Do Marketers Matter for Entrepreneurs? Evidence from a Field Experiment in Uganda

Stephen J. Anderson, **Pradeep Chintagunta**, **Frank Germann**, **and Naufel Vilcassim**

Abstract

Promoting growth by differentiating products is a core tenet of marketing. However, establishing and quantifying marketing's causal impact on firm growth, while critical, can be difficult. This article examines the effects of a business support intervention in which international professionals from different functional backgrounds (e.g., marketing, consulting) volunteered time to help Ugandan entrepreneurs improve growth. Findings from a multiyear field experiment show that entrepreneurs who were randomly matched with volunteer marketers significantly increased firm growth: on average, monthly sales grew by 51.7%, monthly profits improved by 35.8%, total assets increased by 31.0%, and number of paid employees rose by 23.8%. A linguistic analysis of interactions between volunteers and entrepreneurs indicates that the marketers spent more time on product-related topics than other volunteers. Further mechanism analyses indicate that the marketers helped the entrepreneurs focus on premium products to differentiate in the marketplace. In line with the study's process evidence, firms with greater market knowledge or resource availability benefited significantly more than their peers when matched with volunteer marketers. As small-scale businesses form the commercial backbone of most emerging markets, their performance and development are critically important. Marketers' positive impact on these businesses highlights the need for the field's increased presence in emerging markets.

Keywords

differentiation, emerging markets, firm growth, marketing–entrepreneurship interface, premium products, randomized controlled field experiment, volunteer marketers

Online supplement https://doi.org/10.1177/0022242921993176

Most of the businesses are too small and utterly undifferentiated from the many others.
  —Banerjee and Duflo (2011, p. 218) on entrepreneurial businesses in emerging markets

What role, if any, do marketing professionals play in improving the world? We propose that marketers help firms grow profitably, and their positive effects can be tremendous, especially when considering entrepreneurial firms in emerging markets. Flourishing entrepreneurs create jobs and wealth and help improve overall living standards (Anderson, Chandy, and Zia 2018; Banerjee and Duflo 2011; Campos et al. 2017; Schumpeter 1934). In the words of Frese, Gielnik, and Mensmann (2016, p. 196), "Entrepreneurship is one of the most effective means to alleviate poverty in developing countries."

Entrepreneurs are ubiquitous in emerging markets (Gollin 2002). In 2010, more than 31% of the adult population in

Uganda, the setting for our study, was either starting a business or running a business less than four years old (Kelley, Bosma, and Amorós 2011). However, many emerging-market entrepreneurs struggle to make ends meet, and their firms' growth rates are low (Hsieh and Klenow 2014; Kiranda, Walter, and Mugisha 2017), stifling the positive impact they could have on society (Frese, Gielnik, and Mensmann 2016). As Banerjee

Stephen J. Anderson is Assistant Professor of Marketing, McCombs School of Business, University of Texas at Austin, USA (email: sjanderson@mccombs.utexas.edu). Pradeep Chintagunta is Joseph T. and Bernice S. Lewis Distinguished Service Professor of Marketing, Booth School of Business, University of Chicago, USA (email: pradeep.chintagunta@chicagobooth.edu). Frank Germann is Associate Professor of Marketing, Mendoza College of Business, University of Notre Dame, USA (email: fgermann@nd.edu). Naufel Vilcassim is Head of Department, LSE Vice Dean TRIUM Executive MBA Program, and Professor of Marketing, London School of Economics (email: n.vilcassim@lse.ac.uk).
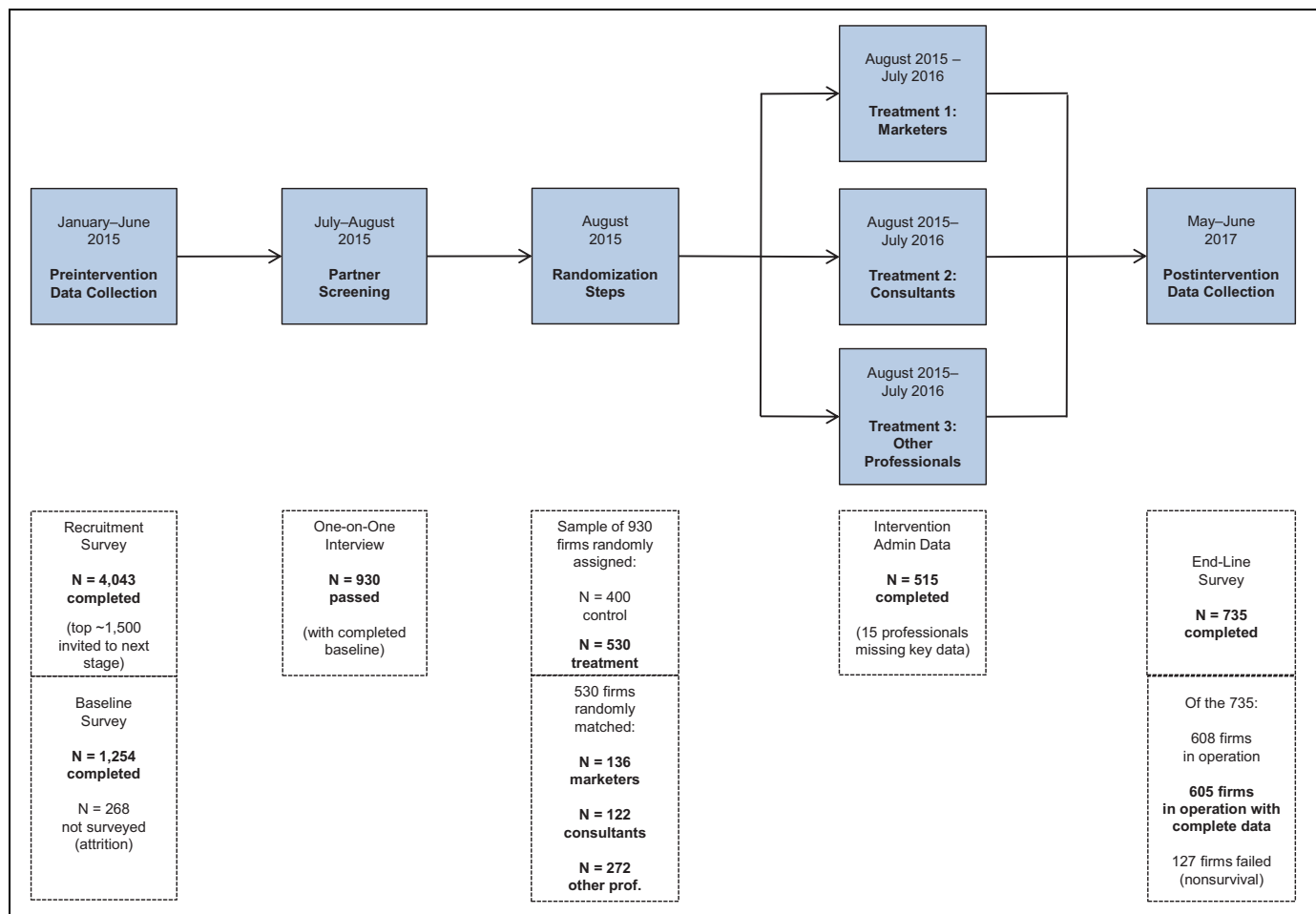
Figure 1. Timeline and data collection.

and Duflo (2011) assert, the low growth rates seem to result from most businesses being "utterly undifferentiated" and failing to attract customer interest.

Marketing helps firms differentiate by attempting to answer the question, "Why should the customer buy from the firm and not elsewhere?" (see, e.g., Boulding, Lee, and Staelin 1994; Kotler and Keller 2016, p. 5). Thus, we examine whether entrepreneurs in emerging markets can benefit from marketers' help. As Figure 1 shows, we conducted a randomized controlled field experiment with 930 entrepreneurs to examine a virtual business support intervention in which international professionals from different functional backgrounds volunteered their time supporting Ugandan entrepreneurs via Skype video conferencing, mobile calls, emails, WhatsApp, and so on. We partnered with a nonprofit, Grow Movement, to recruit international professionals from more than 60 countries to engage in the volunteer activity.

When recruiting the professionals, Grow Movement did not focus on specific functional backgrounds; rather, the organization recruited volunteers from multiple areas with substantial business experience and time to work with an entrepreneur. Marketers made up the largest group: 26% of the volunteers. Business professionals from consulting and other functional

backgrounds were also included. After being randomly assigned to the control group (n = 400) or the treatment group (n = 530), the entrepreneurs receiving the intervention were randomly matched with volunteers. The result was three exogenously determined groups of 136, 122, and 272 treated entrepreneurs working with volunteers from "marketing," "consulting," and "other" backgrounds, respectively. Each entrepreneur–volunteer pair worked virtually for two to six months to improve business performance.

Our study shows the intervention was effective, especially for entrepreneurs collaborating with volunteer marketers. Compared with the control group, firms matched with volunteer marketers increased monthly sales by 51.7%. The firms also achieved 35.8% higher profits than control firms and increased total assets by 31.0% and employees by 23.8%. Importantly, based on a standardized outcome index, only the firms matched with volunteer marketers experienced significant firm growth compared with the control group.[1]

---

[1] We included the volunteer professionals from other functional backgrounds in our analysis primarily to understand the theoretical mechanism allowing marketers to help entrepreneurs grow.

Mechanism evidence suggests that the volunteer marketers tended to help entrepreneurs differentiate their businesses by focusing on the goods or services they offer.[2] A linguistic analysis of the meetings and interactions between volunteers and entrepreneurs indicates that the marketers spent significantly more time on product-related topics than volunteers from other functional areas. Moreover, an intermediate outcome analysis shows that entrepreneurs collaborating with volunteer marketers increased average product price, contribution, markup percentage, and value add compared with those in the control group, indicating that the firms offered more premium products after the intervention than before (Boulding, Lee, and Staelin 1994; Caldieraro, Kao, and Cunha 2015). In addition, we find that these premium product proxies (e.g., price) mediate volunteer marketers' effect on firm growth.

We also investigated heterogeneous treatment effects. In particular, international volunteers are unlikely to have local-market knowledge, a prerequisite for developing business differentiation (Porter 1980), and firms require resources to deploy differentiation efforts (Kerin and Hartley 2017). Accordingly, our results show that emerging-market entrepreneurs with greater ex ante market knowledge or resource availability gain the most from working with a volunteer marketer.

Our study is the first field experiment examining whether and how volunteer marketers help emerging-market entrepreneurs grow their businesses. By addressing our two research questions (i.e., the main effect and its mechanism), we add to the literature in marketing, entrepreneurship, and development economics. We advance understanding of the effectiveness of business support services, including new ways of designing virtual collaborations leveraging technology and enhancing access for emerging-market entrepreneurs. We hope the study assists organizations such as the United Nations and multinationals such as Unilever or Procter & Gamble in designing future business support services for emerging markets.

