SCALA

MERCADO FRESCO

supply hope

WILLIAM DAVIDSON INSTITUTE
AT THE UNIVERSITY OF MICHIGAN

Final Report on SCALA Pilot
Results and recommendations

Date: 12 May 2017

Table of contents

1. **Executive summary** (p. 3)
2. **Introduction to the Metrics Lab and the pilots** (p. 5)
3. **Introduction to the framework** (p. 6)
4. **Goals of the pilot** (p. 7)
5. **Phases of the pilots** (p. 8)
    1. Indicator selection (p. 12)
    2. Data collection process development (p. 15)
    3. Survey instrument development (p. 21)
    4. Data collection (p. 24)
    5. Data analysis (p. 27)
    6. Reporting (p. 37)
6. **Key recommendations** (p. 38)
7. **Across-pilot analysis** (p. 42)
8. **Final deliverables list** (p. 44)
9. **Acknowledgements** (p. 45)
10. **Annex** (p. 46)

MERCADO FRESCO

WILLIAM DAVIDSON INSTITUTE
AT THE UNIVERSITY OF MICHIGAN

Executive Summary: This report shares results of the pilot conducted with the organization and includes recommendations for future measurement endeavors (1/2)

Goals of the pilot

- The Metrics Lab (an initiative of SCALA) aims to help member organizations measure their socio-economic impact through a common framework, such that they can enhance their positive impacts on their micro-distributors as well as improve business outcomes such as retention and sales
- The goals of the pilot were to test the common framework while also creating customized data collection processes and surveys for the organizations participating in the pilots

Six pilot phases

There were six distinct phases in the pilot

- Phase 1: Selected key indicators through document review, conversations with senior management and qualitative interviews with key stakeholders
    - Indicators selected: empowerment at home (decision-making, influence on family), self-efficacy (general, time management, sales skills, financial skills), quality of life of children, nutrition of children, aspirations for children, pride, access to information goods and services, Progress out of Poverty (PPI) and prior income
- Phase 2: Developed data collection process and draft data collection manual for the survey pretest and the pilot data collection phases
- Phase 3: Identified existing instruments to measure indicators and developed survey, showcards, informed consent section in survey introduction, and excel database
    - Developed pretest training materials and conducted remote training for interviewers in Managua
    - Pretested survey with 12 micro-franchisees through cognitive interview methodology (After each day of pretesting, WDI led debrief sessions to discuss issues)
- Phase 4: Implemented improved post-pretest version of the survey with 52 micro-distributors and updated data collection manual based on these experiences
- Phase 5: Conducted two key analysis on the data: Cronbach's alpha on multi-item scale questions and descriptive statistics on all indicators
- Phase 6: Revised survey based on pilot results and developed recommendations for future impact measurement endeavors

Executive Summary: This report shares results of the pilot conducted with the organization and includes recommendations for future measurement endeavors (2/2)

Key Recommendations

WDI captured lessons learned from each stage of the pilot- from indicator selection and refinement to data analysis. We provide recommendations to guide the organization on future impact measurement activities. Key recommendations include:

1. Continue to support quality impact measurement activities such as survey administration, by building monitoring and evaluation capability among staff
2. Continue to focus on measuring multi-dimensional poverty outcome indicators and conduct an impact assessment using a robust research design
3. Systematically and regularly measure impacts on store owners to gain a more nuanced understanding of their needs, as well as how these needs change over time, in order to better address them through business activities
4. Pretest and pilot any changes or adaptations to the survey or interview format with the representative population to ensure accurate data collection
5. Prior to conducting any data collection, conduct trainings with enumerators on interview techniques and best practices
6. Only collect data– both qualitative and quantitative–that will be used by the organization for some purpose such as impact assessment, reporting, adaptive management, decision-making on design etc

Please see final survey for the complete list of recommended changes to the survey

The Metrics Lab is a SCALA initiative that helps its member organizations measure their socio-economic impacts through a common framework. The Metrics Lab worked with three organizations to test the framework and develop context-specific surveys and data collection processes for each of them

The Metrics Lab

- The Metrics Lab, and initiative of SCALA and led by WDI, is helping organizations measure their socio-economic impact such that they can enhance positive impacts on their stakeholders and improve business outcomes such as retention and sales

The Metrics Lab Framework

- The Metrics Lab has developed a simple, standardized framework which can be independently adapted across the SCALA network in order to guide decision making within organizations and encourage learning across the micro-distributor network
  - Results from organizations collecting data on framework indicators can be aggregated across the network to demonstrate the beneficial impacts of the micro-distributor model to outside stakeholders

The pilots

- To test this framework, the Metrics Lab put out a call to the SCALA network in search of member organizations interested in conducting pilots
- To pilots allow for testing the following processes: indicator selection, data collection, survey development and data analysis. The three organizations selected were:
  - **i. Chakipi Acceso**, a last-mile distribution venture in Peru that provides women with sales training and then supplies them with products such as nutritious foods, personal care items, pharmaceuticals, and solar lamps that they sell in their communities
  - **ii. Kiteiras**, a micro-distribution network of door-to-door saleswomen managed by "madrinhas," or godmothers, in poor communities in Brazil. The program empowers women through entrepreneurship training, healthy eating advice and life skills coaching
  - **iii. Supply Hope**, a non-profit in Nicaragua that helps families living in poverty earn income through micro-franchises. Mercado Fresco has more than 90 stores located in the homes of micro-franchise operators. Through these stores, women provide access to affordable, quality food, including fresh vegetables and dairy products to the communities

MERCADO FRESCO
WILLIAM DAVIDSON INSTITUTE AT THE UNIVERSITY OF MICHIGAN

Source: NextBillion https://wdi.umich.edu/news/wdi-impact-framework-being-tested-in-latin-america/

The well-researched, internally developed, framework used in the pilots is holistic, multidimensional, flexible and promotes aggregated learning across organizations

Features of the framework	Description	Benefits
Holistic	• Indicators capture both business and social changes	• Organizations able to use social indicators to improve business outcomes and guide improvements in operations
Multidimensional	• Indicators capture outcome and impact level changes • Indicators capture changes in economic, capability and relationship well-being • Indicators capture negative impacts • Indicators measure short-term and long-term changes	• As opposed to only outputs, organizations gather outcome and impact level data on micro-distributors • As opposed to only economic changes, organizations capture changes in capability well-being such as decision making, self-efficacy etc. and relationship well-being such as support for children, social network etc. of micro-distributors • Programs need indicators they can track and use on a regular basis to guide decision-making (short-term), as well as indicators that demonstrate their contribution to poverty reduction (longer-term)
Flexible	• This standardized framework allows for flexible selection of indicators as deemed necessary by the organization	• Organizations can adapt the framework such that they only collect indicators that meet their personal data needs (versus a one-size fits all approach) • Organizations can select indicators based on their stage of growth: pilot, growth and scale stages
Aggregative	• The framework promotes aggregated learning, decision-making, and benefits to the SCALA network	• Data collected from standardized indicators across member organizations can be aggregated, leading to rapid learning and sharing of best practices across SCALA initiatives
Well-researched	• The framework is developed after reviewing and adapting key indicators from six existing metric frameworks and tools, that have already gained credibility within the development community	• Organizations do not need to carry out research on finding the appropriate framework • Organizations can track their contribution to Sustainable Development Goals explicitly related to micro-distribution

Goals from the pilots included creating context-specific tools and processes for the organizations, testing the framework, and learning lessons across pilots to share with the broader SCALA network

Goals for the organization	Goals for the Metrics Lab	Goals for the SCALA network
Select context-specific indicators from the Metrics Lab Framework	Test the framework that includes social and business, long-term and short-term indicators	Create learning on common indicators, data collection practices, survey development and data analysis
Develop a context-specific data collection process and survey which includes best practices from the field	Identify best practices in collecting data on common socio-economic indicators	Guide decision-making within organizations
Train staff on survey pretesting (cognitive interviewing) as well as data collection of impact indicators	Gather and present quantitative evidence of organizations' socio-economic impact, annually	Demonstrate benefits and impacts of micro-distributor network to outside stakeholders such as external funders
Launch and set up the initial steps required to measure socio-economic impact	Conduct long-term, in-depth, data collection with pilot organizations to assess continued value of metrics and adapt indicators over time	Set up groundwork to measure socio-economic impact of SCALA members to enhance business outcomes such as retention and sales, and address vulnerabilities along the value chain

The pilot activities began in May 2016 and all phases were completed by May 2017

Activities	Approximate dates												
	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017
Phase 1: Indicator identification & selection													
Phase 2: Data collection process development													
Phase 3: Survey instrument development with pretest													
Phase 4: Data collection with pilot sample													
Phase 5: Data analysis													
Phase 6: Report development and presentation													

Each of the six phases were associated with a specific goal. The pilot began with indicator selection and ended with the development of the final report. The final report includes recommendations for future impact measurement activities

Phase	Name of Phase	Goal of Phase
Phase 1	Indicator identification and selection	Identify and select full list of potential context-specific indicators for the pilot that are valuable to management and reflect the impact on the micro-distributors
Phase 2	Data collection process development	Develop data collection process plan (including information on how to select the pretest/pilot samples; and the size of those samples) that is efficient, effective and reduces burden on organization staff
Phase 3	Survey instrument development (refined through pretest)	Train interviewers on cognitive interviewing methods to conduct the pretest. Develop context-specific survey with showcards and informed consent section
Phase 4	Data collection	Collect data for the pilot and finalize the data collection manual for future impact measurement activities
Phase 5	Data analysis	Calculate Cronbach's alphas for all multi-item scale questions and descriptive statistics for all impact and demographic indicators
Phase 6	Report development and presentation to the organization	Develop final report that shares recommendations, lessons learned during the pilot, findings and also methodology

Activities were grouped into six phases. Each phase provided inputs for the next and consisted of detail-oriented activities to achieve the goals of the pilot

I Phase 1

Activities

Indicator selection
1. Launch & engage with senior management
2. Conduct document review
3. Develop qualitative interview protocols
4. Conduct interviews to prioritize impacts
5. Select prioritized impact Indicators

II Phase 2

Data collection processes
1. Interview data collection staff members
2. Develop research design for pretest and pilot
3. Develop draft data collection manual

III Phase 3

Survey development
1. Research existing multi-item scale questions
2. Create survey and adjoining showcards
3. Create informed consent statements
4. Develop training materials and guides
5. Translate all pretest materials

Pretest
1. Train POC / translators on pretest methods
2. Train interviewers on pretest methods
3. Conduct cognitive interviews with sample
4. Conduct and document debrief meetings
5. Revise survey at the end of each debrief day

Finalization of pilot survey & materials
1. Finalize survey & showcards
2. Finalize informed consent statements
3. Finalize cognitive interview guide
4. Develop draft data collection manual
5. Create Excel indicator database

IV Phase 4

Activities

Data Collection
1. Re-train interviewers on interview techniques
2. Conduct data debrief calls with team
3. Review incoming pilot data in Excel
4. Finalize data collection manual

V Phase 5

Data Analysis
1. Clean dataset
2. Run Cronbach's alpha on all multi-item questions
3. Run descriptive statistics on all indicators

VI Phase 6

Results
1. Develop recommendations
2. Write final report
3. Final presentation to organization

MERCADO FRESCO

WILLIAM DAVIDSON INSTITUTE
AT THE UNIVERSITY OF MICHIGAN

To help accomplish goals of the pilot, the following formal interviews and meetings were conducted: Across phases 1 and 2, we conducted one qualitative interviews. We conducted 12 cognitive interviews in phase 3 and administered the survey to 52 micro-franchise owners in phase 4

Interview with Key Stakeholder	Number of Interviews
Phase 1	
In-depth, qualitative, focus-group style interview with 5 organization staff to discuss the impacts of the organization on micro-franchises and select prioritized indicators	1
Phase 2	
Document review of organization's existing data collection processes and 'touch points' with micro-franchises. Also engaged in many informal conversations with the POC and organization team via email	0
Phase 3	
Cognitive interviews with micro-franchises during pretest to develop a context specific survey for the organization	12
Debrief sessions with senior level management and enumerator team	4
Group meetings with senior level management to discuss WDI's recommended changes to post-pretest survey, in order to finalize for use in pilot	1
Phase 4	
Interviews with micro-franchises to collect survey data for the pilot	52
Debrief sessions with senior level management and enumerators to learn of progress and problem-solve issues	2

This is a snapshot of the key formal interviews and meetings that took place, please note several other informal meetings and conversations took place to accomplish the goals of the pilot; -- under phase 4, change the second bullet point to Debrief sessions

Phase 1 activities were conducted between May and July 2016 to first identify potential indicators from the common framework and then, based on qualitative interviews, select prioritized indicators for the pilot

Activity	Approximate timeline
Conducted phase 1 kickoff call with organization's senior management	May 2016
Reviewed documentation sent by organization to identify potential indicators of interest and select relevant ones from the framework	June 2016
Developed interview protocol based on the learnings from the documents as well as based on impacts of interest identified by senior management	June 2016
Conducted focus-group interview with point of contact (POC) and organization to better understand the type of business and social impacts that occur on women selling Mercado Fresco products	June 2016
Coded and analyzed interview notes	June 2016
Developed draft list of final indicators selected for the pilot and sent to POC	June 2016
Received feedback and question on draft indicators and discussed questions for POC via email	June - July 2016
Finalized indicators based on feedback. WDI shared final indicators for pretest and pilot via email	July 2016

The prioritized indicators selected for the pilot can be organized into three types of well-being: capability, relationship, and economic. Additional demographic-based indicators were also selected for the survey*

Capability Well-being	Relationship Well-being	Economic Well-being
Self-efficacy • General • Time management and planning • Sales skills • Financial skills	Pride • For Mercado Fresco business • For Mercado Fresco community	Access to information, goods, and services • Use and access to services • Satisfaction of services in barrio
Empowerment at home • Decision-making • Influence on family matters		Progress out of Poverty (PPI)
Quality of life of children • Focus on overall quality of life, health, and nutrition		Prior income*
Aspirations for children (qualitative question)		

Demographic and Other Indicators			
Gender*	Age*	Education level*	Civil status*
Age started selling products	Household size*	Household composition (Children 0-5 years; 6-12 years; 13-18 years)*	

*Indicators marked with an asterisk (*) indicate indicators which were developed for the pilot but were later removed from the survey. This decision was made by the Supply Hope team.

