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WHAT PREVENTS

MORE SMALL FIRMS

FROM USING

PROFESSIONAL

BUSINESS SERVICES?

An Information and Quality-Rating Experiment in Nigeria*

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Abstract

Why do more small firms in developing countries not use the market for professional business services like accounting, marketing, and human resource specialists? Two key reasons may be that firms lack information about the availability of these services, and that they struggle to distinguish the quality of good versus bad providers. A brand recognition exercise finds that most small firms are unaware of most providers in this market, and a survey of service providers reveals that they largely rely on word-of-mouth and informal reputation mechanisms for acquiring customers. This study set up a business services marketplace that contains information about the different providers present in the market and used mystery shopper visits to develop a quality ratings system. A randomized experiment with more than 1,000 firms provided access to this marketplace to the treatment group and randomized whether firms received just information or also quality ratings. The provision of guality ratings information shifts small firms' preferences over which provider they would like to use, increasing the average quality rating of their preferred providers by 0.2 to 0.4 ratings points out of 5. However, neither the provision of information nor these quality ratings had any significant impact on the likelihood that small firms go on to hire a business service provider over the subsequent six months. The results suggest that alleviating information frictions alone is insufficient to increase usage of professional business services.

Keywords: Business Support Programs; Market for Professional Business Services; Quality Ratings; Small Firm Growth.

JEL Classification codes: O12, L26, L24, M31, M41.

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What Prevents More Small Firms From Using Professional Business Services? An Information and Quality-Rating Experiment in Nigeria

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1. Introduction

The professional business services market of providers offering accounting, marketing, human resources, consulting, and legal services to other businesses is estimated to exceed US\$5 trillion in annual revenue.¹ However, few small firms in developing countries use these services. In a recent experiment in Nigeria, we provided subsidies to firms with 2 to 15 workers, which paid for them to use a human resources firm to insource an accounting or marketing worker, or paid for them to outsource business functions to a professional accounting or marketing firm (Anderson and McKenzie, 2020). We found that this approach of getting firms to use the market for business services led to a much larger improvement in business practices than the traditional approach of trying to train the entrepreneur in these skills, and resulted in these firms using higher quality digital marketing practices, innovating with new products, and achieving greater sales and profits growth over a two-year horizon.

A natural follow-up question is then to ask why more small firms do not use the market for professional business services, and whether there is scope for interventions other than direct subsidies to encourage use. We hypothesized that information frictions may be a key constraint preventing more firms from using these services. When firms in our previous experiment were directly asked why they thought more firms did not use the market for business services, approximately half said a reason related to information or search frictions, such as firms not knowing of any business service providers that could help them, finding it difficult to judge the skills and quality of outside providers, believing it will take a lot of time to find someone, and not being confident that they can trust an outside firm. In more developed economies, these frictions are reduced through information sources such as business directories and industry organizations; reputation mechanisms such as the Better Business Bureau and Angie's List; and functioning legal institutions that can provide a remedy for breaches in trust. The lack of these supporting institutions in many developing countries may lead to underutilization of professional business services by small firms.

¹ Source: <u>https://www.thebusinessresearchcompany.com/report/professional-services-market</u> [accessed 26 February, 2021].

We begin by documenting the status quo of the marketplace for professional business services in Lagos and Abuja. We assess brand recognition of service providers amongst applicants to a government firm support program to show that the majority of service providers are unknown by most firms. We then conduct a survey of these providers to determine how easy it is to find providers, and to examine how they gain clients and the service guarantees they provide. We find there is no centralized database of providers, and that providers typically do not offer any sort of financial guarantee on their services, and rely largely on word-of-mouth for gaining new clients. As such, existing use of these services relies more on informal than formal reputation mechanisms, and potential clients have limited information about competing providers in the market. We then send mystery shoppers to visit and rate the quality of a set of accounting, marketing, and human resource specialists, to give us an independent measure of provider quality.

With these pieces, we develop a business services marketplace, consisting of a website that contains information about the different providers operating in a given geographic location, along with their brand logos, taglines describing their services, and contact information. We conduct a randomized experiment with 1,054 firms with 2 to 15 workers in Lagos and Abuja. The control group just receives a baseline interview and follow-up interview six months later. The treatment group is shown the business services marketplace, and randomized into one of four sub-treatments that vary whether they are just shown information, or also quality ratings (taken from the mystery shoppers). Firms are asked to make incentivized rankings over providers on the platform. We find that firms do respond to the quality ratings provided, with the average star rating (out of 5) of their top three-ranked providers increasing by 0.2 to 0.4 stars. Firms that receive the quality ratings treatment are less likely to choose low-quality (3 star or lower) providers and more likely to choose the top-ranked (5 star) providers. Providing quality ratings services therefore does change firm preferences over providers.

Finally, we conducted a six-month follow-up survey, which tests whether providing information about business service providers, and quality ratings, is enough to get more firms to use this market for business services. We find use of the market for business services is low in the control group, with only 10 percent of firms using a service provider, and that the information and ratings treatments have no significant impact on use of these services. Our estimated treatment effects are

all very close to zero in magnitude, with 95 percent confidence intervals of approximately ± 3 to 5 percentage points. Therefore, alleviating information and quality concerns alone does not seem to be sufficient to get more firms to use professional business services.

