

Deliverable 4- Survey completion report

This document contains the survey completion report for the endline surveys conducted with women-led SMEs in Sourcing2Equal Colombia. It details the methodologies and procedures implemented, including the contact strategy, data collection efforts via phone surveys, self-administered online surveys, and in person surveys, field team structure, and materials utilized, alongside an analysis of completion rates, call efforts, and data quality checks. Additionally, it outlines the four distinct databases that are part of deliverable 5.

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1. Field report

This section outlines the detailed protocol used to conduct the endline surveys with women-led SMEs in Colombia. The data collection used a mix of phone interviews, online self-administered surveys and in person surveys, prioritizing phone surveys. This section details the survey protocol, including the contact strategy, communication protocols, field team structure, and materials that were used during the data collection.

Table 1: Survey Characteristics

Survey Periods	● Telephone surveys ○ <i>General data collection:</i> 22/09/2025 – 31/10/2025 (14 enumerators) ○ <i>Mop-up:</i> 04/11/2025 – 06/11/2025 (5 enumerators) ● Self-administered surveys: The link remained open from 22/09/2025 until 17/11/2025 ● In-person visits ○ <i>Cali:</i> 08/10/2025 – 21/10/2025 ○ <i>Medellín:</i> 15/10/2025 – 30/10/2025 ○ <i>Bogotá:</i> 17/10/2025 – 05/11/2025
Average survey duration	25.7 minutes
Survey Type	Phone, Self-administered (link) & In-person
Software utilized	SurveyCTO, phone provided to enumerator by IPA or participant's device
Field team	14 enumerators, 2 supervisors, 2 auditors
Sample size	1,101 participants
Completion rate	621 / 1,101 (56.4%)
Mode of Completion	● Phone: 365 (58.7%) ● Self-administered: 213 (34.3%) ● In person: 43 (7%)

1.1 Survey protocol: Contact strategy and communication plan and materials

The survey protocol for the collection of the endline surveys aimed to ensure an efficient and orderly way to complete the surveys with participants from women-led SMEs in Colombia. Data was collected through a combination of telephone surveys, in-person surveys and online self-administered surveys.

1.1.1. Contact database and ideal respondent

The final contact database contained 1,101 unique SMEs, after removing four firms from the original 1,105 sample that requested no further communication. Among these SMEs, 1,033 listed one participant, 63 listed two, and 5 listed three. Each firm initially had up to five phone numbers on record. Firms that did not list participants listed the company name as a participant.

- **Ideal respondent**

The IPA Research Team cleaned the database to identify a single initial respondent per WSME, prioritized by program knowledge. In most cases, the same individual appears across levels of hierarchy in program knowledge. When the main contact was unavailable or declined individual consent, enumerators requested another employee best positioned to answer procurement-related questions. This candidate was then verified internally by IPA before being contacted

Wave 1: A single respondent was selected using the following hierarchy:

1. Mentoring participant / Bootcamp participant
2. Masterclass participant
3. Midline survey respondent
4. Baseline survey respondent
5. Another employee best positioned to answer procurement-related questions

Wave 2: A single respondent was selected using the following hierarchy:

1. Masterclass participant
2. Midline survey respondent
3. Baseline survey respondent
4. Another employee best positioned to answer procurement-related questions

Wave 3: A single respondent was selected using the following hierarchy:

1. Employee most likely to attend the Bootcamp/Masterclass (as identified by IFC)
2. Midline survey respondent
3. Baseline survey respondent
4. Another employee best positioned to answer procurement-related questions

Additionally, the following criteria was used on cleaning the contact database.

- No-contact WSMEs: All firms flagged by IFC as “no contact” were removed.
- Email validation: Emails were reviewed to remove spaces or invalid characters.
- Mobile numbers: Kept only if they contained exactly 10 digits and started with “3”. Non-standard mobile numbers were dropped.
- Landline numbers: Must contain 10 digits and start with “60”. When possible, area codes were imputed based on the baseline survey city. Numbers not reaching the required format were removed.
- NIT identification numbers: Required to have exactly 9 digits. If respondents included the verification digit, it was removed.

The cleaned initial contact database of 1,101 WSMEs included at least one phone number and email per firm.

1.1.2 IFC Newsletter announcement

IFC included a notice in its September newsletter, where it briefly informed participants about the endline survey activities. This additional communication helped reinforce the legitimacy of the survey effort and increased the likelihood of participation. The text below corresponds to the announcement included in the IFC newsletters:

Dear participant,

Win a tablet and share your S2E experience!

We want to hear from you! Between Sept 26–Oct 30, 2025, we’ll be running our last follow-up survey about your experience with the Sourcing2Equal program. The survey activities will be conducted by Innovations for Poverty Action (IPA), a non-profit research organization dedicated to generating rigorous evidence to improve programs and policies..

By taking just a few minutes to complete the survey, you’ll help improve programs that support companies like yours and you’ll also have the chance to win one of 5 tablets (valued at around COP \$1,900,000 each)!

It doesn’t matter if your company has participated fully, partially, or not at all, your opinion is valuable! Every response helps us learn how to make S2E more impactful for businesses and employees.

Winners announced in November 2025.

Questions? Write to us at S2EColombia@ifc.org or vdelgadillo@poverty-action.org

1.1.3 Initial mass email announcement

A mass email was sent to all WSMEs in the sample on the 21st of September, a day before data collection began. The message introduced IPA, explained the objective of the endline survey, and announced the upcoming contact period. 1,184 emails were sent, as certain SMEs had more than 1 email, as noted in section 1.1.1. The text below corresponds to the mass email:

Hello, {CONTACT_NAME¹},

We are writing to you on behalf of Innovations for Poverty Action (IPA), a nonprofit research organization dedicated to generating rigorous evidence to improve programs and public policies.

As part of our collaboration with the International Finance Corporation (IFC) / World Bank, in partnership with EAFIT, we are reaching out to learn about {NAME_WSME} experience since joining the Sourcing2Equal (S2E) program.

Earlier this year, between March and April, you were invited to complete a follow-up survey. We are now conducting a new round of follow-up to better understand your company's experience. Your responses are very valuable to us, whether {NAME_WSME} participated actively in the program or decided not to continue.

Between September 22 and October 30, 2025, we will be contacting you to complete a short survey. By completing it, you will be entered into a raffle to win one of five tablets that will be drawn among survey participants, each with an approximate value of COP \$1,900,000.

The winners will be selected from among those who complete the survey and will be announced in November by email. IPA will contact the winners directly using the information provided.

Additional information on the Sourcing2Equal program on the IFC website: <https://www.ifc.org/en/where-we-work/latin-america-and-the-caribbean/gender-lac/sourcing2equal-colombia-sp>

For additional questions or comments, you may write to:

- Sourcing2Equal Colombia: [**S2EColombia@ifc.org**](mailto:S2EColombia@ifc.org)
- Senior Field Manager at IPA – Viviana Delgadillo: [**vdelgadillo@poverty-action.org**](mailto:vdelgadillo@poverty-action.org)

¹ The contact name used was that of the respondent listed as the top-ranked contact in the corresponding hierarchy for each wave

1.1.4 Initial WhatsApp message

Participants were initially contacted through WhatsApp messages before receiving a call from enumerators at the beginning of the first week of data collection. This pre-notification aimed to schedule calls in advance and reduce the need for cold-calling. Sent as a personalized mass WhatsApp message, it briefly explained the purpose of the survey, its approximate duration (20–25 minutes), and the incentives, while also asking respondents to share their availability. The message also included the enumerator's name and the phone number from which the call would be made.