While promoting firm growth by differentiating products is a core marketing tenet, establishing and quantifying marketing's causal impact on growth is nontrivial (Boulding and Staelin 1995). Our study causally identifies marketers' positive impact on emerging-market entrepreneur firm growth, thereby adding to the entrepreneurship literature (e.g., Matsuno, Mentzer, and Özsomer 2002; Webb et al. 2011) and research on marketing's influence within the firm (e.g., Homburg, Workman, and Krohmer 1999; Verhoef and Leeflang 2009).

In addition, while it may seem obvious that marketing professionals focus on differentiation and premium products, this approach may be counterintuitive in emerging markets, where consumers have limited disposable income. If emerging-market consumers can only afford inexpensive, low-quality products, premium products are likely to fail. Our study indicates that this assumption is incorrect. We show that emerging-market entrepreneurs can successfully offer premium products well-aligned with their customers' needs and wants. Thus, we provide support for Mahajan's (2016) observation that low-income consumers in emerging markets desire premium products (see also Arunachalam et al. [2020]). Our finding also responds to calls for research on how to operate in emerging markets (Narasimhan, Srinivasan, and Sudhir 2015).

Finally, our heterogeneous treatment effects provide guidance on which emerging-market entrepreneurs marketing interventions should target (i.e., those with greater ex ante market knowledge or resource availability). Many economists believe that emerging-market entrepreneurs fail to flourish largely due to resource constraints (e.g., Yunus 2007). Our results confirm that more resources help. However, our results also suggest that emerging-market entrepreneurs may require guidance to use available resources effectively.

Entrepreneurship in Sub-Saharan Africa

Many people in emerging markets start businesses (Gollin 2002). Due to limited employment opportunities, the businesses are typically necessity-driven, created for survival rather than to address a clearly identified market opportunity. Most of the businesses are small and undifferentiated and cannot grow beyond subsistence. Many emerging-market entrepreneurs' products closely resemble other products, making it difficult to succeed and grow (Banerjee and Duflo 2011). When emerging-market firms fail to grow, gainful employment and its positive effects also stagnate (Bruton, Ketchen, and Ireland 2013; Kiranda, Walter, and Mugisha 2017).

All else equal, emerging-market entrepreneurs who operate growing businesses enjoy enhanced income and greater purchasing power. The entrepreneurs' families are able to afford quality food, education, and health care and are generally less concerned about meeting basic needs. Their employees benefit through increased wages and job stability. Stable jobs enable employees to access savings accounts and loans to purchase products such as stoves and refrigerators, which can significantly increase quality of life. Emerging-market governments and societies also benefit from growing entrepreneurial businesses, as the firms typically pay higher taxes, and the additional income can be used to enhance regulations and infrastructure (e.g., transportation, sewers, freshwater systems).

Research has shown that entrepreneurship is one of the most effective means of alleviating poverty in emerging markets (Banerjee and Duflo 2011; Frese, Gielnik, and Mensmann 2016; Schumpeter 1934). Scholars also suggest that businesses must clearly identify opportunities in their markets and stand out from the crowd (i.e., be sufficiently differentiated) to grow (Banerjee and Duflo 2011; Kiranda, Walter, and Mugisha 2017). Differentiation opportunities abound in emerging markets (e.g., McKenzie and Woodruff 2014), but entrepreneurs must identify and implement them. Unfortunately, significant gaps remain in emerging-market entrepreneurs' business education and knowledge quality and relevance (Anderson,

---

[2] Hereinafter, we use "products" in reference to tangible, physical goods (e.g., donuts, shampoo), intangible, nonphysical services (e.g., breakfast delivery, hair cutting), and combined offerings (Kerin and Hartley 2017, p. 266).

Chandy, and Zia 2018; Bloom et al. 2013; Kiranda, Walter, and Mugisha 2017; McKenzie and Woodruff 2014).

We suggest that, as a possible solution, experienced professionals could volunteer time to guide emerging-market entrepreneurs. Specifically, we suggest that virtually connecting emerging-market entrepreneurs with experienced professionals from advanced markets could facilitate differentiation. Given their functional backgrounds and experience, we believe volunteer marketers should be particularly effective for helping the entrepreneurs identify and implement viable differentiation strategies, as marketing helps firms discover market needs and customer groups, target appropriate customers, and position products so customers recognize them as distinct from others (Kotler and Keller 2016, p. 5).

A recent study by Anderson, Chintagunta, and Vilcassim (2021) examines how remote volunteers help emerging-market entrepreneurs "pivot" their business model (broadly defined; see Ries [2011]), thereby helping them improve their firms' sales. That study is based on the same business support intervention and data gathering as our study. However, there are key distinctions between their study and ours. First, we focus on isolating the specific impact of marketing volunteers (vs. volunteers in general) as well as how marketing volunteers help emerging-market entrepreneurs become more differentiated by offering premium products. Neither of these aspects (i.e., main effect and mechanism differences) are considered in Anderson, Chintagunta, and Vilcassim. Second, we include multiple outcome measures (e.g., profits, assets, employees, firm growth indices) beyond just sales, which is the focal outcome considered in Anderson, Chintagunta, and Vilcassim. Third, our mediation and text analyses in support of the mechanism are unique and add further distinction. Fourth, our article's interaction analyses are novel given our use of multiple business-level moderators as well as our examination of nonlinear relationships. As a result, our study provides more fine-grained information for governments, nongovernmental organizations (NGOs), researchers, and multinationals on the types of businesses and volunteers likely to lead to greater differentiation and firm growth. The two studies should therefore be viewed as complementary.

Volunteer Marketers and Emerging-Market Entrepreneurs

Marketing and entrepreneurship are two key responsibilities of any young firm (Drucker 1954). However, research on the combination and interaction of marketing and entrepreneurship is sparse (e.g., Matsuno, Mentzer, and Özsomer 2002; Merlo and Auh 2009; Webb et al. 2011) and suggests competing insights. Christensen (1997) hints at incompatibilities between marketing and entrepreneurship, arguing that market-oriented entrepreneurial firms (i.e., those in which marketing flourishes [Kohli and Jaworski 1990]) fail to innovate because they are preoccupied with the market (Matsuno, Mentzer, and Özsomer 2002; Merlo and Auh 2009). In contrast, Webb et al. (2011) argue that marketing significantly supports the entrepreneurship

process (see also Matsuno, Mentzer, and Özsomer 2002). Although they do not test their predictions empirically, Webb et al. propose marketing activities and entrepreneurship processes are positively and reciprocally related.

Marketing and the Entrepreneurship Process

The archetypal entrepreneurship process has five stages (Bygrave and Hofer 1992). The process begins with (1) entrepreneurial alertness, which leads to (2) recognizing an opportunity, followed by (3) innovation, (4) opportunity exploitation, and (5) enhanced performance. Webb et al. (2011) propose that marketing—in particular an entrepreneurial firm's market orientation and marketing-mix skills—positively influences the five steps and enhances performance. The theory implicitly assumes that entrepreneurs, either themselves or through employees, have access to marketing capabilities. However, the assumption is less likely to apply to emerging-market entrepreneurs than those in advanced markets.

Research has shown that emerging-market entrepreneurs employ "sporadic and rudimentary" marketing efforts (McKenzie and Woodruff 2014, p. 49) and lack marketing knowledge and related skills (Anderson, Chandy, and Zia 2018; Kiranda, Walter, and Mugisha 2017). Most emerging market entrepreneurial ventures have few employees (McKenzie and Woodruff 2014), and the workforce cannot compensate for the entrepreneur's lack of marketing knowledge. Thus, emerging markets are less likely to experience the positive interaction between marketing and entrepreneurship that Webb et al. (2011) propose. However, we argue that virtual access to professionals with marketing backgrounds could help emerging-market entrepreneurs address their capability gap.

International Business Support from Volunteer Marketers

Extant research indicates that emerging-market entrepreneurs can acquire general marketing capabilities by attending broad, in-class marketing courses (Anderson, Chandy, and Zia 2018). We propose that emerging-market entrepreneurs can also acquire the skills by collaborating with an experienced volunteer from an advanced market. In contrast to group-based marketing principles courses (Anderson, Chandy, and Zia 2018), one-on-one collaborations deal directly with each entrepreneur's unique products and business challenges. Thus, regularly interacting with an experienced volunteer marketer may be more applicable to entrepreneurs than general classroom training (Campos et al. 2017; McKenzie and Woodruff 2014).

Depending on their functional backgrounds, volunteers likely emphasize different business practices during their collaborations with entrepreneurs. Volunteers naturally bring their own experiences to interactions with entrepreneurs (e.g., Friedrichs 1987), and even when business professionals operate outside their primary functional area, past learning and

conditioning affects their thinking (Waller, Huber, and Glick 1995) and leads them toward familiar solutions (March and Simon 1958). Kaplan's Law states that individuals rely on familiar "tools" (Kaplan 2017); thus, we expect volunteer marketers to focus on their marketing expertise during their interactions with entrepreneurs. Likewise, we expect volunteers with other backgrounds to focus on their unique skills.

Marketing education and professional development emphasizes identifying demand-increasing opportunities (e.g., Fleit and Morel-Curran 2012; Whitler, Krause, and Lehmann 2018). Most other business functions focus on throughput. The finance, legal, and accounting functions, for example, focus internally on improving firm efficiency (Hambrick and Mason 1984). A significant body of research indicates that marketers recognize market-based opportunities (e.g., Vorhies and Morgan 2005; Zhou, Yim, and Tse 2005) and help firms differentiate (Kotler and Keller 2016, p. 5; Sharp and Dawes 2001). Marketers say that they keep differentiation strategies at the top of their minds (e.g., The CMO Survey 2019). Volunteer marketers should thus be well suited and eager to help emerging-market entrepreneurs differentiate and address one cause of their low growth rates (Banerjee and Duflo 2011). Therefore, we expect emerging-market entrepreneurs to exhibit improved performance and grow their firms after interacting with volunteer marketers.

Firms often make product changes and attempt to align better with target customers' needs and wants to become more differentiated (Kerin and Hartley 2017, p. 628). Indeed, Porter (1980) argues that firms frequently aim to distinguish themselves from their rivals by offering differentiated products. Moreover, the emerging-market context makes it difficult for entrepreneurs to differentiate on characteristics other than product. That is, their businesses tend to be local, so differentiation tactics relying on adding new channels or advertising and promotion are less accessible. Thus, ceteris paribus, we expect volunteer marketers to focus on product-related differentiation during collaborations with emerging-market entrepreneurs.