There is a large literature documenting the existence and importance of information frictions in limiting trade in developing countries (e.g. Jensen, 2007; Allen 2014; Jensen and Miller, 2018; Starz 2018). A key policy question is then whether simple interventions to alleviate these frictions will spur more market activity. Dillon et al. (2020) set up a yellow pages system in rural Tanzania and find that giving households information on enterprises does lead them to order more goods from outside their villages. Rudder (2020) finds that the same digital phonebook changes how firms contract with their suppliers, but does not lead to any detectable impact on firm revenues. Our work compliments this approach by testing information provision in a large urban setting and more complicated product environment, and through using ratings in addition to information. We also contribute to a recent literature examining the extent to which ratings can alleviate information and quality frictions and enhance consumer and firm welfare. Dellarocas (2003) highlights the importance of online ratings systems in building trust in situations where trade is moving from word-of-mouth reputation networks to larger scale marketplaces - as is our goal here. Reimers and Waldfogel (forthcoming) document how both professional reviews and peer star ratings boost sales of books on Amazon.com and enhance consumer welfare by allowing them to purchase better products. They note the importance of ratings for experience goods, and we view professional business services as an experience service.

2. The Status Quo

We use a brand recognition exercise with firms that applied and were selected for a government business support program to document that very few business service providers have a brand that is known by small firms. We then conducted a survey of business service providers to understand the characteristics of these providers, how they signal quality, and what they see as the main barriers to small firms using their services.

2.1 How much do firms know about business service providers?

The Growth and Employment (GEM) project was a multi-year government program in Nigeria funded by the World Bank, with the objective of increasing firm growth and employment. It offered programs to improve the performance of firms in five economic sectors: light manufacturing (including agri-business); construction; hospitality and tourism; information and communication technologies (ICT); and entertainment. To qualify for a pilot program in Abuja and Lagos that helped connect firms to business service providers and subsidize the initial use of these services, firms needed to satisfy the following criteria: (i) not already be insourcing or outsourcing both their marketing function and finance functions; (ii) have between 2 and 15 workers; and (iii) receive a score of 5.0 to 8.0 (out of 10) in terms of their baseline business practices.

Firms that attended induction workshops in 2017 were selected for an experiment that helped connect firms to the market for business service providers and subsidized their initial use of HR consultants to insource a worker, or professional accounting or marketing firms to outsource this business function (Anderson and McKenzie, 2020). The project held a new round of induction workshops in January 2019, that were intended to select more firms for this program. As part of this new round of inductions, we measured their knowledge and brand awareness of the business service providers that were on the GEM platform for SMEs to select among.

Each firm was shown on a tablet, in random order, the brand name, logo, and tagline of up to 38 different business service providers that were registered on the GEM platform (Appendix A provides an example). For each service provider, firms were asked whether they had heard of the provider before. Firms were only asked about providers that operated in their city. We also included six fake providers and logos as a check on firms claiming to know providers that they did not know. A total of 217 firms that met the eligibility criteria for the insourcing and outsourcing experiment completed this brand awareness exercise.

Figure 1 shows a histogram of the proportion of SMEs that recognize each provider (after removing firms that claimed to recognize fake providers). The median provider on the platform had only been heard of by 7 percent of firms in the program, and 75% of the 51 providers on the

platform were only known by 10 percent or fewer of the firms. Only one provider had a brand recognized by at least half of the firms in the program. This shows that most small firms lack information about most business service providers in the market.

2.2 How easy is it to find information about business service providers and how do they signal quality?

To better understand what the marketplace for business service providers looks like, we conducted a survey of providers in Lagos and Abuja between November 2017 and June 2018. A key challenge for conducting such a survey is that there was no master list, website, or database of service providers. This points to the challenge facing small firms who wish to use one of these services: it is difficult to know exactly which companies provide these services. We constructed a sample frame by using multiple methods: we began with the set of providers that had been selected for the GEM program, then contacted the professional industry associations (Association of National Accountants of Nigeria; Institute of Chartered Accountants of Nigeria; the National Institute of Marketing of Nigeria) to get a list of their members, and supplemented this with web searches, snowballing, and word of mouth. This resulted in a survey of 271 service providers in total, of which 39 were providers for the GEM program.² By specialization, we have 68 human resource specialists, 102 accounting firms, and 101 marketing firms.

Table 1 summarizes key data from these provider surveys. The first few rows provide information on the characteristics of business service providers in these markets. Most of these providers have been in operation for some time, with a median of 9 years and mean of 11.5 years. They have an average of 10.9 professionals working for them (directors, managers, accounting experts, marketing experts, and human resource experts), with a 10-90 range of 3 to 18 professionals. 38 percent have more than one branch. The mean provider works with about 30 customers a month and has US\$142,000 in annual sales, but there is a lot of variation: the 10-90 range for annual sales is US\$5,500 to US\$274,000.³ Their typical charge for a full day of work has a median of US\$96 and mean of US\$285. These providers work with firms of a range of different sizes: on average 21

² The survey also included an additional 62 general purpose business consulting firms. That type of provider is not part of the marketplace we set up for the information experiment, and so we do not include their data here.

³ We use an exchange rate of 365 Naira = 1 USD for these calculations.

percent of clients have fewer than 5 employees, 33 percent between 5 and 20 employees, 29 percent between 21 and 99 employees, and 22 percent of clients have 100 or more employees.

The second block of rows in Table 1 looks at what external signals of quality these providers use. It is very rare to use any form of money-back guarantee, with only 2 percent of providers offering a financial guarantee if customers are not satisfied – it is only a few marketing firms that offer this. Just over half say they will redo work if the customer is not satisfied, and 28 percent of the accounting firms say they will help clients if they fail an audit or have tax problems. Three-quarters of staff have tertiary qualifications, and 84 percent belong to some form of professional association, but only 39 percent of their staff on average have a professional certification of some form. Note that our sampling process captures the more formal and experienced providers who serve more customers – there are also likely to be some single-person firms providing accounting or marketing to a much more limited client base, and where information and quality concerns may be even more of an issue.

We then asked the providers how they find the majority of clients. The most common method is through word-of-mouth, which is the main method for 66 percent of firms. Only 16 percent of firms get most customers through advertising, and only 8 percent are walk-in customers. This reliance on word of mouth and lack of advertising is consistent with the lack of brand recognition seen in our survey of GEM firms, and shows firms using informal reputation as the main way of trying to overcome information and quality concerns.