See annex for (1) more detailed description of new and existing indicators selected for the pilot and (2) complete list of qualitative questions

For more information on the three types of well-being, please see http://wdi.umich.edu/knowledge/multi-dimensional-impacts-enhancing-poverty-alleviation-performance-the-importance-of-implementing-multidimensional-metrics/

All documents from phase 1, including the final list of indicators selected for the survey, are available in the submissions folder

Phase 1 documents https://drive.google.com/open?id=0B4LJix-Mdkd5T1hKY3RHTUw5MXc

Document Name and Number	Brief Description
1. **Metrics Lab Pilot Proposal**	This proposal includes an overview of Metrics Lab pilot process, including an outline of the workplan, pilot activities, and the associated costs of each phase of the pilot
2. **Phase 1 Kickoff Call Slide Deck**	Reviews the goals and phases of the pilot, the roles and responsibilities for various activities required, and the timeline for phase 1
3. **Qualitative Interview Protocol** (blank)	Includes an outline of all the questions that were explored during the phase 1 focus-group interview with 5 organization staff. The purpose of the interview was to determine what impacts women were most likely to experience as a result of being a micro-franchise owner
4. **Qualitative Interview** A. WDI notes from group interview B. Audio recording of group interview	Theses interview notes and audio recording are from the qualitative focus-group interview conducted in phase 1. Content from this interview was used to select the prioritized indicators to be included in the survey
5. **Phase 1 Deliverable: Final Indicators**	This deliverable is a slide deck which includes a complete list of indicators selected for the pretest/pilot. A complete summary of activities conducted in phase 1 is also included. Note: In this file, some content is written in blue text in order to indicate revisions which were added after WDI received feedback from the organization

MERCADO FRESCO

WILLIAM DAVIDSON INSTITUTE AT THE UNIVERSITY OF MICHIGAN

Phase 2 activities were conducted between July and August 2016 to develop a context-specific data collection plan for the pretest and the pilot; lessons from these would also be used in future measurement efforts

Activity	Approximate timeline
Conducted phase 2 kick off call	July 2016
Reviewed documentation on data collection processes sent by organization	July 2016
Conducted conversations with data management and field operations staff to understand organization's existing data sources and data collection processes such as current touch-points with micro-franchisees; also engaged in many informal conversations with the POC and team via Skype	July 2016
Drafted data collection process plan	July 2016
Received feedback from organization and revised data collection process plan accordingly	July - August 2016
Finalized data collection process plan	August 2016

Based on conversations with persons involved in data collection during phase 2, we identified the sample and process to complete a successful pretest*

Pretest Sample

1. 12 Supply Hope micro-franchisees in Managua, including a random selection of:
   - At least 3 new micro-franchises (prior to or immediately following 2 month evaluation)
   - Roughly 9 Existing micro-franchisees (women who previously passed the 2-month evaluation)
2. Women only

Data Collection Time and Location

1. Face-to-face interviews using a paper-based survey implemented by enumerators who are trained by WDI
2. For new micro-franchisees, survey data is collected the women's home immediately after Supply Hope staff conducts the 2-month in-home evaluation (when possible). Surveys will be conducted on an individual basis, at a date/time agreed by the enumerator and respondent
3. For existing micro-franchisees (women who already passed the 2-month evaluation), survey data is collected during the Personal Development Plan (PDP) at Supply Hope
4. Note: No supervisors should be present (within earshot) of the interview

*The phase 3 data collection process outlined above was developed for the organization. The actual pretest carried out was slightly different

Based on conversations with persons involved in data collection during phase 2, we identified the sample and process to complete a successful pilot (1/3)

Pilot Sample

1. 50 – 55 Supply Hope micro-franchisees in Managua, including:
   - *all available* new micro-franchisees (prior to or immediately following 2 month evaluation)
   - a random selection[3] of existing micro-franchisees (women who previously passed the 2-month evaluation)
2. Women only
3. Does *not* include any Supply Hope interviewed during pretest

Data Collection Time and Location

1. WDI estimates that pilot data collection will take approximately four weeks and will occur in Managua
2. For new micro-franchisees, survey data is collected at the women's home immediately after Supply Hope staff conducts the 2-month in-home evaluation (when possible). Surveys will be conducted on an individual basis, at a date/time agreed by the enumerator and respondent
3. For existing micro-franchisees, survey data is collected during the Personal Development Plan (PDP) meeting at Supply Hope. Surveys will be conducted on an individual basis, at a date/time agreed upon by the enumerator and the Supply Hope
4. Important: No supervisors should be present (within earshot of the interview)

Based on conversations with persons involved in data collection during phase 2, we identified the sample and process to complete a successful pilot (2/3)

Steps to complete prior to pilot

1. POC selects and confirms team of about 5 enumerators who will collect data during pilot. Once selected, POC shares names and information about enumerators with WDI via email
2. POC coordinates logistics for the remote enumerator training (lead by WDI), including but not limited to:
   - scheduling date/time/location for the training (based on enumerator and WDI availability)
   - translating training materials for use by enumerators
   - sharing all requested documents with enumerators prior to the training
3. WDI conducts remote training with team of enumerators who will collect data for the pilot
4. The POC selects new and existing Supply Hope women to interview for the pilot and coordinates logistics with enumerator team to contact Supply Hope to arrange interviews and conduct interviews within the pilot period
   - Note*:* Enumerators may need to contact more than 50-55 micro-franchisees because some women may be unavailable/unable to meet, cancel their interview, etc
5. With oversight from the POC, the enumerator team will schedule interview times with each micro-franchisee on a case-by-case basis
6. The POC will determine process and data entry logistics for the pilot to collect new (survey) and data on existing indicators. Collecting and entering data on existing indicators will be lead by Mary, with help from Flor

Based on conversations with persons involved in data collection during phase 2, we identified the sample and process to complete a successful pilot (3/3)

Steps to complete during pilot

1. Enumerator team begins collecting pilot data:
   - Supply Hope micro-franchisees will be interviewed face-to-face using a paper-based survey conducted by enumerators trained by WDI, using data collection materials created by WDI
2. Recommended # of surveys per week of pilot data collection:
   - Week 1: 12 interviews
   - Week 2: 12 interviews
   - Week 3: 13–16 interviews
   - Week 4: 13–15 interviews
3. Throughout data collection:
   1. First, assigned staff collect data on existing indicators from Supply Hope for each of the micro-franchises that will be surveyed and enter data into excel database*
   2. After entering existing data for Supply Hope, assigned staff input survey data (new indicators, demographic indicators, and open-ended qualitative data) into excel database on matched respondent. Repeat for 4 weeks
   3. If, after data entry, data is found to be missing due to error, enumerator follows up with respondent to ask for missing information
   4. POC translates or organizes translator to translate all data in excel database into English
   5. POC sends completed and translated excel database to WDI for review on a weekly basis. The database will contain both English and Spanish responses
   6. WDI, POC and enumerators have a remote debrief meeting weekly to discuss timelines, learn of any data collection issues, discuss data collected and any issues etc with POC and any required field staff leaders; POC coordinates any resulting changes to logistics associated with pilot data collection
4. Data security: All physical data (surveys) needs to be kept in locked cabinets and all computer files with data should be stored in locked folders

*The database contains responses in both Spanish and English

All documents from phase 2, including the pretest and pilot data collection process plans, are available in the submissions folder

Phase 2 documents https://drive.google.com/open?id=0B4LJix-Mdkd5dmhtb1hLNi1Nakk

Document Name and Number	Brief Description
1. **Phase 2 Kick-off Call Slide Deck**	Reviews phase 2 goals and responsibilities related to various required activities. Also provides a high-level overview of data collection processes for upcoming pretest (phase 3) and pilot (phase 4) phases
2. **Phase 2 Deliverable: Data Collection Process Plan**	This deliverable includes updated information regarding the goals and objectives of the phase 2 data collection process plan, as well as in-depth explanation of the data collection details for the pretest (phase 3) and pilot (phase 4)




Phase 3 activities were conducted between August and October 2016. We developed and pretested the survey and then, based on results from the cognitive interviews, revised and finalized the survey for use in the pilot

Activity	Approximate timeline
Conducted phase 3 kick off call	August 2016
Drafted all survey materials (i.e., survey, informed consent form section in the survey, and survey showcards) and sent to POC for feedback	August 2016
Conducted feedback calls with POC to revise all survey materials	August 2016
Finalized all pre-pretest survey materials based on feedback	August 2016
Drafted, revised, and finalized cognitive interview guide*	August - September 2016
Coordinated pretest logistics (e.g., pretest sample selection, interview schedule and data entry for cognitive interviews)	August - September 2016
Conducted pretest (e.g., translator/POC training, enumerator training, debrief sessions and updates to survey materials)	September 2016
Finalized post-pretest (i.e., pilot) survey, informed consent form, survey showcards and cognitive interview guide based on lessons learned from the pretest	September - October 2016

*See Annex for more detailed information on the purpose of the pretest and the cognitive interview technique

Successful completion of all pretest activities led to the development of a context-specific survey. All enumerators involved in the pretest were trained in cognitive interviewing

Activities	I Survey Development	II Pretesting	III Survey Refinement
1	Researched multiple potential survey measures for each prioritized indicator selected in phase 1	WDI led 5 hour, remote training for pretest interviewers	Summarized findings from the cognitive interviews and pretest debrief sessions
2	Developed survey; examined best practices and survey formats for populations similar to micro-distributors to inform of appropriate survey format	Conducted face-to-face cognitive interviews with 12 Mercado Fresco micro-franchises to improve survey questions	Revised survey with all changes gathered from the pretest experience
3	Translated survey to Spanish; coordinated logistics of interviews and meetings with data collection partner	Debriefed after each day of interviews with all participating enumerators to discuss interviewee responses and necessary question adaptations	Collected and discussed feedback from senior management on the post pretest version of survey
4	Developed cognitive interview guide for the pretest study	Made changes to the survey based on the debrief sessions; new changes were tested on the next day of pretesting	Updated processes based on the pretest findings and drafted data collection manual to capture details of the data collection process

All documents from phase 3, including the pretest and pilot surveys and the cognitive interview training materials, are available in the submissions folder

Phase 3 documents https://drive.google.com/open?id=0B4LJix-Mdkd5cV9NV0Z0V3p1czg

Document Name and Number	Brief Description
1. **Survey Instrument** A. Pretest survey version B. Post pretest version	Original (pretest) and revised (post-pretest) survey. Includes WDI recommended changes based on lessons learned from the pretest, as well as explanation of the related implications for future analyses
2. **Informed Consent Form**	Explains to potential participants: the purpose of the survey, why they are candidates for the research, what risks, benefits, and alternatives are associated with the research, and what rights they have as respondents
3. **Showcards**	These were printed and used by enumerators for relevant survey questions
4. **Cognitive interview training materials** A. Cognitive interview guide B. Enumerator training slides	These documents contain information about the cognitive interview technique that is used to refine and improve survey questions for respondents, as well as an overview of the important role that enumerators play during the pretest
5. **Detailed itinerary for pretest**	Copy of pretest schedule used, which includes logistical details for carrying out a successful pretest, including interview times, names of interviewees and enumerators conducting interview
6. **Summary of lessons learned from cognitive interview debriefs**	This file captures WDI notes from all debriefs held during the pretest period, including documentation of suggested changes and revisions made to the survey

Phase 4 activities were conducted between November 2016 and January 2017, to collect pilot data with a sample of 52 new and existing micro-franchisees

Activity	Approximate timeline
Developed example indicator database in Excel for organization to adapt for input of survey data during pilot	November 2016
Developed data collection process manual (post-pretest version) to be used to train enumerators on the pilot survey and data collection for the pilot	November 2016
WDI conducted 4 hour training for pilot enumerators	December 2016
WDI oversaw and closely monitored data collection from 50-55 new and existing micro-distributors	December 2016 - January 2017
WDI reviewed data, managed timelines, and conducted data collection debrief calls throughout pilot data collection	December 2016 - January 2017

The survey was administered to 52 micro-franchises (included both new and existing). A training was conducted for enumerators on interview techniques

Activities

I Preparations

1. Translated refined survey
2. Identified potential adaptations to data collection processes with pilot organization
3. Reminded organization of the pilot and survey implementation logistics