That said, firms can use several approaches to differentiate their products (Dickson and Ginter 1987), and it is not clear, a priori, which tactic emerging-market entrepreneurs working with volunteer marketers would use. Therefore, we set up our experimental design and data collection so we could explore the approaches that entrepreneurs pursued.

Study Design

Studying volunteer marketers' impact on emerging-market entrepreneurs' differentiation and growth is challenging. No databases record both firm growth indicators (e.g., sales) over time for the same set of entrepreneurs and the functional backgrounds of volunteer business professionals working with the entrepreneurs. Moreover, exogenous variation in entrepreneur exposure to the volunteers would be needed to overcome omitted variables bias (e.g., unobserved alternative factors driving firm growth) and reverse-causality concerns (e.g.,

substantial firm size as a prerequisite for attracting assistance). In addition, obtaining a relevant panel data set may still not solve potential bias from self-selection by entrepreneurs (i.e., varying motivations for choosing to receive assistance) and volunteers (i.e., different preferences for choosing firms to work with). We therefore conducted a two-year field experiment (see Figure 1) in which 930 Ugandan entrepreneurs were randomized into a control group (n = 400) and a treatment group (n = 530). We also randomly matched the treated firms with volunteer business professionals from different functional backgrounds.

Sample Recruitment and Preintervention Data Collection

From January to August 2015, we followed multiple steps to obtain a representative sample of emerging-market entrepreneurs running small firms in Uganda.[3] First, a team of 15 enumerators went door-to-door across greater Kampala, systematically covering all business hubs, marketplaces, and commercial zones. We conducted a recruitment survey of every entrepreneur who could speak conversational English, operated their firm from a physical structure, and was interested in receiving assistance from a volunteer business professional. The survey contained questions on entrepreneur and business characteristics for screening or to be used as controls in our main analysis. Our sampling frame includes the 4,043 entrepreneurs who completed the recruitment survey.

We then implemented an "established firm" scorecard, ranging from 0 to 100 points, using nine proxies from the recruitment survey: business premises, upfront investment, full-time staff, internal affairs organization, new activities and processes, business and formal education, prior corporate experience, exposure to other countries, and external ecosystem awareness. We ranked the 4,043 entrepreneurs using the scorecard and proceeded with the top 1,500 firms.[4] We attempted a baseline survey of the entire group; however, only 1,254 entrepreneurs completed the 90-minute site visit and audit. The survey contained business background questions, detailed financial data (e.g., sales, profits, assets, employees), and product data (e.g., descriptions, prices, costs, markups). Finally, our partner invited the qualifying 1,254 entrepreneurs to a one-on-one interview where they received details about the business support service. Our partner used the registration meeting as an additional eligibility screen and approved 930 entrepreneurs, which formed our sample. The sample includes

---

[3] As noted previously, our data gathering was the same as in the Anderson, Chintagunta, and Vilcassim (2021) study. Although our research questions, study designs, and empirical analyses differ, we repeat some of the sampling and measurement descriptions here for transparency and completeness.

[4] The screening step was in line with our partner's program requirement to work with operational firms committed to and ready to receive a business support service. Screening or targeting approaches have become common in government and NGO programs aiming to allocate scarce resources for stimulating firm or economic growth (e.g., Anderson, Chandy, and Zia 2018). The screening step influences the population to which our results generalize but not our causal effects.

a broad mix of firms, with business-to-consumer retailers and service providers being the most common. (For a summary of firms by industry, see Web Appendix 1.)

Randomization, Matching, and Functional Backgrounds

All 930 firms were randomly assigned to a control group (n = 400) or a treatment group (n = 530). Each treated firm was randomly matched one-to-one with a unique volunteer business professional. The randomization process was done by computer, so differences across groups were due to chance.

Two independent experts coded volunteers' background variables after the study finished using their curriculum vitae, LinkedIn profiles, and partner administrative data. The coders did not have access to entrepreneur or firm data. Volunteers' primary functional backgrounds refer to the business area or specialization in which they spent the majority of their career until project participation. The interrater reliability for coding functional backgrounds was 89.8%; all discrepancies were resolved through discussion. Background data were missing or insufficient for 38 volunteers. The 530 functional backgrounds were coded into ten areas: marketing and sales (n = 136), consulting and advisory (n = 122), finance and accounting (n = 84), strategy and general management (n = 48), engineering and research and development (n = 39), operations and supply chain (n = 23), entrepreneurs and owners (n = 18), human resources (n = 14), legal (n = 8), and unknown (n = 38).

All entrepreneurs and volunteers, as well as the partner's intervention managers, were blind to the experiment. We permitted no one to switch volunteers or entrepreneurs, and we controlled all matching steps and dyad formation. Thus, self-selection did not occur and the assignment of volunteers to treated firms was exogenously determined. This randomized matching (of volunteers and entrepreneurs) enabled us to construct treatment groups based on functional backgrounds. We set the group size minimum at 100 firms to provide sufficient statistical power and thus divided our study sample of 930 firms into four experimental groups: (1) treatment 1 (or marketers), which includes the 136 entrepreneurs exposed to a marketing/sales volunteer; (2) treatment 2 (or consultants), which includes the 122 entrepreneurs exposed to a consulting/advisory volunteer; (3) treatment 3 (or other professionals), which includes the 272 entrepreneurs exposed to volunteers from one of the remaining functional areas (e.g., finance, engineering, strategy, operations); and (4) control, which includes the 400 entrepreneurs who did not receive the intervention during the two-year study.

The identification approach enables us to isolate marketing volunteers' effect on firm growth and product differentiation. It is aligned with our research objective of understanding the relationship between volunteer marketers and emerging-market entrepreneurs.

Intervention Overview: Collaborating with Volunteers

Our intervention exposed each Ugandan entrepreneur to a volunteer in a different country and let the dyad work together for two to six months to improve firm performance. The collaborations were virtual, with every entrepreneur–volunteer interaction, sometimes multiple per week, happening via Skype video conferencing, mobile calls, and text messages. Many dyads leveraged other virtual productivity tools, such as email, Google Docs, Dropbox, and WhatsApp. Our partner, Grow Movement, provided in-country intervention managers to facilitate introductions and ensure that collaborations continued on schedule but otherwise did not intervene. The partner maintained an online project management system allowing volunteers to enter goals, track milestones, and record interaction details at biweekly intervals. Outside its basic structure, the intervention was open-ended (i.e., the volunteers had the discretion to guide the project and tailor the topics, assignments, and activities as they saw fit). Web Appendix 2 provides examples of typical entrepreneurs in the sample and their products.

The 530 volunteers approved to participate in the project initially applied online via the Grow Movement website. Our partner subsequently interviewed and vetted them to ensure we matched only committed volunteers with entrepreneurs. The volunteers had to demonstrate substantial business experience and convince Grow Movement they were willing to work with a Ugandan entrepreneur for multiple months to improve business performance. The partner did not implement prerequisites or quotas regarding volunteers' functional backgrounds. The intervention included business professionals from nearly every continent (see Web Appendixes 3 and 4). Volunteers represented more than 60 countries, with the largest number coming from the United Kingdom (28%), India (10%), the United States (9%), Germany (4%), Italy (4%), Canada (4%), Australia (3%), and Spain (3%).

Intervention Strength and Compliance Rates

The intervention featured a relatively high take-up rate, as 88% of treated entrepreneurs completed at least one of the two-week modules, each of which included multiple interactions with a volunteer (for a breakdown by treatment group, see Web Appendix 5). The first two-week module entailed arranging logistics with an intervention manager, scheduling a two-hour Skype call with the matched volunteer, traveling to a field office or internet café to hold the call, completing multiple assignments (e.g., problem identification, product details, financials, market research, goal setting), and communicating with the professional via follow-up calls, texts, and emails. Intervention compliance was relatively high. The typical collaboration lasted about 2.5 months, with the average number of completed modules varying by group (marketers = 5.04, consultants = 5.98, other professionals = 5.60).[5] However,

---

[5] Take-up rates did not differ between the marketers group and the other professionals group ($p = .137$) or the consultants group ($p = .847$).

entrepreneurs reported completing more modules (around eight in total) than were recorded in our partner's system, likely making the compliance estimate a lower bound.

Postintervention Data Collection

Our study's intervention phase lasted roughly one year, from August 2015 to July 2016. To allow a two-year gap for potential growth from pre- to postintervention data collection, we implemented our end-line survey in May 2017. An independent auditor conducted the survey at each entrepreneur's business location under the supervision of an Innovations for Poverty Action (IPA) research manager (the Uganda office of IPA hosted our study and provided research support). Questions closely mirrored those in the baseline survey to ensure that auditors collected the same financial data (e.g., sales, profits, assets, employees) and product differentiation data (e.g., descriptions, prices, costs, markups) pre- and postintervention. We used an electronic survey tool to collect firm financial data and followed a standard aggregation, anchoring, and adjustment methodology to obtain plausible and precise estimates on key outcomes such as sales and profits (Anderson, Lazicky, and Zia 2021). Our team leaders, field manager, and research manager took several rigorous auditing and verification steps to ensure that every survey was complete and accurate.[6]

Firm Growth Measurement

Our study aims to learn whether and how volunteer marketers help emerging-market entrepreneurs improve their business performance and size. Firm growth is the main outcome of interest. We define firm growth conceptually as an increase in a firm's sales, profits, assets, or employees. We measure firm growth operationally using several indicators and two overall indices. We use aided-recall and iterative anchored-adjusted approaches to measure monthly sales and profits (Anderson, Lazicky, and Zia 2021). Drawing on these measures, we constructed four composites of monthly sales and profits: (1) a winsorized sales composite (average of the aided-recall and anchored-adjusted sales measures after winsorizing each 1%), (2) an inverse-hyperbolic-sine (IHS)-transformed sales composite (average of the aided-recall and anchored-adjusted sales measures after IHS-transforming each), (3) a winsorized profits composite (average

of the aided-recall and anchored-adjusted profit measures after winsorizing each 1%), and (4) an IHS-transformed profits composite (average of the aided-recall and anchored-adjusted profit measures after IHS-transforming each). Moreover, we use an iterative approach to measure the current value of all firm assets and the number of employees, again constructing four composites: (1) a winsorized (1%) assets composite, (2) an IHS-transformed assets composite, (3) a winsorized (1%) employees composite, and (4) an IHS-transformed employees composite.