Finally, we asked the providers why they thought more small firms do not use the types of services that their firm provides. The most common reason given was that firms lack knowledge of the value of these services, which 75 percent of providers gave as one of the three most important factors. Only 25 percent thought the services do not have a high enough return to warrant use by small firms, while 66 percent of providers thought that firms do not have enough money to pay the upfront costs. Not knowing what providers exist in the market was seen as a key factor by 33 percent of providers, and firms not being able to tell the quality of the providers that are on the market was seen as a key factor by 40 percent of firms. These suggest that information frictions

and uncertainty about quality may explain why some small firms are not using this existing market for business services.

3. Measuring the Quality of Business Service Providers

In order to obtain an independent and objective measure of business service provider quality, we conducted a mystery shopper exercise between June and July 2018. We recruited eight real business owners, who had been in business between 3 and 10 years, and were running firms with between 4 and 18 workers. These business owners were trained on a standardized approach to contact a GEM business service provider and arrange a meeting with them to discuss the challenges of their business in a given area (accounting, marketing or human resource needs). They then had a checklist to go through at the pre-contact stage (examining the website of the provider), initial call phase (ease of booking appointments, quality of phone interaction) and then at the meeting stage (quality of interaction, service options, capabilities, quality of needs assessment done).

A total of 53 business service providers in Lagos and Abuja were visited by these mystery shoppers. They were scored by the mystery shopper for each of these areas on the checklist, and then at the end the mystery shopper was asked whether or not they would recommend another SME use this provider, and to give an overall score out of 5. These providers were positively selected, since they had already gone through an earlier screening process to be deemed eligible to offer services under the GEM project. Even after this, the mystery shopper said they would never or rarely recommend 25 percent of the providers, and 23 percent had an overall rating of 3 out of 5 or lower. The median score was 4 out of 5. We use these ratings in our information experiment.

4. Information and Quality Ratings Experiment

4.1 The Sample

We aimed to conduct our information and quality rating experiment on similar types of firms to those that had been part of the earlier GEM project. To do this, we hired Kantar/TNS RMS Nigeria, the same survey firm that had worked on the GEM project to conduct a baseline survey of firms in Lagos and Abuja operating in the same five sectors as had been the focus of GEM (light manufacturing, information and communication technology, hospitality, entertainment, and construction). We targeted firms that had 2 to 15 employees (the same range as the experiment in Anderson and McKenzie, 2020), and that had been in business for at least one year. Firms were sampled using a combination of list-based interviewing and door-to-door screening. Kantar began with its own database of firms, and set of appointments to survey firms which met the sector and firm size criteria. Once the survey team were traveling to a given commercial area or industrial cluster, they then went door-to-door to find and interview other firms that met the sampling criteria. This resulted in an overall sample of 1,054 firms, of which 397 came from the original lists and 657 from door-to-door sampling. Baseline data collection took place between September 2 and October 14, 2019.

Table 2 provides some descriptive statistics on these firms. The entrepreneurs have an average age of 38, have been running their firms for a median of 8 years, and 64 percent have at least two years of university education, and 26 percent have post-graduate education. Twenty-five percent are female. The mean (median) firm has 5.9 (5) employees and USD \$2291 (\$833) in monthly sales. Baseline use of the market for business service providers is low, with only 5 percent having used a human resources (HR) firm to find a worker in the past year, and only 3 percent of firms currently using an outside accounting or marketing firm. We used the indirect method to assess the reasons for the lack of use of this market, asking firms why they thought SME owners in Nigeria (including themselves) did not use this market. Firms answered on a 5-point Likert scale, and we consider the percent of firms who think a factor is very likely or extremely likely to be a key factor for not using this market. Many of the answers given as key factors by firms are consistent with information frictions: 27 percent say not knowing any providers, 37 percent say finding it difficult to judge the quality of providers, 40 percent say not being confident they can find someone they can trust, and 37 percent say it is too much time and hassle to find such a provider. Seventy-two percent of firms think at least one of these information-related reasons is a key factor, and only about one-third of firms (35% for HR providers, 31% for marketing and accounting) are confident they could quickly find a provider if they needed one.

4.2 Random assignment and treatments

Upon being selected for the baseline survey, firms were randomly assigned by computer to either a control group (297 firms) or an information treatment group (757 firms). The first two columns of Table 2 show that these groups are similar on baseline observables, confirming that this in-the-field randomization produced a balanced assignment. The control group were just administered the baseline survey, while the information treatment group were instructed to use the computer tablet of the interviewer to access a *Business Services Marketplace*.⁴ Upon logging into this marketplace, the entrepreneur was asked to look through a list of providers in their city in each of three categories: HR providers, accounting firms, and marketing firms. The marketplace contained information for 35 business service providers in Lagos, and 25 in Abuja, with 7 to 15 providers in any given provider type-city category. They were then instructed to short-list and rank their top three providers in each category. This was an incentivized choice, since they would have the option to go into a draw to win funding that they could use to spend on their top choice among this list.

Firms were further randomized into one of four groups that were provided with different information on the platform when making this choice: (1) 187 firms were allocated to an *information only* treatment group, where they were shown information about the business service providers such as their name, logo, tagline (e.g. "We are client-focused with over 10 years of experience in recruitment and selection"), and contact information. This group were not given any independent information about provider quality; (2) 187 firms were allocated to a *ratings only* group, which supplemented the information with a star rating, based on the mystery shopper ratings⁵; (3) 183 firms were allocated to a *ratings plus negative comments* group, which provided the star ratings and any negative comments from the mystery shopper; and (4) 200 firms were allocated to a *ratings plus all comments* group, which received star ratings and both positive and negative comments provided by the mystery shopper. Appendix B provides examples of each screen. Columns 4 onwards of Table 2 show the different treatment groups are well-balanced on most baseline observables.

