

EDI Research Area 4 Project Proposal

1. Submitted by

Name(s), affiliation(s) and email address(es) of the principal investigator(s). Please identify one corresponding principal investigator. Please also attach all relevant CV(s).

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2. Project title

Understanding the role of information, quality signalling, and third-party certification in building a marketplace for professional business services in Nigeria

3. RA4 Thematic Areas (for which this is relevant)

Institutions and Private Sector Development

4. Abstract

Briefly state the main question(s) the project addresses (within 150 words).

The main question we address is why don't more SMEs use the market for professional business services like accounting, marketing and HR? Such marketplaces form a crucial institution that can support private sector growth and innovation, yet they're inefficient in developing economies. We hypothesize that two key reasons are firms (i) lack information about the availability of these services, and (ii) cannot distinguish the quality of good versus bad providers. In developed economies, established communication channels, as well as formal reputation and quality signalling mechanisms help overcome these constraints, whereas in Nigeria the supporting institutions are underdeveloped and informal. We plan to survey SMEs in Lagos and Abuja about their information on business services, and providers in this marketplace to learn how they currently signal quality. We will also conduct experiments to test whether SMEs will change how they use these services when provided with more information and third-party quality certifications.

5. Broader Motivation

Explain how you expect the project research to contribute towards broader goals of the thematic area, and potential policy relevance (within 300 words).

This project contributes directly to the first theme (Institutions and Private Sector Development). It will study the case of the marketplace for business services in Nigeria's capital city (Abuja) and most important city for business (Lagos) to understand how the formal and informal aspects of this market interact in enabling (or inhibiting) the private sector to build the skills it needs to grow and innovate.

The project is linked to, and leverages, the Nigeria Growth and Employment (GEM) project, a \$160 million loan from the World Bank to the Government of Nigeria to promote private sector growth and employment. One component of this project is to build the capacity of SMEs. The traditional approach has been to directly provide business training to build the skills of the owner. We have worked with the project implementation unit to recommend piloting an alternative approach, which is to subsidize firms to use the market for business services by either insourcing or outsourcing core business functions like accounting and marketing. We have spent the past two years screening business service providers, developing an online platform for SMEs to select providers, and working with a first wave of 302 SMEs that have since completed 9 months using these services.

We now wish to build on the knowledge gained through our initial research efforts to better understand the marketplace for these services, and to test whether providing a more formal reputation mechanism will change the use of these services for new firms coming into the program (in the second wave), as well as for other firms across the economy. This will directly influence later rounds of this project, as well as potentially influence the ways the World Bank and other governments try to engage the market in building business services moving forward.

6. Design

Please provide details on the proposed project design, method and context of the project. Please include information on whichever of the following is relevant: analytical component (models to be drawn upon or to be developed), relevant institutional details, data sources and empirical strategy (within 2000 words; add supplementary notes if absolutely necessary as an Appendix)

Our goals are to understand how the existing market for business services function in Nigeria, and then test whether firms will respond to interventions that aim to overcome these problems, ultimately helping to further develop the marketplace for such services. We also want to learn what type of third party certification will have a greater impact on SME choice. Will they respond more to peer ratings (as in Yelp/Angie's List) or to a third party professional (e.g. Better Business Bureau). We aim to build up this knowledge through the following steps:

Step 1: Measure SME's Information Availability and Quality Perceptions for Existing Service Providers in the Market.

We leverage our partnership with the Nigerian government's Growth and Employment (GEM) project, which is offering programs for firms looking to grow and expand. Firms apply online, and then attend an induction workshop where they learn about the program and receive a baseline survey. Currently 18,000 firms have registered for the second round of this program, of which approximately 2,500 are in Lagos and Abuja.

During this baseline survey (done on tablets), we will measure baseline knowledge and prior use of different providers. Each firm owner will be shown (in random order) the brand names, logos, and taglines of different business service providers that have registered for the GEM platform. After viewing a given provider's information, the firm owner will be asked:

- (i) Have you heard of this provider before?
- (ii) What is your view of the quality of this provider? (positive, neutral, negative, or don't know)
- (iii) Have you used the provider before?

We will also include some fake providers in this list, and use these to reduce the incidence of false positives by discounting SMEs that say yes to everything. These surveys of SMEs will also include additional questions on how firms currently conduct their accounting and marketing functions, and the extent to which they source these workers through informal mechanisms such as referrals (versus using the marketplace for service providers). We anticipate getting this data for at least 1,000 firms in Lagos and Abuja.

Step 2: Conduct a Market Survey of Business Service Providers.

