

MEASURING THE IMPACT OF IMPACT MEASUREMENT

EMANUELE COLONNELLI^{*}, TIM MCQUADE[§], NATALIA RIGOL[†], AND BENJAMIN N. ROTH[‡]

June 2026

ABSTRACT. Impact measurement is central to impact investing and social entrepreneurship, yet little is known about whether firms benefit privately from measuring impact. We conduct the first randomized controlled trial of an impact measurement intervention among high-growth social enterprises in India. Treated firms exhibit nearly twice as much revenue growth and raise nearly twice as much capital as control firms. In a companion experiment with early-stage investors, we find that investors respond strongly to quantified impact metrics but not to generic qualitative impact statements. Together, our results show that impact measurement can shape firm growth and capital allocation.

We thank our partner Villgro for support throughout the process. We also thank Vittorio Bassi, Emily Breza, Sean Higgins, Nicola Limodio, Chris Woodruff, and many seminar and conference participants for helpful comments and suggestions. Kristina Kokoneci, Rafael Tiara, Julián Zenteno, and several Villgro members provided superb research support. The views expressed in this paper are the views of the individual authors and should not be attributed to Villgro or other research partners. This research is supported by the University of Chicago Booth School of Business, Harvard Business School, the CEPR-PEDL Research Initiative, and the International Growth Centre SGB Initiative. This study's unique identifying numbers are IRB No. IRB22-1502 and AEARCTR-0018392.

^{*} Booth School of Business, The University of Chicago, and NBER, CEPR, J-PAL, BREAD. Email: emanuele.colonnelli@chicagobooth.edu.

[§] University of California, Berkeley Haas School of Business and NBER. Email: tmcquade@haas.berkeley.edu.

[†] Harvard Business School, and NBER, J-PAL, BREAD. Email: nrigol@hbs.edu.

[‡] Harvard Business School, and J-PAL, BREAD. Email: broth@hbs.edu.

I. INTRODUCTION

The last two decades have seen tremendous growth in the scale and legitimacy of the movement to combine social impact with corporate interests. Leading estimates suggest that impact investors control more than one and a half trillion dollars in assets under management (Hand et al., 2024), and that social enterprises generate more than two trillion dollars in annual revenue worldwide (World Economic Forum and Schwab Foundation for Social Entrepreneurship, 2024). Impact investing rests on the premise that capital should be allocated not only to profitable firms, but also to firms that create social value. Yet this premise creates a measurement problem (Serafeim and Trinh, 2020). Profits are measured because accounting, taxation, and investor reporting make financial measurement unavoidable. Social impact, by contrast, is often costly to quantify, difficult to compare across firms, and communicated through qualitative narratives. This raises a basic economic question: are there private returns to measuring social returns?

We answer this question with two experiments. In the first, we randomize hands-on support that helps Indian social enterprises collect stakeholder-level impact data and translate it into a personalized impact report. Treated firms grow faster and raise more capital. In the second, we randomize the impact information shown to early-stage investors and show that investors respond to quantified impact metrics, but not to generic impact narratives.

We conducted the first experiment in partnership with Villgro, India's largest incubator of social enterprises. All 163 participating firms—spanning industries such as agribusiness, health, energy, and education—were offered the same impact measurement and management (IMM) course. Random assignment determined whether firms also received hands-on implementation support: treatment firms worked through several one-on-one sessions with Villgro representatives to choose an IMM framework, define impact indicators, plan stakeholder outreach, and operationalize data collection; their customers, employees, and suppliers were then surveyed by the research team, and the results were synthesized in a personalized impact report summarizing stakeholder surplus measures.¹ Control firms received the same course but not the full implementation support or report until the end of the study.

The intervention had a large impact on both revenue growth and access to capital. While both treatment and control firms grew over the course of our experiment, firms in the treatment group experienced approximately an additional USD 20,000 in revenue growth, bringing total treatment-group growth to nearly double that of control firms. Similarly, treatment group firms raised an additional USD 43,000 in external funding, again a doubling relative to control.