⁴ Internet connectivity issues meant that only 685/757 firms (90.5%) were able to successfully connect to the marketplace and view and rate providers. We use intention-to-treat analysis, which considers the impact of being randomly assigned to see the marketplace.

⁵ We had intended to show them the customer ratings from firms that had used these firms in the GEM project, but instead the ratings from the mystery shoppers were entered in a programming error. An advantage of this error is that it ensures the same ratings were used as for the ratings plus comments groups.

The ratings information provided followed the standard format of showing a star rating out of 5, in whole number increments. Around one-quarter (23%) of providers received the top rating of 5 stars, 42% had a rating of 4 stars, and 35% had ratings of 3 or below (including five providers with no ratings at all, or 0 stars). The median rating was 4 out of 5 stars. This is similar to what is seen on many online platforms, for example Reimers and Waldfogel (forthcoming) report an interquartile range of 4.1 to 4.7 for star ratings of books on Amazon.com. Showing any negative comments was intended to provide context for any low ratings, as well as mimic a mechanism in which customers may leave complaints about a company (as is the case with organizations such as the Better Business Bureau). For example "client response time was slow" or "the action plan did not meet my needs". Showing both positive and negative comments mimics a Yelp or Amazon ratings process, where positive feedback is also left (e.g. "It was very educational, and gave me answers to mistakes I have made with recruiting in the past" or "The service was very high quality. They do not just recruit and send you staff, but look at your whole business needs and analyze exactly what your business needs in terms of staffing").

After rating their top three firms in each category, firms were given a printed pamphlet which listed all the service providers, and highlighted the top three they had selected in each category. They were then encouraged to contact any providers of interest, and research which one was of most interest to them by calling or visiting any providers, and to then respond to an SMS message by logging in and indicating their number one most preferred provider. They were told that all firms that indicated their most preferred provider would then go into a draw to receive one of ten labeled cash prizes of 70,000 Naira that they could use to spend on the services of their top-ranked provider. Only 92 firms responded with this final selection, and so we do not use this final provider choice as an outcome.⁶

⁶ Of these 92 firms, 30% chose an HR provider, 50% a marketing provider, and 20% an accounting provider as their most preferred. The prizes were given as labeled cash, with the suggestion they could be used to pay for the provider they chose, but this was not enforced in any way.

4.3 Impact of Ratings on Provider Rankings

To estimate the impact of providing quality ratings on firm's choice of business service provider on the marketplace, we run the following treatment regression:

*Provider Choice Outcome*_i

 $= \alpha + \beta_1 RatingsOnly_i + \beta_2 NegativeComments_i + \beta_3 AllComments_i$ $+ \delta Lagos_i + \varepsilon_i$

We consider three metrics of the choice of providers made when firms were asked to select their top three providers in a given category. The first is the overall average star rating, the second is the proportion of their choices which have a top rating of 5 stars, and the last is the proportion of their choices which have a low rating of 3 stars or below.⁷

Table 3 shows the results. Panel A shows that the information only treatment group chose providers with an average rating of 3.44 stars overall, which is very close to the average rating among all providers of 3.35. This is consistent with the firms having very little pre-existing information about the quality of providers and not being able to distinguish amongst them. Providing them with a star rating increases the average rating of providers shortlisted by 0.2 stars, while also providing comments increases it by 0.35 to 0.39 stars, with very little difference between negative comments only and both positive and negative comments. All three quality treatments have statistically significant effects at the 1 percent level. We cannot reject equality of the ratings only and treatments with comments when choosing accounting or marketing providers, but can do so for HR providers. One potential reason for this is that the lowest ranked HR providers had particularly negative comments such as "I was not attended to at all", "The service provider seems to exist only on the web and never answers my calls", and "The provider was not paying attention to my needs at all".

⁷ Our AEA registration and grant proposal stated we would look at the proportion of choices in the top third and bottom third. A score of 5 corresponds to the top third of rankings. However, to avoid arbitrary splitting of tied ranks, we use a score of 3 or lower (bottom 23%) rather than the bottom third of the rankings.

Looking at Panels B and C of Table 3, we see that quality ratings information works to both increase the number of providers chosen with the highest score of 5 (by 7 to 11 percentage points), as well as to reduce the number of bottom-ranked firms (by 9 to 15 percentage points). Thus it does not seem to be a story of firms using these rankings to simply screen out really bad providers and then other information such as location or how attractive they find the company's logo and tagline to then choose providers, but rather than there is a demand for the highest quality as well as just for avoiding low quality.

4.4 Impact on Subsequent Use of Business Service Providers

We conducted a short follow-up survey approximately six months after the information intervention. This survey took place between March 30 and May 14, 2020. It began just as the COVID-19 pandemic was starting, and as a result had to be conducted by telephone. We were able to re-interview 697 of the 1,054 firms (66%), with the response rates not statistically different (p=0.888) for those receiving the information treatment (65.5%) and the control group (67.7%). Appendix Table C1 shows that female business owners were more likely to attrit than male owners, but that other characteristics of the firms are similar between attritors and non-attritors. Moreover, the information treatment and control group remain balanced on baseline observables among the non-attriting firms.

We use this follow-up survey to estimate the impact of providing firms information and quality ratings on their knowledge and use of this marketplace for business service providers. We run the following treatment regression to measure the impact of being given any form of information through the business services marketplace:

$Y_i = \alpha + \beta InfoTreatment_i + \delta Lagos_i + \varepsilon_i$

Where *Y* is an outcome measuring knowledge or use of the market for business service providers, *InfoTreatment* is a dummy variable taking value one for those assigned to the information treatment, and *Lagos* is a dummy variable for being in Lagos versus Abuja (since randomization was stratified on city). We then also examine whether the impacts differ by the type of information treatment assigned.