II Pilot

1. Trained interviewers remotely on pilot survey, data entry, and data collection best practices
2. Oversaw data collection conducted for pilot (52 interviews with micro-distributors)
3. Tested survey implementation logistics, data collection process and incentives for future data collection endeavors
4. Debriefed with POC after 20% and 80% of total pilot interviews were complete; discussed data entry adjustments

Breakdown of the sample selected for the pilot (the total size of the sample = 52 respondents)	
Category	**Interviews conducted per category**
Existing micro-franchisees (>3 months with organization)	37
New micro-franchisees (<3 months with organization)	14
Micro-franchisees with unknown start date	1
Micro-franchisee store location in Managua	41
Micro-franchisee store location in Ciudad Sandino	11

All documents from phase 4, including an example indicator database and the data collection manual and training guide, are available in the submissions folder

Phase 4 documents https://drive.google.com/open?id=0B4LJix-Mdkd5dE9rcF9hcXNCWGM

Document Name and Number	Brief Description
1. **Example Excel Indicator Database**	Provides an example database for entering survey data into Excel, including an example of how to calculate PPI scores in Excel (based on respondent's answers to the PPI survey questions, i.e., raw data) using the "=IF" function. Note: organizations will need to adapt the PPI calculation formula because the PPI point values associated each question of the 10 PPI scorecard questions varies by country
2. **Data collection debrief notes** A. Debrief #1 B. Debrief #2	These documents include WDI comments on the indicator database data received from the pilot organization at 20% and 80% completion of pilot data collection
3. **Data collection manual**	The data collection manual serves a similar purpose to phase 3 'cognitive interview guide' because it is used to help train current and future enumerators on the survey and relevant processes; it also include information/instructions for person responsible for data entry
4. **Enumerator training guide for pilot**	This Excel document includes a training version of the final pilot survey. Training notes are presented in column AF

Phase 5 activities were conducted between January and March 2017 to first analyze the pilot survey data and then develop recommendations to improve the survey and data collection and reporting

Activity	Approximate timeline
Reviewed incoming pilot data and identified missing or inaccurately entered data	January 2017
Prepared a clean database	January 2017
Conducted Cronbach's alpha analysis on all multi-item scale questions	January - February 2017
Calculated descriptive statistics for all impact and demographic indicators	February 2017
Updated the survey and developed recommendations to improve the survey based on data analysis	February – March 2017

WDI conducted analysis of Cronbach's alpha (CA) values for all multi-item survey questions to identify the internal consistency of the group of items and further strengthen the survey (1/3)

Cronbach's alpha (CA):
- A measure of "internal consistency"
- Tells you whether the several sub-items/statements that form a multi-item question 'hold' together, i.e. do they measure the same construct (e.g., the construct of "self-efficacy" or "household empowerment")
- Alpha scores range from 0.0 to 1.0 in absolute value

Key for understanding Cronbach's alpha scores:

Green	Good - Cronbach's alpha is between 0.70 and 1.0; i.e., the items in the multi-item question hold together
Orange	Okay - Cronbach's alpha is between 0.60 and 0.69. Historically, researchers have desired to have Cronbach's alphas above 0.7 for a scale; However, for the purpose of this pilot, we believe Cronbach's alpha above 0.6 to be acceptable given the multi-faceted nature of the constructs being measured (e.g., strength of time management self-efficacy, QOL of children)
Red	Unacceptable - Cronbach's alpha is below 0.60; i.e., the items in the multi-item question do not hold together

Example of Cronbach's alpha analysis and recommended changes:

Survey Question (based on pilot version of survey)		*Indicator*	*CA Original (pilot)*	*Recommended changes to the question*	*CA New (post-pilot)*
Q1	*"I would like to know more about the barrio in which you live and your access to services"*	*Access to services within barrio*	*0.79 (n=30; 10 items)**	*None required*	*– –*

Useful definitions:
- <u>CA New</u> – A revised calculation of the Cronbach's alpha score. This demonstrates what the CA value would be for a given survey question if all recommended changes to the question are made as suggested by WDI
- <u>Multi-item measure</u> – A survey question that include two or more sub-items that are analyzed/calculated together (e.g., if question 26 has items 26a-26d, then it is considered 'multi-item'; whereas question 42 includes only item 42a and hence it is considered a 'single-item' measure)

* "n" is sample size & "items" are the number of statements in the multi-item question

WDI conducted analysis of Cronbach's alpha (CA) values for all multi-item survey questions to identify the internal consistency of the group of items and further strengthen the survey (2/3)

Survey Question (based on pilot version of survey)		Indicator	CA Original (pre-pilot)	Recommended changes to the question	CA New (post-pilot)
Q1	"I would like to know more about the barrio in which you live and your access to services"	Access to services within barrio	0.79 (n=30; 10 items)	None required	– –
Q6	"The next set of questions asks about how you think your children quality of life, health, and other areas…"	Quality of life for children (all items)	0.76 (n=42; 9 items)	None required	– –
	Q6i	Quality of Life: General		Create new, separate QOL (general) question from item 6i	N/a; CA not calculated for single-item measure
	Q6d-h	Quality of Life: Health Domain		Create new, separate, QOL question using items 6d-6h	0.78 (n=42; 5 items)
Q7	"…some questions on the quality and quantity of food your children ate…"	Nutrition for children	0.84 (n=45; 4 items)	None required	– –
Q18	"The next few questions think about how you managed your time…"	Time management self-efficacy	0.51 (n=52; 5 items)	Remove items 18b,18d,18f	0.78 (n=52; 3 items)
Q19	"I would like to ask you how you sell, including the strategies, methods and approaches that you use to deal with your customers…"	Sales self-efficacy	0.47 (n=52; 8 items)	Remove items 19a,b,d,e and h	0.78 (n=52; 3 items)

'n' is sample size and 'items' are the number of statements in the multi-item question

Self-efficacy is one's belief in one's ones ability to succeed in specific situations or accomplish a task. During the Supply Hope pilot, four different measures of self-efficacy were collected, including micro-franchisees' self-efficacy related to (a) time management and planning, (b) sales skills, and (c) financial skills, as well as (d) a general measure of overall self-efficacy

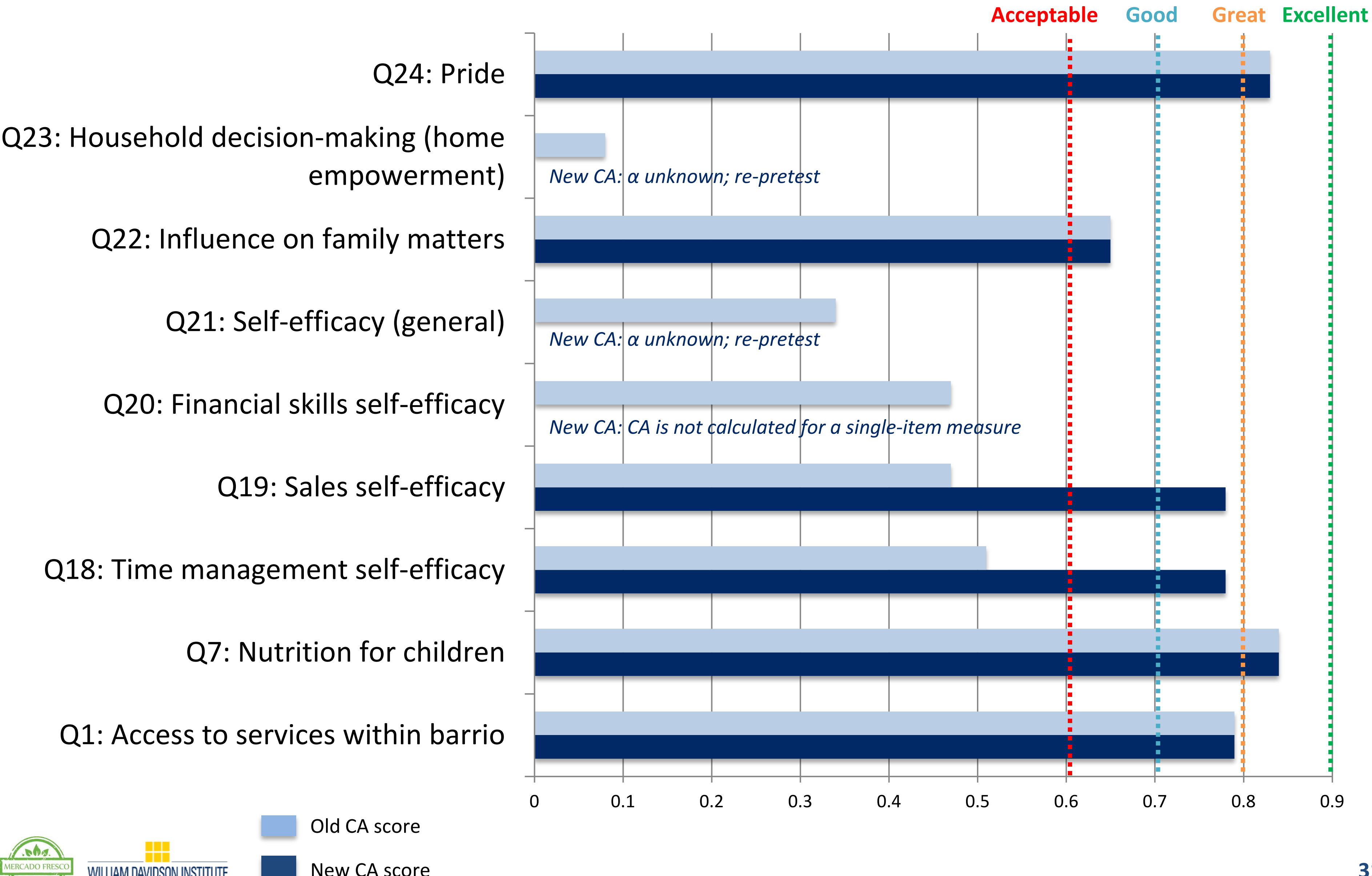
WDI conducted analysis of Cronbach's alpha (CA) values for all multi-item survey questions to identify the internal consistency of the group of items and further strengthen the survey (3/3)

	Survey Question (based on pilot version of survey)	Indicator	CA Original (pre-pilot)	Recommended changes to the question	CA New (post-pilot)
Q20	"…grade your abilities in the economic area…"	Financial skills self-efficacy	0.47 (n=52; 4 items)	Delete this multi-item question; Keep some items as single-item measures, as desired	N/a; CA not calculated for single-item measure
Q21	"…now I would like to ask you how you feel about yourself…"	Self-efficacy (general)	0.34 (n=52; 5 items)	Re-pretest entire scale (21a-21e), with focus on simplifying wording;	Unknown/ Re-pretest and calculate new CA
Q22	"I am going to ask you about your opinion about household roles…"	Influence on family matters	0.65 (n=52; 4 items)	None required	– –
Q23	"I would like to know more about your relationship at home with your partner or a senior family member..."	Household decision-making (home empowerment)	0.08 (n=52; 5 items)	Re-word reverse-scored items 23b and 23c AND A) Keep all items in question, re-pretest, and re-calculate Cronbach's alpha OR B) Delete this multi-item question; Keep some items as single-item measures, as desired	A) Unknown /Re-pretest and calculate new CA B) N/a
Q24	"You feel proud to [have a Mercado Fresco Store]/[be part of the Mercado Fresco community]…"	Pride	0.83 (n=52; 2 items)	None required	– –