Due to sample size limitations, our experiment is not designed to separately identify mechanisms, but the intervention naturally creates two forms of decision-relevant information. Internally, the process of choosing indicators, engaging stakeholders, and collecting stakeholder-level data may

¹By surplus, we mean the value created for a stakeholder beyond the stakeholder's next-best alternative: for customers, willingness-to-pay net of price; for workers and suppliers, compensation or payments net of reservation values.

help firms learn which customers and use cases generate the most value. Externally, quantified impact metrics may make impact claims more credible to investors.

Access to capital is both a central outcome for early-stage social enterprises and a possible channel through which impact measurement affects firm growth. We therefore run a companion experiment that isolates investor demand for quantified impact information. We conducted a field experiment with 223 early-stage investors with experience investing in Indian startups, inspired by non-deceptive variations of resume audit studies commonly used in the labor literature (Harrison and List, 2004; Kessler et al., 2019).² Investors were recruited through Villgro and Harvard Business School networks, direct outreach, and a professional survey firm. Investors were shown hypothetical startup profiles, with characteristics drawn at random from the distribution of startups participating in our first experiment. Investors then rated these profiles based on their investment interest. Ratings were incentivized by the offer to introduce investors to real startups seeking capital, whose characteristics matched the preferences investors expressed through their ratings. Randomizing firm attributes allows us to infer the causal impact of any firm characteristic on investor interest, holding other firm characteristics constant.

Our primary comparison of interest is how a startup's social impact is communicated. Some profiles reported only baseline customer demographics, such as average monthly customer income and the share of customers earning less than \$5 per day. Others added a qualitative impact statement, meant to represent the narrative approach to communicating impact adopted by many social enterprises. Finally, others reported customer surplus, one of the key quantitative impact metrics covered in the IMM course and implemented in the first experiment.

Our main result is that investor interest is strongly responsive to quantified impact metrics. Moving a startup from below- to above-median customer surplus increases investor interest by an amount comparable to moving the firm from unprofitable to profitable. By contrast, generic qualitative impact statements have a small and statistically insignificant effect on investor interest. Investors therefore do not appear to reward impact language per se; they respond to quantified evidence of impact.

Our results contribute first to the body of work on impact measurement, impact investing, and social entrepreneurship (e.g. Serafeim et al., 2019; Allcott et al., 2026b). Most related is the work establishing a link between social impact and firm performance (e.g. Kramer and Porter, 2011; Edmans, 2011; Eccles et al., 2014; Henderson and Steen, 2015; Khan et al., 2016; Lins et al., 2017). Our main contribution is to establish a causal link between impact measurement and firm performance. To our knowledge, this is the first randomized field experiment focused on the implementation of impact measurement practices.

Second, we speak to the experimental literature on entrepreneurship training and management practices (see Karlan and Valdivia 2011 and Bloom et al. 2013 for examples on micro-firms and large

²For a related application of this experimental design to ESG impact signals in the labor market, see Colonnelli et al. (2023).

firms, respectively, and [McKenzie et al. 2025](#) for a review). Related to our focus, in the context of micro-entrepreneurs, [Kaul et al. \(2025\)](#) show that customer feedback seeking can improve performance and generate spillovers to customers not directly solicited for feedback. Specific to startups, [Camuffo et al. \(2020\)](#) and [Lee et al. \(2024\)](#) both find that entrepreneurship training programs cause startups to more quickly abandon their ideas, and improve firm outcomes conditional on persevering. We contribute to this literature by studying the impact of a training program explicitly targeted toward high-growth social enterprises, and focusing on impact measurement, demonstrating that this type of program can have meaningful consequences for firm growth and the ability to raise capital.

Finally, we contribute to the experimental literature on investor social preferences. Existing work asks whether investors value social impact and how they trade it off against financial returns. For example, [Humphrey et al. \(2021\)](#) identify asymmetries between social benefits and harms, [Heeb et al. \(2023\)](#) argue that investors respond to relative, but not absolute, levels of impact, [Bonfon et al. \(2025\)](#) and [Green and Roth \(2025\)](#) characterize the degree to which investors have consequentialist social preferences, and [Allcott et al. \(2026a\)](#) show that investor responses to sustainability disclosures depend in part on how intuitively the information is presented. We study the information problem behind those preferences: when impact is communicated in different ways, what type of evidence moves investor demand? Our results show that investors respond to quantified impact metrics, but not to generic qualitative impact statements. Thus, the form of impact measurement matters for the allocation of impact capital.