Finally, we constructed two indices of firm growth. For the first index, we used the following 12 measures: (1) aided-recall sales winsorized, (2) anchored-adjusted sales winsorized, (3) aided-recall sales IHS-transformed, (4) anchored-adjusted sales IHS-transformed, (5) aided-recall profits winsorized, (6) anchored-adjusted profits winsorized, (7) aided-recall profits IHS-transformed, (8) anchored-adjusted profits IHS-transformed, (9) assets winsorized, (10) assets IHS-transformed, (11) employees winsorized, and (12) employees IHS-transformed. We standardized each of these 12 measures (control group as the base) and then computed the average of these values to construct the overall Firm Growth Index 1 outcome variable. For the second index, we used the following eight composite measures: (1) winsorized sales composite, (2) IHS-transformed sales composite, (3) winsorized profits composite, (4) IHS-transformed profits composite, (5) winsorized assets composite, (6) IHS-transformed assets composite, (7) winsorized employees composite, and (8) IHS-transformed employees composite. We again standardized each of these eight composite measures (control group as the base) and then computed the average of these values to construct the overall Firm Growth Index 2 outcome variable. This second index measure is the main dependent variable used in our additional analyses (i.e., intermediate effects and interaction effects). Combining the outcomes into an index better represents the construct by capturing all relevant dimensions, improving statistical power to detect effects in the same direction, and guarding against multiple hypothesis testing (e.g., Campos et al. 2017). Web Appendix 6 provides additional details for each firm growth indicator and index.

Empirical Methodology and Summary Statistics

Model Specification

Given that we randomly assigned entrepreneurs to experimental groups, we estimate the effect of exposure to a volunteer business professional as the difference in average outcomes for the treatment and control firms at end line using an intention-to-treat regression:

$$\begin{aligned} Y_i = {} & \alpha + \beta_1 \, \text{Marketer}_i + \beta_2 \, \text{Consultant}_i \\ & + \beta_3 \, \text{OtherProfessional}_i + \sum \gamma_s \, d_{i.s} + \delta Y_{i,\,b} + \varepsilon_i. \end{aligned}$$

$$(1)$$

Compliance levels did not differ from marketers to other professionals ($p = .246$), but consultants completed more modules than marketers ($p = .099$).

[6] Team leaders, a field manager, and a research manager supervised our field team and reviewed data daily. Outliers, anomalies, and data entry errors were immediately clarified with the enumerator or entrepreneur. Additional auditors, blind to the research design and firms, cross-checked a random set of 10% of the surveys with the entrepreneurs daily. The field manager and/or team leaders conducted on-site business audits to verify flagged responses. After all data from a survey round had been collected, the research manager in Uganda verified the accuracy of all outliers and anomalies, with particular attention paid to sales, profit, asset, and employee estimates, by visiting the entrepreneur and conducting an additional audit of financial information and cross-checking flagged variables. The same steps were taken for each completed survey.

Y_i is the dependent variable (i.e., firm growth) for firm i at end line. Marketer$_i$ is a treatment dummy variable indicating whether a firm is randomly assigned to the marketing intervention and matched with a marketing volunteer. Consultant$_i$ is a treatment dummy variable indicating whether a firm is randomized into the consultant intervention group and matched with a consulting volunteer. OtherProfessional$_i$ is a treatment dummy variable indicating whether a firm is randomized into the other professional intervention group and matched with a nonmarketing or nonconsulting volunteer.[7] $d_{i,s}$ comprises control variables measured preintervention, including 10 controls for baseline entrepreneur characteristics (gender, age, ethnicity, marital status, children, education level, business program, prior salaried job, previous ownership experience, and commitment), 15 controls for baseline business characteristics (founder, operating years, start-up capital, formal loans, separation of business–personal affairs, days open per week, sales frequency, business premises, location, registration, size, business practices, product competition, business-to-business customers, and markets outside neighborhood), and 10 industry fixed effects based on two-digit Standard Industrial Classification codes. We include the controls to improve estimate precision and account for any group imbalances due to attrition or spurious correlations in interaction analyses. Equation 1 also controls for the baseline value of the dependent variable, $Y_{i,b}$ (whenever this outcome was measured at baseline).[8] Robust standard errors are reported in all regression specifications. Because the dependent variable is continuous (e.g., sales, profits, assets, employees), we estimate Equation 1 via an ordinary least squares regression.

Firm and Entrepreneur Profile

In our sample, 70% of the firms are run by the founder and, on average, have been in operation for nearly four years and are open 6.5 days per week. The firms are fairly formalized, with 74% maintaining separate business and personal affairs, 13% having received a financial institution loan, and 22% being formally government-registered. The average firm in the sample operates from a small stand-alone shop or larger physical premises, is located in a busy area, has monthly sales of 4.4 million UGX ($\sim$\$1,190[9]), has monthly profits of 673,000 UGX ($\sim$\$184), owns assets valued at 14.4 million UGX ($\sim$\$3,950), and employs 1.7 paid staff (excluding the owner).

Female entrepreneurs make up 40% of the sample, and 99% are local Ugandans. The typical entrepreneur is 31 years old, has 2.3 children, and has completed at least high school. On average, 55% have engaged in a prior business development program (e.g., training course), 54% are married, and 46% previously owned a business. Web Appendix 7 displays summary baseline statistics for our full sample of 930 firms.

Balance Checks

Our experimental groups are reasonably balanced on preintervention covariates (i.e., randomization was successful; see Web Appendix 7). Out of 120 t-tests, we find six statistically significant differences in means, which would be expected by chance. Nonetheless, we control for entrepreneur and business characteristics in all regression analyses to account for group imbalances on observables.[10] We perform attrition and survival checks but do not detect differential effects among groups (see Web Appendix 9).

Given that the experimental groups do not differ in attrition or failure, our subsequent analysis includes the full sample of survivors with complete end-line surveys and key data (n = 605). We also followed the standard conservative approach for dealing with nonsurvivors in small firm studies suggested by Anderson, Chandy, and Zia (2018) and rerun each analysis with nonsurvivors, obtaining qualitatively similar results.

Main Effect: Analysis and Results

Model Free Evidence for Volunteer Marketers' Impact

Figure 2 provides model-free evidence for volunteer marketers' impact on firm growth. The control group decreased on the raw index measure ($-.030$ SD) from baseline to end line. The average change in growth for the marketer treatment group is positive (.123 SD) and significantly larger than for the control group ($p = .042$). We see a similar pattern of positive growth effects across our outcome measures: change in monthly sales, monthly profits, total assets, and paid employees is greater for firms exposed to a volunteer marketer than for control firms. We also plotted the four experimental groups' cumulative distribution functions for the firm growth index, which show a rightward shift for treated firms. In particular, across the distribution, it appears that entrepreneurs matched with a volunteer marketer achieved the most growth compared with the control group (see Web Appendix 10).

Regression Results for Volunteer Marketers' Impact

Table 1 presents our regression results for the volunteers' effect on firm growth. Our findings from the intention-to-treat

---

[7] In our interaction analysis, Equation 1 includes the pretreatment theoretical variables of interest (i.e., market knowledge and resource availability) and interaction terms, one for each interaction between the treatment dummy and theoretical variables.

[8] The analysis of covariance specification can increase statistical power compared with a difference-in-differences model when measures are noisy and low autocorrelation exists between the baseline and end-line dependent variable values, a common condition for small firm outcomes such as sales and profits in emerging markets (McKenzie 2012).

[9] We use a currency conversion rate of US\$1 = 3,656 UGX (as per www.xe .com on October 31, 2017; the midpoint of our end-line surveying period).

[10] We perform the same randomization checks with the full sample at end line in Web Appendix 8. The F-test is not significant for any of the three group comparisons. We find only eight statistically significant differences across the 120 t-tests.
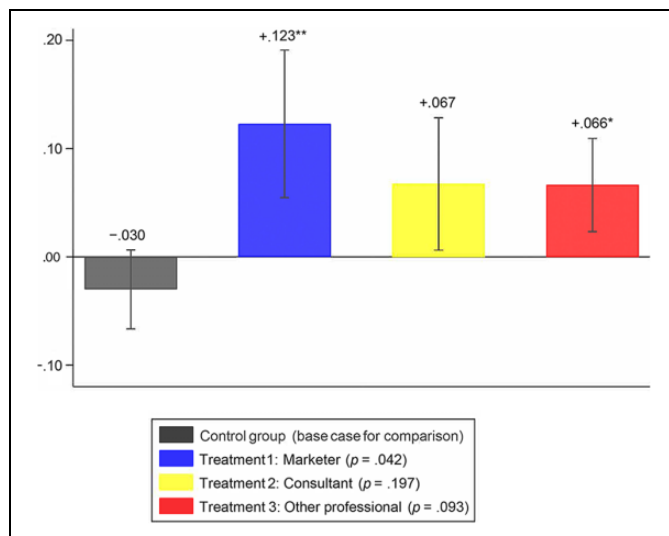
Figure 2. Volunteer marketers' main effects on firm growth.
*$p < .10$.
**$p < .05$.
Notes: The y-axis represents the pre-to-post change in Firm Growth Index 2. Error bars $= \pm 1$ SE.

analysis are consistent with the model free evidence. Across the outcome measures, we see significant positive main effects for the marketer treatment group (for full details, see Web Appendix 11).

We find that entrepreneurs who were matched with a volunteer marketer, on average, increased in size on multiple growth indicators. Table 1 shows monthly sales increased by 2,311,757 UGX (51.7% or .30 SD), monthly profits by 292,912 UGX (35.8% or .23 SD), total assets by 4,386,521 UGX (31.0% or .19 SD), and paid employees by .45 (23.8% or .17 SD) for marketer treatment group firms compared with control group firms. We also include the respective changes in logs (based on the IHS-transformed measures) in Table 1 for each growth indicator. Although firm growth measures commonly feature large standard errors in emerging market business studies (McKenzie 2012; McKenzie and Woodruff 2014), we find consistent coefficient magnitudes across our eight indicators (32.5% average effect size across columns 1–8 of Table 1).

Most importantly, our overall firm growth indices are positive and significant. Table 1 shows a firm growth index effect of .187 to .189 standard deviations for volunteer marketers, 2.95 times greater than that for consultants (.064 SD) and 2.49 times greater than that for other professionals (.076 SD). Taken together, the regression analysis finds a positive and meaningful treatment effect for the marketing intervention. For example, a 292,912 UGX ($80) increase in monthly profits (i.e., the marketer treatment effect in column 3) would enable the average firm in our sample to substantially expand its business premises, especially given that mean rent at baseline was 341,136 UGX per month. Moreover, as per Table 1 (column 5), growing total assets by 4,386,521 UGX ($1,200) is equivalent to a 67% rise in stock and inventory. Such working capital

gains can fuel the sales engine of a small emerging-market business. Overall, the main-effect results suggest that entrepreneurs exposed to a marketer tended to grow their firms more than those who did not receive any intervention.[11]

Robustness 1. We obtain a similar pattern of main effect results using the following alternative specifications: excluding control variables, selecting control variables via Lasso, including nonsurvivor firms, and designating the marketer treatment as the excluded base group. The main effect also continues to hold when we use difference-in-differences approaches instead of the analysis of covariance model specified in Equation 1. We further support our findings using a bounding exercise to examine attrition, where lost control group firms are assigned the treated firms' average growth values. Web Appendix 12 shows these robustness checks.