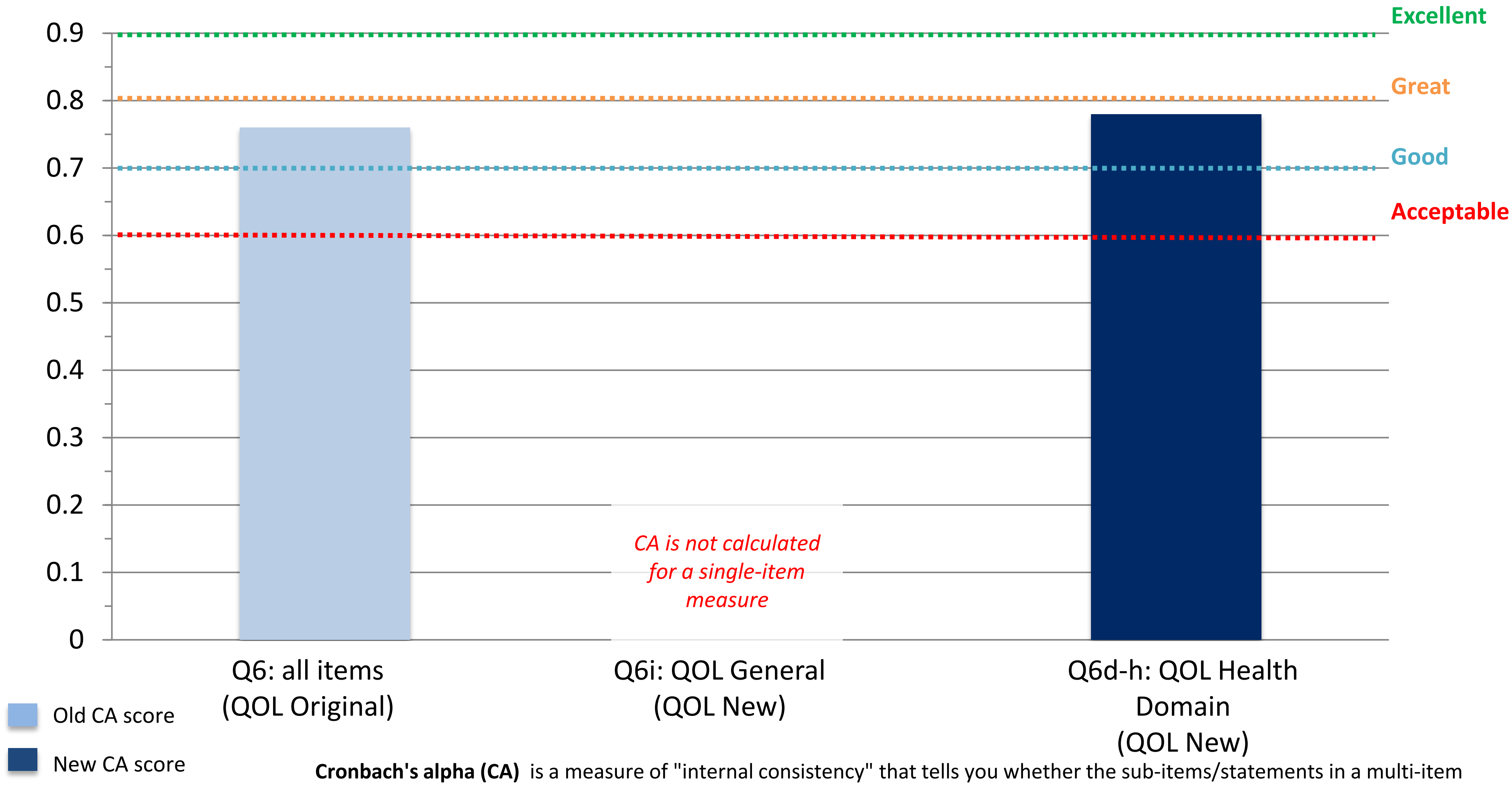
'n' is sample size and 'items' are the number of statements in the multi-item question

Self-efficacy is one's belief in one's ones ability to succeed in specific situations or accomplish a task. During the Supply Hope pilot, four different measures of self-efficacy were collected, including micro-franchisees' self-efficacy related to (a) time management and planning, (b) sales skills, and (c) financial skills, as well as (d) a general measure of overall self-efficacy

Using Cronbach's alpha analyses, seven out of ten multi-item survey questions reached acceptable reliability standards. Results for all multi-item survey questions *except* the quality of life for children indicator appear below.



The question related to Quality Of Life (QOL) for the children of Mercado Fresco micro-franchise operators was created using a modified subscale of the globally used WHOQOL scale. Based on Cronbach's alpha values calculated using pilot data, Supply Hope can choose to separate QOL for children into 2 individual questions or keeps QOL as one combined question



Cronbach's alpha (CA) is a measure of "internal consistency" that tells you whether the sub-items/statements in a multi-item question 'hold together.' CA measures how well several different statements/parts are fitting together to measure the same construct (e.g., the construct of "self-efficacy", or "household empowerment"). CA's can range from 0.0 to 1.0 (absolute value). The reliability of the questions used in our survey ranges between acceptable to excellent as determined by the Cronbach's alpha

MERCADO FRESCO

WILLIAM DAVIDSON INSTITUTE AT THE UNIVERSITY OF MICHIGAN

We calculated the descriptive statistics for all demographic indicators, final impact indicators, and existing business indicators. Here, we list the mean for each indicator

Final Impact Indicator	Mean
Access to Services in Barrio (scale of 7, where 7 is the highest)	4.57
Quality of Life for Children (Q6, all items) (scale of 7, where 7 is the highest)	5.50
Quality of Life for Children: General (Q6i) (scale of 7, where 7 is the highest)	5.57
Quality of Life for Children: Health Domain (Q6d-h) (scale of 7, where 7 is the highest)	5.54
Nutrition for Children (scale of 5, where 5 is the highest)	4.31
Time Management Self-Efficacy (scale of 5, where 5 is the highest)	4.71
Sales Skills Self-Efficacy (scale of 5, where 5 is the highest)	4.87
Influence on Family (scale of 5, where 5 is the highest)	4.57
Pride (scale of 5, where 5 is the highest)	4.91

Demographic and Existing Business Indicator	Mean
Age	44.76
Age started selling products (years)	24.77
Mercado Fresco Sales Oct. 2016 (USD)	481.62
Mercado Fresco Sales Nov. 16 (USD)	577.88
Mercado Fresco Sales Dec.16 (USD)	639.17
Average Sales (USD)	566.26
Commission Oct. 16 (USD)	70.24
Commission Nov. 16 (USD)	84.33
Commission Dec. 16 (USD)	94.29
Average Commission (USD)	83.00
Number of New Customers (monthly)	160.95

These examples can provide a useful snapshot for how to display descriptive statistics and ‘cut’ data by ‘new’ and ‘existing’ micro-distributor status

1) Display differences in mean scores across ‘new’ and ‘existing’ micro-distributors

Indicator	New Micro-franchise (Mean)	Existing Micro-franchise (Mean)
Duration of interview (hh:mm)	00:49	00:54
Sales experience (Years)	20.36	26.16
Time Management (scale of 5, where 5 is the highest)	4.45	4.82
Nutrition for Children (scale of 5, where 5 is the highest)	4.71	4.19
Pride (scale of 5, where 5 is the highest)	5.00	4.89
Access to Internet in Barrio (Q1j) (scale of 7, where 7 is highest)	3.90	4.58
Borrowed from formal institution in last 12 months (Q2a) (scale of 7, where 7 is highest)*	1.57	1.59
Borrowed from informal sources in last 12 months (Q2b) (scale of 7, where 7 is highest)*	1.21	1.19

2) Report key descriptive statistics of key indicators for entire sample

Survey Question	Indicator	Mean	Median	Mode	SD	Range	N
Q4	Age Started Selling (years)	24.77	24	8	12.66	7-55	52
Q6i	Children’s General QOL	5.57	6	5	.97	3-7	44

3) Display descriptive statistics related to access and use of different services

Service used (in last 12 months)	% of respondents who said Yes
Borrow from formal institution (Q2a)	59%
Borrow from informal sources (Q2b)	19%
Send/Receive money from non-local family (Q2d)	18%
Use mobile phone to pay bills or send/receive money (Q2e)	6%

*Indicators marked with an asterisk (*) indicate a survey question with a “No” or “Yes” response option, where “1” is “No” and “2” is “Yes.” The closer mean values are to 1, the more likely respondents reported “No” to this question.

‘New’ micro-distributors were those who had sold Mercado Fresco products for less than 3 months at the time of pilot data collection while ‘existing’ micro-distributors were those who had sold Mercado Fresco products for more than 3 months

We use the PPI to determine the likelihood of an individual household or a group of households living below the poverty line. While individual household PPI scores cannot be averaged, the individual household poverty likelihood values can be averaged. Here are the steps to calculate the poverty rate of a group of households

Steps to determine the rate of poverty of a group of households:

1. Calculate the PPI score for each individual household
2. Convert the PPI score to the likelihood value of living below the poverty line. To do this, use the PPI-provided lookup tables to convert PPI scores to their associated poverty likelihoods
3. Find the average of the poverty likelihood values of all the households surveyed
    - A poverty likelihood is the probability that an *individual household*'s expenditure level falls below a poverty line. For example, a poverty likelihood of 30% reflects a three-in-ten chance that a household is poor.
    - For example, using the table to the right, World Vision could use a total PPI score of 25 to report: *"A micro-distributor with a PPI score of 25 has a 23.2% likelihood of living below the USAID 'Extreme' poverty line in Brazil"*

PPI Score	USAID "Extreme" Poverty Line: Total Below the USAID "Extreme" Poverty Line	USAID "Extreme" Poverty Line: Total Above the USAID "Extreme" Poverty Line
0-4	80.2%	19.8%
5-9	77.2%	22.8%
10-14	65.0%	35.0%
15-19	47.0%	53.0%
20-24	36.1%	63.9%
25-29	23.2%	76.8%
30-34	15.2%	84.8%
35-39	8.3%	91.7%
40-44	5.1%	94.9%
45-49	3.1%	96.9%
50-54	2.1%	97.9%
55-59	1.2%	98.8%
60-64	1.2%	98.8%
65-69	0.4%	99.6%
70-74	0.6%	99.4%
75-79	0.0%	100.0%
80-84	0.0%	100.0%
85-89	0.0%	100.0%
90-94	0.0%	100.0%
95-100	0.0%	100.0%

See Annex for more information on PPI analysis and reporting

See this short video on how a PPI is made: https://www.youtube.com/watch?v=lEvJHaIvbJk

For more information see: http://www.progressoutofpoverty.org/blog/why-averaging-ppi-scores-wont-work

Source: Microfinance Risk Management, L.L.C

http://www.microfinance.com/English/Papers/Scoring_Poverty_Nicaragua_2009_EN.pdf

All documents from Phase 5, including data analysis results and final recommended survey changes, as well as the final versions of the indicator database (with the pilot data), are available in the submissions folder

Phase 5 documents https://drive.google.com/open?id=0B4LJix-Mdkd5a0YzUkx3dmJWRk0

Document Name and Number	Brief Description
1. **Cronbach's alpha (CA) Results table**	This table shows what the original Cronbach's alpha (CA) was for each question and the new CA score when questions are changed as per WDI's recommendations
2. **Descriptive statistics**	SPSS output which includes report of all descriptive statistics for all survey questions, as well as a comparison of descriptive statistics across new and existing micro-distributors
3. **Clean indicator database** *with PPI calculation and final measures*	Final deliverable. A clean copy of all the raw pilot data which was used to conduct analyses during phase 5
4. **Final indicator database** *with update PPI calculation and final indicators*	This version of the indicator databases is ready to use if all recommended changes to survey were implemented by the organization. WDI updated the spreadsheet to reflect the revised survey question numbering, creation of final indicators (e.g., 'total self-efficacy') and corrected PPI calculation formulas
5. **Final Survey** *with WDI recommended changes*	An updated version of the survey, post-pilot, which includes WDI's question-by-question recommended survey changes based on lessons from the pilot and phase 5 data analyses

Phase 6 activities were conducted from March to mid-May 2017; this included developing the final report and recommendations and presenting these to senior management

Activity	Approximate timeline
Developed final report	March - April 2017
Developed and refined final recommendations	April 2017
Presented final report to senior management	May 2017

WDI created recommendations related specifically to each phase of the pilot process, as well as for the survey, interviewers, and for use across the SCALA network (1/4)

Phase 1 and 2

1. Continue to support quality impact measurement activities such as survey administration, by building monitoring and evaluation capability among staff

i. Hire one person at the organization devoted to monitoring and evaluation activities, or have an existing staff member adopt this role as part of his/her responsibilities.This person should be responsible for the organization's impact assessment efforts, research and data collection requirements as well as data analysis and reporting plans. Engage in and seek regular training opportunities related to the focus of their measurement activities

ii. Conduct trainings with enumerators (staff members or representatives from the data collection partner) before any data collection instance to inform of best practices when administering surveys and the survey questions with the purpose of each question. Include short quizzes, two-way dialogue opportunities and role playing activities to keep the enumerators engaged during trainings

2. Continue to focus on measuring multi-dimensional poverty outcome indicators and conduct an impact assessment using a robust research design

i. Develop and implement a robust research design to conduct an impact assessment; this can include a baseline-endline (see annex for commonly used design) with a representative comparison group

ii. Discuss the need for a (1) true baseline, and (2) a comparison group

iii. To establish a more accurate baseline, we strongly recommend that the organization begin collecting data from micro-distributors when they are still 'New.' That is, they have been selling products for *less than* 2 months, preferably as soon as they are registered and *before* they receive any training; utilize the survey developed in this pilot

iv. A good rule of thumb is to have 200* treatment group respondents at endline and 200 comparison group respondents at endline; another common practice is to assume a 20% attrition rate of respondents from baseline to endline

v. Look for positive and unintended negative impacts; management should pay careful attention to identifying the likelihood and magnitude of negative social and economic impacts in order to improve operations and outcomes for the business

WDI has also provided recommendations on processes and training in the data collection manual. Please refer to the manual for detailed guidance on these topics.