This survey will map out the current business services marketplace in Abuja and Lagos in terms of providers of accounting, marketing, and HR services. The sample size anticipated is approximately 200 providers. The sample frame will come from industry association lists, providers that have registered for the GEM platform, web searches, and word of mouth. We aim to cover providers that offer services to the

SME sector. These will range in size from single person providers to larger companies that also serve this sector.

Part of this exercise will reveal how easy/difficult it is to obtain information on the service providers available in the market, to determine what type of external quality signals are currently provided online about them, as well as to learn from these providers about how they themselves attempt to establish reputation and signal quality in the marketplace, the range of services they provide, and their prices and market shares. The focus here will be on understanding how the informal and formal institutions interact to enable (or inhibit) service providers to attract SME clients.

Step 3: Measure Professional Quality Ratings for Business Service Providers.

The aim here is to obtain an objective measure of the quality of each provider in our sample through a standardized patient/mystery shopper approach. We will recruit a small number of real SMEs and pay the owners to have their firms participate in this exercise. We will then recruit and train actors to play the co-owners of these enterprises; providing them with scripts to follow in approaching business service providers and asking for advice on hiring particular services. For example, an SME will pretend that it is interested in hiring a worker to carry out accounting functions in the firm. Then we will develop a scoring procedure that measures whether the business service provider can provide guidance on such a function. This will include measurement at multiple stages of the process:

- Pre-contact phase: Does the business service provider have a website? Does it list an email to contact, do they respond to email within 24 hours? Do they answer the phone or return a call within 24 hours?
- Initial call phase: Do they speak professionally? Can they provide a clear explanation of the services they offer? Do they ask about the size of the firm and why they want this type of worker?
- Meeting: do they offer to have a meeting at the SME premises, or require the SME to come to them? Do they clearly explain the steps involved in recruiting a worker? Can they explain how they recruit workers and give examples of recent work they have done that is similar? Do they conduct a needs assessment and ask follow-up questions to understand what type of worker qualities the firm is looking for, or just accept what the SME says they want? What are their fees? Do they offer any type of guarantee or quality signalling device?

This will require piloting and fine-tuning, but should provide a snapshot of quality during the provider's initial interaction with the firm.

In addition, our surveys will also ask business service providers to give us the name and contact details for an SME they have provided good service to in the past 6 months. We will then interview the SME and ask questions to assess:

- (i) Customer satisfaction.
- (ii) Willingness to recommend to others (word-of-mouth).
- (iii) Willingness to pay for further services from the same provider (loyalty).
- (iv) Effectiveness ratings based on how much the service has helped them.

Finally, we will use social media searches and legal records to record the number of complaints made against these providers.

Step 4 (Experiment 1): Measure Peer Quality Ratings and Test the Impact on SME Provider Choice.

This experiment will work with 400 SMEs who are selected through the GEM project to receive either free insourcing services (working with an HR company to hire a worker) or outsourcing services (contracting an external marketing or accounting company to provide professional services). These firms use an online marketplace (accessed through their private GEM dashboard) to select a provider. In the first round of the program, this marketplace just listed a brand name, logo, tagline (tweet-length description of the services offered), and contact number for each provider participating in the program. For the proposed second round, we will randomly allocate the SMEs into two groups:

- (1) Control group: they get the online marketplace as it was, with only the providers' information (i.e., brand name, logo, tagline, contact number) presented.
- (2) Treatment group: in addition to the provider information, they also see a quality 'star' rating (average from approximately five firms that already completed the program), the number of firms that provided this rating, along with text comments from these firms on what the provider does well or does not do well.

After reviewing this online marketplace, SMEs need to select 3 providers to call and discuss services, and then they choose one to work with. Our admin data track which providers an SME shortlists and its final choice.

Hypothesis: if SMEs respond to peer ratings (and don't just choose based on convenience, distance, prior knowledge, personal rapport, etc.), then SMEs in the treatment group should be more likely to shortlist and, ultimately, choose highly rated providers and less likely to choose poorly rated providers.

Outcomes will be measured at the SME level:

- (i) Proportion of providers shortlisted that have a peer quality rating of 4 or above.
- (ii) Proportion of providers shortlisted that have a peer quality rating of 3 or below.
- (iii) SME chooses a provider that has a peer rating of 4 or above.
- (iv) SME chooses a provider that has a peer rating of 3 or below.

This experiment will enable us to test whether providing a more formal mechanism for signalling quality (e.g., via a marketplace institution) impacts SME choice of business services.