Table 4 presents the results. Panel A shows the pooled information treatment results, and Panel B the results separated by type of information treatment. We begin by examining whether the treatment had a lasting impact on whether firms know of any business service providers. We see that 30 percent of firms say they know of an HR provider, and the information treatment led to a statistically significant 8.4 percentage point increase in this knowledge. The impact on knowing a marketing or accounting provider is also positive (3.2 percentage points), but not statistically significant. The next two columns show no significant change in their confidence of being able to find a provider if they needed one. Twenty percent of firms claim to have contacted an HR provider, and 29 percent to have contacted a marketing or accounting provider in the past six months to enquire about their services. Neither treatment has a statistically significant impact on this contact, with 95 percent confidence intervals of (-1 p.p., +12 p.p.) for contacting HR providers, and (-13 p.p., +3 p.p.) for contacting marketing or accounting firms.

The last three columns of Table 4 show the impact of our information and quality ratings treatment on our key outcome of interest: whether firms have actually used a business service provider in the past six months. Our estimated treatment effects are all very close to zero in magnitude, and not statistically significant, with 95 percent confidence intervals of approximately ± 3 to 5 percentage points. Given that only 7 percent of firms used an HR provider and 3 percent any marketing and accounting provider, these do allow for the possibility of large relative effects, but any effects will still be small in absolute terms. That is, alleviating informational frictions and concerns about quality is not enough by itself to get most SMEs to use the market for business service providers.

4.5 Why did information not have more of an effect?

We have seen that many small firms lack information about the market for business service provision and that providing quality ratings did lead to changes in their preferred providers on the platform. However, providing information and quality ratings did not lead firms to be more likely to actually use the market for business services. One potential explanation for this is that information and quality concerns may not be the binding constraint for many firms in the sample, and instead issues like a lack of funding to pay for these services may be more binding. However, we are unable to reject a lack of heterogeneity in treatment effects when we interact the information treatment with whether or not they said knowledge was an issue at baseline (p=0.853), that it was difficult to assess the quality of providers (p=0.833), that the returns to using these services were low (p=0.661), and that a lack of funding was the constraint (p=0.920). We also find no evidence of heterogeneity by the predicted likelihood of using these services at endline, using the endogenous stratification approach of Abadie et al. (2018). Our statistical power is low for examining treatment effect heterogeneity, and it may still be the case that there is a subset of firms for which purely providing the business services marketplace would be enough to get them to use this market, but this is not the case for the majority of firms.

Instead, we think two other explanations are likely. The first is that there are other information and knowledge frictions that simply providing access to the marketplace does not correct. Surveys of management practices find that many badly managed firms do not know that they are badly managed (Bloom et al. 2013, Iacovone et al., forthcoming). A consequence is that firms may not know that they need to improve. Then even if they know they need to improve, the information they may be unsure about is whether the business service providers can provide the right expertise and advice for their specific needs. Even knowing that providers have offered quality services to other firms may not be enough to resolve this uncertainty, and as a result, firms may only be able to learn the value of using professional business services through learning-by-doing. Evidence for this is seen in the fact that many of the firms in the experiment of Anderson and McKenzie (2020) do go back to the market for services after having been subsidized to try it out.

A second explanation is that firms face multiple constraints to growth, and alleviating this information friction alone is not enough. If firms also have their financial constraints alleviated and also experience demand shocks that offer a pathway for business growth, they may be more willing to go to the market to seek professional advice in hiring workers to help this growth. As noted, we do not find any significant treatment heterogeneity, but are underpowered for detecting whether there are impacts for subsets of firms with more finance and demand.

5. Conclusions

There are a wide range of business practices that it would benefit most small firms to adopt. A market-based approach of encouraging small firms to hire the expertise to help improve their accounting and marketing practices appears to be a useful alternative to the billions spent on training programs (McKenzie et al, 2020). However, most small firms in developing countries do not use this market for professional business services. This paper documents several information frictions which prevail in this market: few small firms know of the providers in the market, and the providers largely rely on word-of-mouth and informal reputation mechanisms to acquire customers. The result is that a small firm that wishes to start using these business services will find it difficult to find a high quality provider to use.

A marketplace that lists firms by location and specialty, and which provides a quality ratings system that enables firms to establish reputation would appear to have the potential to lower these frictions. However, our experiment finds that providing this marketplace by itself is not enough to get most firms using professional services. Nevertheless, we do not see this lack of treatment effect as necessarily implying that there is no value in setting up and improving these marketplaces. First, lowering these search frictions may still be valuable for the firms that were planning on using these services anyway, just as those firms that were planning on formalizing may benefit from easier and cheaper entry regulations, even if few informal firms decide to formalize when entry regulations are relaxed (Bruhn and McKenzie, 2014). Second, if the quality ratings system were adapted over time to incorporate customer ratings, it could induce business from lower quality to higher quality providers. The platform would need to run for a longer time and over a larger scale than our study for such effects to emerge.

Nevertheless, we do view the evidence of this experiment as providing more support for the view that the value of professional business services is often only learned and appreciated by small firms through trying out these services for themselves, potentially leading firms to underinvest in this management technology. Business service providers may need to experiment with discounts or free trials to attract customers. Another potential solution is government programs which subsidize the initial use of these professionals, and couple this with providing information and credentialing

of providers that can be used. For example, the Business Link Pacific program provides subsidies for small and medium enterprises in several Pacific nations to use a provider (such as an accountant) from a network of approved providers.⁸ Such programs are not only used in developing countries. For example, the £30 million Growth Vouchers⁹ program in the United Kingdom provided small firms with vouchers of up to £2,000 to help them access specialist support on hiring, financial management and marketing. Coupling these subsidy schemes with a mechanism to allow feedback into provider reputations would be a useful area for future policy and research.