*This number is calculated based on power analysis . More information can be found here: http://www.3rs-reduction.co.uk/html/6__power_and_sample_size.html

WDI created recommendations related specifically to each phase of the pilot process, as well as for the survey, interviewers, and for use across the SCALA network (2/4)

Phase 1 and 2 continued

3. Systematically and regularly measure impacts on store owners to gain a more nuanced understanding of the needs of micro-franchisees, as well as how these needs change over time, in order to better address them through business activities

i. Embed data collection processess into the program to decrease the burden on oganization staff and survey respondents

ii. Administer the survey to micro-franchisees at an interval that is determined by the organization staff to help capture both short- and long-term impacts, e.g. conduct an impact assessment every three years

iii. Develop a monitoring system that tracks indicators where statistical relationships exist (as discovered from the impact data analysis). Frequency of data collection for this monitoring system (e.g., once per quarter using the same relevant survey questions used in this study) should be adjusted and right-sized based on existing resources such as staff time

4. Consider other methods of data collection such as using an independent third-party partner to conduct the assessment

i. Hiring a third party to conduct the impact assessment interviews can reduce response bias and can be perceived as less biased to funders

ii. A less expensive alternative is that the organizations' staff continue to administer the surveys themselves. If this option is chosen, commission an independent assessment of impacts every few years to ensure objectivity of the findings

    i. If this option is used, please account for time away from regular duties; time to attend cognitive interview training and arrange interviews, travel costs to the interview site for both the interviewer and interviewee, and time to conduct pretest interview

    ii. If this option is used, please ensure enumerators are trained in skillfully asking respondents for truthful and honest answers and also in reminding the respondent that negative responses will not affect their relationship with the organization

WDI created recommendations related specifically to each phase of the pilot process, as well as for the survey, interviewers, and for use across the SCALA network (3/4)

Phase 3

1. Pretest and pilot any changes or adaptations to the survey or interview format with the representative population to ensure accurate data collection

i. Pretest questions that need to be added or adapted
ii. Pretest the survey when administering it in a new location for adaptation to the local context
iii. Pretest the survey if the survey interview format were changed to an electronic administration format (e.g., using tablets)
iv. The pretest sample should include a minimum of 10-12 micro-franchises

2. Prior to conducting any cognitive interviews in the future, offer refresher trainings for enumerators that will administer the pretest

i. Assign one member of the team to be responsible for the training. His/her tasks should include printing all training materials, managing logistics and ensuring the training is run effectively
ii. If more than one enumerator is conducting cognitive interviews, debrief meetings should be held on each day that cognitive interviews are conducted. This is essential - enumerators must debrief on their findings and co-develop solutions to test on the next day of pretesting

The Survey

1. Adopt the question-by-question recommended survey changes provided in the the "Final Survey with WDI recommended changes" document. Additionally, we provide several other general recommendations related to the current and any future surveys:

i. For new questions which ask respondents to report their answer in terms of the frequency of their actions, *avoid* vague response options that do not help quantify respondent's answers. The best response options, in order of 'best-to-use': Actual numbers (e.g., 5 times a week), number ranges (e.g., from 2-3 times a week), and approximate ranges (e.g., everyday, a few times a week)
ii. Avoid creating questions with "Agree" to "Disagree" scales as these can be confusing to respondents
iii. Avoid negatively framed questions or those with double-negatives as these can be confusing to all
iv. Always translate *and back-translate* survey questions that are first created/written in English
v. Use seperate data entry sheets to record survey responses to save resources on printing surveys

WDI created recommendations related specifically to each phase of the pilot process, as well as for the survey, interviewers, and for use across the SCALA network (4/4)

Phase 4

1. Continue to support quality data entry practices by building staff capabilities

i. Increase support to persons responsible for entering new and existing survey data on micro-franchises into Excel through ongoing trainings and dialogues

ii. All survey data should first be entered as raw data (i.e., exactly as it was recorded in the survey)

2. Adopt commonly used best practices when administering surveys

i. No upper level management should be present during interviews as this increases the potential that a respondent will provide biased answers in an effort to appear favorably. This may also make the respondent feel nervous and uncomfortable, and thus influence their response

ii. When surveying female micro-franchisees, male interviewers should not be selected unless absolutely necessary because this has the potential to bias respondent answers

iii. Always conduct interviews in a private space, free from distractions and away from other people who may bias their responses such as their family members or other micro-franchises

iv. Conduct trainings with enumerators before any data collection to remind them of interview techniques and best practices

Phase 5

1. Convert all PPI raw data into PPI scores and report as values in terms of "poverty likelihood"

i. Information is provided in the phase 5 data analysis section on how to analyze and report PPI values

2. Only ask key qualitative questions in the survey and use all data collected

i. Use qualitative data to "dig deeper' and expand on related quantitative data

ii. If qualitative data is not being coded and analyzed to inform learning, remove these questions; include only one over-arching question which can be used to gather meaningful quotes on impacts from micro-franchises

3. Remove qualitative and quantitative questions from the survey where the data is not used (analyzing, reporting, etc)

i. Utilize every piece of data such that you do not create burden on the respondent (especially important to avoid creating survey fatigue)

4. Use appropriate excel functions to conduct descriptive stats as well as other bivariate analysis*

*Please see annex for commonly used Excel functions for descriptive statistics and bivariate analysis

For more information on qualitative coding, please see http://programeval.ucdavis.edu/documents/Tips_Tools_18_2012.pdf

We compared indicators selected across all 3 SCALA Metrics Lab pilots

Chakipi	Supply Hope	Kiteiras
Self-efficacy • General • Time management & planning • Sales skills • Communication	**Self-efficacy** • General • Time management & planning • Sales skills • Financial skills	**Self-efficacy** • General • Time management & planning • Sales skills • Financial skills
Empowerment at home • Decision-making • Influence on family	**Empowerment at home** • Decision-making • Influence on family	**Empowerment at home** • Decision-making • Influence on family
Quality of life of children • Overall QOL, health, and resources and support	**Quality of life of children** • Overall quality of life and health	**Support provided to children**
Nutrition for children	**Nutrition for children**	
Aspirations for children (qualitative question)	**Aspirations for children** (qualitative question)	
Pride • For organization	**Pride** • For organization/business • For community	**Pride** • For organization
Progress out of Poverty (PPI)	**Progress out of Poverty (PPI)**	**Progress out of Poverty (PPI)**
Social support • From Chakipi colleagues • From Chakipi promoter	**Access to information, goods, and services** • Use and access to services • Satisfaction of services in barrio	**Social Network** • Personal • Professional **Social support** • From Kiteiras colleagues
	Prior income	**Use of mobile technology** related to their Kiteiras activity
Various demographic and business indicators	Various demographic and business indicators	Various demographic and business indicators

We developed some key across-pilot recommendations

Recommendations Across Pilots

- Allocate resources to increase organizational capacity to carry out monitoring and evaluation activities *across* the SCALA network e.g. trainings, sharing results from monitoring and evaluation activities
- Include an indicator in the Metrics Lab framework that focuses on the impact on the children. This this was identified as an important impact across all three pilots
- When resources allow, let experts conduct the pretest: findings from the pilot revealed stronger survey measures (as indicated by Cronbach's alpha) were created when WDI conducted a portion of the pretest interviews in-person and led the debrief sessions

CHAKIPI acceso

kiteiras
DESENVOLVENDO O EMPREENDEDORISMO

supply hope

MERCADO FRESCO

WILLIAM DAVIDSON INSTITUTE AT THE UNIVERSITY OF MICHIGAN

All final deliverables, from phase 1 indicator selection to phase 6 reporting, are available in the submissions folder

Final Deliverables: https://drive.google.com/open?id=1m2nzHym2DYHeA9fxr-9NRhRk1zhRaguVzlDNYwOPoyk

Phase	Final Deliverable
Phase 1: Indicator identification & selection	1. Complete list of indicators selected for the pilot
Phase 2: Data collection process development	1. Data collection process plan
Phase 3: Survey instrument development (aka, "The Pretest")	1. Survey instrument (used for pretest) 2. Informed consent form 3. Data collection process manual with cognitive interview training guide for enumerator (used in pretest version) 4. Context-specific survey instrument (post-pretest version) 5. Transcripts of cognitive interviews conducted by WDI staff 6. Summary of lessons from cognitive interviews debriefs
Phase 4: Data collection (aka, "The Pilot")	1a. Data collection process manual (post-pretest version) 1b. Enumerator training guide that explains the survey
Phase 5: Data analysis	1. Clean database used to conduct pilot analysis (Note: Tab 3 also includes final database which has been updated based on WDI's recommended survey changes)
Phase 6: Reporting	1. Final report (PowerPoint) 2. Final Post-pilot survey, including recommended final changes based on data analysis findings

We want to thank the teams across the different organizations that we worked with (Acknowledgements in alphabetical order per organization)

William Davidson Institute Team

1. **Rebecca Baylor**, Research Associate, WDI Performance Measurement Initiative
2. **Daniel DeValve**, Project Administrator, WDI Grants Management Department
3. **Heather Esper**, Senior Program Manager, WDI Performance Measurement Initiative
4. **Yaquta K. Fatehi**, Sr. Research Associate, WDI, Performance Measurement Initiative

IDB

1. **Aminta Parez Gold,** Project Specialist, Multilateral Investment Fund (Retired 2017)
2. **César Buenadicha Sánchez,** Lead Project Specialist, Multilateral Investment Fund

Others

1. **Nidhi Krishen,** Consultant, BSD Consulting
2. **Observatorio SCALA**, University of los Andes

Supply Hope and Mercado Fresco Team

1. **Julissa Aguilera,** Administrative Technical Assistant, Mercado Fresco Project
2. **Manuel Aleman,** Business Coach, Supply Hope (Phase 1 interviewee)
3. **Fanny Alvarez,** Training Coordinator, Supply Hope (Phase 1 interviewee)
4. **Mary Anderson,** Director of Research & Strategy, Supply Hope
5. **Claudia Lopez,** Nicaragua Program Director, Supply Hope (Phase 1 interviewee & Translator)
6. **Leana Lopez,** Psychologist, Supply Hope (Phase 1 interviewee)
7. **Beth Meadows,** Founder and CEO, Supply Hope
8. **Martha Mora,** Mercado Fresco Micro-Franchise Operator, Supply Hope (Pilot Enumerator)
9. **Emily Navarro,** Supply Hope
10. **Flor Silva,** Temporary Contractor, Supply Hope

Annex

Table of contents for the annex:

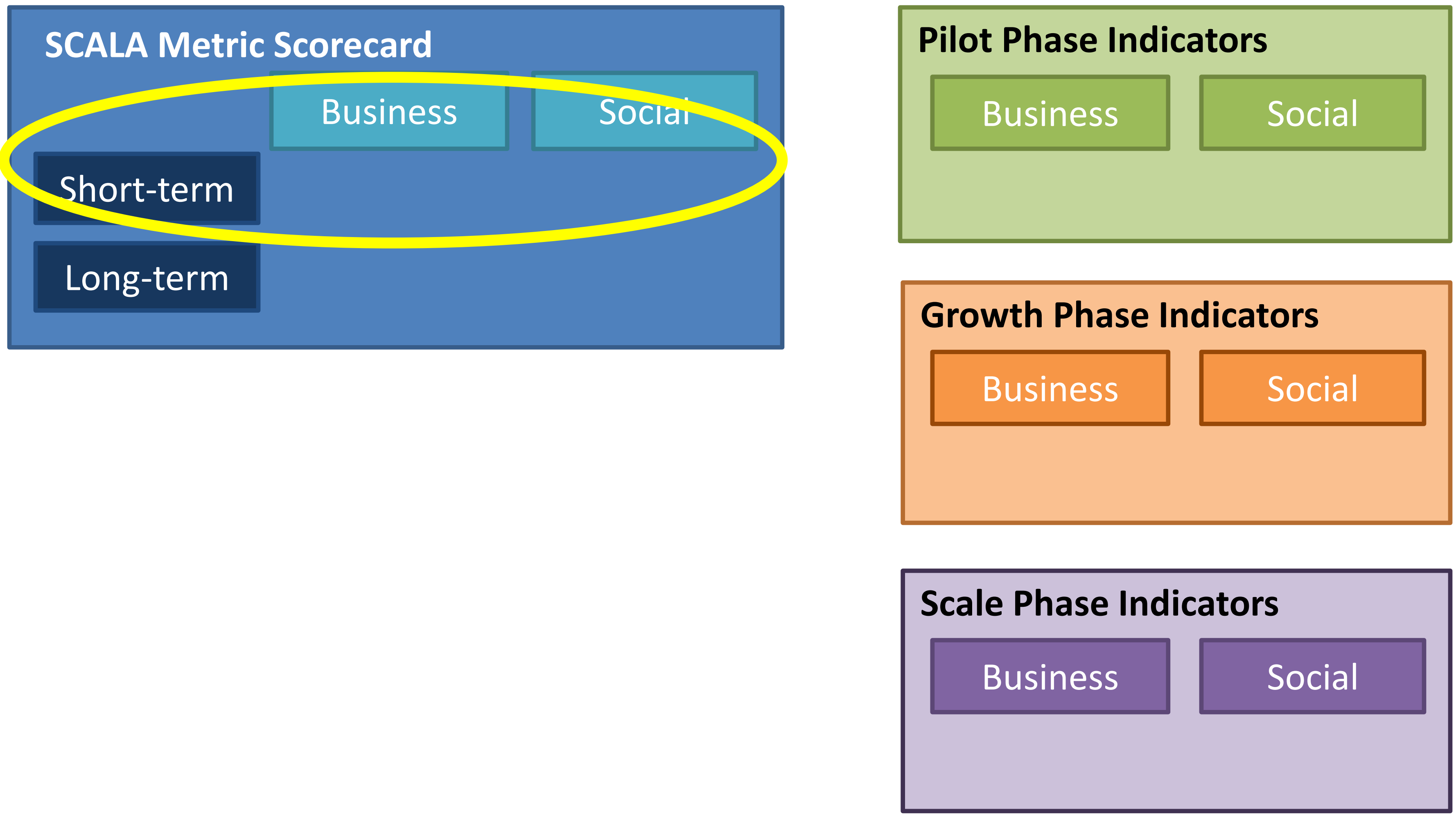
	Page
Features of the Metrics Lab Framework	45 – 52
How Metrics Lab Framework indicators relate to SDGS	53 – 54
Boundaries and limitations of the pilot and conflict of interest statement	55
Final list of new and existing indicators selected for the pilot survey	56 – 59
Additional details related to phase 3 pretest purpose and cognitive interviews	60 – 61
More information on random selection	62
List of original measures with links	63
Commonly used Excel functions for descriptive statistics and bivariate analysis	64
PPI scorecards and lookup tables	65 – 66
Explanation of common research design with baseline, endline, and a comparison group	67
Challenges faced during the pilot	68
References, including helpful PPI resource links	69