In total, 1,377 initial WhatsApp messages were sent, as some SMEs had more than one WhatsApp-enabled cellphone, while others only had landline numbers and could not be reached via WhatsApp. As a result, the field team was able to schedule initial survey calls with 58 respondents; in 33 of these cases, respondents provided specific time slots for us to call them. The following sample sequence of messages shows the mass WhatsApp interaction sent to participants. Before this sequence of messages began, a flyer highlighting the incentive was also shared (see Annex 1):

- *Hi {CONTACT_NAME}! 🙌 We are IPA Colombia (a non-profit organization). In partnership with IFC, we are conducting a short survey about Sourcing2Equal, whether you have already participated, are currently participating, or only registered for the program.*
- *A member of our team ({ENUMERATOR_NAME}) will contact you from the phone number 📞({ENUMERATOR_PHONE}). Do you have any preferred time window for our call?"*

1.1.5 Initial direct contact through phone call

Starting on September 22nd 2025, an initial call was made to reintroduce the study and confirm the willingness of the employee/owner to participate in the survey.

If the respondent answered and agreed to participate, they had the following options:

- (i) Complete the survey immediately over the phone.
- (ii) Schedule an appointment to complete the survey with an enumerator over the phone.
- (iii) Complete the survey independently using the survey link. For a WhatsApp link, the enumerator sent the survey link to the participant using the phone assigned by IPA. For an email link, the Research Team sent the survey link from an IPA email account. Regardless of the respondent's preferred channel, whenever a survey link was

requested via WhatsApp, the Research Team also sent an email with the same link from an IPA account at 5:00 p.m. that same day, together with the other email requests.

If the respondent declined options (i)–(iii), they were offered the possibility of scheduling an in-person visit from an enumerator to administer the survey at their place of business.

If the respondent opted to complete the survey independently using the shared link, but did not do so within 3 days, IPA routinely followed up as noted below:

- **First follow-up call:** the enumerator offered to complete the survey immediately by phone or to schedule an appointment (by phone or in person).
- **Second follow-up:** if needed, an additional phone call or WhatsApp reminder was made within 2–3 days of the previous follow-up.
- **Email reminder:** starting on October 16, the Research Team also sent a reminder email with the survey link to participants who had chosen to complete the survey independently. This reminder was systematically sent 3 days after the original link whenever the survey remained incomplete.

The following text shows the email sent to WSMEs that requested the self-administered survey. This same email was used as a reminder three days after the self-administered link was sent, in cases where no response had been received:

Hello, {CONTACT_NAME}!

Thank you for taking the time to speak with us! Given your request and the registration of {{name_sme}} in the Sourcing2Equal program, we invite you to complete a survey to better understand the ecosystem of women-led businesses and their corporate procurement processes. There are only a few days left to participate!

Given your request for more information, we have attached the official Sourcing2Equal brochure to this email.

 *Access the survey here: {{LINK}}*

We know your time is very valuable, so we would like to highlight four key points:

 *The survey takes about 20 minutes and you can complete it whenever is most convenient for you.*

 *By completing it, you are automatically entered into a draw to win 1 of 5 iPads (each with an approximate value of COP \$1,900,000).*

 *The winners will be announced in November 2025 by email. IPA will contact the winners using the information provided in the survey to coordinate delivery.*

 Your participation is voluntary and does not affect your ability to take part in Sourcing2Equal Colombia activities.

If you would prefer us to schedule an in-person visit so that one of our enumerators can help you complete the survey, please let us know! We are ready and willing to visit you.

Lastly, we would like to inform you that Sourcing2Equal Colombia is inviting women-led MSMEs that have not yet participated and are eligible to join a new cycle of activities, including masterclasses and bootcamps.

If you have any questions, you can contact us here:

- Sourcing2Equal Colombia –  S2EColombia@ifc.org
- Viviana Delgadillo – Senior Field Manager at IPA  vdelgadillo@poverty-action.org -  315 778 9492

Thank you very much for your time and interest!

If the initial call was not answered, a second attempt was made the same day, never exceeding two (2) attempts per day per phone number.

- Up to ten (10) attempts were made to contact the WSMEs through the phone numbers on the contact list.
- After four (4) unsuccessful call attempts, the enumerators were instructed to send a personalized WhatsApp message using the phone number assigned to them by IPA with content tailored to each wave:
 - **Wave 1:** “Hi we are *Innovations for Poverty Action (IPA)*. As part of our collaboration with the International Finance Corporation (IFC) / World Bank in alliance with EAFIT, we have been trying to contact you to invite you to participate in a brief survey related to the program **Sourcing2Equal** in which your firm participated this year.”
 - **Wave 2:** “Hi we are *Innovations for Poverty Action (IPA)*. As part of our collaboration with the International Finance Corporation (IFC) / World Bank in alliance with EAFIT, we have been trying to contact you to invite you to participate in a brief survey related to the program **Sourcing2Equal** in which your firm is about to participate.”
 - **Wave 3:** “Hi we are *Innovations for Poverty Action (IPA)*. As part of our collaboration with the International Finance Corporation (IFC) / World Bank in alliance with EAFIT, we have been trying to contact you to invite you to participate in a brief survey related to the program **Sourcing2Equal** in which your firm will participate later in the year.”

- When phone numbers were out of service, the case was classified as a Failed Number. However, as an additional effort to reach these participants, the Research Team sent them an email with the self-administered survey link.

Summary of First Call Attempt Outcomes:

The distribution of initial call outcomes varied between the endline and midline. The endline had fewer immediate completions (88 vs. 127) and fewer scheduled follow-up calls (343 vs. 405), but a substantially higher number of respondents requesting self-completion links (127 vs. 67). The number of non-answered cases remained almost identical across both rounds.

Call outcome category	Midline	Endline
Completed immediately	127	88
Sent self-completion link (WhatsApp/email)	67	127
Scheduled follow-up phone survey	405	343
Refused to participate	14	49
Provided updated contact information	8	1
Failed numbers	11	16
Non-answered calls requiring more attempts	471	477
Total cases	1,103	1,101

1.1.6. Additional follow-up call after initial engagement

Follow-up phone calls were conducted in cases where the respondent had previously answered the phone and either

- (i) Scheduled a time to complete the survey later
- (ii) Requested a self-completion link, but had not completed the survey within three (3) days.
- (iii) Requested additional information on the S2E program to decide whether to complete the survey.

All follow-up efforts were recorded in the call log and were subject to the same limits on daily call attempts. The following text shows the email sent to WSMEs that requested additional information, as noted in numeral (iii):

Hello, {CONTACT_NAME},

We are contacting you from Innovations for Poverty Action (IPA), a nonprofit organization that researches and promotes effective solutions to development challenges.

Within the framework of the Sourcing2Equal Colombia project (from the World Bank/IFC in collaboration with Universidad EAFIT), {NAME_SME} was registered, and your information was shared with us so we could invite you to complete a short survey about women-led and/or women-owned SMEs. Your participation helps us improve the design of programs for women entrepreneurs like you.

On this occasion, we are reaching out to remind you to complete the survey, in this case through a link. What should you know?

 *The survey takes about 20 minutes and you can complete it whenever is most convenient for you.*

 *By completing it, you are automatically entered into a draw to win 1 of 5 iPads (each with an approximate value of COP \$1,900,000).*

 *The winners will be announced in November 2025 by email. IPA will contact the winners using the information provided in the survey to coordinate the prize delivery.*

 *Your participation is voluntary and does not affect your ability to participate in Sourcing2Equal Colombia activities.*

 *Access the survey here: {link}*

If you prefer that we schedule an in-person visit so that one of our enumerators can help you complete the survey, please let us know. We are ready and available to visit you.

If you completed a similar survey about six months ago, thank you! Your continued participation now is very valuable. And if you have not responded before, your contribution at this moment also matters greatly.