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⁸ <u>https://about.businesslinkpacific.com/use-the-subsidy-to-access-quality-business-advice/</u> [accessed 27 February, 2021]

⁹ <u>https://www.gov.uk/government/news/small-business-big-support-confirmed-by-prime-minister</u> [accessed 27 February, 2021].

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Figure 1: Most Business Service Providers are Unknown by the Majority of SMEs

Notes: Data are from 217 firms with 2 to 15 workers in Lagos and Abuja that applied for the GEM program and that were interviewed in January 2019. Firms were shown brand logos and taglines in random order and asked whether they had heard of the company before. Fifty-one providers were shown in total across the two cities, although firms were only shown providers that operate in their city. Six fake brands were included as a check, and responses from SMEs that claimed to recognize a fake brand were dropped.

	All Pro	viders	Me	ans by Provide	er Type
	Mean	S.D.	HR	Accounting	Marketing
Provider Characteristics					
Age of firm (years)	11.5	8.5	11.4	14.2	8.8
Has more than one branch	0.38	0.49	0.37	0.52	0.24
Number of full-time professionals	10.9	16.8	10.9	13.1	8.6
Annual sales (000s of USD)	148	357	85	173	162
Number of customer per month	29.6	47.0	28.3	42.1	17.8
Daily rate (USD)	285	692	210	233	387
Quality information					
Offers money-back guarantee	0.02	0.15	0.00	0.00	0.06
Will re-do work if not satisfied	0.53	0.50	0.60	0.43	0.58
Share of staff with tertiary degree	0.73	0.25	0.72	0.75	0.70
Share of staff with skill certification	0.39	0.25	0.37	0.45	0.34
Belongs to a professional organization	0.84	0.37	0.82	0.97	0.71
Main way of getting customers					
Word of mouth	0.66	0.48	0.59	0.68	0.68
Advertising	0.16	0.37	0.24	0.08	0.19
Walk-ins	0.08	0.27	0.07	0.08	0.09
Bidding on contracts/RFPs	0.14	0.34	0.09	0.15	0.16
Main reasons they think SMEs do not use					
Cost: too expensive for firms to afford	0.61	0.49	0.62	0.60	0.62
Returns: not worth it for small firms to use	0.25	0.43	0.24	0.25	0.26
Knowledge of returns: firms don't know the returns	0.75	0.43	0.74	0.77	0.74
Uncertain quality: firms can't tell quality	0.40	0.49	0.40	0.40	0.39
Uncertain returns: firms don't know if it will work for them	0.31	0.46	0.24	0.35	0.31
Knowledge of providers: Firms don't know providers	0.33	0.47	0.38	0.34	0.28
Sample Size	271		68	102	101

Table 1: Business Service Provider Survey Data

2: Descriptive Statistics and Treatment Balance	2: Descr	riptive	Statistics	and	Treatment	Balanc
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	Infor	mation Experi	ment		Ratings Experiment				
	Control	Information	p-value	Info only	Ratings only	Negative Comments	All Comments	P-۱	
Characteristics									
2	0.23	0.26	0.582	0.28	0.27	0.20	0.28	0.	
	38.0	39.2	0.224	38.7	39.1	39.2	39.7	0.	
st 2 years college	0.62	0.65	0.446	0.65	0.66	0.62	0.65	0.	
haracteristics									
uction sector	0.20	0.18	0.426	0.17	0.19	0.20	0.17	0.	
ainment sector	0.09	0.10	0.675	0.12	0.13	0.08	0.09	0.	
ality sector	0.19	0.20	0.652	0.19	0.20	0.23	0.19	0.	
ctor	0.14	0.13	0.454	0.13	0.16	0.11	0.12	0.	
Nanufacturing sector	0.38	0.39	0.812	0.40	0.32	0.38	0.45	0.	
firm	9.5	10.7	0.157	10.0	9.8	11.4	11.4	0.	
ly sales (USD)	2541	2194	0.511	2007	2626	2037	2101	0.	
er of Employees	5.9	5.9	0.527	6.3	5.9	5.8	5.8	0.	
Service Providers									
an HR Firm	0.05	0.04	0.935	0.05	0.06	0.03	0.04	0.	
Accounting Firm	0.02	0.03	0.376	0.05	0.03	0.03	0.02	0.	
Narketing Firm	0.02	0.03	0.564	0.04	0.04	0.01	0.03	0.	
ns why SMEs don't use									
know any providers	0.30	0.26	0.564	0.25	0.25	0.28	0.27	0.	
difficult to judge quality	0.38	0.37	0.785	0.35	0.39	0.35	0.38	0.	
f supply of good quality	0.24	0.23	0.700	0.22	0.27	0.19	0.23	0.	
It to trust providers	0.39	0.41	0.268	0.36	0.40	0.44	0.44	0.	
uch hassle to find providers	0.38	0.36	0.419	0.30	0.44	0.34	0.37	0.	
he returns are low	0.33	0.35	0.128	0.34	0.39	0.36	0.33	0.	
unding to pay for services	0.51	0.57	0.047	0.57	0.56	0.57	0.58	0.	
nfident they could find HR	0.32	0.37	0.152	0.45	0.36	0.30	0.35	0.	
nfident they could find marketing/accounting	0.28	0.33	0.089	0.39	0.34	0.25	0.33	0.	
e Size	297	757		187	187	183	200		

information experiment assigns firms to a control, or to a treatment group which gets provided information on the business marketplace.

formation treatment is further subdivided into four types of information provided, for a ratings experiment.

es test for equality in means, after adjusting for randomizing on city (Lagos vs Abuja).