Features of the framework* include core component with focus on short-term indicators (1/6)

Goal: Keep framework simple, practical and flexible (not a one size fits all approach)

Core metrics collected by all SCALA members

Optional metrics by stage of growth



*The Metrics Lab Framework presented is a draft and has not yet been updated based on lessons learned from the SCALA pilots

Features of the framework: Core social indicators in the framework– short-term (2/6)

Unit of Analysis	Theme	Core Elements	Indicator	Examples
Micro-distributor	Economic Opportunity	Livelihood	Income	Income of micro-distributor prior to and after joining organization
			Sales	Sales of micro-distributor compared to the organization's average sales per micro-distributor
		Economic Resilience	Income stability	Stability of the micro-distributor's income week to week
			Assets	Assets owned by the micro-distributor such as TV, car, radio, type of flooring, toilet, number of rooms in home, electricity source, water source, etc.
			Credit	Micro-distributor's access to credit such as loans
	Empowerment	Capabilities (Knowledge and Skills)	Financial literacy	Financial management knowledge gained by micro-distributors through training and on the job
			Self-esteem	Self-assessment of self-worth and abilities by micro-distributor
		Empowerment	Empowerment	Self-assessment of influence, power, self-determination and competence by micro-distributor
		Non-economic Resources	Access to information/goods/services	Micro-distributor's access to technology as well as services such as health care, transportation, etc.
			Social support	Support micro-distributor receives (advice as well as resources) by individuals in their social network
	Enterprise	Enterprise Growth	Entrepreneurship index	Micro-distributor's decision-making skills, general knowledge, network, and income
			Gradual 'formality'	Degree of formality of micro-distributor's job such whether they receive social security and other benefits such as health care
		Opportunity Cost	Opportunity cost	Number of hours micro-distributor works versus number of hours spent with family
		Brand Leverage	Pride	Micro-distributor's pride for the organization and brand
		Career Progression Path	Aspirations/ hope	Micro-distributor's opportunity for growth and advancement as well as rewards and incentives.

MERCADO FRESCO
WILLIAM DAVIDSON INSTITUTE AT THE UNIVERSITY OF MICHIGAN

*The Metrics Lab Framework presented is a draft and has not yet been updated based on lessons learned from the SCALA pilots

Core business indicators in the framework - short-term (3/6)

Unit of Analysis	Theme	Core Elements	Indicator	Examples
Business	Business	Sales	Sales and growth	Sales growth of the organization over the past year
			Sales revenue	Average sales per year of the organization
		Talent Retainment	Retention	Retention of micro-distributors per month
		Mission	Contribution to enterprise business and social strategy	Degree to which program contributes to both the business and social mission
		Satisfaction	Market share	Percentage of clients recommending organization
		Social Capital	Number of advisors	Number of board members, advisory board members, venture advisors identified and on-boarded by the company
			Number of ecosystem partners	Number of systemic partners and collaborations established by the company
		Capital	$ Capital raised	New capital raised in the form of equity, debt or grants received
		Reach	Number of BoP lives reached	Number of unique BoP individuals who were clients of the organization during the reporting period
			Number of employees	Number of BoP and non-BoP paid full time and part-time employees or staff across organization
			Number of countries reached	Number of countries the organization is operating within

*The Metrics Lab Framework presented is a draft and has not yet been updated based on lessons learned from the SCALA pilots

Core components of framework with focus on long-term social indicators (4/6)

Goal: Keep framework simple, practical and flexible (not a one size fits all approach)

Core metrics collected by all SCALA members

SCALA Metric Scorecard

Business

Social

Short-term

Long-term

Optional metrics by stage of growth

Pilot Phase Indicators

Business

Social

Growth Phase Indicators

Business

Social

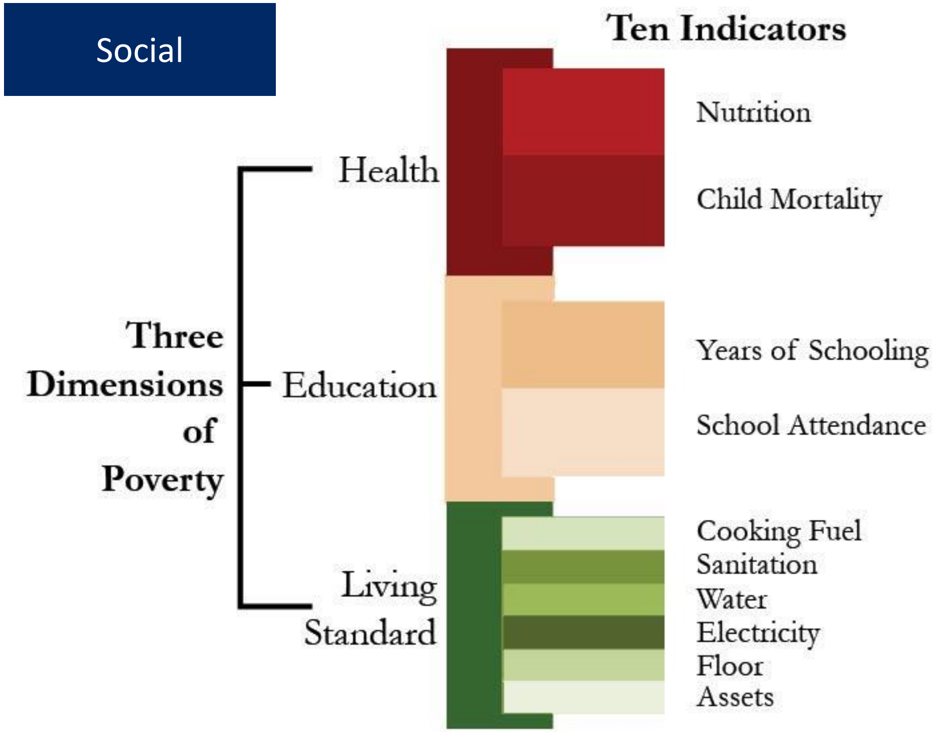
Scale Phase Indicators

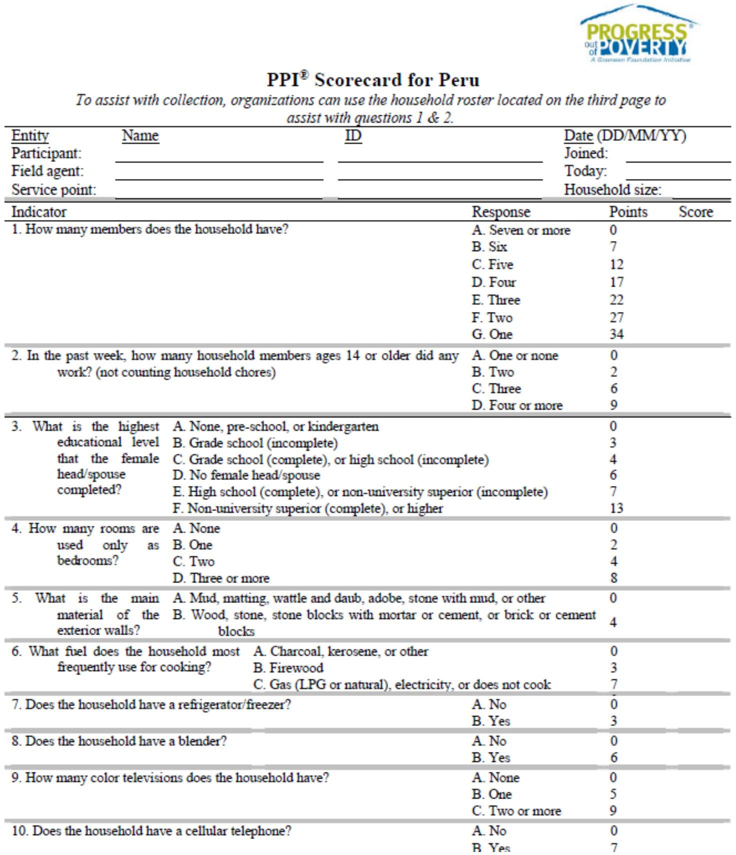
Business

Social

Core social indicators in the framework – long-term (5/6)

Social





PPI® Scorecard for Peru

To assist with collection, organizations can use the household roster located on the third page to assist with questions 1 & 2.

Entity	Name	ID	Date (DD/MM/YY)
Participant:			Joined:
Field agent:			Today:
Service point:			Household size:

Indicator	Response	Points	Score
1. How many members does the household have?	A. Seven or more	0	
	B. Six	7	
	C. Five	12	
	D. Four	17	
	E. Three	22	
	F. Two	27	
	G. One	34	
2. In the past week, how many household members ages 14 or older did any work? (not counting household chores)	A. One or none	0	
	B. Two	2	
	C. Three	6	
	D. Four or more	9	
3. What is the highest educational level that the female head/spouse completed?	A. None, pre-school, or kindergarten	0	
	B. Grade school (incomplete)	3	
	C. Grade school (complete), or high school (incomplete)	4	
	D. No female head/spouse	6	
	E. High school (complete), or non-university superior (incomplete)	7	
	F. Non-university superior (complete), or higher	13	
4. How many rooms are used only as bedrooms?	A. None	0	
	B. One	2	
	C. Two	4	
	D. Three or more	8	
5. What is the main material of the exterior walls?	A. Mud, matting, wattle and daub, adobe, stone with mud, or other	0	
	B. Wood, stone, stone blocks with mortar or cement, or brick or cement blocks	4	
6. What fuel does the household most frequently use for cooking?	A. Charcoal, kerosene, or other	0	
	B. Firewood	3	
	C. Gas (LPG or natural), electricity, or does not cook	7	
7. Does the household have a refrigerator/freezer?	A. No	0	
	B. Yes	3	
8. Does the household have a blender?	A. No	0	
	B. Yes	6	
9. How many color televisions does the household have?	A. None	0	
	B. One	5	
	C. Two or more	9	
10. Does the household have a cellular telephone?	A. No	0	
	B. Yes	7	

Business

Indicator	Examples
Market intelligence	Assessment of interaction between micro-distributors and target communities effect on gaining intelligence about markets and responding effectively to meet market needs
Brand awareness and market reach	Assessment of effect of micro-distributors on expanding market reach to BoP communities and creating awareness of the brand in new markets (including cost-effectiveness assessment)

Source: http://www.ophi.org.uk/wp-content/uploads/Tenindicators.jpg?783468, http://www.progressoutofpoverty.org/

Core business indicators in the framework – long-term (6/6)

Unit of Analysis	Theme	Core Elements	Indicator	Examples
Business	Business	Efficiencies	Market intelligence	Assessment of interaction between micro-distributors and target communities effect on gaining intelligence about markets and responding effectively to meet market needs
			Brand awareness and market reach	Assessment of effect of micro-distributors on expanding market reach to BoP communities and creating awareness of the brand in new markets (including cost-effectiveness assessment)

*The Metrics Lab Framework presented is a draft and has not yet been updated based on lessons learned from the SCALA pilots

How the indicators in the framework relate to SDGs (1/2)

Unit of Analysis	Theme	Core Elements	Indicator	Examples	SDGs Goal 1	SDGs Goal 5	SDGs Goal 8	SDGs Goal 17
Micro-distributor	Economic Opportunity	Livelihood	Income	Income of micro-distributor prior to and after joining organization	1.1		8.5	
			Sales	Sales of micro-distributor compared to the organization's average sales per micro-distributor				
		Economic Resilience	Income stability	Stability of the micro-distributor's income week to week	1.5			
			Assets	Assets owned by the micro-distributor such as TV, car, radio, type of flooring, toilet, number of rooms in home, electricity source, water source, etc.	1.5	5.6a		
			Credit	Micro-distributor's access to credit such as loans	1.4	5.6a	8.3	
	Empowerment	Capabilities (Knowledge and Skills)	Financial literacy	Financial management knowledge gained by micro-distributors through training and on the job	1.5			
			Self-esteem	Self-assessment of self-worth and abilities by micro-distributor				
		Empowerment	Empowerment	Self-assessment of influence, power, self-determination and competence by micro-distributor		5.5		
		Non-economic Resources	Access to information/goods/services	Micro-distributor's access to technology as well as services such as health care, transportation, etc.	1.4	5.6b		
			Social support	Support micro-distributor receives (advice as well as resources) by individuals in their social network	1.5			
	Enterprise	Enterprise Growth	Entrepreneurship index	Micro-distributor's decision-making skills, general knowledge, network, and income			8.3	
			Gradual 'formality'	Degree of formality of micro-distributor's job such whether they receive social security and other benefits such as health care	1.3	5.6c	8.3	
		Opportunity Cost	Opportunity cost	Number of hours micro-distributor works versus number of hours spent with family		5.4	8.8	
		Brand Leverage	Pride	Micro-distributor's pride for the organization and brand				
		Career Progression Path	Aspirations/ hope	Micro-distributor's opportunity for growth and advancement as well as rewards and incentives.				