Robustness 2. Web Appendix 13 presents additional robustness checks. The regression results show that the marketer treatment effects continue to hold, with coefficients similar to those in Table 1, when consultants and other professionals are collapsed into a single treatment group labeled nonmarketers. Critically, this lends support to the exogeneity of the marketer treatment dummy (i.e., the randomized matching of entrepreneurs and volunteers) as the effects remain similar. The nonmarketer treatment dummy variable is significant for the sales outcomes, which is consistent with Anderson, Chintagunta, and Vilcassim's (2021) findings.

Mechanism: Analysis and Results

We argued that volunteer marketers help emerging-market entrepreneurs differentiate, a trait that many entrepreneurs lack and a key reason that they fail or stagnate (Banerjee and Duflo 2011). Moreover, we predicted that volunteer marketers would focus specifically on product-related differentiation strategies. However, we noted that firms can take different routes to product differentiation (Dickson and Ginter 1987), and it is not clear how the entrepreneurs exposed to volunteer marketers would proceed. Thus, we set up our experimental design and data collection so we could analyze the entrepreneurs' approaches. In what follows, we present the insights from these analyses.

Intervention Effects: Insights from Linguistic Analysis

As we have described, the volunteers were encouraged to use Grow Movement's online project management system to summarize the topics they discussed in each entrepreneur meeting. All summaries were provided in English and saved in the

---

[11] Considering the firm growth indices, we cannot reject the null hypothesis of equal coefficients between firms in the marketer and consultant treatment groups ($p = .161$ and $p = .192$, respectively) or between the marketer and other professional treatment groups ($p = .139$ and $p = .169$, respectively). However, our goal is to examine volunteer marketers' effects on business growth (instead of the differences among treatment groups), and we therefore focus on the marketer effects in our discussion.

Table I. Volunteer Marketers' Main Effects on Firm Growth.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Monthly Sales		Monthly Profits		Total Assets		Total Employees		Firm Growth	
	Levels: UGX	Logs: IHS	Levels: UGX	Logs: IHS	Levels: UGX	Logs: IHS	Levels: UGX	Logs: IHS	Index 1	Index 2
Treatment 1: offered marketer (yes = 1)	**2,311.757****	**.245***	**292.912***	**.559*****	**4,386.521***	**.216****	**.454***	**.162***	**.187****	**.189*****
	(910.151)	**(.133)**	**(158.327)**	**(.223)**	**(2,368.823)**	**(.105)**	**(.252)**	**(.091)**	**(.075)**	**(.072)**
Treatment 2: offered consultant (yes = 1)	1,210.990	.153	1.116	−.047	2,894.067	.177	.094	.071	.066	.064
	(979.500)	(.132)	(142.183)	(.264)	(2,405.527)	(.133)	(.234)	(.089)	(.073)	(.071)
Treatment 3: offered other professional (yes = 1)	970.828	.219**	101.796	.302	2,230.143	.103	.108	.104	.076	.076
	(718.131)	(.099)	(130.877)	(.217)	(1,857.546)	(.093)	(.176)	(.070)	(.060)	(.058)
Baseline value of dependent variable included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15 business controls included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10 entrepreneur controls included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10 industry fixed effects included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	.375	.425	.312	.148	.404	.425	.525	.469	.428	.465
Sample size: total	605	605	605	605	605	605	605	605	605	605
Control: mean of dependent variable	4,475.372	8.290	818.983	6.244	14,167.098	9.531	1.903	.996	−.013	−.012
Control: standard deviation of dependent variable	7,625.873	1.251	1,254.108	2.246	23,190.844	1.227	2.828	.955	.700	.717

*$p < .10$.
**$p < .05$.
***$p < .01$.

Notes: Robust standard errors are in parentheses. Firm growth values in levels (sales, profits, assets) are listed as Ugandan Shillings (UGX) in thousands. Firm Growth Index 1 is the average of the 12 standardized measures of sales, profits, assets, and employees. Firm Growth Index 2 is the average of the eight standardized composites of sales, profits, assets, and employees.

partner's database. On average, 71.5% of volunteer marketers, 70.6% of volunteer consultants, and 69.1% of other volunteers provided written summaries. The entry rates were not significantly different ($p > .55$). We also examined average entry length; marketers averaged 959 words (SD = 1,413), consultants averaged 1,163 words (SD = 1,518), and other professionals averaged 915 words (SD = 1,380). The three groups did not significantly differ in average words used ($p > .18$).

Words and text provide information about their author (Tirunillai and Tellis 2014), and analysts can aggregate text across authors to study larger groups. Because grouping individuals on the basis of shared characteristics can provide insight into their similarities and differences (Berger et al. 2020), we first organized all session summary text by treatment group. We then used topic modeling to identify underlying themes and general topics discussed during the intervention and differences in the extent to which each treatment group focused on topics. We used structural topic modeling (STM) for the analysis, removing stop words and employing stemming (Berger et al. 2020). We also removed all names. We employed the "stm: R package" developed by Roberts, Stewart and Tingley (2017) for our analysis. No clear guidance is available for selecting an optimal number of topics for STM analysis (Berger et al. 2020). However, the semantic coherence measure of our data was highest when we set topics at K = 6. Thus, combining the statistical measure results with researcher judgment (Berger et al. 2020), we used K = 6 topics. Table 2 presents the topics extracted from the text, along with the words most likely to be present for each (Roberts, Stewart, and Tingley 2017).

Across the three treatment groups, volunteers devoted similar amounts of text to the six topics when creating their session summaries, with one notable exception. Volunteer marketers devoted significantly more text to topic 4, which relates to products, than consultants and other professionals. Topic 4 captures text such as "She has a good handle on the profit and loss side of business. To grow the business [she] will need to focus on marketing [her products better]" and "She has visited three supermarkets [so far]. They are telling her that they want her product delivered hot and have their own display." Other text includes "Are there products that are often wasted and not sold?," "Are there products that take a lot of time to make?," and "[I advised her to] introduce a new line of products."

In particular, volunteer marketers devoted, on average, 18% of their text to topic 4. Consulting volunteers devoted, on average, 10% of their text to topic 4, while other volunteers devoted, on average, 12% to topic 4. The differences are statistically significant, with marketers being greater than consultants ($p = .006$) and than other volunteers ($p = .015$).

Topic 4 captures text devoted to products, including their performance, which resonates with customers. Thus, consistent with our prediction, our STM results suggest that volunteer marketers aimed to help entrepreneurs differentiate through product-focused approaches. However, the STM results do not offer insights into how entrepreneurs supported by volunteer marketers changed their products. Nevertheless, these results indicate further analyses pertaining to emerging-market entrepreneurs' products are warranted.

It is also noteworthy that marketers did not devote more text to topic 2 (which captures text devoted to customers and the market) than the other volunteers. This finding suggests that customer and market-related topics—aside from product-related discussions captured by topic 4—were equally covered across the treatment groups. Thus, this offers further evidence that volunteer marketers' product focus was a key driver of their positive impact, again suggesting that additional analyses of emerging-market entrepreneurs' products are worthwhile.

Intermediate Effects: Insights from Mediation Analysis

According to Porter (1980), to effectively differentiate products, firms must provide some unique and meaningful value. Porter (1980) also argues firms that differentiate are frequently able to charge a premium price for their products, not just to compensate for potentially higher costs but also to achieve higher margins. Notably, differentiation has been found to reduce customers' price sensitivity and to enable the firm to earn a price premium (e.g., Sharp and Dawes 2001). That said, emerging-market entrepreneurs may also try to differentiate their products by offering lower prices (e.g., Arunachalam et al. 2020). Against this backdrop, we analyzed the marketers' effect on four proxies to assess whether and how entrepreneurs differentiate their products: (1) price per unit, (2) contribution per unit, (3) markup percentage per unit, and (4) enhancement of products. Web Appendix 14 provides details on measurement of the product differentiation proxies. The regression results in Table 3 demonstrate volunteer marketers' impact on emerging-market entrepreneurs' product differentiation efforts (for full details, see Web Appendix 15).

We find a 58.2% increase ($\beta_1 = 46.94$) in average price per unit for firms in the marketer treatment group versus the control group. Moreover, we find that the average unit contribution increased by 75.2% ($\beta_1 = 23.36$) for firms exposed to volunteer marketers relative to firms receiving no intervention. In addition, compared with control group firms, marketer treatment group firms improved markups by 15.3% on average, and 33.3% more of the firms ($\beta_1 = .103$) enhanced their products. These results suggest that volunteer marketers indeed helped emerging-market entrepreneurs differentiate their products. The results also suggest that emerging-market entrepreneurs started offering more premium products—defined as products that demand "higher prices" and that "provide greater value to consumers" (e.g., Caldieraro, Kao, and Cunha 2015)—after the marketing intervention. We also examined volunteer marketers' impact on changes in outcomes not related to product differentiation (e.g., firm operational or financial capabilities) but do not find significant effects, providing some evidence against alternative mechanism explanations.

To address noisy measurement issues, we also tested volunteer marketers' effect on a product index (referred to as "premium product index"), constructed by averaging the four standardized product differentiation proxies. As Table 3 shows,

Table 2. Linguistic Analysis Insights.

	(1)	(2)	(3)	(4)	(5)	(6)
	Topic 1: Proactive Behavior	Topic 2: Customer and Market	Topic 3: Business in Uganda	Topic 4: Products and Performance	Topic 5: Understanding the Firm	Topic 6: Intervention Logistics
Highest probability words (in descending order)	get will can also talk ask now	custom discuss market client new servic increas	uganda will creat can busi time page	product shop sale month profit cost new	busi session discuss plan understand manag cash	client session call progress time email week
Examples of text	Talked to me before final decision with the loan shark	Concluded that better customer service would help	Conduct research on payment options	Has a good handle on profit and loss. Needs to focus on marketing	Understand business and what main challenges are	He had not received email
	Started using email	Discussed the competitive analysis	Enabling Uganda's vulnerable youth	Products that are often wasted	Conducted cash flow and profitability analysis	We agreed on a time for next call
	Will get a large dryer	What are the market needs?	Opening a bank account for business	Introduce a new line of products	Discussed revenue and cost	The session was cancelled
Text Devoted to Topic by Treatment Group						
Treatment 1: marketer	12%	17%	5%	18%	42%	6%
Treatment 2: consultant	15%	22%	3%	10% ***	43%	8%
Treatment 3: other professional	14%	18%	4%	12% **	42%	10% ***

*$p < .10$.
**$p < .05$.
***$p < .01$.
Notes: Marketers devoted significantly more text to topic 4 (18%) than consultants (10%) and the other professionals (12%). In addition, marketers devoted significantly less text to topic 6 (6%) than the other professionals (10%). Text devoted to the six topics does not significantly differ between the consultants and other professionals.

marketer group firms achieve a .254-standard-deviation increase for the overall premium product index compared with those in the control group, a roughly 37% increase. By contrast, we observe no significant change in the premium product index or the four product differentiation proxies for consultant and other professional group firms.