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	All	HR	Marketing	Accounting						
	Providers	Providers	Providers	Providers						
Panel A: Average Star Rating of Top-ranked Providers (out of 5)										
Ratings Only	0.200***	-0.014	0.296***	0.294***						
	(0.043)	(0.091)	(0.061)	(0.070)						
Negative Comments	0.386***	0.414***	0.334***	0.408***						
	(0.049)	(0.100)	(0.060)	(0.073)						
All Comments	0.345***	0.430***	0.281***	0.345***						
	(0.048)	(0.093)	(0.059)	(0.071)						
Mean of Information Only Group	3.44	3.04	3.91	3.34						
Sample Size	660	665	668	667						
P-value: test of equality	0.000	0.000	0.588	0.233						
Panel B: Proportion of Providers Chosen with Top Rating of 5										
Ratings Only	0.067***	0.048**	0.137***	0.024						
	(0.018)	(0.020)	(0.031)	(0.020)						
Negative Comments	0.107***	0.081***	0.173***	0.074***						
	(0.020)	(0.024)	(0.032)	(0.023)						
All Comments	0.073***	0.080***	0.119***	0.029						
	(0.020)	(0.023)	(0.032)	(0.021)						
Mean of Information Only Group	0.170	0.210	0.210	0.085						
Sample Size	660	665	668	667						
P-value: test of equality	0.164	0.222	0.309	0.088						
Panel C: Proportion of Providers Chosen with Low	/ Rating (3 or	· lower)								
Ratings Only	-0.092***	-0.050*	-0.069***	-0.148***						
	(0.015)	(0.026)	(0.020)	(0.029)						
Negative Comments	-0.142***	-0.184***	-0.064***	-0.175***						
	(0.016)	(0.029)	(0.020)	(0.029)						
All Comments	-0.146***	-0.185***	-0.073***	-0.183***						
	(0.016)	(0.027)	(0.019)	(0.029)						
Mean of Information Only Group	0.352	0.531	0.126	0.400						
Sample Size	660	665	668	667						
P-value: test of equality	0.000	0.000	0.837	0.369						
Notes:										

Table 3: Impact of Quality Ratings on Choice of Business Service Provider

Regressions also control for city. Robust standard errors in parentheses.

*, **, *** denote significance at the 10, 5, and 1 percent levels respectively.

Test of equality tests equality of the three quality treatments: providing star ratings only,

also providing any negative comments, and also providing positive and negative comments.

	Know a	Know a Provider Confident can Find		nt can Find	Contacted	d a Provider	Use of Bu	e Provider	
	HR	Mktg/Acct	HR	Mktg/Acct	HR	Mktg/Acct	HR	Mktg/Acct	Either
A: Pooled Information Treat	tment								
nformation Treatment	0.084**	0.032	-0.104	-0.039	0.054	-0.049	-0.006	0.006	-0.008
	(0.039)	(0.042)	(0.108)	(0.109)	(0.035)	(0.039)	(0.023)	(0.016)	(0.025)
B: By Type of Information T	reatment								
nation Only	0.116**	0.066	-0.147	-0.024	0.094*	-0.011	0.037	0.009	0.030
	(0.056)	(0.058)	(0.164)	(0.156)	(0.050)	(0.053)	(0.036)	(0.023)	(0.038)
gs Only	0.127**	0.052	-0.098	-0.173	0.080	-0.019	-0.024	-0.009	-0.033
	(0.055)	(0.057)	(0.150)	(0.160)	(0.049)	(0.052)	(0.028)	(0.019)	(0.031)
gs + Negative Comments	0.009	0.007	-0.183	-0.150	-0.004	-0.068	-0.013	0.001	-0.012
	(0.054)	(0.058)	(0.151)	(0.153)	(0.046)	(0.051)	(0.029)	(0.021)	(0.034)
gs + All Comments	0.078	0.003	-0.007	0.156	0.046	-0.094**	-0.021	0.019	-0.015
	(0.053)	(0.055)	(0.146)	(0.141)	(0.047)	(0.047)	(0.027)	(0.023)	(0.032)
le Size	697	693	696	654	695	690	694	694	694
ol Mean	0.30	0.38	4.10	4.15	0.20	0.29	0.07	0.03	0.10
ue: test all jointly zero	0.066	0.722	0.713	0.268	0.186	0.259	0.421	0.815	0.554

4: Impacts of Information on Business Service Provider Knowledge and Use

•

st standard errors in parentheses. *, **, *** denote significance at the 10, 5, and 1 percent levels respectively.

a Provider is a binary outcome taking value one if they say they know at least one of these types of providers; *Confident can Find* a scale of 1 to 5, where 5 denotes high confidence in their ability to find this type of provider if they need it; *Contacted a Provider* inary outcome taking value one if they contacted this type of provider in the past six months; and *Use of Business Service Provider* inary outcome taking value one if they hired this type of provider in the past six months. HR denotes Human Resources providers, *A*ktg/Acct denotes marketing and accounting providers. The final column is for hiring either type of provider.

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Appendices

Appendix A: Example of Logo and Tagline Shown in the Brand Recognition Exercise

Firms were shown logos and tag lines of business service providers one at a time, and asked if they had heard of the company before, and whether they had used the company before. Logos were shown in random order.



Appendix B: Business Services Marketplace

Firms allocated to the information treatment were first presented with a screen introducing them to the Business Services Marketplace, and provided a log-in (Exhibit B1). They accessed this on the tablet of the survey enumerator.

Exhibit B1: Entry screen to Business Services Marketplace

MARKETP	LACE
Sign in	
Login Id	×
Password	A
Remember Me	Sign In
orgot Password	

Once logged in, they were asked to look through service providers of HR, accounting, and marketing, and rank the firms they consider to be in the top three (Exhibit B2).