MERCADO FRESCO
WILLIAM DAVIDSON INSTITUTE AT THE UNIVERSITY OF MICHIGAN

How the indicators in the framework relate to SDGs (2/2)

Unit of Analysis	Theme	Core Elements	Indicator	Examples	SDGs Goal 1	SDGs Goal 5	SDGs Goal 8	SDGs Goal 17
Business	Business	Sales	Sales and growth	Sales growth of the organization over the past year			8.2	
			Sales revenue	Average sales per year of the organization				
		Talent Retainment	Retention	Retention of micro-distributors per month				
		Mission	Contribution to enterprise business and social strategy	Degree to which program contributes to both the business and social mission				
		Satisfaction	Market share	Percentage of clients recommending organization				
		Social Capital	Number of advisors	Number of board members, advisory board members, venture advisors identified and on-boarded by the company				17.16, 17.17, 17.3, 17.6, 17.7, 17.8. 17.9, 17.11, 17.13, 17.15
			Number of ecosystem partners	Number of systemic partners and collaborations established by the company				17.16, 17.17, 17.3, 17.6, 17.7, 17.8. 17.9, 17.11, 17.13, 17.15
		Capital	$ Capital raised	New capital raised in the form of equity, debt or grants received				17.3
		Reach	Number of BoP lives reached	Number of unique BoP individuals who were clients of the organization during the reporting period	1.1			
			Number of employees	Number of BoP and non-BoP paid full time and part-time employees or staff across organization			8.5	
			Number of countries reached	Number of countries the organization is operating within				

MERCADO FRESCO

WILLIAM DAVIDSON INSTITUTE AT THE UNIVERSITY OF MICHIGAN

WDI recognizes it is important to recognize the boundaries and limitations of the pilot as well as address any conflicts of interest

Boundaries of the pilot:

1. Findings from this pilot cannot provide impact data; the results of this pilot cannot be used to say what impacts the organization is having on their micro-distributors
2. This pilot is not a baseline study; as a result, data collected from this pilot cannot be used as a “baseline” against which to monitor and assess an activity's progress and effectiveness during its implementation and after the activity is completed
3. This pilot did not determine what considerations to take in to account when selecting members of a comparison group (if a research design in the future requires this)

Conflicts of interest:

1. The authors of this report did not have any financial or research-related conflicts of interest which would have affected or restricted the findings of this pilot

Final list of new indicators selected for the pilot survey (1/2)

Indicator	Reason for selection	Type of indicators (social, business, short term, long term)	Maps to SDG goal
Empowerment at home, includes decision-making and influence on family matters	In the original proposal, we listed 'empowerment' as an indicator to collect in the pilot. Based on insights gained from phase 1 interviews about the organizations impact on women's empowerment, women's 'empowerment at home' was selected	Social, short-term	Goal 5.5
Self-efficacy includes general self-efficacy measure as well as a focus on time-management and planning, financial skills, and sales skills	We chose to collect self-efficacy related to certain skills because women could possibly gain these through trainings and experience with organization	Social, short-term	Goal 1.5
Aspirations for children (qualitative question)	In the original proposal, we listed 'aspirations/hope' as a potential indicator. Based on insights gained from interviews, we specifically selected women's aspirations for the children in their household	Social, short-term	N/A
Quality of life for children, including change in **nutrition** (based on perception of micro-franchise)	Originally, we listed 'improvement on women's children' as an indicator to collect in the pilot. Based on insights gained from interviews, we selected change in quality of life for children	Social, short-term	Goal 1.2

Self-efficacy is one's belief in one's ones ability to succeed in specific situations or accomplish a task

Final list of new indicators selected for the pilot survey (2/2)

Indicator	Reason for selection	Type of indicator (social, business, short term, long term)	Maps to SDG goal
Access to information, goods and services	This was included in the original proposal and was selected based on insights gained from Phase 1 interviews	Social, short-term	Goal 1.5
Pride for organization	This was included in the original proposal and was selected based on insights gained from Phase 1 interviews	Social, short-term	N/A
Progress out of Poverty (PPI)	This was included in the proposal and was selected based on insights gained from Phase 1 interviews	Social, long-term	N/A
Income prior to joining Supply Hope	This was included in the original proposal, but was removed from pilot survey to be collected by the organization at a different time	Social, short-term	Goal 1.1 and Goal 8.5

Final list of strong qualitative questions selected for the pilot survey

Qualitative interview questions
Mention three things that you like about this job with Mercado Fresco?
What three things do you dislike about operating a Mercado Fresco store? Please do share openly with me because your answers will help us develop solutions to improve operating a Mercado Fresco store. You do not need to hesitate or feel any sort of apprehension. We will not mark you negatively for your truthful answers. You are helping us!
Please share stories about your experience with other Mercado Fresco store owners. How have the other owners had an influence on you?
How has your relationship with your family changed since you started working with Mercado Fresco? In what ways has your relationship changed? These changes can be economic, emotional, etc.
Now that you work with Mercado Fresco, do you feel that you can make decisions in your home? How has your role as a decision maker changed?
Now that you work with Mercado Fresco, how have your aspirations for the children you are responsible for changed?

Final list of existing business indicators selected to be reported by the organization during the pilot

Existing business indicator	Reason for selection	Type of indicator (social, business, short term, long term)	Maps to SDG goal
Commission (monthly) from the organization (reported for 3 months to assess income stability) – this is at the individual level	Based on document review, conversations with senior management and focus group interview from Phase 1	Social, short-term	Goal 1.1 and 8.5
Sales (monthly) – this is at the individual level	Based on document review and conversations with senior management	Business, short-term	N/A
Retention Status– this is at the individual level	Based on document review and conversations with senior management	Business, short-term	N/A
# of customers (weekly) – this is at the individual level	Based on focus group interview from Phase 1	Business, short-term	Goal 1.1
# of organizational partners	Based on document review and focus group interview from Phase 1	Business, short-term	Goals 17.3, 17.6- 17.9, 17.11, 17.13, 17.15, 7.16, 17.17

Existing indicators include any data provided by Supply Hope and/or Mercado Fresco
All monetary values (e.g., income, sales) were reported in USD in our pilot

The phase 3 pretest served was very important because its purpose was to improve the survey for the pilot and teach enumerators how to conduct cognitive interviewing (1/2)

1. The purpose of the pretest is to improve the survey such that we test a context-specific survey in the pilot phase

2. For the pretest, we will use cognitive interview techniques to:
   i. Make sure respondents understand each question
   ii. Improve the survey section order (ensure logical flow as well as keeping sensitive questions towards the end of the survey) and reduce length
   iii. Understand how the respondents comprehend, interpret, and answer each question

3. Based on the results, we will make changes to the survey, including:
   i. Change the wording of the questions such that it is easier to understand
   ii. Incorporate the local language of the micro-distributors
   iii. Shorten the survey
   iv. Improve the 'INTERVIEWER NOTES' that explain how to read the survey

Note: In order to limit each pretest interview to 1.5 hours, WDI will assign interviewers to ask only certain survey sections (For example, Part A, C, and G).

For last 2 interviews: Interviewers will test the entire survey without cognitive interviewing, including the **time** taken to answer each question and section

The phase 3 pretest served was very important because its purpose was to improve the survey for the pilot and teach enumerators how to conduct cognitive interviewing (2/2)

What is Cognitive Interviewing?

An interview method where interviewers ask additional questions about a survey in order to identify and analyze sources of error in a survey. For the pretest, interviewers will focus on the cognitive thought processes that micro-distributors use to answer each survey question.

Interviewers should observe and focus on:

1. Verbal feedback – Micro-distributor's answers to questions and probes
2. Non-verbal feedback (very important!) – Micro-distributor's body language, expressions, looks of confusion, etc

What are 'Probes'?

'Probes' are the additional questions that an interviewer asks the micro-distributor about a particular question in the survey.

For each survey question, we want micro-franchisees to:

1. Tell us if any specific words or phrases in the question were confusing. Do they have any questions?
2. Let us know if the can the survey question can be worded differently such that it is easier or clearer for all other micro-distributors to answer
3. Describe how they decided to provide the answer they gave
4. Explain what the survey question means to them (what do they think the question is asking?)

More information on random selection of the sample used in data collection

For the pilot sample, each micro-distributor should have an equal chance of being selected for an interview. The women should not be individually chosen by project staff.

To select a sample of 50-55 persons:

1. Make two separate lists one with all the new micro-distributors and another with all the existing micro-distributors
2. For each list, assign every individual a unique number,
3. Use a random number generator to randomly generate approximately 28 numbers for each list; these numbers correspond to the micro-distributors selected for the pilot, and
4. Ideally, persons selected for the pilot ***should not***
   i. Be trained or employed by another program/project or
   ii. Be micro-distributors who have left the organization and returned to the project after a period of absence

List of original questions used in the pre-pretest version of the survey with links

Indicator	Sources	Additional information
Time management	https://cepa.stanford.edu/sites/default/files/time%20management%20final.pdf	See page 11 for information on time management analysis
Sales skills	Adaptive Selling: Conceptualization, Measurement, and Nomological Validity: Rosann L. Spiro and Barton A. Weitz http://personal.psu.edu/faculty/j/x/jxb14/JMR/JMR1990-1-061.pdf ; Shortened versions: http://www.uab.edu/Communicationstudies/humancommunication/PRSIBCORASSP,2007,465-486.pdf ; http://mesharpe.metapress.com/media/9c59kctwvpcuwlmngadt/contributions/h/0/2/9/h029164r11850t54.pdf	Robinson and William (2002) proposed the shorter version (5 scales) of adaptive selling questionnaire, and it has been validated & used.
General Self-Efficacy (GSE)	Jerusalem, Matthias, and Ralf Schwarzer. "Self-efficacy as a resource factor in stress appraisal processes." (1992). http://userpage.fu-berlin.de/health/engscal.htm	How to analyze scale: http://userpage.fu-berlin.de/health/engscal.htm
Influence on family	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjw9sL-q-rSAhULyoMKHTgzAYIQFggcMAA&url=http%3A%2F%2Fwww.mdpi.com%2F1660-4601%2F8%2F6%2F1772%2Fpdf&usg=AFQjCNH_5nhOTTF735kirnbdK-UGoFfBkw&sig2=4P0RhskfDzga5fZuDoYu2w	Original source measured Individual Community-Related Empowerment. (See page 1781). tested in Estonia.
Quality of Life	http://www.who.int/mental_health/media/en/76.pdf?ua=1	
Children's Quality of Life	http://dl2af5jf3e.scholar.serialssolutions.com/?sid=google&auinit=U&aulast=Ravens-Sieberer&atitle=KIDSCREEN-52+quality-of-life+measure+for+children+and+adolescents&id=doi:10.1586/14737167.5.3.353&title=Expert+review+of+pharmacoeconomics+%26+outcomes+research&volume=5&issue=3&date=2005&spage=353&issn=1473-7167	
Nutrition for children	Developed for this survey. Looked at this link: http://ac.els-cdn.com/S1499404606600699/1-s2.0-S1499404606600699-main.pdf?_tid=0edb332e-8099-11e4-a0ed-00000aacb360&acdnat=1418235739_0d2f1f05cf2ad69f73866a2fc83449c9	
Aspiration for children	http://link.springer.com.proxy.lib.umich.edu/article/10.1007%2Fs10964-010-9568-8	
Strength of social network	Author: Erika Deserrano; http://www.povertyactionlab.org/evaluation/women-farmers-and-barriers-technology-adoption-rural-uganda	Used with low income populations in Uganda.
Financial self-efficacy	Wilson, F., Kickul, J. and Marlino, D. (2007), "Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: implications for entrepreneurship education", Entrepreneurship Theory & Practice, Vol. 31 No. 3, pp. 387-406. Source: http://search.proquest.com/docview/859635880?pq-origsite=360link&accountid=14667 Microfinance Impact on Poor Rural Women Household-Level Employment: Bargaining Models Approach (The DESCI1 Case: Tigrai State, Northern Ethiopia)	
Access to financial services	http://econ.worldbank.org/external/default/main?theSitePK=469382&contentMDK=21698561&menuPK=476752&pagePK=64165401&piPK=64165026 USING SURVEYS TO UNDERSTAND HOUSEHOLD FINANCIAL ACCESS: THE RESEARCH AGENDA	

Commonly used Excel functions

1. **Calculate descriptive statistics in Excel**
   i. Find the range of scores by first finding the lowest (minimum) and highest (maximum) values with "**=min()**" and "**=max()**" Excel functions and then, using subtraction to calcualte the range (the distance between the minimum and maximum values)
   ii. Find the quartiles to understand which scores fall in the 25th percentile, 50th percentile, etc.
      i. Find the 25th percentile with **=quartile(range,1)**
      ii. Find the 50th percentile with **=quartile(range,2)**
      iii. Find the 75th percentile with **=quartile(range,3)**
      iv. Find the 100th percentile with **=quartile(range,4)**
   iii. Calculate measures of central tendency and dispersion to find the mean **=average()**, median **=median**, mode **=mode()** as well as the standard deviation **=stdev** and variance **=var()**
2. **Compare the relationship between two sets of scores– such as the relationship between pre- and post- scores or between New and Existing micro-distributors**
   i. Correlations between scroes can be calculated by typing **=correl(**, selecting the two arrays, i.e., coloumns of data that you want to compare, and then typing a closing **)**. Note: This formula calculates the Pearsons r correlation coefficited of the two data sets
3. **Determine whether the differences between two scores (e.g., pre- and post- scores, New and Existing micro-distributors) is statistically significant**
   i. Statistical significance can be calculated by typing **=ttest(**, select the first array (column of data), select the second array of data, type a **2** to conduct a 2 tailed ttest, and then type a **1** to conduct a paired (dependent) t-test or a **2** to conduct a two sample (independent) t-test**)**
   ii. Full formula: **=ttest(**array 1, array 2, tails, type**)***
   iii. Note: This formula returns a p-value. Lower numbers (below .01) indicate statistical significance
4. Conduct cronbach's alpha analysis in excel: https://www.youtube.com/watch?v=yvzVl1G8RBg

*"**Tails**" A 2-tailed t-test means that you are *not* hypothesizing the direction of the relationship between the scores in array 1 and array 2. A 1-tailed t-test means that you are hypothesizing the direction (e.g., you are certain that post-test scores will be higher than pre-test scores. Most likely, your organization will want to calculate a 2-tailed t-test.