Statistical power: we assume that control group SMEs will be largely uninformed and essentially choose providers orthogonally to quality. If one-third of control group firms then choose providers in the bottom third of the quality distribution, with a sample of 200 treatment and 200 control firms, we have 81% power to detect a treatment effect – which reduces this to 20% of the treatment group choosing low quality providers. We will attempt to improve power further by conditioning on baseline knowledge and reputation (measured in step 1).

Step 5 (Experiment 2): Does Information Matter? Do Firms Respond More to Peer or Professional Quality Ratings?

In developed country markets, business service quality is typically evaluated or certified by third parties in two ways:

- (i) Peer Ratings: as shown in Yelp, Angie’s List, etc. – this rating is from a fellow customer and usually contains both positive and negative content, along with text reviews and a points rating (e.g., score out of 1 to 5 stars).
- (ii) Professional Ratings: as per the Better Business Bureau – this rating is from an independent institution that receives complaints and shares this negative content, but also gives a letter grade on the quality of a given business.

We will work with a new sample of 500-1000 SMEs to test whether access to provider information or quality (or both) matters for the adoption of business services in developing economies, as well as what type of quality certification matters more. This new sample could include: firms that went through the induction workshop in phase 1 or phase 2 but were not chosen to be part of the experimental sample; SMEs that registered for the program but never attended induction workshops; and a booster sample of SMEs in Abuja and Lagos with 5-15 workers that we put together.

These firms would get a short (2-page) phone survey (conducted pre-intervention) to obtain basic information on firm size, industry, current use of the business service provision market, and plans to use a market provider in the next 6 months. They will then be randomly assigned into one of five experimental groups:

- (1) Control group: firms get no marketplace access or content, and we just follow-up with them to measure outcomes.
- (2) Information Only group: firms get access to the online marketplace, which only includes the providers’ information (i.e., brand name, logo, tagline, contact number) – but no quality certifications.
- (3) Peer Ratings group: firms get access to the online marketplace (including provider information), and also see the quality ratings from peers (measured in step 4).
- (4) Professional Ratings group with negative information only: firms get access to the online marketplace (i.e., provider information), and also see the quality ratings

from professionals – but they only learn about a provider’s negative score from the professional rating exercise and any complaints against them (measured in step 3).

(5) Professional Ratings group with negative and positive information – they get access to the online marketplace (i.e., provider information), and also see the quality ratings from professionals – but here they learn about a provider’s negative and positive quality scores, as well as any other comments or complaints against them (measured in step 3).

To encourage firms in treatment groups (2)-(5) to use the online marketplace, we will tell them that we will be randomly drawing some firms to be offered these services for free. After reviewing the online marketplace, SMEs will be required to select 3 providers to call and discuss services (shortlist), and then they choose one to work with (final choice).

A follow-up survey 6 months later will measure whether these SMEs have contacted business service providers to enquire about using their services, and whether they have started using them.

Outcomes will be measured at the SME level:

- (i) The proportion of providers shortlisted by an SME (i.e., three selections) that have a quality ranking in the top third of all providers (according to the joint peer and professional ratings).
- (ii) Whether the highest provider chosen by an SME (i.e., final choice) has a quality ranking in the ‘top’ third of all providers.
- (iii) Whether the highest provider chosen by an SME (i.e., final choice) has a quality ranking in the ‘bottom’ third of all providers.
- (iv) Did the SME have an in-person meeting with a provider to discuss business service provision in the six months post-intervention? And did the provider complete a formal Needs Assessment?
- (v) Did the SME hire a business service provider in the six months post-intervention? And did the SME sign a formal Contract with the provider?

Power: minimum sample size of 500, with 100 in each experimental group; ideally 1000 with 200 in each group.

– Control group: assume they choose firms randomly, so that 1/3 of their top-ranked firms will be low quality, and 1/3 in top quality tercile.

– With a sample of 98 in each group, we have power to detect a drop in the proportion choosing low-ranked firms of 0.18 (from 0.33 to 0.15) – i.e. that we approximately halve the rate of firms choosing low-quality firms. To detect an increase of 0.17 in the proportion choosing a top-ranked firm (from 0.33 to 0.50) we would need 187 in each group.

– These power calculations do not account for any power gains from controlling for baseline characteristics, so are conservative.

Summary

We will then combine the results of these five different steps, along with institutional information collected throughout the process, to write a research paper on the market for business services in Abuja and Lagos, and the role of information and quality signalling in determining how this market functions.

7. Policy Engagement

Please provide details on how the study will help policymakers better understand and address institutions-related development challenges? Is there indication that partners or involved stakeholders would be interested for evidence to inform their decision making? How will other implementers become aware of the results of this evaluation? Outline a detailed dissemination plan to engage policymakers from the outset and that goes beyond the usual presentations and meetings targeted at an academic audience. (within 500 words)

The study will help policymakers better understand the marketplace institution for business services. This is a topic for which there is currently very little research or guidance to inform policy. We have two principal stakeholders that will be interested in the evidence developed and will use it to inform their decision-making.