Exhibit B2: Firms asked to rank the top 3 firms by category

The information they were given about each firm varied by treatment group assigned. Firms in the information-only treatment group were shown a screen which contained the providers' information such as brand name, logo, their tagline, and contact information, but no quality certification (Exhibit B3). Firms in the ratings treatment were also shown a customer rating of 1 to 5 stars (Exhibit B4) but no comments. Firms in the ratings + negative information received a star rating, along with any negative comments raised (Exhibit B5), while firms in the ratings + all information received a star rating along with any positive or negative comments raised (Exhibit B6). In each case the entrepreneur could click on the provider name to get a link to their telephone number, location, and website. Exhibit B7 shows the pamphlet firms were given.



Exhibit B3: Example of Information-Only Treatment Screen

Exhibit B4: Example of Ratings-only Treatment Screen





Exhibit B5: Example of Ratings plus Negative Comments Treatment Screen

Exhibit B6: Example of Ratings + All Comments



Exhibit B7: Example of Pamphlet Given with Marketplace Details

MARKETING

Proventures Ltd. Suite 12, Block B, Ground Floor, Alausa Shopping Mall, 131 Obafemi Awolowo Road, Ikeja Lagos. Dalian Plaza, 2nd Floor, 43 Oritshe Street, Off Obafemi Awolowo Way, Ikeja Lagos. Phone: 0803 593 1357

Purple Pearl Consulting Ltd. No 5 Yesufu Abiodun Street, Oniru, Victoria Island, Lagos. Phone: 0803 311 6773

Sesema Public Relations 1, 2nd Avenue, Ismail Estate Maryland, Ikeja Lagos. Phone: 01 295 3849

Starcom Media 79 Oduduwa Crescent GRA, Ikeja, Lagos. Phone: 0802 305 0255

ACCOUNTING

Akasoro Quadri And Associates Lasu Expressway Idowu Egba Bus Stop, Iseri Olofin, Lagos. Phone: 0803 505 9983, 0703 776 7657, 0802 626 0200

Balogun Isiaka & Co. 35, Association Avenue, Obanikoro Bus Stop, Ilupeju. Lagos. Phone: 0803 453 2917, 0802 626 0209

ACCOUNTING

Bayo Ayeni & Co. 82, Old Ojo Road, Kuje Amuwo Amuwo Odofin Lagos. Phone: 0803 306 8716

Dr Austin Ejaife Associates Suites C-273/274, Road 1, Ikota Shopping Complex, VGC Lekki, Lagos. Phone: 0703 166 4488

Johnson Oluata & Co. 7, Moses Somefun Street, Behind Diamond Bank, College Road, lju-Ifako, Ifako, Lagos. Phone: 0802 371 4700, 0814 365 2537.

Mustafa Alawiye & Co. No. 15, Ayinde Street, Alagomeji, Yaba. Lagos. Phone: 0803 717 5168, 0805 044 3494

Okupe Adedamola & Co. 3rd Floor Tejumola House Opposite NNPC Station,Isheri Road Omole Phase 1, Ikeja, Lagos. Phone: 0802 306 4633

Segun Fagbulu Associates 120 Lasu Express Road, Idowu - Egba Bus-Stop Isheri-Olofin, Lagos. Phone: 0818 518 1545, 0802 290 9631



This image shows a section of the pamphlet, which also provided information on human resource specialists and more marketing firms in the city.

Appendix C: Attrition is Balanced

Appendix Table C1: Endline Attrition Characteristics and Baseline Balance for Non-Attritors

	Means by Attrition Status			Baseline Balance for Non-Attritors		
	Don't Attrit	Attrit	p-value	Information	Control	p-value
Owner Characteristics						
Female	0.22	0.31	0.002	0.24	0.18	0.582
Age	38.7	39.2	0.341	38.9	38.2	0.224
At least 2 years college	0.64	0.64	0.923	0.64	0.64	0.446
Firm Characteristics						
Construction sector	0.18	0.19	0.788	0.18	0.19	0.426
Entertainment sector	0.10	0.10	0.788	0.11	0.08	0.675
Hospitality sector	0.19	0.22	0.272	0.19	0.19	0.652
ICT sector	0.13	0.13	0.936	0.13	0.13	0.454
Light Manufacturing sector	0.39	0.36	0.358	0.39	0.40	0.812
Age of firm	10.5	10.1	0.403	10.9	9.6	0.157
Monthly sales (USD)	2250	2372	0.736	2060	2723	0.511
Number of Employees	5.84	6.06	0.340	5.85	5.84	0.527
Use of Service Providers						
Used an HR Firm	0.05	0.03	0.075	0.05	0.05	0.935
Uses Accounting Firm	0.03	0.04	0.434	0.03	0.01	0.376
Uses Marketing Firm	0.03	0.02	0.227	0.03	0.02	0.564
Reasons why SMEs don't use						
Don't know any providers	0.28	0.25	0.334	0.27	0.30	0.564
Find it difficult to judge quality	0.38	0.36	0.643	0.37	0.39	0.785
Lack of supply of good quality	0.24	0.22	0.607	0.23	0.25	0.700
Difficult to trust providers	0.40	0.41	0.624	0.40	0.39	0.268
Too much hassle to find providers	0.37	0.37	0.991	0.36	0.38	0.419
Think the returns are low	0.35	0.34	0.895	0.34	0.36	0.128
Lack funding to pay for services	0.58	0.51	0.039	0.60	0.53	0.047
Are confident they could find HR	0.36	0.34	0.649	0.36	0.35	0.152
Are confident they could find marketing/accounting	0.33	0.29	0.180	0.33	0.30	0.089
Sample Size	697	357		496	201	