In addition, we would like to inform you that Sourcing2Equal Colombia is inviting women-led MSMEs that have not yet participated to join a new round of activities, including masterclasses and bootcamps.

For more information, we are attaching the official S2E brochure.

If you have any questions, you can write to us here:

- Sourcing2Equal Colombia – [✉ S2EColombia@ifc.org](mailto:S2EColombia@ifc.org)
- Viviana Delgadillo – Senior Field Manager at IPA : [✉ vdelgadillo@poverty-action.org](mailto:vdelgadillo@poverty-action.org)
-  315 778 9492

1.1.7. In person visits

As an additional effort to contact participants, the Research Team also conducted in-person visits in the three cities where the WSMEs were located. IFC did not provide addresses, however, the team initially relied on the Unified Business and Social Registry (Registro Único Empresarial y Social, or RUES, in Spanish), a public database containing legal and administrative information on companies registered with local Chambers of Commerce. Using the firms' tax identification numbers (NIT), 661 (60.03%) of Sourcing2Equal participants were matched to records in RUES. Auditors then verified these addresses using online sources and supplemented them with any other publicly available addresses they identified.

Table 2: Fieldwork period for in person visits

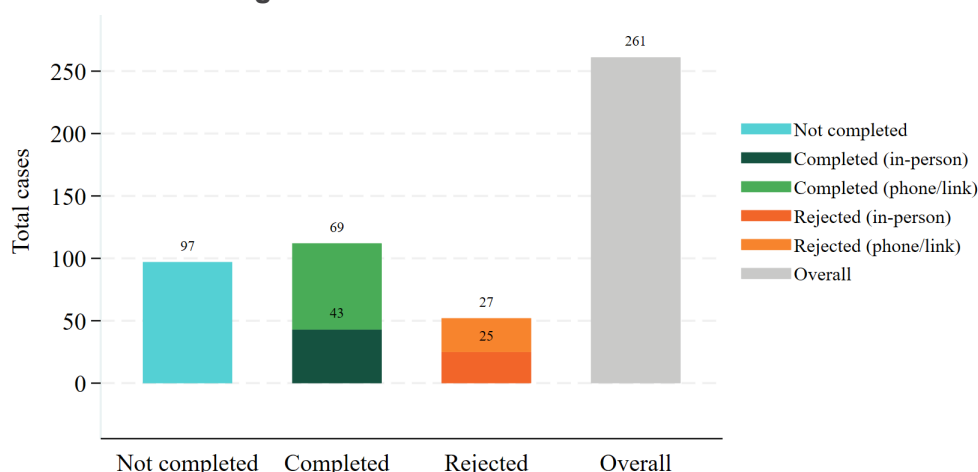
City	Start Date	End Date for Wave 3	End Date for Wave 1 & 2
Cali	08/10/2025	14/10/2025	21/10/2025
Medellín	15/10/2025	21/10/2025	30/10/2025
Bogotá	17/10/2025	27/10/2025	05/11/2025

Before in-person visits were conducted, IFC sent a notice to participants eligible for visits, since some participants were registered in cities different from the location of the provided address, making it impossible for enumerators to conduct the visit. In-person visits were intended to occur only after at least six phone call attempts had already been made. Visits were limited to the urban areas of Cali and Medellín, and in Bogotá to its urban area and nearby municipalities (Mosquera, Chía, and Cajicá).

A total of 301 in-person visits were conducted to 261 participants. When participants provided an additional address because the original one was incorrect, enumerators were instructed to revisit the participant at the updated location. If the new address was still incorrect, or if participants were busy or declined to complete the survey at that moment, the case was returned for phone follow-up. When participants requested to reschedule the visit, enumerators conducted another visit to the address.

Overall, from the visited WSMEs 112 surveys were completed as a result of the in-person visits: 43 were completed on the spot during the visit, and another 69 were completed after the visit, either through a follow-up phone call or via a self-administered link. In contrast, 52 cases ended in refusal, with 25 refusals occurring during the visit itself and 27 occurring later by phone or link. The remaining 97 visited cases did not lead to either a completed survey or an explicit refusal, which likely came as a result of not having accurate addresses of the firms.

Figure 1: Outcomes of visited cases



Source: Endline Sourcing2equal Colombia survey- Contact Log

1.1.9. Mass communications including survey links using Email and WhatsApp

For WSMEs who had not responded to any communication two weeks before enumerator data collection closed, by October 17, a personalized mass email was sent (160 emails sent) inviting them to participate in the survey by self-completing it via the provided link. Three additional mass reminder emails were then sent not only to those who had not responded to previous communications, but more broadly to all participants who had not yet completed the survey and for whom fewer than ten contact attempts had been made. These emails were sent two days before the original enumerator data collection closed on October 29 (327 emails sent), after enumerator data collection closed on November 7 (190 emails sent) and after the link availability was extended on November 13 (183 mass emails). Additionally, 213 personalized WhatsApp messages with the survey link were sent on October 30 to further encourage participation.

1.1.8. Final mop-up

At the end of data collection on October 31th, and as agreed between the IPA Research Team and IFC, five enumerators were assigned to follow up with WSMEs who had not yet responded to the survey and had been contacted fewer than ten times. This group included participants who had not answered any contact attempts, those who had agreed to complete the survey via link but had not done so, and those who could not be reached in person.

This final follow-up effort was conducted between November 4th and 6th. From November 6th to 18th, the survey remained open for self-administration. This mop-up phase resulted in 16 completed surveys, 2 refusals, 90 calls, and 3 in-person visits. Of the completed surveys, 14 were completed by link, 1 by phone, and 1 in person.

1.2. Field Team size and roles

The field team played a key role for the successful implementation of the survey. It consisted of individuals with clearly defined responsibilities, ensuring both data collection efficiency and quality control. The team included the following members:

- **Senior Field Manager (1):** The Field Manager served as the main liaison between the IPA research team and the field staff (including supervisors, auditors, and interviewers). They provided feedback to enumerators based on live supervisions and input from both supervisors and auditors. The Field Manager also monitored enumerator productivity, and ensured compliance with all protocols.
- **Auditors (2):** Two auditors were responsible for conducting verification calls on at least 10% of the completed surveys. At the end of the data collection phase, 10.6% of the completed surveys were audited. Through brief interviews, they validated the consistency of respondents' answers and identified potential errors or discrepancies. Their findings were documented in weekly quality reports and shared with the research team. The auditors played a key role in ensuring data accuracy and adherence to the study's methodological standards. They also were responsible for validating publicly available data on WSMEs addresses.
- **Field Supervisors (2):** Each supervisor oversaw a team of 6–8 enumerators, ensuring adherence to protocols and work schedules. They conducted spot-checks, provided immediate feedback or re-training when needed, and monitored enumerator performance. Supervisors also tracked case progress, submitted daily reports to the Field Manager, and verified cases flagged by the research team through High Frequency Checks (HFC).
- **Enumerators (14):** IPA recruited 14 enumerators with prior phone survey experience. They received a three-day online training on the survey protocols and instruments and

were tested on their understanding. On the third day of training, enumerators conducted pilot surveys using the pilot database provided by IFC to assess their interviewing skills. During data collection, enumerators conducted the interviews, maintained constant communication with their supervisors, and reported refusals, rejections, and completed surveys through designated channels. They were responsible for ensuring the highest data quality and received feedback from their supervisors, the field manager, or the research team when appropriate.