II. EXPERIMENT #1: THE IMPACT OF IMPACT MEASUREMENT

Our main experiment was conducted in partnership with Villgro—India’s largest incubator of social enterprises. Representatives from Villgro, together with faculty from Harvard Business School and the University of Chicago Booth School of Business, offered all 163 participating firms the same impact measurement and management (IMM) course. The course was common to both experimental arms, holding fixed exposure to IMM concepts, language, and certification. Random assignment determined whether firms also received the remaining components of a practical IMM implementation engagement: one-on-one support to select a framework, define indicators, and plan stakeholder outreach; stakeholder surveys conducted by the research team; and synthesis of the results in a personalized impact report. The treatment therefore isolates the incremental effect of moving from IMM training to implementation, rather than the effect of classroom exposure alone.

A. Impact Measurement and Management Course

Startup participants were recruited through Villgro’s network. Active startups that had participated in previous Villgro programs, attended Villgro events, or otherwise indicated a desire to be

notified of Villgro programming were directly contacted to participate in the course. Representatives from Villgro also circulated several announcements of the course through its social media accounts. All startups with a social impact focus were invited to apply to the program.

In total, 163 eligible startups (out of 277 complete applications) participated in the program.³ The two primary selection criteria were that the startup conveyed plausible ambitions to achieve significant scale and social or environmental impact, and that a founder or member of the executive team had committed to attend the majority of the course sessions, should they be invited to enroll.

The course ran from April to June of 2023, in seven two-hour sessions taking place over Zoom, every other week—see Appendix Figure A1 for a timeline of the intervention and data collection, and Appendix Section C for a detailed course overview.⁴ The course covered three main components that largely followed the content of the Harvard Business School elective course “Data for Impact.” First, participants learned to outline their theory of change, the mapping from their core business activities and outputs to societal or environmental impact, and to make explicit the assumptions required for their business activities to have their intended impact. Second, participants were introduced to three approaches to measuring social or environmental impact. The Global Impact Investing Network’s (GIIN) Impact Reporting and Investment Standards (IRIS+) framework provides standardized, sector-specific KPIs linked to existing empirical evidence. Acumen’s Lean Data approach uses short customer surveys to capture how products affect users’ lives. Finally, an economic approach based on customer, employee, and supplier surplus uses willingness-to-pay, compensation, reservation values, and transaction data to quantify value created for different stakeholders. Together, these approaches emphasize direct stakeholder data and quantitative evaluation as the gold standard for impact measurement. Third, the course covered tactics for communicating social and environmental impact to employees, donors, and investors.

B. Intervention

Beginning in April 2023, treatment firms received hands-on support to operationalize impact measurement. The treatment was designed to approximate a practical IMM engagement, in which classroom concepts are translated into firm-specific metrics, stakeholder surveys, data collection, and reporting. Each treated firm was assigned a Villgro representative and typically met with that representative four to five times. These meetings helped firms choose the IMM framework most suited to their context and provided explicit guidance on how to implement it. Support was personalized to each firm’s needs, but often included identifying relevant impact KPIs, crafting survey questions and stakeholder recruitment scripts, planning data collection, and discussing

³In fact, 215 firms were selected to participate, but by the time the program began, 48 had dropped out (prior to randomization). Four additional outlier firms (with 32 times as much revenue and more than 14 times as many employees than our average firm) were dropped, as they did not match our target of young and small social enterprises.

⁴Representatives from Villgro engaged lightly with participating startups, both in treatment and control, starting from October 2022. This primarily entailed pre-readings distributed over email and WhatsApp.

how the resulting data could be synthesized for managerial and external use. The research team then conducted surveys of treatment firms' customers, employees, and suppliers and produced a personalized impact report summarizing stakeholder surplus measures—see Appendix Figure A2 for an example. In this sense, the intervention was intended to mirror the bundled nature of real-world IMM adoption.

Control firms received the same course but did not receive implementation support, stakeholder surveys, or a personalized impact report until the end of the study. By July 2024, both treatment and control firms were invited to participate in a final round of stakeholder data collection. At this final stage, all participating firms received an analogous impact report.

C. Data and Descriptive Statistics

Our analysis draws primarily on two surveys of participating startups.

