17  
18 events: “[DtW] often assists governments with high level operational decisions, such as  
19  
20 *developing the country's treatment strategy and operational guidelines and creating a budget for*  
21  
22 *the program” (2020 GiveWell Assessment Report of DtW). Interestingly, SCI’s long-term goal is*  
23  
24 to enable local partners to run the intervention on their own: “*SCI would like the governments it*  
25  
26 *works with to contribute more to treatment programs so that it can eventually transition program*  
27  
28 *management into their hands.” (2014-10-16 Interview Notes)*  
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### 32 33 5.2.3. *Process bundle #3: Assuring intervention quality*

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35 Cost-effective charities engage in intervention monitoring and communication to ensure that their  
36  
37 interventions are implemented as planned and that any issue is addressed properly and adequately.  
38  
39 First, the charities impose certain standards on local stakeholders to guarantee that their expansion  
40  
41 does not undermine their overall cost-effectiveness and does not lead to poor use of financial  
42  
43 resources. For instance, GD imposes strict standards on the communities to respect eligibility  
44  
45 standards for wealth transfers and also on the beneficiaries to adhere to registration processes and  
46  
47 avoid conflicts in their households: “*Some recipients refuse to be included in the census, but when*  
48  
49 *they see GiveDirectly staff following through during registration, they request to be included or*  
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51 *say they were missed the first time. It is GiveDirectly’s policy not to register households that*  
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3 *refused at census*” (2014-10-20&21 Interview Notes).

4  
5 Second, most charities monitor the activities during the implementation of their interventions.  
6  
7 For instance, DtW makes unannounced calls to schools where the deworming medication is  
8 distributed to assess whether proper procedures are followed: *“DtW’s independent monitoring,*  
9 *through its District Coordinators, independent monitors, and tele-callers, is key to the success of*  
10 *its deworming programs”* (2013 Site Visit Notes). Furthermore, all sampled charities assess the  
11 quality of their interventions once the intervention is completed. For instance, both DtW and SCI  
12 evaluate the extent to which their deworming programs have been able to reach the target  
13 population of school-aged children. As DtW notes in one of the interviews: *“[Independent*  
14 *monitors] go to [a] sample of schools ... to see if teachers filled out the forms correctly and ask*  
15 *the kids what the pills tasted like, as a means of validating program coverage”* (2013-06-19  
16 Interview Notes). SCI employs household coverage surveys that assess what percentage of the  
17 target population received the treatment: *“Normally, SCI plans to do a coverage survey after the*  
18 *first round of treatment...After the first round, coverage surveys would probably be roughly every*  
19 *three years unless there are issues that warrant follow up”* (2014-10-16 Interview Notes).

#### 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 5.2.4. *Process bundle #4: Building in redundancy in operations*

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40 These charities intentionally duplicate some aspects of their operations to assure their  
41 interventions’ effectiveness. First, most of them have a follow-up round of intervention in place to  
42 revisit the target population and give them a second opportunity to receive the aid so that, in the  
43 end, as many qualified beneficiaries as possible are reached by their intervention. For instance,  
44 both DtW and AMF organize a “mop-up day” after their interventions, during which DtW reaches  
45 out to children that have not received the deworming medication in the main MDA: *“Mop-Up*  
46 *Day” [is] the day that occurs several days after Deworming Day and is when students who were*  
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3 *absent or sick on Deworming Day”* (2020 GiveWell Assessment Report of DtW). AMF offers a  
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5 second chance to the target beneficiaries to pick up their nets: *“Frequently a whole village or a*  
6  
7 *large part of a village will not show up at the distribution site on distribution day, most likely due*  
8  
9 *to a funeral. There are also cases of individual households not showing up... A “mop-up”*  
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11 *distribution [is organized] to reach these beneficiaries. The mop-up distribution follows a similar*  
12  
13 *procedure to the main phase distribution”* (2016-04-15 Interview Notes).  
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17 Second, all sampled charities collect the same data multiple times to ensure data quality. For  
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19 instance, after collecting data on the beneficiaries of their interventions, AMF re-samples them to  
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21 verify that the initially collected data is accurate: *“After the [distribution partners] have collected*  
22  
23 *data from all villages, spot-checkers independently collect the same data from 5% of households*  
24  
25 *in each village”* (2016-04-15 Interview Notes). HKI follows a similar procedure: *“[HKI’s]*  
26  
27 *coverage surveys included an auditing procedure in which supervisors randomly selected and then*  
28  
29 *re-surveyed 10% of households in order to assess the accuracy of initial results, to which they*  
30  
31 *were blinded”* (2020 GiveWell Assessment Report of HKI).  
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## 34 35 **6. Discussion**