1.3. Materials

- **SurveyCTO App:** This data collection primarily used the SurveyCTO app on mobile devices to ensure that surveys could be stored locally in case of internet connectivity issues. This approach allowed the IPA team to continue data collection without interruptions and sync responses once a stable connection was available. The app was user-friendly to enumerators, most of whom had previously used it, and all of the enumerators were retrained to use the app correctly and efficiently.
- **SurveyCTO Server Dataset (cases):** IPA created and uploaded a dedicated dataset (“cases”) to the SurveyCTO server to support the survey form with each participant’s unique information. This dataset was automatically updated based on the status of every attempt recorded through the form. Depending on the status of the previous attempt and the user type stored in this dataset, the survey flow was adjusted accordingly.
- **Trackers:** IPA programmed a tracker that displayed progress in real time through visual reports. It showed the number of completed surveys, as well as the number of call attempts and each possible outcome for the call. The tracker also displayed progress by enumerator, average time for each section of the survey, descriptive statistics for some key questions and the modality in which a survey was completed. This tracker was shared with the IFC team.
- **Cell Phones:** IPA provided phones with the SurveyCTO app and internet access to each enumerator, supervisor, and auditor.
- **Twilio:** This cloud communications platform was used during the initial phase to schedule first calls and during the final outreach phase to send survey links via WhatsApp to phone numbers that had previously been contacted but had not answered calls or had opted to complete the survey via link but had not yet responded.

2. Data collection results

2.1. General results

During 32 working days, a team of 14 enumerators, supported by two supervisors and two auditors, administered the endline survey instrument designed to capture procurement knowledge, attitudes, bidding metrics, and program engagement indicators. An additional 11 days were allocated for respondents to complete the self-administered online survey link (as noted in section 1.1.8).

The *response rate* is defined as the proportion of WSMEs that began the survey (621 fully completed plus 2 incomplete or partially completed) out of the total sample of 1,101, yielding [56.6%]. The *completion rate* reflects the share of fully finished questionnaires (621/1,101), or [56.4%].

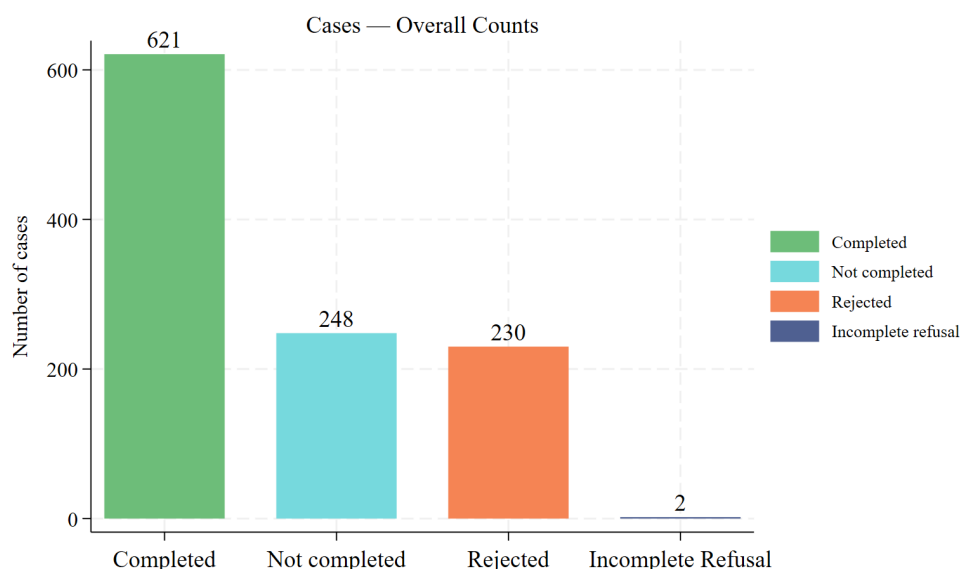
Table 3: Survey status for all WSMEs in the contact list

Survey Status	Number of WSMEs	%
Completed	621	56.4%
Incomplete	2	0.1%
Refusals	230	21.0%
No more attempts	169	15.3%
Failed Numbers	24	2.2%
Pending 10th attempt	55	5.0%
<i>Requested no more calls</i>	7	0.6%
<i>Closed for Wave 2</i>	1	0.1%
<i>Closed for Wave 3</i>	47	4.3%
Not completed	1,101	100%

This breakdown shows that more than half of the contact list resulted in completed surveys, while one fifth of the sample refused to participate. Of the remaining 22.5% who did not

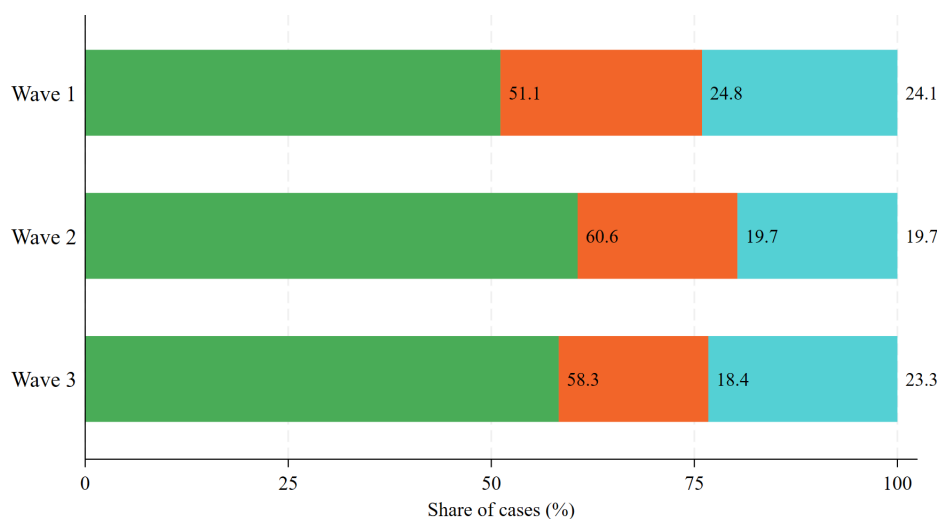
complete the survey, 15.3% reached the maximum number of contact attempts (10 attempts), 2.2% were failed numbers, and the remaining 5% were cases with fewer than 10 attempts. These cases correspond to: Wave 2 firms that IFC requested to close due to oversaturation with S2E materials; Wave 3 cases that attended the Masterclass and were therefore no longer part of the control group; and cases in which participants emphatically requested no further contact but did not formally refuse the survey. Deliverable 5 includes the contact log for each case, while Annex 3 provides details on manual status changes resulting from communications outside the survey (email, WhatsApp, and S2E/IFC requests).

Figure 2: Survey status for all WSMEs



Source: Endline Sourcing2equal Colombia survey- Completed surveys

Figure 3. Composition of Survey Status per Wave



Source: Endline Sourcing2equal Colombia survey- Completed surveys

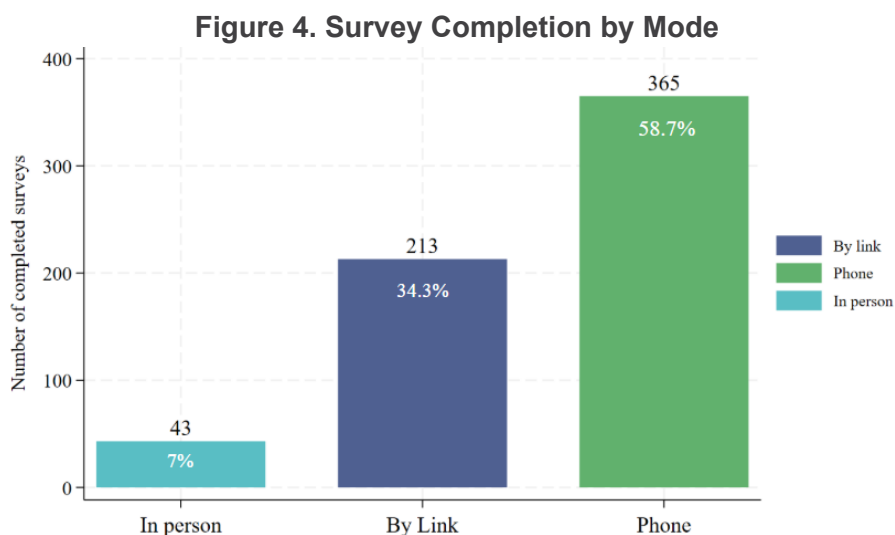
The decisions based on evidence made to modify the contact protocol allowed us to contact as many surveys as possible. As a consequence, there was a higher contact rate in the endline (77.5%) than in the midline (75%), even with more completed surveys by link, however this did not translate to completed surveys. The higher contact rate could be attributed to the extended data collection period relative to the midline fieldwork. Figure 2 illustrates the number of surveys based on their status, while Figure 3 presents the percentage breakdown of case statuses across three survey waves. The overall data indicates that completed surveys make up the majority of cases, but also shows an important amount of refused cases. Therefore, as an additional effort to understand the reasons for refusal, the IPA Research Team has codified each case refusal, as detailed in section 2.3. The team has also constructed a database with the comments regarding each refusal case, as noted in section 4.