The first is the Ministry of Trade and Investment in the Government of Nigeria, and more specifically, their project implementation unit for the Growth and Employment project. They are interested in learning whether insourcing and outsourcing business services to the market can be a substitute for their traditional approach to supporting firms through offering business training. The answer depends on how efficiently this market for services functions, and they are also interested in whether they can play a future role in helping this institution to function better. We have been working closely with this unit over the past two years to evaluate the relative impacts of business training, consulting, insourcing and outsourcing programs on SMEs, and to help improve the functioning of the GEM project.

The second set of stakeholders are operational staff in the World Bank, who help governments around the world design policies for private sector growth. A recent re-organization has seen a unit called "Firm capabilities and innovation" created with the mandate of helping build capabilities in firms. We believe the market-based approach explored in this study could represent an important part of the toolkit they offer to assist policymakers around the world with enhancing private sector growth. We will discuss this project with their staff throughout its lifecycle.

Our dissemination plan includes regular and ongoing engagement with these stakeholders. We have made several trips to Nigeria to discuss and develop this program of work within the GEM project. We also hold weekly calls with two members of the project implementation unit and a member of the World Bank operational team in order to jointly discuss progress on implementation and issues. In addition, we have more formal meetings with the heads of these units during our field visits to Nigeria. We will prepare briefs to share with them as we progress through the steps outlined above, and discuss the final research findings with them in person. Likewise, we expect to discuss our results and findings regularly with World Bank operational teams preparing projects in other countries, thereby providing a way for other implementers to access these results.

In addition to the traditional academic research seminars, working paper, and published research paper, we also plan the following types of dissemination:

– A two-page “[Finance & PSD Impact note](#)”. This series summarizes findings of impact evaluations in an accessible way, and is sent to all World Bank staff working on finance and private sector issues. Release of these notes is often followed by requests to discuss findings in more detail or to help think about adapting them into other country contexts.

– Blog posts on the World Bank’s [Development Impact blog](#). This blog has more than 3,500 email subscribers, which combined with web readers, results in wide dissemination to a broad audience interested in development. McKenzie will also tweet about the results to his over 4,500 followers.

– We will be happy to work with the EDI communications team on other methods of dissemination, including perhaps a post on VoxDev.

We also will hire a professional photographer to take media-quality images and to conduct two video case studies of firms participating in this market for the first time, to provide content that can help in disseminating the work to a broader audience.

8. Budget

Please submit with your application a **Budget Justification Narrative** that describes budgeted costs, and responses to the following budget guidelines: **Declaring secured and immediately pending co-funding, Demonstrating Value for Money, Project Implementation Costs and Assets.** Please also complete the excel attachment outlining the detailed budget.

This project leverages secured funding from the World Bank that is paying for both the implementation costs of the underlying project, and for an impact evaluation that compares the impact of receiving insourcing or outsourcing services to that of receiving standard business training or consulting. The insourcing and outsourcing services cost approximately \$2000 per firm in direct grants, plus the administrative costs of running the program, and the World Bank project is covering the approximately \$2.5 million cost of offering these – part of this sample provides the peer quality ratings that we use in experiment 1, while the other part of this group forms the experimental subjects for experiment 1.

In addition the GEM project and World Bank grants pay for the costs of baseline and follow-up surveys of these firms (along with a control group and those receiving training or consulting). The World Bank project is also paying for the time of a full-time field coordinator, for the staff time of PI McKenzie, and for his travel to Nigeria. Stanford University will contribute the time of PI Anderson.

All told the co-funding most directly relevant for this application is at least \$4million (and likely higher, depending on how much of the broader GEM project one considers necessary to have running for our component to work).

The budget requested from EDI is £69,891. We use an exchange rate of £1 = US\$1.40 in our calculations. This budget request is justified as follows:

Step 1: Measure SME's Information Availability and Quality Perceptions for Existing Service Providers in the Market.

– The baseline survey of at least 1000 firms applying for the GEM project, and the programming manpower for implementing the module on knowledge of business service providers is fully covered by the World Bank project (estimated value 1000 firms x \$20/firm = \$20,000).

Step 2: Conduct a Market Survey of Business Service Providers.

– Research Manager (consultant) time to build sample frame and to oversee activities: 15 days at \$200/day = **\$3,000. [£2,175]**

– Programmer time to develop and pilot electronic survey tool for market survey, as well as host/manage data server: 5 days at \$300/day = **\$1,500. [£1,050]**

– Survey cost: 200 business service providers at \$50 per provider = **\$10,000. [£7,000]**

Step 3: Measure Professional Quality Ratings for Business Service Providers.