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37 Previous studies have demonstrated that to efficiently use donations and have a positive impact on  
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39 society – to be cost-effective – is a complex task for charities. While prioritizing efficiency may  
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41 discourage charities from building the capacity needed for effective interventions (Arya and  
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43 Mittendorf, 2015, Altamimi and Liu, 2022), overlooking the importance of having efficient charity  
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45 operations can undermine their odds of survival (Nunnenkamp et al., 2013). In this research, we  
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47 aimed to explore how charities can successfully pursue the dual – and often competing – goals of  
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49 efficiency and effectiveness. Specifically, we focused on operational strategies and processes that  
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51 would enable charities to resolve the tensions arising from their cost-effectiveness paradox. In  
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3 doing so, we conducted an exploratory qualitative study of six charities that are recognized for  
4 their cost-effectiveness to have an in-depth understanding of their operations. The result of this  
5 research is the comprehensive theoretical framework presented in Figure 1.  
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10 --- Insert Figure 1 about here ---  
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### 12 *6.1. Theoretical Contributions*

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14 Paradox theory is a big-tent meta theory which can be applied across numerous contexts (e.g.,  
15 Lewis and Smith, 2022), including the context of the operations of cost-effective charities. Hence,  
16 paradox theory informed our research design and analysis. However, as Boer et al. (2015) note  
17 “...it seems virtually impossible to make a significant contribution to high level theories that are  
18 so fundamental to how businesses operate that they are almost tautological...Rather than focusing  
19 on high-level theories, it is equally valid to contribute to midrange and focal theories which are  
20 often context specific to OM” (p. 1248). Therefore, we make no claims to contribute to the paradox  
21 theory itself. Instead, our primary theoretical contributions come in the form of the propositions  
22 and Figure 1, which combine to create our mid-range theoretical framework of cost-effective  
23 charity operations.  
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38 Our findings reveal that the need to be cost-effective creates a tension between prioritizing the  
39 status quo and prioritizing change. The paradox literature indicates that charities could navigate  
40 this tension in multiple ways. For instance, they could prioritize the status quo in the short term  
41 and change in the long term (e.g., Lewis and Smith, 2022). The temporal separation arising from  
42 this ‘either/or’ thinking would make managing the tension between the status quo and change  
43 easier, but would also increase the tension between efficiency and effectiveness (Smith and Lewis,  
44 2011). Therefore, cost-effective charities use ‘both/and’ thinking to engage with the tensions  
45 between prioritizing the status quo and change without losing sight of the need to remain cost-  
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3 effective (Lewis and Smith, 2022).  
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5 The concept of focus (e.g., Ketokivi and Jokinen, 2006, Pieters et al., 2010, Skinner, 1974),  
6 which emphasizes doing a relatively small number of operational tasks exceptionally well, is a key  
7 component of the seminal operations strategy literature. Prioritizing the status quo reflects the  
8 notion of focus in the context of cost-effective charity operations. Equally, the need to learn and  
9 change is a common theme in the management literature (e.g., Chen et al., 2022). However,  
10 resolving the tension between these two diverging strategic priorities poses a challenge for all  
11 organizations (e.g., Kristensen et al., 2022), and this challenge is even greater in the resource-  
12 constrained environment of charities. One of the key insights from our research is the way in which  
13 cost-effective charities dynamically navigate this tension to make strategic operational decisions.  
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26 These charities make a concerted effort to identify their failures and uncover their root causes.  
27 They actively invite external scrutiny to assess their cost-effectiveness, not only to preserve a  
28 particular image (Dhanani and Connolly, 2015) but also to enhance their ability to detect potential  
29 failures and reinforce their operations. Importantly, unlike other charities that tend to focus their  
30 disclosure efforts on the financial information (Carvalho et al., 2020), cost-effective charities  
31 expend significant resources demonstrating their impact on their target social cause. Furthermore,  
32 cost-effective charities are cautious when it comes to expanding their portfolio in a new location.  
33 Their cautious approach both prevents poorly planned expansions from negatively impacting their  
34 efficiency (Kistruck et al., 2013), and ensures that past success is replicated in the new location.  
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47 *Proposition 1a. Balancing the tension between prioritizing the status quo and change with*  
48 *both/and thinking allows charities to be cost-effective.*