A closer examination of each wave reveals significant variation in outcomes throughout the data collection phases. In Wave 1, approximately 25% of surveys were not completed, while Wave 2 saw a decrease to about 20%. In contrast, Wave 3 experienced an increase back to about 23% of surveys left incomplete. Wave 2 achieved the highest completion rate at 60.6%, followed by Wave 3 at 58.3%, and Wave 1 at 51.1%. Wave 2's stronger performance may reflect optimal timing, these participants were neither too distant from their training activities nor in the immediate post-training period. The similar incompleteness rates between Waves 1 and 3 suggest that both the earliest-trained participants and those not yet trained were equally challenging to reach. Both groups are distanced from active program participation; for Wave 1, this may reflect attrition over time or disengagement from the program, while Wave 3 seems to indicate lower initial engagement as these participants had not yet taken part in training and enrollment processes that occurred in November of 2024.

Compared to midline completion rates of 57.9% for Wave 1, 67.2% for Wave 2, and 69.1% for Wave 3, endline patterns shifted for Wave 2 and 3, but not Wave 1. Wave 1 had both the lowest completion rate and the highest number of cases with no completed status during the midline and endline data collection. During the midline, Waves 2 and 3 demonstrated the best results, which led to the hypothesis that this was due to their impending training commencement. However, during the endline the highest completion rates in Wave 2 suggest that this was not the only reason for their success. Even though, on this occasion, Wave 3 was prioritized over Wave 2, due to the imminent start of training activities, the results for Wave 2 remained superior.

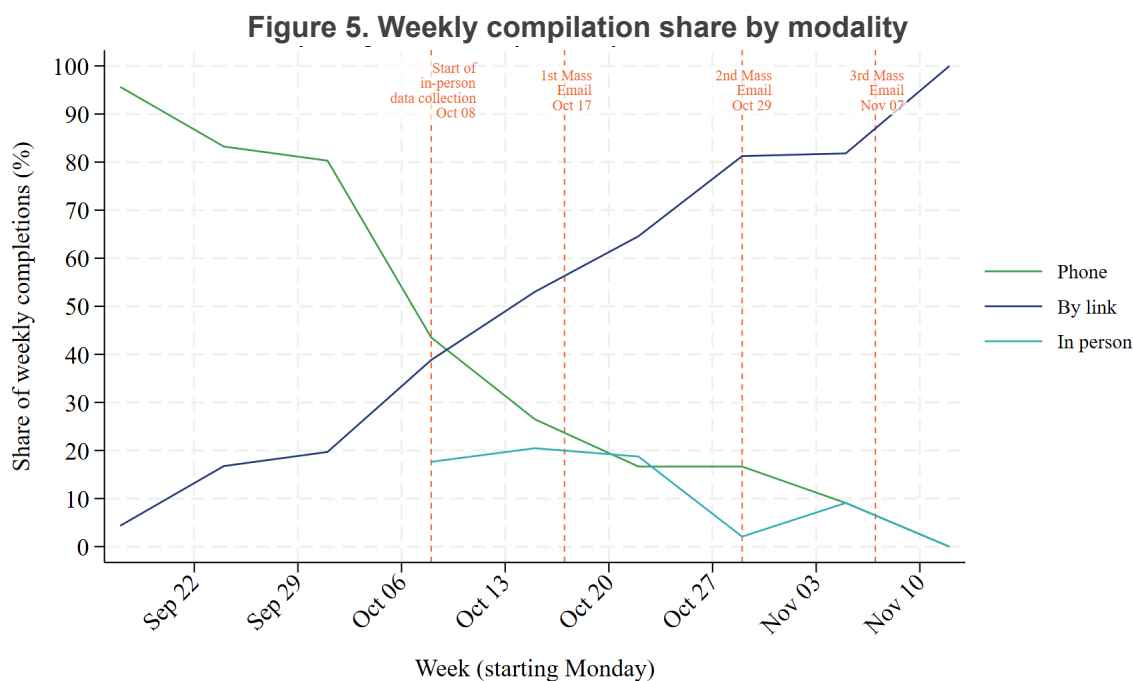
2.2. Survey completion breakdown by mode

By the end of field work, 365 surveys were completed by the enumerators (58.7%), while 213 were completed by link (34.3%) and 43 by in person visits (7%). In comparison to midline activities, the endline data collection had a higher number of by link surveys increasing from 23.2% to 34.3% in addition to having a new completion mode.



Source: Endline Sourcing2equal Colombia survey- Completed surveys

Figure 5 shows that during the initial part of the field work period, the enumerators completed the majority of the surveys. After the in person activities began (October 8th), the self administered surveys and phone surveys had similarly the same share of completed surveys. However, with time, link surveys represent the highest share of completed surveys. During this period, enumerators visiting WSMEs had less time for calls, but continued following up on self-administered surveys. Eventually this modality showed the highest share of weekly completed surveys. After 31st of October when only 5 enumerators continued making calls, more than 80% surveys were completed through the link.



Source: Endline Sourcing2equal Colombia survey- Completed surveys

Figure 6 presents the cumulative completion rate (solid green line) alongside weekly incremental progress (dashed line) throughout the survey data collection period, with annotations marking four mass email interventions. The data collection demonstrates strong initial momentum, achieving 16.2% completion within the first week of operations (ending approximately September 29th). The cumulative completion rate exhibits steady growth through mid-October, reaching 37.5% by October 13th. Additionally, the weekly progress indicator reveals a consistent and expected declining trend throughout the entire collection period wherein the most accessible and responsive participants complete surveys early in the field period.

In regards to the email campaign, the first mass email reminder on a Friday two weeks before enumerator data collection ended was conducted as a preventative measure allowing sustained completion progress deployed at 44.8% completion and reaching 50.4% at the end of the week. The second mass email effort two days before the end of enumerator data collection had the objective of supporting enumerators in as many cases as possible, implemented at a 50.4% completion rate and advancing to 55.0%. The last two mass emails after enumerator data collection had ended aimed to remind participants of the self-administered survey's link. Even though 3rd mass email had minimal impact in comparison to the previous emails, it managed to impact 5 participants that completed the survey between November 7th and 12th. The last mass email announcement had no results. In summary, email campaigns have a decreasing marginal impact on survey completion: they are initially effective, but their results wane over time.