Baseline data come from the applications that startups submitted to participate in the training program. These data were collected in September 2022 and contain information on firm characteristics (e.g., incorporation year, sector, target customers), and firm financials (e.g., revenues, profits, employees, and amount and type of capital raised to date).

Our endline survey was collected in July 2024. It elicited revenues and profits for the previous three years, as well as the amount of debt, equity, and grant capital raised to date. Because many early-stage firms in our sample are not yet profitable, 33 percent of firms report zero profits. We therefore focus on whether the firm has reached profitability, rather than estimating treatment effects on profit levels.

Table 1 presents descriptive statistics on our final sample of 163 firms who participated in the program and submitted baseline data. About 26% of the firms in our sample are in the “minimum viable product” stage, indicating that they have not yet generated revenue, about 32% have launched a product in the market but have not raised significant capital, and about 42% are in their “growth stage,” indicating they have raised significant outside financing. 26% of our sample is in agri-business, about 22% is in health services, about 22% is in energy and clean tech, 7% is in education, and about 14% focus on improving livelihoods and skill acquisition.⁵ Average annual revenues at baseline were about USD 60,000, firms have on average 12.6 employees, and they have raised on average USD 84,000 in outside capital. Across all of these variables, the only statistically significant difference between treatment and control firms is that the treatment firms

⁵Examples of companies in agribusiness include those that produce, source, and process organic products from farmers, those that provide consulting for farmers, connect farmers to markets, and deploy technical innovations to increase yields. Companies in the health sector include those that provide telehealth consultations, mental and physical health applications, and those that develop novel technologies like prosthetics and biometric monitors. Examples in the energy and clean tech sector include companies that facilitate recycling and the disposal of e-waste, companies that manage microgrids, and water management and purification. Examples of companies in the education sector include those that are providing e-learning solutions for psychosocial skills, coding, and general education. Finally, companies in the livelihood sector include those that manage HR platforms and marketplaces for vendors.

are 11.8 percentage points more likely to be in energy and clean tech (p-value = 0.06), and an F-test does not reject that the two samples are drawn from the same distribution (p-value = 0.85).

Supplemental Appendix Table B1 examines attrition in our endline survey. We find no evidence of differential attrition. We failed to collect outcome data for 21 firms in each of treatment and control (26.2% of treatment firms and 25.3% of control firms). We find no statistically significant differences in the characteristics of attriting firms across treatment and control. An F-test does not reject the fact that the two attriter samples are drawn from the same distribution (p-value = 0.39).

D. Results

To estimate the impact of our intervention, we employ a difference-in-differences design. Specifically, we estimate:

$$y_{it} = \alpha + \beta_1 Treat_i + \beta_2 Post_t + \beta_3 Post_t * Treat_i + \varepsilon_{it} \quad (II.1)$$

where y_{it} is our outcome of interest for startup i in period t , $Treat_i$ is an indicator for whether startup i is in our treatment group, and $Post_t$ is an indicator for whether the outcome corresponds to a period after our intervention began. In alternative specifications, we include firm fixed effects. Standard errors are clustered at the firm level and, to account for our relatively small sample, we report both p-values based on traditional standard errors as well as wild cluster bootstrap (Cameron et al., 2008).⁶

For revenues and profitability, we observe multiple pre-intervention measures. The baseline survey elicited the average value over 2021 and 2022, while the endline survey retrospectively elicited 2021 and 2022 values separately. In the main specification, we include these three pre-intervention measures and cluster standard errors at the firm level.⁷ The post-period measure is the firm's revenue or profitability in the fiscal year preceding the July 2024 endline survey (i.e., April 2023–April 2024). For capital raised and other outcomes, which were not elicited retrospectively for the pre-period, the panel contains one baseline observation and one endline observation per firm.

Table 2 reports treatment effects on revenues, profitability, and total capital raised. Even columns contain firm fixed effects. The coefficient on $Post_t$ shows that control firms grew substantially over the study period. Annual revenue grew by about USD 24,000, firms were 16-19 percentage points more likely to be profitable, and firms raised about USD 38,000 in additional outside capital. All of these estimates are statistically significant at the 1% level, except for firm profitability in column 4, which is statistically significant at the 5% level.

⁶Due to the presence of outliers, for our main analysis we top-code all monetary outcome variables at the 95th percentile.