49 *Proposition 1b. Cost-effective charities can balance prioritizing the status quo and*  
50 *prioritizing change by maintaining interest in intervention failures, inviting external scrutiny,*  
51 *and cautiously expanding to new locations.*  
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54 Cost-effective charities make strategic decisions to maintain the status quo, prioritizing what  
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3 has been working to avoid increasing the tension between efficiency and effectiveness. For  
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5 example, they focus on interventions that have already proven effective in addressing their target  
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7 social causes, and they continue to work in locations where they have established successful  
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9 operations. This finding aligns with the operations strategy literature on focus (e.g., Skinner, 1974)  
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11 but it contrasts with recommendations from general management that charities should diversify  
12  
13 their interventions to ensure long-term survival (Mendoza-Abarca and Gras, 2019).  
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17 In addition, previous research on charities indicates that many do not avoid duplicating the  
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19 efforts of other charities (Fruttero and Gauri, 2005) and that they are more likely to be located in  
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21 more affluent areas (McDonnell et al., 2020, McDougale and Lam, 2014). In contrast, we found  
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23 that cost-effective charities address neglected intervention gaps which are likely to remain  
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25 unfulfilled without their interventions and focus on locations that are not affluent. Focus allows  
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27 them to continuously improve efficiency and effectiveness, while the location decisions mean they  
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29 operate in low-cost environments where they will also have the largest impact, instead of operating  
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31 in high-cost locations with less need. These decisions reduce the tension between efficiency and  
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33 effectiveness.  
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38 *Proposition 2a. Prioritizing the status quo allows charities to navigate the tension between*  
39 *efficiency and effectiveness.*

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41 *Proposition 2b. Cost-effective charities prioritize the status quo by addressing neglected*  
42 *intervention gaps and focusing on their current interventions and locations.*  
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45 Only prioritizing the status quo would be an ‘either-or’ choice that would increase the tension  
46  
47 between efficiency and effectiveness and likely erode effectiveness in the long run. Hence, to  
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49 maintain their cost-effectiveness these charities also prioritize change in their operations strategy.  
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51 However, rather than following the advice to increase the number of interventions (Mendoza-  
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53 Abarca and Gras, 2019) that could harm efficiency, cost-effective charities actively seek better  
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55 versions of their existing interventions. They invest significant resources into experimenting with  
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3 their interventions and make adjustments when promising changes are discovered.  
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5 In addition, our findings further reinforce previous research emphasizing the importance of  
6 donor constraints when allocating funding (Keshvari Fard et al., 2022) by highlighting the value  
7 of flexibility in cost-effective charities' resource allocation. These charities operate in multiple  
8 locations, and they need to adjust their financial and operational commitments based on the  
9 specific needs of each location. Crucially, if the cost-effectiveness of their intervention in a certain  
10 location is jeopardized, these charities willingly cease their operations, even if they had previously  
11 achieved success in the location. These decisions reduce the tension between efficiency and  
12 effectiveness.  
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24 *Proposition 3a. Prioritizing change allows charities to navigate the tension between efficiency*  
25 *and effectiveness.*