Figure 6. Cumulative progress of completed surveys



Source: Endline Sourcing2equal Colombia survey- Completed surveys

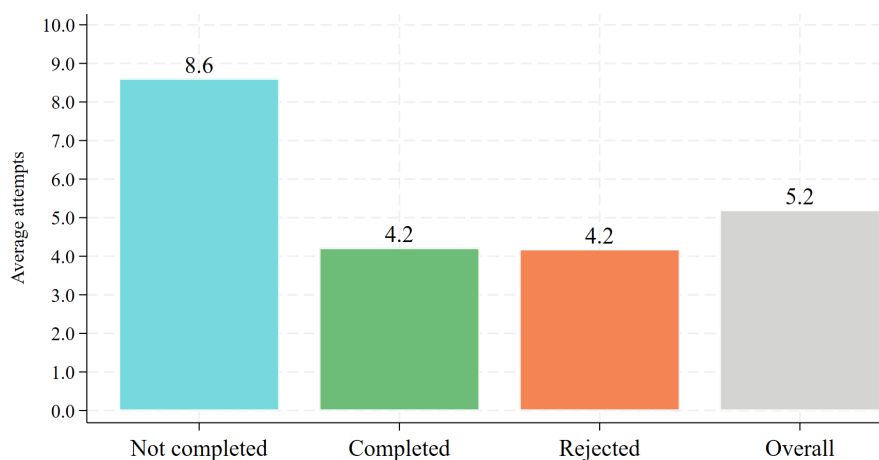
Table 4 shows the overall number of attempts made by phone calls, in-person visits, emails, and mass WhatsApp messages. Overall, the total number of contact attempts across the three data-collection modalities was 6,164. Because some participants had more than one phone number, and enumerators could register additional numbers during fieldwork, the team made 12,192 calls in total. Enumerators averaged 27 calls per day per enumerator over the 32 days of data collection. The field team also carried out 301 in-person visits. In addition, as part of the effort to contact participants by email, 3,066 emails were sent, along with 1,509 mass WhatsApp messages, which do not capture individual WhatsApp interactions between enumerators and participants. These figures reflect the considerable effort made to reach participants and ensure high-quality data collection.

Table 4. Total contact attempts

Type of contact	Number of contacts
Overall attempts	6,164
Calls	12,192
Emails sent	3,066
Mass WhatsApp messages	1,509
Visits	301

On average, there were 4.2 call attempts for participants who either completed or refused the survey. Meanwhile, for cases that ultimately were not completed (cases that exhausted all attempts, failed numbers, Wave 2 and Wave 3 cases closed after more than six attempts, and cases in which participants requested no further contact), the average number of attempts reached 8.6. As specified in Table 3, the average number of attempts for non-completed surveys is lower than 10 due to specific cases that could not be reached further.

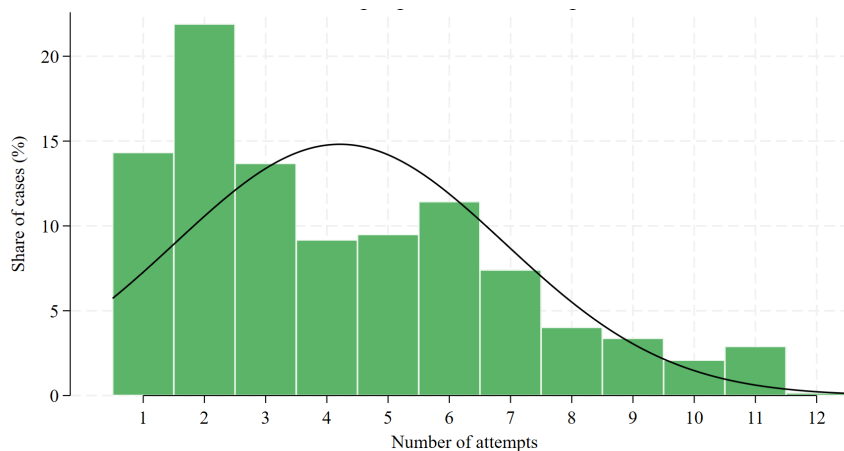
Figure 7. Average number of call attempts per final status



Source: Endline Sourcing2equal Colombia survey - Contact log

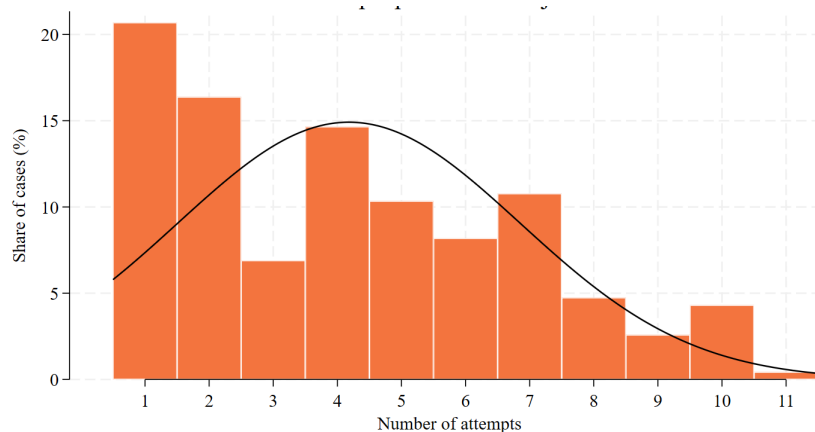
The following figures present histogram-based distributions of attempts that resulted in either completed or rejected cases. Figure 8 shows that more than 50% of the completed surveys were completed in the first 3 attempts, however some surveys were completed during and even after the 10th attempt, as certain cases requested follow-up calls after the 10th attempt. Similarly, Figure 9 shows that almost 50% of refusals were registered in the first 3 attempts. While it also shows two main moments when participants refused, during the first two attempts and then after the 4th and 5th attempt. This could indicate that there are two times of refusals: immediate rejection and gradual drop offs, where people might have the intention of completing the survey and then dropped out.

Figure 8. Distribution of attempts in completed surveys



Source: Endline Sourcign2equal Colombia survey - Contact log

Figure 9. Distribution of attempts in refused surveys



Source: Endline Sourcign2equal Colombia survey - Contact log

2.3. Enumerator productivity and fieldwork challenges

Enumerator productivity is calculated as the number of completed surveys per enumerator divided by the number of days worked. By the end of fieldwork, the average daily productivity of the field team was 1.7 completed surveys per day. Several challenges encountered during data collection help explain this outcome:

- The target population had limited availability to respond to a phone survey, making it difficult to complete interviews during working hours. In several cases, respondents requested to reschedule calls for late evening hours, well beyond the workday. To accommodate these constraints, a limited number of calls were authorized during weekends.

- When respondents preferred to self-complete the survey via link, they often forgot to do so and some did not respond to follow-up contact attempts, even when an in-person visit was also offered.
- A significant portion of respondents did not recall registering for the program, which created hesitation in completing the survey. Meanwhile, others mention they had participated in a past survey and did not wish to participate again. Both of these were the main reasons for refusal. The recorded reasons of refusal, based on the comments provided by enumerators, are presented in Table 5.
- There was no updated information on WSMEs' addresses, so in-person visits were sometimes unsuccessful when trying to reach remaining participants. Because address details had not been previously confirmed by the WSMEs and the available information was not reliable enough to guarantee accuracy, enumerators frequently visited incorrect locations, which reduced the overall effectiveness of the in-person follow-up strategy.
- Enumerator productivity went down over the data collection period, as the backlog of non answering respondents got increasingly higher.

Table 5. Main reasons of refusal

What are the reasons for refusal?		Phone	In person	%
1	Company did not participate in S2E and are not interested in answering the survey	50	1	22.0%
2	They prefer not to give out information about the company	36	8	19.0%
3	No time for a survey	37	5	18.1%
4	Other (no reason given, special cases)	30	1	13.3%
5	They do not remember being registered or anyone else in the company	24	3	11.6%
6	Completed the survey recently and do not wish to repeat it	23	-	9.9%
7	Participated before in S2E and are no longer interested on the program	7	-	3.0%
8	Company no longer exists	5	-	2.2%
9	Rejected mid-survey	2	-	0.9%
Total (232 REJECTED CASES)		214	18	100%

3. Data quality checks summary

High Frequency Checks (HFC) were conducted daily throughout the data collection period, starting on September 23rd. These data quality checks allowed for the identification of duplicate surveys, missing values, outliers, enumerator time statistics, and comparisons with audited surveys.