In terms of the substantive impact for entrepreneurs who were paired with a volunteer marketer, on average, their per-unit prices increased by 46,944 UGX ($12.84, or a 58.2% increase relative to control firms), and their unit contribution increased by 23,356 UGX ($6.39, or a 75.2% increase relative to control firms). These increases represent meaningful effect sizes for entrepreneurs selling in a marketplace where most customers are earning $5–$12 per day.

We next examined the relationship between the product differentiation proxies and firm growth. The general pattern of results suggests a positive and significant correlation between product differentiation and firm growth (see

Table 3). We also tested whether product differentiation mediates volunteer marketers' effect on firm growth using Hayes's (2018) PROCESS Model 4. The indirect effect of the marketer treatment on our main firm growth index—through the premium product index—is positive and significant (i.e., a × b = .04; 95% confidence interval based on 10,000 bootstrap samples = [.01, .08]; see Web Appendix 16). Thus, entrepreneurs exposed to volunteer marketers not only created more premium products with higher prices, unit contributions, and markups but also were successful at selling these products, as indicated by their increased sales and profits. We repeated the mediation analysis for the consultant treatment and other professional treatment groups. Neither of the indirect effects was significant, indicating that product differentiation does not mediate the firm growth effects for these groups.

Taken together, the results support our predictions that volunteer marketers help emerging-market entrepreneurs improve

Table 3. Volunteer Marketers' Effects on (Intermediate) Product-Related Outcomes.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Product Price	Product Unit Contribution	Product Markup	Product Enhancement	Premium Product Index	Firm Growth Index 2				
Treatment 1: offered marketer (yes = 1)	**46.944***	**23.356****	**.153****	**.103***	**.254****					
	(27.023)	**(11.174)**	**(.069)**	**(.054)**	**(.086)**					
Treatment 2: offered consultant (yes = 1)	23.734	16.096	.021	−.041	.065					
	(28.624)	(13.676)	(.083)	(.056)	(.094)					
Treatment 3: offered other professional (yes = 1)	−21.473	−7.971	.025	−.066	−.087					
	(15.763)	(6.869)	(.059)	(.045)	(.054)					
Product price: average per unit (UGX in 1000s)						.00067***				
						(.00017)				
Product unit contribution: average per unit (UGX in 1000s)							.00144***			
							(.00039)			
Product markup: average per unit (%)								−.05885		
								(.04261)		
Product enhancement: changed output and added value (yes = 1)									.09486*	
									(.05224)	
Premium Product Index (Average of Standardized Measures)										**.17089***
										(.04494)
Baseline value of dependent variable included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15 business controls included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10 entrepreneur controls included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10 industry fixed effects included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	.496	.401	.311	.176	.418	.495	.496	.460	.463	.483
Sample size: total	605	605	605	605	605	605	605	605	605	605
Control: mean of dependent variable	80.604	31.058	4.154	.309	.002	−.012	−.012	−.012	−.012	−.012
Control: standard deviation of dependent variable	201.888	85.062	.716	.463	.682	.717	.717	.717	.717	.717
Premium product measure (normalized 0–1): coefficient						1.340	1.220	−.312	.095	1.406

*$p < .10$.
**$p < .05$.
***$p < .01$.

Notes: Columns 1–5 show the effects on different measures of product outcomes. Columns 6–10 show the relationship between each product measure and overall firm growth outcomes (i.e., Firm Growth Index 2, the average of the eight standardized composites of sales, profits, assets, and employees). Robust standard errors are in parentheses. Firm growth values in levels (price and contribution per unit) are listed as Ugandan shillings (UGX) in thousands.

product differentiation. Interestingly, the focus seems to be on selling more "premium" products, which is somewhat counterintuitive given the low disposable incomes of consumers in these markets. This analysis uncovers at least one (new) process through which the marketing intervention leads to firm growth.

Heterogeneous Effects: Analysis and Results

Next, we analyzed interaction effects to determine which types of firms volunteer marketers help most. In particular, given the findings from the mechanism analysis thus far, the marketing intervention should be more effective for businesses better equipped for product differentiation. This raises the question, what makes a firm better equipped for a product differentiation–focused marketing intervention? Morgan, Vorhies, and Mason (2009) show that a firm's marketing capabilities and market orientation combine and interact and are akin to interconnected assets (Teece, Pisano, and Shuen 1997). Intelligence generation and dissemination are key components of a firm's market orientation (Jaworski and Kohli 1993). In turn, market knowledge is an important outcome of the two and helps firms understand customer preferences and competitor positions, which should enhance differentiated product development. Thus, we expect entrepreneurs with greater market knowledge to benefit more from the marketing intervention.

Moreover, the marketing intervention enables and is akin to benchmarking (e.g., Vorhies and Morgan 2005), a learning process by which the entrepreneur tries to identify best practices from the volunteer marketer. That said, the benchmarking literature has shown that firms with greater resources are better equipped to act on benchmarking insights (e.g., Anand and Kodali 2008). Indeed, greater resources (e.g., money, time) should assist firms in delivering products to market and improve their deployment of premium, differentiated products. Thus, we expect entrepreneurs with greater resources to benefit more from the marketing intervention.

We used three business characteristics to capture each firm's market knowledge (i.e., local market experience, demand tracking system, and diverse customers) and resource availability (i.e., start-up capital, business partners, and cash reserves). We provide details on measuring the characteristics in Web Appendixes 17 and 18. We created two composites for each construct (normalized 0–1 and median split, with 0 = lower and 1 = higher) and separately examined heterogeneity in the volunteer marketers' treatment effect.

Table 4 (columns 1–5) presents interaction regressions based on a firm's ex ante market knowledge using the composite measures and all three dimensions. We observe positive firm growth effects for entrepreneurs exposed to volunteer marketers when the businesses have greater market knowledge. In particular, the marketer interaction coefficient is large, with a 2.71-standard-deviation firm growth increase. Interpreted differently, a 33% market knowledge composite increase (i.e., obtaining the maximum score on one of three

dimensions) leads to a .904-standard-deviation gain in overall firm growth.

Likewise, marketers' impact on firm growth is greater for entrepreneurs with more resource availability. As shown in Table 4 (columns 6–10), firms matched with volunteer marketers realize a 3.57-standard-deviation gain when their resource availability is highest (i.e., 1 on the normalized composite). The positive firm growth effects persist whether the composite measure is normalized or split at the median, as well as for each of its three dimensions. We note that when all interaction terms are included in the same model (column 11 in Table 4), the results are substantively similar.[12]

Market Knowledge and Nonlinear Firm Growth Effects

We also explored nonlinearities in the relationship between market knowledge and firm growth to delve deeper into heterogeneity. Web Appendix 19 summarizes the regression results when we include the continuous market knowledge measure (normalized 0–1 and mean-centered) and its squared term interacted with our treatment dummy variables. The positive impact on firm growth persists when businesses increase in market knowledge and are matched with a volunteer marketer. Moreover, we find a positive and significant squared term (7.03), which suggests that the relationship is nonlinear. We plot the predicted values from the regression in Figure 3 to highlight differences between the marketing treatment and control groups. For marketing treatment firms, we observe a convex relationship as market knowledge increases from the left tail (−.159) to the right tail (+.292) of its distribution. The plot shows that most of the interaction effect occurs toward the right tail, where market knowledge is highest and separation from the control group distribution is greatest.

To better understand the pattern, we also divided the market knowledge composite into terciles and see a similar nonlinear relationship (see Web Appendix 19). Thus, these results suggest that only businesses with high market knowledge appear to see a large and increasing positive effect on firm growth when exposed to a marketer.

Resource Availability and Nonlinear Firm Growth Effects

We also explored treatment heterogeneity and nonlinear firm growth effects for resource availability. Web Appendix 20 summarizes the regression results when we include the continuous resource availability measure (normalized 0–1 and mean-centered) and its squared term interacted with our treatment dummy variables. The positive firm growth effect persists when

---

[12] An additional analysis (not reported) indicates that high market knowledge and high resource availability combined result in a growth effect of .431 standard deviations ($p = .006$) for firms exposed to a volunteer marketer, which is greater than knowledge alone (.266 SD) or resources alone (.318 SD). This effect suggests a synergistic relationship between knowledge, which can help develop differentiated products, and resources, which can help deploy products in the market.

Table 4. Heterogeneity in Volunteer Marketers' Interaction Effects on Firm Growth.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11) Combined Model	
		MK Analysis					RA Analysis				MK Coef.	RA Coef.
					Firm Growth Index 2							
(MK or RA) × (Marketer)	2.713***	.266*	1.681**	.898**	1.048**	3.565**	.318**	1.126*	3.357**	2.083**	2.457***	3.261**
	(.976)	(.146)	(.701)	(-.438)	(.530)	(1.687)	(.141)	(.655)	(1.590)	(.992)	(.926)	(1.619)
Treatment 1: offered marketer (yes = 1)	.206***	.187***	.198***	.211***	.184***	.194***	.197***	.175**	.186***	.206***	.213***	
	(.070)	(.072)	(.069)	(.076)	(.071)	(.071)	(.072)	(.071)	(.068)	(.070)	(.069)	
(MK or RA) × (Consultant)	1.337***	.156	-.149	.588	.699**	2.000*	.031	1.289	.911	.728	1.06*	1.478
	(.628)	(.136)	(.378)	(.416)	(.344)	(1.106)	(.141)	(.898)	(1.768)	(.640)	(.617)	(1.034)
Treatment 2: offered consultant (yes = 1)	.053	.061	.049	.053	.062	.081	.075	.064	.066	.063	.061	
	(.069)	(.071)	(.071)	(.069)	(.070)	(.071)	(.072)	(.073)	(.071)	(.071)	(.069)	
(MK or RA) × (Other professional)	1.496**	.222**	-.340	.503	.864***	2.778***	.055	1.541***	.631	1.193	1.135**	2.631***
	(.655)	(.110)	(.703)	(.423)	(.271)	(1.067)	(.102)	(.506)	(1.051)	(.759)	(.569)	(.998)
Treatment 3: offered other professional (yes = 1)	.072	.077	.070	.061	.083	.061	.077	.073	.071	.069	.057	
	(.057)	(.058)	(.058)	(.055)	(.057)	(.053)	(.057)	(.055)	(.057)	(.055)	(.054)	
MK: composite[a]	-.416										-.215	
	(.460)										(.428)	
MK: high (yes = 1; median split)		-.036										
		(.074)										
MK dimension: local market experience[a]			.459									
			(.288)									
MK dimension: demand tracking system[a]				-.075								
				(.232)								
MK dimension: diverse customers[a]					-.574**							
					(.252)							
RA: composite[a]						-.804						-.842
						(.836)						(.794)
RA: high (yes = 1; median split)							.039					
							(.068)					
Dimension: start-up capital[a]								-.524				
								(.350)				
Dimension: business partners[a]									-.645			
									(1.063)			
Dimension: cash reserves[a]										-.185		
										(.575)		
R-squared	.493	.474	.491	.475	.483	.488	.470	.485	.477	.482	.515	
Sample size: total	605	605	599	604	605	605	605	589	605	605	605	
Control: mean of dependent variable	-.012	-.012	-.012	-.008	-.012	-.012	-.012	-.014	-.012	-.012	-.012	
Control: standard deviation of dependent variable	.717	.717	.719	.715	.717	.717	.717	.722	.717	.717	.717	

*$p < .10$.
**$p < .05$.
***$p < .01$.
[a]Normalized 0–1; mean-centered.