26 *Proposition 3b. Cost-effective charities prioritize change by remaining open to changing their*  
27 *interventions, operating a portfolio of locations, and being willing to cease operations in some*  
28 *of their locations.*  
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31 Paradox theory posits that organizations can trigger either vicious or virtuous cycles based on  
32 how they engage with competing demands (Lewis and Smith, 2022). The results indicate that  
33 charities create a virtuous cycle via their operational processes and decision-making which allows  
34 them to maintain their cost-effectiveness. Particularly, to create cost-effective operations in each  
35 location, they first establish processes that help assure the fit between their interventions and the  
36 location. Svensson et al. (2020) highlighted the importance of adapting interventions to the local  
37 context, and our findings reveal several operational processes that allow this adaptation to occur.  
38 Specifically, the charities collect data to verify the need for their interventions and conduct pilot  
39 tests at the outset of their interventions. Additionally, they prepare the location for their  
40 interventions by securing support from local leaders and communities, organizing the training of  
41 local hires, and in some cases, actively seeking to enhance the capabilities of their local  
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3 stakeholders. These actions help to ensure that a specific intervention is cost-effective and that this  
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5 intervention does not increase the tension for other interventions or the organization as a whole.  
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8 *Proposition 4. Creating cost-effective charity operations requires assuring a fit between the*  
9 *intervention and the location and preparedness for the intervention.*

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11 Previous research acknowledges that assessing charities' impact on their beneficiaries is  
12  
13 challenging (Taylor and Taylor, 2014, Medina-Borja and Triantis, 2014). Moxham and Boaden  
14  
15 (2007) note that charities often struggle to accurately assess their effectiveness, because of the  
16  
17 confidentiality of their stakeholders and beneficiaries. Cost-effective charities tackle these  
18  
19 challenges by implementing processes to ensure they can maintain cost-effective operations in  
20  
21 each location. A key process to assure intervention quality is monitoring. The majority of the  
22  
23 charities in our sample oversee the implementation of their interventions, and all of them monitor  
24  
25 the impact of their interventions after completion. They also enforce strict monitoring criteria and  
26  
27 standards on their local stakeholders and incorporate redundancy into their operations and data  
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29 collection, despite the costs, to enhance the likelihood of achieving their intended outcomes.  
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35 *Proposition 5. Maintaining cost-effective charity operations requires assuring intervention*  
36 *quality and building in redundancy in the operations.*