- "**Type**" of t-test. For the **=ttest()** formula, enter a "1" for a paired samples t-test (i.e., respondents in array 1 are identical to the respondents in array 2). Enter a "2" for an independent t-test (where respondents in array 1 are not the same as respondents in array 2)

More information on the PPI

Look-up table for converting scores to poverty likelihoods

	Poverty likelihood (%)								
		National			USAID		Intl. 2005 PPP		
Score	Food	100%	150%	200%	'Extreme'	$1.25	$2.50	$3.75	$8.00
0–4	80.5	100.0	100.0	100.0	85.1	66.8	89.3	100.0	100.0
5–9	61.8	97.6	100.0	100.0	71.8	37.7	89.3	99.5	100.0
10–14	52.1	93.7	100.0	100.0	60.7	28.4	84.3	98.7	100.0
15–19	43.4	87.6	98.7	100.0	53.0	13.7	78.6	96.3	100.0
20–24	21.4	71.6	98.3	99.9	34.4	5.7	62.5	92.8	100.0
25–29	14.2	67.7	94.4	99.4	24.5	2.7	48.5	89.3	100.0
30–34	11.1	59.3	90.6	98.4	21.6	1.1	44.5	78.9	100.0
35–39	4.1	40.4	81.5	96.9	11.1	0.8	21.9	70.9	99.9
40–44	2.9	21.3	62.6	89.0	6.8	0.4	12.1	49.2	98.6
45–49	0.4	14.6	54.3	80.3	4.0	0.0	7.9	37.6	94.4
50–54	0.0	6.7	43.4	70.2	1.0	0.0	2.9	25.7	89.8
55–59	0.0	3.1	27.8	55.7	0.2	0.0	0.8	16.5	86.2
60–64	0.0	1.3	16.1	41.7	0.2	0.0	0.3	8.0	74.3
65–69	0.0	0.2	7.6	28.1	0.0	0.0	0.0	3.9	58.2
70–74	0.0	0.0	6.3	12.0	0.0	0.0	0.0	1.6	38.7
75–79	0.0	0.0	0.2	5.8	0.0	0.0	0.0	0.0	27.7
80–84	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	25.2
85–89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3
90–94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

More information on the PPI

Simple Poverty Scorecard for Nicaragua

Entity	Name	ID	Date (DD/MM/YY)	
Participant:			Date joined:	
Field agent:			Date scored:	
Service point:			# HH members:	

Indicator	Response	Points	Score
1. How many household members are there?	A. Eight or more	0	
	B. Seven	5	
	C. Six	9	
	D. Five	13	
	E. Four	19	
	F. Three	27	
	G. One or two	41	
2. Are all household members ages 7 to 18 enrolled this school year in the formal educational system?	A. No one 7 to 18	0	
	B. No	2	
	C. Yes	6	
3. In their main line of work in the past seven days, how many household members were wage or salary workers?	A. None	0	
	B. One	3	
	C. Two or more	7	
4. How many rooms does the household have for its use (excluding kitchen, bathrooms, hallways, and garages)?	A. One	0	
	B. Two	2	
	C. Three or more	5	
5. What is the main material of the floor of the residence?	A. Dirt, or other	0	
	B. Wood planks, mud bricks, or tiles and concrete	3	
	C. Cement bricks or tile (mosaic, ceramic, or glazed)	11	
6. What fuel does the household usually use for cooking?	A. Non-purchased firewood	0	
	B. Purchased firewood, charcoal, or does not cook	5	
	C. Butane or propane gas, kerosene, electricity, or other	10	
7. Does the household have an iron?	A. No	0	
	B. Yes	2	
8. Does the household have a blender?	A. No	0	
	B. Yes	4	
9. How many cellular telephones does the household have?	A. None	0	
	B. One	3	
	C. Two or more	8	
10. Does the household have a bicycle, boat, horse, donkey, mule, motorcycle, or automobile?	A. No	0	
	B. Yes	6	

Microfinance Risk Management, L.L.C., `microfinance.com` **Score:**

MERCADO FRESCO

WILLIAM DAVIDSON INSTITUTE
AT THE UNIVERSITY OF MICHIGAN

A commonly used research design includes a baseline and an endline along with a comparison group when resources permit

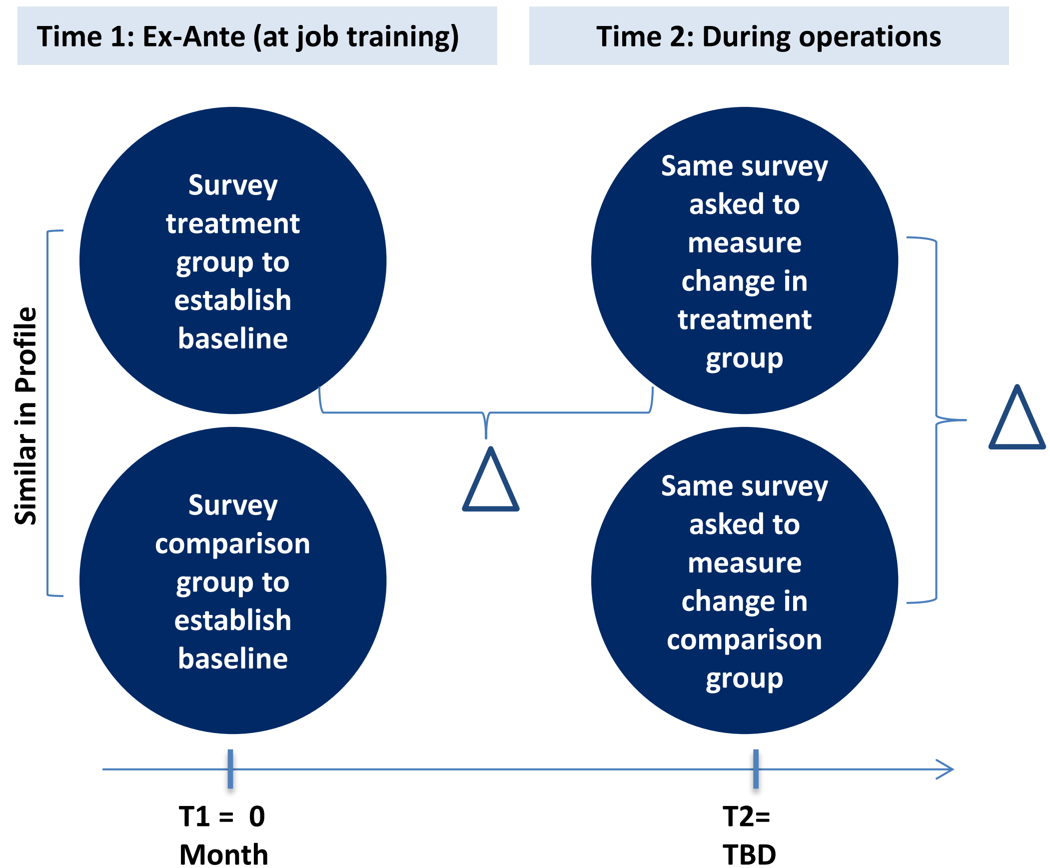
Research Question: What is the impact on low-income women from working with an organization

Why two groups: a treatment and a comparison group?

1. Two groups allow us to establish a similar baseline
2. Two groups help us to rule-out natural improvements (i.e. participants might change or improve naturally over time) or events in the outside world that might be causing the changes that we see

Why the ex-Ante (baseline) and follow-up (endline) data collection points?

1. The ex-ante impact measurement serves as the baseline to compare the project’s results with later evaluations
2. The follow-up measurement (endline) assesses the mid-term results of the intervention and compares the data to the baseline with sufficient number of salespersons to make strong conclusions



Any change is attributed to the entire package of benefits (any kind of training and any kind of support/resources provided)

For more information on how to implement a quantitative study design to measure impact, please see http://wdi.umich.edu/knowledge/quantitative-methodology-enhancing-poverty-alleviation-performance-quantifying-changes-experienced-by-local-stakeholders/

In order to develop solutions for the future, WDI lists key challenges encountered during the course of this project. Some of these issues occurred with all three pilots and a few of the primary challenges were also created by WDI

1. **Point of Contacts (POCs):**
   1. Throughout the length of the three pilots, WDI worked with a combined total of eight POCs instead of the expected three POCs leading to WDI investing more time than anticipated in getting POCs up to speed
   2. POCs did not follow through on all responsibilities and often did not understand the crucial role they played in ensuring all processes were implemented successfully and efficiently; this was from scheduling meetings/coordinating schedules, to translating all required documents, resulting in WDI guiding the POC more often than initially estimated
2. **Existing data on business indicators:**
   1. In some cases, staff had a limited knowledge on existing data currently being collected on business indicators resulting in investing more time than anticipated in gathering this data
3. **Shifting deadlines and delays:**
   1. There were often shifts in timelines for receiving feedback from the organization; in some cases, WDI also experienced poor engagement from key staff members
4. **Implementation of sample selection for the pilot:**
   1. The sample selection protocols prescribed by WDI were not followed as hoped. The employed methods also differed from the envisioned steps carried out by the organization
5. **Cognitive interviewing:**
   1. Cognitive methodology is a difficult technique to grasp. WDI developed a detailed training on cognitive interviewing concepts and processes and found that an in-person training was more effective than remote trainings. This is because key pillars of the technique needed to be revisited with enumerators on the debrief calls throughout remote pretests
   2. Experiences showed that the pretest conducted by WDI served the organization better. WDI requested that the training include a practice role play but were not sure if this occurred
6. **Technical capacity**
   1. WDI sometimes tended to use very technical language which created confusion for the pilot organization staff
7. **Multiple methods of communication**
   1. WDI used multiple methods of communication – skype, google hangout, webex, gotowebinar, teleconference line. This caused undue inconvenience for pilot organizations and should have been standardized from the phase 1 kickoff call

References used during this project

- IDB Donors Memorandum – BRIEF__EMPOWERMENT_LOW-INCOME_WOMEN_THORUGH_MERCADO_FRESCO_EXPANSION
- LOGICAL FRAMEWORK_EMPOWERING_OF_LOW_INCOME_WOMEN_THROUGH_MERCADO_FRESCO_EXPANSION
- Information on multi-item measures: https://www.stats.ox.ac.uk/~snijders/MultilevelAnalysis.pdf
- Types of well-being: https://hbr.org/2009/05/making-better-investments-at-the-base-of-the-pyramid
- Good resource of evaluation: http://www.betterevaluation.org
- Examples of Likert scales: https://www.uc.edu/content/dam/uc/sas/docs/Assessment/likert-type%20response%20anchors.pdf
- Information on how big your sample should be in order to say your survey results are representative of your population: https://help.surveymonkey.com/articles/en_US/kb/How-many-respondents-do-I-need
- Power analysis for calculating sample size for impact assessments:
  - http://stats.idre.ucla.edu/other/mult-pkg/seminars/intro-power/
  - http://statsoft.ru/home/textbook/modules/stpowan.html
- Introduction to qualitative coding: http://programeval.ucdavis.edu/documents/Tips_Tools_18_2012.pdf
- Cronbach's alpha analysis in Excel: https://www.youtube.com/watch?v=yvzVl1G8RBg
- PPI Links:
  - Nicaragua PPI: http://www.microfinance.com/English/Papers/Scoring_Poverty_Nicaragua_2009_EN.pdf
  - PPI scoring and analysis
    - http://www.progressoutofpoverty.org/blog/why-averaging-ppi-scores-wont-work
    - https://www.freedomfromhunger.org/client-outcome-performance-cope-indicators-database
    - "This straightforward tool automatically calculates the poverty likelihoods for up to ten poverty lines for each beneficiary"– http://www.progressoutofpoverty.org/data-tools
  - PPI FAQ:
    - http://www.progressoutofpoverty.org/faq-page#n496