Notes: MK = market knowledge; RA = resource availability. 15 business controls, 10 entrepreneur controls, and 10 industry fixed effects are included in all regressions. To avoid duplication, the "start-up capital" control is dropped from the resource availability regressions in columns 6–8. Robust standard errors are in parentheses. Firm Growth Index 2 is the average of the eight standardized composites of sales, profits, assets, and employees.
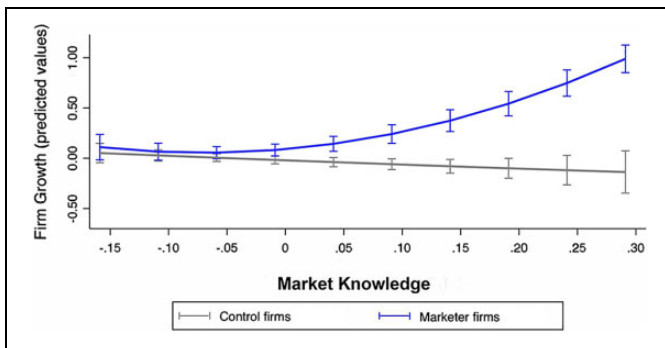
Figure 3. Market knowledge and nonlinear firm growth effects.
Notes: The predicted values of firm growth (*p*-hat) are obtained following a nonlinear interaction analysis that regresses Firm Growth Index 2 onto the continuous measures of market knowledge and its squared term as well as the interactions of both variables with each of the treatment dummies (and the full set of controls). For complete results, see Web Appendix 19. For display purposes, 2.5% of the distribution's right tail is truncated in the figure. Error bars = ± 1 SE.

Figure 4. Resource availability and nonlinear firm growth effects.
Notes: The predicted values of firm growth (*p*-hat) are obtained following a nonlinear interaction analysis that regresses Firm Growth Index 2 onto the continuous measures of resource availability and its squared term as well as the interactions of both variables with each of the treatment dummies (and the full set of controls). For complete results, see Web Appendix 20. For display purposes, 2.5% of the distribution's right tail is truncated in the figure. Error bars = ± 1 SE.

businesses increase in resource availability and are matched with a marketer. However, the negative and significant squared term (-14.19) suggests that the relationship is again nonlinear. We plot the predicted values from the regression in Figure 4 to highlight the differences between the marketing treatment and control groups. For marketing treatment firms, we observe a concave relationship as resource availability increases from the left tail ($-.057$) to the right tail ($+.291$) of its distribution. The plot shows that the interaction effect occurs mainly toward the mid- to right tail as resource availability increases.

To further examine the nonlinear relationship, we also divided the resource availability composite into terciles and again obtain similar results (see Web Appendix 20). These findings indicate that only businesses with high resource availability appear to see a large and slightly decreasing positive effect on growth when exposed to a marketer.

Discussion and Conclusion

Interest in the effects of business support interventions on firm and economic growth in emerging markets has risen over the past decade. Researchers have suggested that entrepreneurship, in particular, can be a catalyst for growth (Campos et al. 2017; Frese, Gielnik, and Mensmann 2016). However, scholars have also pointed out a need for research determining which business skills are impactful, and for whom, and for work examining the process through which interventions enhance firm performance (e.g., McKenzie and Woodruff 2014).

Our results, based on a randomized controlled field experiment with 930 entrepreneurs in Uganda, indicate that volunteer marketers significantly and positively impact the entrepreneurs' firm growth by 32.5% on average, as measured in monthly sales and profits, total assets, and paid employees.

Our theory and mechanism analyses indicate that volunteer marketers are effective because they help the entrepreneurs differentiate, a capability many desperately lack (Banerjee and
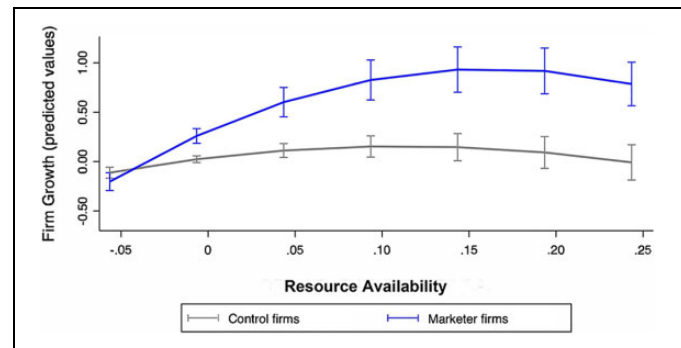
Duflo 2011). Process evidence suggests that entrepreneurs matched with volunteer marketers create more premium products that resonate with target customers. Finally, our evidence based on interaction effects provides insight into which types of businesses benefit most from a volunteer marketer—namely, those with greater ex ante market knowledge or resources.

Implications for Governmental Organizations and NGOs

Governmental organizations and NGOs invest billions in business support interventions to fight poverty in emerging markets each year (Campos et al. 2017). Researchers debate whether the aid is beneficial (e.g., Easterly 2014; Sachs 2005; Singer 2009). Our study focuses on a basic, concrete question: Can marketers help small-scale entrepreneurs in Uganda grow their businesses? If yes, marketers could partially alleviate Uganda's pervasive poverty (e.g., Kiranda, Walter, and Mugisha 2017). As Frese, Gielnik, and Mensmann (2016, p. 196) point out, "Increasing the . . . quality of entrepreneurs is probably one of the most helpful ways to reduce poverty because it creates employment and boosts the innovation and economic empowerment of individuals in poor countries with extremely high unemployment rates."

Many emerging-market entrepreneurs struggle and fail to grow because they are "utterly undifferentiated" (Banerjee and Duflo 2011). We find that marketers can be especially effective as volunteers because they help entrepreneurs differentiate.

We therefore offer governmental organizations and NGOs an accessible recommendation for future business support interventions in emerging markets. We hope our findings will earn marketers a seat at the policy table with organizations such as the World Bank, International Monetary Fund, and United Nations, which invest heavily in business and entrepreneurship programs every year. Our results suggest that the organizations should consider how marketers and marketing tools can be integrated into solutions for stimulating firm growth.

Many economists believe that emerging-market entrepreneurs often fail to thrive due to resource constraints (e.g., Yunus 2007). While our results confirm that resources help entrepreneurs succeed, we find that resources alone may not be enough. Emerging-market entrepreneurs may also need guidance from experienced business professionals, particularly marketers, to use their available resources.

Our partner, Grow Movement, estimates that each of its entrepreneur–volunteer collaborations costs $450–$500 when run at a large scale in a single country, where fixed costs can be spread across units. These costs compare favorably to other business support interventions in emerging markets (e.g., Campos et al. 2017; McKenzie and Woodruff 2014), suggesting that governmental organizations and NGOs would be willing to support the costs. In fact, several business schools and NGOs have recently started incorporating versions of our "remote coaching" intervention into their programs with a focus on matching entrepreneurs with marketing practitioners. In addition, multinationals in developed markets could participate in future remote marketing coaching interventions such as ours. In short, we envision multinationals enabling their interested marketers to spend a few hours a week remotely coaching an emerging-market entrepreneur. This endeavor, we believe, could be a win-win for the entrepreneurs and the multinationals: the entrepreneurs' businesses would likely grow, and the multinationals would likely have more satisfied employees, accrue corporate social responsibility–related benefits, and learn about opportunities (and threats) in emerging markets.

Implications for Emerging-Market Entrepreneurs and Marketers

The marketing literature has largely neglected entrepreneurial firms, which is surprising given the important role such companies play across all markets (e.g., Matsuno, Mentzer, and Özsomer 2002; Webb et al. 2011). Likewise, the entrepreneurship literature has largely ignored marketing, which is equally surprising, as some have argued that "marketing is the home for the entrepreneurial process" (Morris and Paul 1987, p. 247). Although marketing and entrepreneurship are two key business responsibilities (Drucker 1954), researchers have done little to understand how the two interact (Webb et al. 2011). Our study offers evidence that marketing and entrepreneurship blend especially well in emerging markets. The insight adds to the literature on marketing's influence within the firm (e.g., Homburg, Workman, and Krohmer 1999; Verhoef and Leeflang 2009), suggesting that emerging-market entrepreneurs benefit from marketing knowledge and skills.

We hope that entrepreneurs in emerging markets take note of our findings and consider either acquiring marketing skills or hiring marketers. Marketers could consider partnering with entrepreneurial firms as volunteers or paid employees. Finally, we hope that emerging-market entrepreneurs and marketers note our finding that premium products can be successful in emerging markets. Thus, we add to the emerging literature on low-income consumers' preferences in emerging markets (e.g., Arunachalam et al. 2020; Mahajan 2016).

Limitations and Future Research

Our study is not without limitations, some of which provide opportunities for future research. Although our study was conducted over two years, longer than many prior business-support-intervention studies, its long-term implications are not obvious. For example, we cannot say with certainty that the treated entrepreneurs will continue using the marketing capabilities they acquired during the intervention. Although we show that the entrepreneurs significantly changed their products, which bodes well for long-term effects (McKenzie and Woodruff 2014), future intervention studies might measure outcomes over longer periods.

We randomly assigned volunteers to entrepreneurs as part of our experimental setup. Thus, we did not match volunteers and entrepreneurs on the basis of their backgrounds. However, more technical businesses, for example, might benefit from a volunteer with an engineering background. Entrepreneurs and volunteers might also match well on the basis of demographics such as gender or age. Future research should explore matching-related questions.