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38 The framework shows that cost-effective charities differ in multiple ways from the charities  
39  
40 previously examined and discussed in the literature. Previous research indicates that charities often  
41  
42 target more affluent areas (McDonnell et al., 2020, McDougale and Lam, 2014), do not avoid  
43  
44 duplicating the efforts of other charities (Fruttero and Gauri, 2005), and mainly focus their  
45  
46 disclosure efforts on financial information (Carvalho et al., 2020). In addition, charities generally  
47  
48 do not engage in resource-intensive monitoring, measuring, and reporting of the effectiveness of  
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50 their operational processes (Medina-Borja and Triantis, 2014, Moxham and Boaden, 2007) as a  
51  
52 safeguard against possible criticism (Ashforth and Lee, 1990) and tend to disclose such  
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54 information only if it portrays their organization in a positive light (Dhanani and Connolly, 2015).  
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3 In contrast, cost-effective charities achieve their dual goals by strategically targeting intervention  
4 gaps that are unlikely to be addressed without their interventions, monitoring and measuring their  
5 operations, welcoming external scrutiny of their intervention's effectiveness, and acknowledging  
6 and learning from their failures.  
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12 Consistent with the predictions of paradox theory (Lewis, 2000, Hahn et al., 2018), we find  
13 that the relationship between effectiveness and efficiency is not a fixed trade-off, but rather a  
14 dynamic tension. Our findings reveal that while cost-effective charities implement some  
15 operational processes that prioritize one goal at the expense of the other, they have other processes  
16 that maintain balance. For instance, monitoring efforts during and after the interventions are costly,  
17 but essential to confirm the interventions' effectiveness. However, assuring fit between the  
18 intervention and the location by collecting data before interventions and conducting pilot projects  
19 helps charities determine if they can implement the interventions at a low cost and with the  
20 intended impact.  
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33 The paradox literature notes that addressing a tension at one level may trigger tensions at  
34 another level (Lewis and Smith, 2022). In our context, this plays out with the pursuit of the dual  
35 goal of cost-effectiveness creating a tension between prioritizing the status quo and prioritizing  
36 change. Our framework offers important new insights into how cost-effective charities  
37 strategically "engage, rather than defend against, competing forces [of prioritizing the status quo  
38 and prioritizing change]" (Lewis and Smith, 2014). The charities' operational-level processes  
39 during all stages of intervention implementation enable them to navigate these tensions. Assuring  
40 fit between the intervention and the location by pre-intervention data collection, securing local  
41 buy-in, and training the local workforce helps maintain strategic balance by ensuring that when an  
42 intervention is implemented in a new location or with a new approach (change), it aligns with the  
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3 original design and can be replicated (status quo). When maintaining cost-effective operations, the  
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5 processes of imposing standards on local stakeholders, monitoring, and maximizing intervention  
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7 coverage further enhance balance by ensuring the current intervention is implemented correctly  
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9 (status quo), while information collection and triangulation processes help identify the needs for  
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11 change.  
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15 Our study is focused on cost-effective charities. Yet, many other types of organizations, both  
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17 for-profit and non-profit, strive to use their operations to make a positive social impact and they  
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19 often struggle to balance their traditional operational goals, such as cost reductions or faster  
20  
21 delivery, with their social impact goals. Balance implies meeting the needs of multiple  
22  
23 stakeholders who may have conflicting goals or needs. Hence, we suggest that our theoretical  
24  
25 framework could apply to other organizations aiming to create a positive societal impact while  
26  
27 satisfying potentially conflicting stakeholder needs. For instance, social enterprises often struggle  
28  
29 to balance their social cause with their simultaneous need to be profitable (Meqdadi et al., 2020).  
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31 Governmental operations, are ubiquitous, designed to deliver societal benefits and face serious  
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33 cost constraints; yet, they are frequently overlooked in the OM literature (e.g., Seepma et al., 2021).  
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35 These would offer possible contexts to explore the implications of the framework developed in  
36  
37 this study.  
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## 42 *6.2. Contributions to Practice and Policy*