⁷Results are robust to restricting the pre-period for revenues and profitability to the baseline 2021–2022 average only, excluding the retrospectively elicited 2021 and 2022 values. See Appendix Table B2.

The main effects of interest are captured by the coefficient on $Post_t * Treat_i$, which indicates that growth in revenue and capital raised was about twice as large for firms in the treatment group. For instance, column 2 indicates that treatment firms had an additional annual revenue growth of USD 20,240 (wild bootstrap p-value = 0.03), and column 6 indicates that treatment firms raised an additional USD 43,110 in outside capital (wild bootstrap p-value = 0.03). We do not find an effect on whether a firm reaches profitability, consistent with the fact that many early-stage startups prioritize revenue growth and capital raising over short-run profits. All estimates are highly stable to the inclusion of firm fixed effects.

Figure 1 plots the distribution of changes in revenues and capital raised from baseline to end-line, separately by treatment status. The treatment-control difference is visible across much of the distribution, suggesting that the results are not driven solely by a small number of extreme observations.

Supplemental Appendix Table B3 reports treatment effects on the type of capital raised: equity, debt, and grants. Column 1 indicates that treatment firms raised an additional USD 18,580 in equity capital (wild bootstrap p-value = 0.02), and column 3 indicates that they raised an additional USD 10,110 in debt (wild bootstrap p-value = 0.03). While the point estimate on grant capital is also positive in columns 5 and 6, it is not statistically significant. Once again, estimates are highly stable to the inclusion of firm fixed effects.

E. Mechanisms

The treatment deliberately bundled the main components required to implement IMM in practice: translating course frameworks into firm-specific indicators, planning stakeholder outreach, collecting stakeholder data, and synthesizing the results in a personalized report. The experiment therefore estimates the effect of a practical IMM implementation package, not the effect of a single mechanism. We argue that two channels are especially natural.

First, impact measurement can generate internal business intelligence. To measure impact rigorously, firms must identify which stakeholders benefit from their products or services, what dimensions of the product create value, how to reach those stakeholders, and how much value different users receive. Because the treatment included guidance on indicators, survey design, stakeholder outreach, and interpretation, it could generate managerial learning throughout the implementation process (Gans et al., 2019). More broadly, rigorous impact measurement requires firms to engage directly with customers and other stakeholders to understand which customers derive the most value from the firm's products and services. This type of information gathering is closely aligned with customer discovery and market research commonly taught in business school entrepreneurship and marketing courses. For social enterprises, this information is not only an

impact metric; it is also information about demand, high-value customer segments, and the firm's value proposition. This channel can help rationalize the revenue effects.⁸

Second, impact measurement can generate externally credible information. A completed stakeholder-data collection process, summarized in a quantified impact report, gives firms a more precise way to communicate their social value proposition to investors and funders. This channel can help rationalize the effects on capital raised, and the investor experiment in the next section directly tests whether investors respond to quantified impact information.

These two channels may reinforce one another. Revenue growth can make firms more attractive to investors, while additional capital can finance further growth.

Finally, certification effects are unlikely to explain the treatment effects. All study participants, in both treatment and control, were offered the same course and certification. The experimental contrast was designed to hold course exposure fixed and isolate the effect of moving from IMM concepts to implementation through personalized support, stakeholder outreach, data collection, and firm-specific reports.

III. EXPERIMENT #2: INVESTOR DEMAND FOR IMPACT MEASUREMENT

Access to capital is both an important outcome for early-stage social enterprises and a potential channel through which impact measurement affects firm growth. The first experiment shows that treated firms raised more capital, but it cannot by itself determine whether this occurred because impact measurement directly changed investor demand, improved firm operations, or both. We therefore conduct a companion experiment that directly measures investor demand for quantified impact information while holding fixed other firm attributes. Between April and August 2025, we implemented an incentivized survey experiment with early-stage investors, eliciting their interest in startup profiles that vary experimentally in whether and how they report social impact.