3.1. HFC main results

The HFCs made it possible to identify outliers in variables such as company income during 2025, the number of supplier databases they have registered the company, the number of submitted bids and won procurement contracts, and the number of full time and parttime employees. These surveys were sent to audit and the data was confirmed when needed, which allowed for the final cleaning of the database. Annex 1 includes a more detailed description of the findings from the High Frequency Checks and the respective responses.

3.2. Back checks results

Additionally, the two auditors were able to complete 66 audited surveys (10.6% of completed surveys). These backchecks helped identify potential typing errors committed by the enumerators while filling out the survey during phone calls, typing errors committed by participants when completing the survey via link, and confirming enumerator protocol compliance.

Table 6. Data quality checks summary

Result	Action taken
Outliers	Within the first two days of data collection, it was found that the revenue question was confusingly phrased, leading respondents to provide answers for either a year or for six months. The survey question was changed, and, as a result 10 surveys were audited to obtain accurate data.
Skip pattern	Within the first two days of data collection, an error was identified in the skip pattern for the variables "treatment_change" and "treatment_challenge". Participants were asked questions that did not correspond to their wave, the issue was corrected.
Self-administered surveys	Several outliers and missing data were identified in the surveys completed via the link, resulting in 45% of the audited surveys being completed using this method.

3.3. Form versions

To address issues in question wording, better understand the reasons for refusal, and incorporate three additional questions for cases that refused, three major updates were made to the survey form. The versions and dates of these modifications are described below.

Table 7. Form versions

Form Version	Update	Issue
2509301104	30th of September	Questionnaire revisions requested by IFC to align wording and clarify instructions to enumerators. The following modifications were taken into account: • Standardised the reference period across Section B to “in the last six months,” including revising B3 and the corresponding note, and removing references to “annual” or “last year.” • Clarified the instructions so that enumerators do not read the response options aloud and removed the phrase “which of the following” to improve the flow and precision of the question. • <i>Question C4 – response options</i>: Streamlined the list of response options by deleting “Automated procurement process” in both the Spanish and English versions of the questionnaire. • <i>Question C7 – interviewer instructions</i>: Added explicit guidance indicating that, for this question, enumerators should read all response options aloud to respondents. • <i>Question F.9.1 – wording alignment</i>: Broadened the English wording to refer to “participated in contracting with other MSMEs,” rather than only “submitted bids,” to better capture the intended concept and to align with the broader Spanish formulation. • <i>Questions H2–H3 – structure of loan questions</i>: Revised the structure so that H2 now captures the presence of any loans (formal or informal) under a single option, while H3 separately differentiates between formal and informal loans, ensuring consistency across languages and avoiding unnecessary duplication.
2510021814	3rd of October	New question added to categorize the reason for refusal. The new question asked was: • Enumerator, please select one of the following options that best describes the reason for refusal: a. No time for survey b. Company did not participate in S2E and are not interested in answering the survey c. They prefer not to give out information about the company

		d. They do not remember being registered or anyone else in the company e. Participated before in S2E and are no longer interested on the program f. Company no longer exists g. Other (please specify in the comments)
2510201918	21st of October	New option added allowing refusal cases to answer three follow-up questions. The follow up questions added were the following: • <i>company_privatebids_6m_ref</i>: Approximately how many supply contracts with corporate buyers has your company submitted bids to in the last 6 months? • <i>company_privatebids_won_6m_ref</i>: Approximately how many of the supply contracts with corporate buyers that your company submitted in the last 6 months, did you win? • <i>attitudes_confidence_bid_ref</i>: My firm can successfully compete for and win corporate procurement contracts

4. Databases information

The deliverable includes three distinct databases, each providing critical information related to the endline survey of women-led WSMEs in Sourcing2Equal Colombia.

- **Completed Surveys Database:** This database contains all variables from the questionnaire provided by the IFC.
 - Number of Observations: It includes data from 623 cases, for which 621 were completed and 2 were incomplete surveys out of the total 1,101 WSMEs.
 - Identification Variables: The unique identification variables for this database are *caseid* (used by IPA) or *case_label* (used by IFC), and source identification (phone, in person or link)
 - Survey variables: 173 from the 57 questions on the questionnaire.
- **Refused Surveys Database:** This database includes information on refused surveys, the reason for refusal, additional comments from enumerators, and the three follow-up questions asked to participants who refused to complete the survey.
 - Number of Observations: The dataset contains information for 232 refused surveys out of the total 1,101 WSMEs. Of these, 230 correspond to explicit

refusals, and 2 correspond to surveys that were rejected during survey completion.

- Identification Variables: The unique identification variables for this database are *caseid* (used by IPA) or *case_label* (used by IFC)
 - Survey variables: 11 (including the 3 additional variables from the original questionnaire)
- **Contact Log Database:** This database documents all phone call and visit attempts made by enumerators trying to contact the targeted respondents for each firm. Additionally, it also includes general information from self-administered surveys.
 - Unit of observation: Each observation in the database corresponds to a single attempt to reach a respondent, via phone call, self administered link or through an in-person visit. As the same WSME was contacted in multiple attempts to achieve a completion, the unique participant id appears in multiple observations, one for each contact attempt.
 - Number of Observations: In total, the database contains 6,145 contact attempts: 5626 phone calls, 216 link-based interactions (completed or rejected self-administered surveys), and 301 in-person visit attempts.
 - Identification Variables: Each attempt is uniquely identified by the participant-level *caseid* (used by IPA) or *case_label* (used by IFC) combined with the attempt counter (*n_attempt*). In the original SurveyCTO dataset, uniqueness is additionally enforced through the *KEY* variable, which assigns a unique identifier to each log record.
 - **Updated Results Contact Database:** This database provides the final survey status for each of the 1,101 WSMEs. It also includes details such as the names of the final respondent, phone numbers, email addresses, physical addresses, and the initial information provided by the IFC.
 - Number of Observations: It includes the 1,101 observations from the initial contact database
 - Identification Variables: The unique identification variables for this database are *caseid* (used by IPA) or *case_label* (used by IFC)
 - Additional information: Based on the in person visits, the dataset includes the address information of the companies with public information available (337 WSMEs) and a variable that identifies if this address was visited and found during visits (139 addresses). Not all addresses were visited, as in person visits were part of mop up activity.

Databases' relationship: The databases are connected and can be merged as follows:

- Completed Surveys Database (1) + Updated Contact Database (3): Merging these two databases will provide a comprehensive overview for all 1,101 WSMEs in the contact list, linking their initial information and final survey status with the corresponding complete questionnaire data.
- Completed Surveys Database (1) + Contact Log Database (2): Combining these databases will yield additional information regarding the effort, in terms of phone calls and attempts, required to obtain each complete questionnaire.

5. Lessons learned and suggestions for future surveys

The successful completion of this endline survey provides several key lessons that can be applied to future data collection efforts for this population. The following recommendations are structured chronologically according to the survey process and are based on the challenges and outcomes observed during fieldwork.