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45 Charitable giving is omnipresent, yet there is a room for improvement for many charities. Hence,  
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47 by increasing our understanding of the operations of cost-effective charities, this research makes  
48  
49 significant contributions to practice and policy. When it comes to managing cost-effective  
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51 charities, the results suggest some key managerial actions. First, target persistent intervention gaps  
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53 that are neglected by others. Yet, to maintain cost-effectiveness, managers must be prepared to  
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3 ignore some potential beneficiaries. This is, in part, why cost-effective charities maintain a  
4 portfolio of locations. They move funding from one location to another when it is important for  
5 their operations. But the side effect of reaching the most beneficiaries for the lowest cost is that  
6 malaria nets or de-worming medications do not reach some potential beneficiaries. In essence, to  
7 improve society, managers of cost-effective charities will have to be a bit ruthless.  
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15 These organizations are also very open, and data driven. Transparency is a current  
16 organizational priority, yet most organizations struggle to be transparent with what they do, let  
17 alone invite others to critique their strategies and processes. The managers of cost-effective  
18 charities invite scrutiny, collect a great deal of data, share that data, and perhaps most importantly,  
19 find ways to improve their interventions based on what they and others learn about their  
20 effectiveness. Based on what we know about human behaviour (Ashforth and Lee, 1990),  
21 translating these findings into action may occasionally be painful. But the charity managers, who  
22 are typically motivated by wanting to make positive societal benefits, need to understand that while  
23 inviting potential criticism may not be enjoyable; doing so will benefit their organization and the  
24 society. Equally, while many of the operational processes in our proposed framework require using  
25 potentially scarce resources today, the fact that our exemplar cost-efficient charities have been top  
26 ranked for multiple years, indicates that these actions pay off over time. Hence, it is crucial for  
27 charity managers to take a long-term perspective.  
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45 Part of maintaining that long-term focus comes from building in redundancy into the  
46 operations and data collection processes of cost-effective charities. Although this approach may  
47 appear wasteful, it is another example of how these charities strategically navigate the efficiency-  
48 effectiveness paradox (Lewis and Smith, 2014) over time. By taking extra measures to ensure the  
49 reliability of their data, they confirm that they are indeed targeting unfulfilled intervention gaps.  
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3 By taking additional steps to ensure that their interventions reach the majority of target  
4 beneficiaries, they minimize the need to repeat their interventions in the future. Therefore, it is  
5 imperative that charity managers do not confuse cost minimisation today with cost-effectiveness  
6 over the long term.  
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12 Finally, Martinez (2003) suggests that partnering with governments can be inherently risky  
13 for charities. Yet, four of the sampled charities not only leverage the infrastructure of local  
14 governments that often lack capabilities, but they also take measures to enhance the governments'  
15 capabilities. By choosing to work in less affluent countries, these charities can have a greater  
16 impact on their target social cause. They mitigate the risks of collaborating with governments by  
17 securing their buy-in while simultaneously imposing stringent standards. Avoiding risky  
18 government partners might seem like a way to maintain cost-effectiveness, but our results suggest  
19 that charity managers need to instead find ways to work with governments and reduce risk via  
20 capability building.  
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33 Policymakers should also be interested in these results. Most discussions of cost-effectiveness  
34 at charities focus on overheads. This measure is useful for identifying the inefficient use of  
35 resources, but it does not provide much insight into effectiveness. Our proposed framework  
36 provides a template that policymakers can use to assess the likelihood a charity will be both  
37 efficient and effective. Similarly, governmental operations are expected to deliver positive social  
38 impacts and to use their tax take (donations if you will) efficiently. They face the same issues as  
39 charities, suggesting that they could benefit by benchmarking the operations of these exemplary  
40 cost-effective charities or using this as an inspiration to benchmark other more cost-effective  
41 government operations be they local or global. But governments would have substantial economies  
42 of scale for some of the processes, especially those targeted at data collection and analysis, that  
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3 charities would not. In other words, done across a number of government initiatives, these  
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5 processes could create significant positive societal benefits.  
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## 7. **Limitations and Conclusions**