A. Survey, Sample, and Recruitment

We recruited 223 investors with experience investing in India-based startups. The sample combines two recruitment channels. First, we recruited investors through personal and professional networks at Harvard Business School, Villgro, and LinkedIn, yielding 65 completed responses ("Direct Outreach"). Second, we partnered with Dynata, a commercial survey platform, to recruit early-stage angel investors, yielding 158 completed responses. Participants span a broad range of investment experience, stage focus, and sectoral focus. On average, respondents have made 13 direct

⁸A related possibility is that customer-surplus measurement gives firms information about willingness-to-pay and pricing. We do not have reliable data on firm prices, but quantifying the strength of this channel is an important avenue for future research, as price impacts would have ambiguous welfare implications. We therefore interpret the revenue effects as private returns to impact measurement, not as direct evidence on welfare.

investments in India-based startups, with a median investment size in the USD 100,000—250,000 range.

Our design is inspired by the non-deceptive incentivized resume rating framework of [Kessler et al. \(2019\)](#) and its application to firm-investor matching of [Colonnelli et al. \(2024\)](#). The core experimental task asks investors to evaluate a set of 15 synthetic company profiles. Each profile contains randomized components, including general company information, key financial indicators (such as revenues and profits), team characteristics, and measures of social impact. Although we designed the company profiles to appear realistic, respondents are explicitly informed that the investment opportunities are purely hypothetical, ensuring no deception.

Both direct outreach and Dynata respondents responded to our survey on the online platform Qualtrics. The direct outreach survey was incentivized through a matchmaking opportunity. Respondents were told that their evaluations would be used to facilitate introductions to real startups from Villgro’s incubation programs that were actively seeking capital and whose characteristics matched their revealed preferences.⁹ Dynata respondents instead completed an otherwise identical but fully hypothetical version of the survey. There is no other incentive to participate in the survey.

The setting is well suited to studying demand for impact information. Many investors in the sample report challenges in assessing impact investments: Figure 2 shows that respondents frequently cite difficulty assessing and comparing impact and lack of standardized impact data or measurement as major challenges. The experiment therefore studies a population for whom the measurement problem is directly relevant.

B. Company Profiles and Experimental Variation

The company profiles were designed to resemble India-based social enterprises. To construct them, we drew on firms participating in Villgro’s incubation programs and on the type of information investors commonly observe on startup platforms such as Crunchbase and PitchBook. Each profile contained standard investment information, including headquarters location, sector, business model, team characteristics, revenues, profits, capital raised, number of customers, number of employees, and number of investors. The full set of randomized profile components is reported in Appendix Table B4.

The key experimental variation is the information shown in the *Social Impact* section. All profiles report baseline customer demographics: average monthly customer income and the percentage of customers earning less than \$5 per day. Profiles then vary across four impact-information conditions. Type I profiles report only these baseline customer demographics (seen by everyone). Type II profiles add a qualitative impact statement, while Type III profiles report total customer surplus, and Type IV profiles report total customer surplus, average customer surplus, and average

⁹Participation in this matchmaking process was optional, and respondents could complete the survey without opting into introductions. Fourteen direct outreach respondents did not explicitly opt into the matchmaking process.

customer surplus as a percentage of customer income. For Type III and Type IV profiles, a sidebar indicates whether total customer surplus is above or below the median of the synthetic profile sample. Appendix Figure A3 shows an example of the baseline company profile (Type I), and Appendix Figure A4 shows examples of the various impact-information conditions across all four types.

Qualitative impact statements were designed to mimic the narrative impact language commonly used by social enterprises, and were placed in the same Social Impact section as the quantitative metrics. We constructed them using impact descriptions provided by Villgro-incubated firms and then used large language models to generate statements with similar tone, length, and content. Quantitative customer-surplus metrics were designed to mirror one of the economic impact measures covered in the IMM course and implemented in the first experiment.

Investors rated each profile using a 7-point scale based on the question: “*How interested would you be in investing in this company?*” The scale ranged from 1, “I am not at all interested in investing in this company,” to 7, “I am very interested in this company; it stands out as a strong candidate for investment.” At the respondent level, profile assignment was balanced across impact-information conditions: each respondent evaluated six profiles with customer-surplus information (with an equal probability for Type III vs Type IV), six profiles with only baseline customer demographics (Type I), and three profiles with qualitative impact statements (Type II).