Finally, some economists (e.g., Easterly 2014) and organizations (e.g., the American Enterprise Institute) are skeptical of or oppose foreign aid. Some suggest that foreign aid is often focused on recipients' material well-being without addressing underlying issues such as corrupt governments and individual rights suppression. These concerns are serious and valid; however, evidence suggests that flourishing entrepreneurship translates to positive long-term net effects in developing economies (e.g., Frese, Gielnik, and Mensmann 2016). We hope future research continues to explore ways in which marketers can play a role in "doing good" in the economies and societies of emerging markets, thereby contributing to a better world.

ORCID iD

Stephen J. Anderson https://orcid.org/0000-0003-1945-1963

References

Anand, Gurumurthy and Rambabu Kodali (2008), "Benchmarking the Benchmarking Models," *Benchmarking: An International Journal*, 15 (3), 257–91.

Anderson, Stephen J., Rajesh Chandy, and Bilal Zia (2018), "Pathways to Profits: The Impact of Marketing vs. Finance Skills on Business Performance," *Management Science*, 64 (12), 5559–83.

Anderson, Stephen J., Pradeep Chintagunta, and Naufel Vilcassim (2021), "Connections Across Markets: Stimulating Business Model Innovation and Examining the Impact on Firm Sales in Uganda," working paper.

Anderson, Stephen J., Christy Lazicky, and Bilal Zia (2021), "Measuring the Unmeasured: Aggregating, Anchoring, and Adjusting to Estimate Small Business Performance," working paper.

Arunachalam, S., S. Cem Bahadir, Sundar G. Bharadwaj, and Rodrigo Guesalaga (2020), "New Product Introductions for Low-Income Consumers in Emerging Markets," *Journal of the Academy of Marketing Science*, 48 (5), 914–40.

Banerjee, Abhijit and Esther Duflo (2011), *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: Public Affairs.

Berger, Jonah, Ashlee Humphreys, Stephan Ludwig, Wendy W. Moe, Oded Netzer, and David A. Schweidel (2020), "Uniting the Tribes: Using Text for Marketing Insight," *Journal of Marketing*, 84 (1), 1–25.

Bloom, Nicholas, Benn Eifert, Aprajit Mahajan, David McKenzie, and John Roberts (2013), "Does Management Matter? Evidence from India," *Quarterly Journal of Economics*, 128 (1), 1–51.

Boulding, William and Richard Staelin (1995), "Identifying Generalizable Effects of Strategic Actions on Firm Performance: The Case of Demand-Side Returns to R&D Spending," *Marketing Science*, 14 (3), 222–36.

Boulding, William, Eunkyu Lee, and Richard Staelin (1994), "Mastering the Mix: Do Advertising, Promotion, and Sales Force Activities Lead to Differentiation?" *Journal of Marketing Research*, 31 (2), 159–72.

Bruton, Garry D., David J. Ketchen Jr., and R. Duane Ireland (2013), "Entrepreneurship as a Solution to Poverty," *Journal of Business Venturing*, 28 (6), 683–89.

Bygrave, William D. and Charles W. Hofer (1992), "Theorizing About Entrepreneurship," *Entrepreneurship Theory and Practice*, 16 (2), 13–22.

Caldieraro, Fabio, Ling-Jing Kao, and Marcus Cunha Jr. (2015), "Harmful Upward Line Extensions: Can the Launch of Premium Products Result in Competitive Disadvantages?" *Journal of Marketing* 79 (6), 50–70.

Campos, Francisco, Michael Frese, Markus Goldstein, Leonardo Iacovone, Hillary C. Johnson, David McKenzie, and Mona Mensmann (2017), "Teaching Personal Initiative Beats Traditional Training in Boosting Small Business in West Africa," *Science*, 357 (6357), 1287–90.

Christensen, Clayton M. (1997), *The Innovator's Dilemma*. Cambridge, MA: Harvard Business School Press.

Dickson, Peter R. and James L. Ginter (1987), "Market Segmentation, Product Differentiation, and Marketing Strategy," *Journal of Marketing*, 51 (2), 1–10.

Drucker, Peter (1954), *The Practice of Management*. New York: Harper & Row.

Easterly, William (2014), *The Tyranny of Experts: Economists, Dictators, and the Forgotten Rights of the Poor*. New York: Basic Books.

Fleit, Caren and Brigitte Morel-Curran (2012), *The Transformative CMO*. Los Angeles: The Korn/Ferry Institute.

Frese, Michael, Michael M. Gielnik, and Mona Mensmann (2016), "Psychological Training for Entrepreneurs to Take Action: Contributing to Poverty Reduction in Developing Countries," *Current Directions in Psychological Science*, 25 (3), 196–202.

Friedrichs, David O. (1987), "Bringing Ourselves Back In: The Reflexive Dimension in Teaching a Humanist Sociology," *Teaching Sociology*, 15 (1), 1–6.

Gollin, Douglas (2002), "Getting Income Shares Right," *Journal of Political Economy*, 110 (2), 458–74.

Hambrick, Donald C. and Phyllis A. Mason (1984), "Upper Echelons: The Organization as a Reflection of Its Top Managers," *Academy of Management Review*, 9 (2), 193–206.

Hayes, Andrew F. (2018), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Perspective*, 2nd ed. New York: Guilford Press.

Homburg, Christian, John P. Workman Jr, and Harley Krohmer (1999), "Marketing's Influence Within the Firm," *Journal of Marketing*, 63 (2), 1–17.

Hsieh, Chang-Tai and Peter J. Klenow (2014), "The Life Cycle of Plants in India and Mexico," *Quarterly Journal of Economics*, 123 (3), 1035–84.

Jaworski, Bernard J. and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences," *Journal of Marketing*, 57 (3), 53–70.

Kaplan, Abraham (2017), *The Conduct of Inquiry: Methodology for Behavioural Science*. Abingdon, UK: Routledge.

Kelley, Donna, Niels Bosma, and José E. Amorós (2011), "Global Entrepreneurship Monitor 2010 Executive Report," Global Entrepreneurship Monitor, https://www.gemconsortium.org/report/gem-2010-global-report.

Kerin, A. Roger and Steven W. Hartley (2017), *Marketing*, 13th ed. New York: McGraw-Hill.

Kiranda, Yusuf, Max Walter, and Michael Mugisha (2017), *Reality Check: Employment, Entrepreneurship, and Education in Uganda*. Kampala: Konrad-Adenauer Stiftung.

Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54 (2), 1–18.

Kotler, Philip and Kevin Lane Keller (2016), *Marketing Management*, 15th ed. London: Pearson.

Mahajan, Vijay (2016), *Rise of Rural Consumers in Developing Countries: Harvesting 3 Billion Aspirations*. New York: SAGE Publications India.

March, James G. and Herbert A. Simon (1958), *Organizations*. New York: John Wiley & Sons.

Matsuno, Ken, John T. Mentzer, and Ayşegül Özsomer (2002), "The Effects of Entrepreneurial Proclivity and Market Orientation on Business Performance," *Journal of Marketing*, 66 (3), 18–32.

McKenzie, David (2012), "Beyond Baseline and Follow-Up: The Case for More T in Experiments." *Journal of Development Economics*, 99 (2), 210–21.

McKenzie, David and Christopher Woodruff (2014), "What Are We Learning from Business Training and Entrepreneurship Evaluations Around the Developing World?" *World Bank Research Observer*, 29 (1), 48–82.

Merlo, Omar and Seigyoung Auh (2009), "The Effects of Entrepreneurial Orientation, Market Orientation, and Marketing Subunit Influence on Firm Performance," *Marketing Letters*, 20 (3), 295–311.

Morgan, Neil A., Douglas W. Vorhies, and Charlotte H. Mason (2009), "Market Orientation, Marketing Capabilities, and Firm Performance," *Strategic Management Journal*, 30 (8), 909–20.

Morris, Michael H. and Gordon W. Paul (1987), "The Relationship Between Entrepreneurship and Marketing in Established Firms," *Journal of Business Venturing*, 2 (3), 247–59.

Narasimhan, Laxman, Kannan Srinivasan, and K. Sudhir (2015), "Marketing Science in Emerging Markets," *Marketing Science*, 34 (4), 473–79.

Porter, Michael E. (1980), *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: The Free Press.

Ries, Eric (2011), *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. New York: Crown Business.

Roberts, Margaret E., Brandon M. Stewart, and Dustin Tingley (2017), "STM: R Package for Structural Topic Models," *Journal of Statistical Software*, 91 (2), 1–40.

Sachs, Jeffrey (2005), *The End of Poverty: Economic Possibilities for Our Time*. New York: Penguin Press.

Schumpeter, Joseph A. (1934), *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.

Sharp, Byron and John Dawes (2001), "What Is Differentiation and How Does It Work?" *Journal of Marketing Management*, 17 (7–8), 739–59.

Singer, Peter (2009), *The Life You Can Save*. New York: Random House.

Teece, David J., Gary Pisano, and Amy Shuen (1997), "Dynamic Capabilities and Strategic Management," *Strategic Management Journal*, 18 (7), 509–33.

The CMO Survey (2019), "Highlights and Insight Report—August," (accessed November 19, 2019), https://cmosurvey.org/results/august-2019/.

Tirunillai, Seshadri and Gerard J. Tellis (2014), "Mining Marketing Meaning from Online Chatter: Strategic Brand Analysis of Big Data Using Latent Dirichlet Allocation," *Journal of Marketing Research*, 51 (4), 463–79.

Verhoef, Peter C. and Peter S.H. Leeflang (2009), "Understanding the Marketing Department's Influence Within the Firm," *Journal of Marketing*, 73 (2), 14–37.

Vorhies, Douglas W. and Neil A. Morgan (2005), "Benchmarking Marketing Capabilities for Sustainable Competitive Advantage," *Journal of Marketing*, 69 (1), 80–94.

Waller, Mary J., George P. Huber, and William H. Glick (1995), "Functional Background as a Determinant of Executives' Selective Perception," *Academy of Management Journal*, 38 (4), 943–74.

Webb, Justin W., R. Duane Ireland, Michael A. Hitt, Geoffrey M. Kistruck, and Laszlo Tihanyi (2011), "Where Is the Opportunity Without the Customer? An Integration of Marketing Activities, the Entrepreneurship Process, and Institutional Theory," *Journal of the Academy of Marketing Science*, 39 (4), 537–54.

Whitler, Kimberly A., Ryan Krause, and Donald R. Lehmann (2018), "When and How Board Members with Marketing Experience Facilitate Firm Growth," *Journal of Marketing*, 82 (5), 86–105.

Yunus, Muhammad (2007), *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*. New York: Public Affairs.

Zhou, Kevin Zheng, Chi Kin Yim, and David K. Tse (2005), "The Effects of Strategic Orientations on Technology and Market-based Breakthrough Innovations," *Journal of Marketing*, 69 (2), 42–60.