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10 This research, like all research, has limitations that need to be addressed in future studies. First, all  
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12 of the exemplar charities in the sample address persistent and pervasive problems in the developing  
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14 world. Future research should explore charities that address different problems and/or in developed  
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16 economies, for instance, food banks or homeless charities in Europe. Second, while the use of  
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18 secondary data is one of the strengths of the research given the data's depth and detail, the data  
19  
20 were collected to determine if the charities were cost-effective while our interest is in how these  
21  
22 charities manage their operations to be cost-effective. Primary data collected to address our  
23  
24 specific research issues might reach additional or different conclusions; future research should  
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26 explore this possibility. Third, a chief limitation of all exploratory small-sample research is that  
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28 the models developed may be idiosyncratic and not apply outside the sample, let alone to another  
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30 context. Hence, our proposed framework needs to be tested. We would suggest that it could be  
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32 tested both in a wider sample of charities to determine what makes them cost-effective as well as  
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34 in other contexts where organizations struggle to balance the need to be efficient with resources  
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36 with a desire to effectively make a positive societal impact. Finally, testing our framework with a  
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38 larger sample will help address the limitation that some constructs are not universally present  
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40 across all six case studies. This is likely to uncover any moderating factors that may impact the  
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42 significance of a specific construct in ensuring cost-effectiveness.  
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49 This study addresses recent calls for research on non-profit organizations in the field of  
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51 operations management (Pagell et al., 2018, Berenguer and Shen, 2020). To our knowledge, this  
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53 is the first in-depth study of exemplary charity operations. The propositions and framework  
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1 significantly advance knowledge in this area by revealing how charities can navigate the tensions  
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3 arising from the cost-effectiveness paradox and identifying the interrelationships between the  
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5 strategic operational priorities and processes used by these charities. The results can be used by  
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7 operations managers in the charity sector as a decision-making tool for devising operational  
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9 strategies and priorities and setting organizational goals. The findings should also help  
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11 policymakers and potential donors to determine which charities should receive their donations.  
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13 Finally, the results likely have implications beyond the charity sector and can inform operations  
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15 managers at any organization looking to have a positive societal impact while maintaining the  
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17 fundamental of operations management priority of using resources efficiently.  
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**Table I. Collected sample of cost-effective charities**

<b>Charity</b>	<b>Cause</b>	<b>Intervention</b>	<b>Documents Coded</b>
Give Directly	Extreme poverty	Distribution of wealth transfers	29 Interviews/Interview Notes
			1 Site Visit Note
Deworm the World	Schistosomiasis and soil-transmitted helminthiases	Support of deworming programs during school-based mass drug administrations	3 GiveWell Assessment Reports
			6 Charity Website Webpages
Against Malaria Foundation	Malaria	Funding and distribution of long-lasting insecticide-treated nets	21 Interviews/Interview Notes
			4 Site Visit Notes
Malaria Consortium	Malaria	Distribution of seasonal malaria chemoprevention	3 GiveWell Assessment Reports
			2 Charity Website Webpages
Schistosomiasis Control Initiative	Schistosomiasis and soil-transmitted helminthiases	Support of deworming programs during school-based mass drug administrations	18 Interviews/Interview Notes
			2 Site Visit Notes
Helen Keller International	Vitamin A deficiency	Support of government-run vitamin A supplementation program	4 GiveWell Assessment Reports
			11 Charity Website Webpages
			12 Interviews/Interview Notes
			2 GiveWell Assessment Reports
			14 Charity Website Webpages
			4 Charity Reports
			20 Interviews/Interview Notes
			1 Site Visit Note
			3 GiveWell Assessment Reports
			7 Charity Website Webpages
			7 Interviews/Interview Notes
			1 Site Visit Note
			2 GiveWell Assessment Reports
			1 Charity Response to GiveWell Assessment
			3 Charity Website Webpages
			5 Charity Reports