– Research Manager (consultant) time to manage and train SMEs for mystery shopping 30 days at \$200/day = **\$6,000. [£4,350]**

– Programmer time to develop and pilot electronic survey tool for mystery shopper survey, as well as host/manage data server: 3 days at \$300/day = **\$900. [£630]**

– Payment of \$50 per visit (completed quality record) made to the SMEs trained as mystery shoppers, for 200 business service providers = **\$10,000. [£7,000]**

Step 4 (Experiment 1): Measure Peer Quality Ratings and Test the Impact on SME Provider Choice.

– The GEM project will bring the SMEs to the platform and pay for the costs of the business services they are offered on this platform (estimated value 400 firms x \$2000/firm = \$800,000).

– The only additional cost needed to conduct this experiment is programmer's time, needed to implement the quality rating and randomization. This is budgeted at 7 days at \$300/day = **\$2,100. [£1,470]**

Step 5 (Experiment 2): Does Information Matter? Do Firms Respond More to Peer or Professional Quality Ratings?

– Programmer time to develop and pilot electronic survey tool for baseline survey, as well as host/manage data server: 5 days at \$300/day = **\$1,500. [£1,050]**

Baseline survey costs for mostly phone survey are \$25 per firm for 1000 SMEs (this includes costs of building sample frame) = **\$25,000. [£17,500]**

– Programmer time to develop and pilot electronic survey tool for follow-up survey, as well as host/manage data server: 5 days at \$300/day = **\$1,500. [£1,050]**

– 6-month follow-up survey costs for 1,000 SMEs are \$25 per firm (mostly phone follow-ups, with in-person follow-ups to reduce attrition) = **\$25,000. [£17,500]**

Other Costs:

– Overhead (15%) budgeted for project administration and grant management = **\$12,763. [£9,116]**

9. Timeline

Please provide details on the project timeline (in a gantt chart format), including start/end dates.

This project will start the first step in the first quarter of 2018, using funding from World Bank sources and the researchers' own time. We expect to finish this project by the end of the first quarter of 2020, if not sooner.

	2018: Q1	2018: Q2	2018: Q3	2018: Q4	2019: Q1	2019: Q2	2019: Q3	2019: Q4	2020: Q1
Step 1: Measure knowledge of existing providers									
Finalize induction questionnaire	█								
Conduct induction workshops		█	█	█					
Analyze data on firm knowledge			█	█	█				
Step 2: Conduct market-survey of business service providers									
Finalize questionnaire	█	█	█						
Build Sample frame of providers	█	█	█						
Conduct survey of providers		█	█	█					
Analyze data on how firms signal quality			█	█	█				
Step 3: Quality measurement of business service providers									
Develop mystery shopper idea and hire firms		█	█	█					
Pilot idea			█	█					
Carry out mystery shopper ratings			█	█					
Step 4: Experiment on SME provider choice on GEM platform									
Fine-tune platform to allow for experiment	█	█	█						
Conduct experiment on GEM firms selected		█	█	█	█				
Analyze data and write up results					█	█			
Step 5: Experiment on does information matter, and quality ratings									
Develop sample frame of SMEs			█	█	█				
Conduct baseline survey			█	█	█				
Provide information on existence and quality of business service providers				█	█	█			
Conduct 6 month follow-up survey						█	█	█	
Analyze data and write-up results							█	█	█
Research paper and dissemination									
Write research paper			█	█	█	█	█	█	█
Dissemination of early results					█	█	█	█	█
Dissemination of full results								█	█
Public release of all data									█

10. Proposed Output Delivery Milestone schedule

Please complete the table below with the dates for milestones delivery. Note that this schedule will form part of your contract for successful applicants.

Milestone	Completion Date	Comments
Concept Note *	[01 May 2018]	
<i>Field Report of Data Collection according to EDI template</i>	<i>[15 June 2019]</i>	<i>If survey or randomised control trial planned</i>
<i>Progress Report 1 **</i>	<i>[30 Jun 2019]</i>	<i>If Final Working Paper Delivery in 2020</i>
First Draft Paper *	[31 Oct 2019]	
Policy Brief *	[01 Mar 2020]	
Final Working Paper including comments from Scientific Committee or Thematic Group *	[31 Mar 2020]	

* Mandatory for all proposals

** Mandatory for research projects with a Final Working Paper delivery date more than 13 months after contract award. In such cases, the Progress Report shall be delivered in June of each year