5.1. Pre-Fieldwork Preparation

Proactive Contact Database Updating

- o **Insight:** There was no information for WMSEs addresses to conduct the in person data collection, leading to unsuccessful visits.
 - **Suggestion:** The in person data collection was a useful strategy to obtain some completed surveys and generate trust to complete the survey after the visit. Even though S2E did not gather address information, having access to the address of WSMEs and gathering the data when they register could not only facilitate further data collection strategies, it is also an additional way to communicate with participants as some numbers failed and several emails sent bounced back. Updating information is a very cost-effective strategy towards improving enumerator productivity. In addition, we suggest collecting addresses and more contact information from participants in future program implementations.

A Multi-Channel Announcement and Incentive Strategy

- o **Insight:** A substantial portion of respondents did not recall registering for the Sourcing2Equal program even after the S2E mass announcement and IPAs

mass email announcement or mentioned having participated before in a survey and no longer interested.

- **Suggestion:** Develop a comprehensive communication plan that announces the survey activities during and after training. When participants are aware that S2E will follow back on them several times (midline and endline surveys), it gives them more clarity into why and how many times they will be contacted.
- o **Insight:** The incentive for participation was not communicated until the data collection period started. Additionally, some studies show that guaranteed incentives could be more effective for participation than prize drawings (Dykema et al., 2024, *Social Science Computer Review*).
 - **Suggestion:** Implement a Two-Tiered Incentive: To maximize motivation, consider a two-tiered incentive structure:
 - Offer a small but guaranteed reward (e.g., a digital voucher) for every complete survey. This acknowledges the value of every participant's time and can increase the overall completion rate.
 - Continue to offer a high-value prize, like tablets, as a raffle for all who complete the survey. This combination of a guaranteed reward and a grand prize can be highly effective.

Timeline for pre data collection activities

- o **Insight:** A tight schedule in the preparatory activities, to give more time for data collection activities, meant that there was not enough time from the final modifications and approval of the survey instrument. This reduces the possibility for final survey programming adjustments and testing, which increases the likelihood of running into errors, such as the phrasing error in the income question, as well as the modification to the survey instrument request from S2E after data collection began.
 - **Suggestion:** Allow for at least five days after the deadline for the final survey instruments to include all final changes into the survey programming and to allow for an adequate development and testing window after the questionnaire is finalized. This period is critical for allowing the technical team to double check for any changes in the survey logic.

5.2. During Data Collection

Optimize Fieldwork Protocols and improve self-completion follow-up

- o **Insight:** Participants preferred to complete the survey by link in a different time or by themselves when they had extra time. There was a high amount of self-administered surveys where there is no way to confirm who answered and the quality of the answer. Almost half of the audited surveys were completed in this modality.
 - **Suggestion:** The link surveys were more popular probably due to the lack of time of participants as enumerators commented they were always very busy. Shortening the time of the survey could also mean participants are more eager to respond. Twenty minutes sounds much longer than 10-15 minutes.
- o **Insight:** There were almost no answers to the batch of three survey questions for refusal cases.
 - **Suggestion:** Offering a shorter survey version could increase completion rates. For participants who refuse because they already completed the midline survey, a condensed version might encourage participation. However, this approach should be integrated into the data collection strategy from the beginning of data collection activities and not only as a last resort measure.

Annex 1- Communications

2.1. WhatsApp Flyer for initial interaction

The following flyer accompanied the initial WhatsApp message to inform participants about the incentives. Participants who completed the survey were entered into a raffle to win one of five iPads.

¡Participa por una tableta!

■ ¡Cuéntenos su experiencia en Sourcing2Equal!

- Responderá una encuesta telefónica de 20 minutos para empresas que ya participaron, están participando o solo se inscribieron a Sourcing2Equal.
- Gane 1 de 5 tabletas completando la encuesta (≈ COP \$1.900.000 c/u).

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Annex 2- High Frequency Checks log

The following annex details the main results obtained while running the HFC during data collection

Check	Description	Action taken
Form versions	A total of 26 form versions of the survey were updated during data collection and field work. Each version addressed minor programming issues, such as spelling errors or data updates. Major form revisions are detailed in section 3.3	Form update notifications were communicated to supervisors to verify that all enumerators were working with the latest version of the questionnaire, minimizing discrepancies due to outdated forms.
Duplicates	A survey was completed twice. Surveys: caseid M_0372	Confirmed through the supervisor that the enumerator mistakenly sent a completed survey with mock data at the beginning of data collection to “test” the survey. The

		case was reopened and further completed by the participant.
Duplicated case	The same participant had two companies registered in the S2E program. Completed survey: caseid M_0215 (SME name: HIROKI) Rejected survey: caseid M_0303 (SME name: NATASA SAS)	The participant mentioned that they had registered two companies to the S2E training and they refused to answer the survey again for the second company. Furthermore, they do not wish to be associated with the company for which the survey was rejected.
DK/R (Doesn't know or refuse to answer)	Found out that 5 particular variables have the highest response rates for "Doesn't know" or "Refuse to answer" Variables: • <i>Company_income_2025</i> • <i>Knowledge_procurement_process</i> • <i>Company_otherpriv_6m</i> • <i>Company_activity6mo</i> • <i>Company_publicbids_6m</i>	The high frequency of these responses in the five identified variables was discussed with the field manager and supervisors. These variables were flagged for additional monitoring.
Recoding for "Other" option	It was found that for two specific variables, a high frequency of "Other" responses provided by participants were recoded in order to clean the dataset of completed surveys. Variables: • <i>City_code_other</i> • <i>Knowledge_procure_s_other</i> • <i>Representative_position_other</i>	City_code_other: • Created the option "Santa Marta", with 6 observations • Created the option "Cartagena", with 9 observations • Created the option "Barranquilla", with 16 observations Knowledge_procure_s_other: • Created the option LinkedIn with 14 observations Representative_position_other: • Created the option "Administrator" with 8 observations • Created the option "Legal Representative" with 21 observations
Outliers	Outliers were found for different values, especially regarding employees and private and public bids: Variables: • <i>Company_activity6mo</i> • <i>Company_otherpriv_6m</i> • <i>Company_otherpriv_won_6m</i> • <i>Company_privatebids_6m</i> • <i>Company_privatebids_won_6m</i> • <i>Company_employees_fulltime</i> • <i>Company_employees_parttime</i>	For each specific case, the typed value was verified with the enumerator and the surveys were also sent for audit. • Company_employees_fulltime: During the audit it was found that this variable was mostly inconsistent in 50% of the audited surveys. People seem to answer differently when asked again in the survey audit.

Annex 3- Manual status changes

ID	Original final status	Modified final status	Reason of modification
M_0320	Failed_Numbers	Refusal	Participant is enrolled as a mentor rather than a workshop participant and has requested to be removed from the list of surveyed firms.
M_0675	Pending_Link	Refusal	Participant refused the survey by email. The S2E Colombia team has already spoken with them due to dissatisfaction with the program.
M_0623	Undefined	Failed Number	Third party answered, does recognize the firm, reports the participant is abroad and does not wish to be contacted; requests no further calls as does not provide the phone number of the participant.
M_0527	Undefined	Failed Number	Both available phone numbers were out of service.
M_0012	Refusal	Not_Answered	The participant was visited in person, but staff on-site informed the field team that entry was not permitted. These cases were subsequently contacted by email instead of by phone.
M_0440	Refusal	Not_Answered	The participant was visited in person, but staff on-site informed the field team that entry was not permitted. These cases were subsequently contacted by email instead of by phone.
M_0730	Refusal	Not_Answered	The participant was visited in person, but staff on-site informed the field team that entry was not permitted. These cases were subsequently contacted by email instead of by phone.
M_0846	Refusal	Not_Answered	The participant was visited in person, but staff on-site informed the field team that entry was not permitted. These cases were subsequently contacted by email instead of by phone.
M_0965	Refusal	Not_Answered	The participant was visited in person, but staff on-site informed the field team that entry was not permitted. These cases were subsequently contacted by email instead of by phone.