**Table II. Identified constructs, their brief descriptions, and their distribution across the sample**

Construct	Description	GD	DtW	AMF	MC	SCI	HKI
<b>Group I: Operations Strategy Constructs</b>							
Addressing neglected intervention gaps	Focusing on a charitable cause that would remain unaddressed without the charity's intervention	Y	Y	Y	Y	Y	Y
Operating in a portfolio of locations	Diversifying the charity's operations in terms of administrative regions where the charity implements its intervention	L	L	Y	Y	Y	Y
Focusing on the current intervention	Prioritizing the charity's ongoing intervention that has been effective so far	Y	Y	Y	Y	Y	Y
Focusing on current locations	Prioritizing the charity's ongoing operations in locations where they have been successful so far	Y	Y	Y	Y	Y	Y
Openness to changing intervention	Experimenting with the charity's intervention	Y	L	Y	Y	L	L
Cautious openness to expanding to new locations	Seeking to implement the charity's intervention in new administrative regions	N	L	L	Y	L	L
Interest in intervention failure	Seeking to learn about instances when the charity's intervention was unsuccessful	Y	Y	L	Y	Y	Y
Ceasing operations	Halting the charity's intervention when its effectiveness and/or efficiency can be undermined	Y	N	Y	N	Y	L
Inviting external scrutiny	Sharing information with external stakeholders that can open the charity to criticism	Y	L	Y	L	L	Y
<b>Group II: Operations Process Constructs</b>							
Calibrating the approach	Changing the charity's intervention depending on the specifics of the location	N	Y	N	L	Y	Y
Pre-intervention data collection	Collecting information about the charitable cause before implementing the charity's intervention	Y	Y	Y	Y	Y	Y
Using pilot projects	Using trial projects when the charity enters a new location	Y	Y	Y	Y	Y	L
Enhancing capabilities of local stakeholders	Improving the ability of local partners to conduct the intervention	N	Y	Y	Y	Y	L
Securing local buy-in	Ensuring support for the charity's intervention among local stakeholders	Y	Y	Y	Y	Y	L
Training local workforce	Improving the skills of the workforce employed by the charity's local partners	N	Y	Y	Y	N	Y
Intra-intervention monitoring	Monitoring the charity's intervention during its implementation	L	Y	Y	Y	Y	N
Imposing standards on local stakeholders	Imposing requirements on the stakeholders involved in the charity's intervention	Y	Y	Y	L	Y	L
Maximizing intervention coverage	Re-visiting the charity's target population to maximize the coverage rate	Y	Y	Y	N	Y	Y
Post-intervention monitoring	Monitoring the charity's intervention efficiency and effectiveness after its completion	Y	Y	Y	Y	Y	Y
Data triangulation	Comparing information from multiple sources about the charity's intervention	Y	Y	Y	Y	Y	Y

Coding: Y: Evidence exists that a charity engages in the activity significantly; N: No evidence exists that a charity engages in the activity; L: Evidence exists that a charity has limited engagement in the activity.

**Table III. Operations strategy bundles**

<b>Meta Construct</b>	<b>Constructs</b>	<b>Count</b>
Strategy bundle #1: Prioritizing status quo	Addressing neglected intervention gaps	6Y
	Focusing on the current intervention	6Y
	Focusing on current locations	6Y
Strategy bundle #2: Prioritizing change	Openness to changing intervention	3Y, 3L
	Operating in a portfolio of locations	4Y, 2L
	Ceasing operations	3Y, 1L
Strategy bundle #3: Balancing two diverging priorities	Cautious openness to expanding to new locations	1Y, 4L
	Interest in intervention failure	5Y, 1L
	Inviting external scrutiny	3Y, 3L

**Table IV. Operations process bundles**

<b>Meta Construct</b>	<b>Constructs</b>	<b>Count</b>		
Creating cost-effective operations	Process bundle #1: Assuring fit between the intervention and the location	Pre-intervention data collection	6Y	
	Process bundle #1: Assuring fit between the intervention and the location	Calibrating the approach	3Y, 1L	
		Using pilot projects	5Y, 1L	
		Process bundle #2: Assuring preparedness for the intervention	Securing local buy-in	5Y, 1L
	Maintaining cost-effective operations	Process bundle #2: Assuring preparedness for the intervention	Training local workforce	4Y
			Enhancing capabilities of local stakeholders	4Y, 1L
Imposing standards on local stakeholders			4Y, 2L	
Process bundle #3: Assuring intervention quality		Intra-intervention monitoring	4Y, 1L	
Post-intervention monitoring		6Y		
Process bundle #4: Building in redundancy in operations	Maximizing intervention coverage	5Y		
	Data triangulation	6Y		

Figure 1. Theoretical framework for enabling cost-effectiveness in charities