C. Results

We estimate investor preferences by regressing investment interest on the randomized impact-information signals and other randomized profile attributes using the following specification:

$$y_{ij} = \alpha_i + \phi_j + \beta_{CS_L} \cdot CS_{L,j} + \beta_{CS_H} \cdot CS_{H,j} + \beta_S \cdot S_j + \sum_{k=1}^K \theta_k X_{jk} + \varepsilon_{ij}, \quad (\text{III.1})$$

where y_{ij} is the investment interest of respondent i in profile j , α_i are respondent fixed effects, and ϕ_j are profile fixed effects. The main variables of interest are $CS_{L,j}$ and $CS_{H,j}$, indicators for whether customer-surplus information is displayed and total customer surplus is below or above the median, respectively, and S_j , an indicator for whether the profile includes a qualitative social impact sentence.¹⁰ The omitted impact-information condition is a profile that reports only baseline customer demographics. The coefficients on the customer-surplus and qualitative statement indicators therefore measure how investor interest changes when otherwise comparable profiles disclose quantitative or qualitative impact information. The variable X_{jk} is an indicator equal to one if characteristic k takes a specific value or meets a specified threshold in profile j (e.g.,

¹⁰Specifically, $CS_{L,j}$ equals one if customer surplus information is displayed and total customer surplus is below the median of the synthetic profile sample, and zero otherwise. Conversely, $CS_{H,j}$ equals one if customer surplus information is displayed and total customer surplus is above the median, and zero otherwise.

“Profitable Firm”, “High Revenues”, “No Investors”), and zero otherwise. When profile fixed effects are included, these profile-level characteristics are absorbed. The characteristics are detailed in Table B5. The parameters θ_k capture the effects of these additional profile characteristics. We report heteroskedasticity-consistent robust standard errors (Abadie et al., 2023).

Table 3 presents the main results. Investors respond strongly to quantified impact information. In the richest specification, showing that a firm has above-median customer surplus increases investment interest by 0.42 points on the 1–7 scale. Showing that a firm has below-median customer surplus reduces investment interest by 0.39 points. Both effects are statistically significant at the 1% level across all columns. This magnitude is economically large. For comparison, the premium for being profitable is approximately 0.56 points, and the premium for high revenues is approximately 0.28 points in the specifications without profile fixed effects. Quantified impact information therefore moves investor interest by an amount comparable to core financial characteristics.

By contrast, qualitative impact statements do not meaningfully shift investor interest. The coefficient on a qualitative impact statement is small, positive, and statistically insignificant across specifications. Investors therefore do not appear to reward generic impact language. Rather, they use quantified impact metrics to distinguish between higher- and lower-impact firms.

We report two robustness checks in Appendix Tables B6 and B7. First, we estimate the main specification separately for investors recruited through direct outreach and through Dynata, and find that the impact-information coefficients are stable across recruitment channels. Second, we re-estimate the main specification excluding the 14 private outreach respondents who did not opt into the matchmaking incentive with Villgro-incubated firms, and find that the results are robust.

Appendix Table B8 reports analogous specifications using continuous measures of customer surplus and customer income rather than median-based indicators. The results are consistent with the main specification: investment interest increases with customer surplus, while customer income does not drive the effect.

Overall, these patterns support the interpretation that investors respond to measured impact, not merely to the demographic characteristics of the customer base. The experiment does not distinguish whether investors value customer surplus directly as impact or as a signal of future demand and growth; it establishes that quantified impact metrics are decision-relevant for investors.

IV. CONCLUSION

Impact investing and social entrepreneurship are built on the premise that firms can create both financial and social returns. Yet that premise is difficult to operationalize without credible measures of social value. This paper provides, to our knowledge, the first experimental evaluation of the private returns to impact measurement. In a randomized controlled trial of an IMM implementation intervention, high-growth social enterprises in India received hands-on support to choose an impact framework, define indicators, collect stakeholder-level data, and synthesize the results

in personalized impact reports. Treated firms experienced substantially faster revenue growth and raised substantially more capital than control firms.

The companion investor experiment directly shows that measurement also matters for capital allocation. When early-stage investors evaluate otherwise comparable startup profiles, quantified customer-surplus metrics substantially shift investment interest, while generic qualitative impact statements do not.

The evidence also points to important next questions. The RCT estimates the effect of a practical IMM implementation package, not a single isolated mechanism. Stakeholder-level data may improve internal business intelligence, external credibility with investors, or both. Future work should separate these channels, study the pricing and welfare implications of impact measurement, and test which impact metrics are most relevant across sectors.

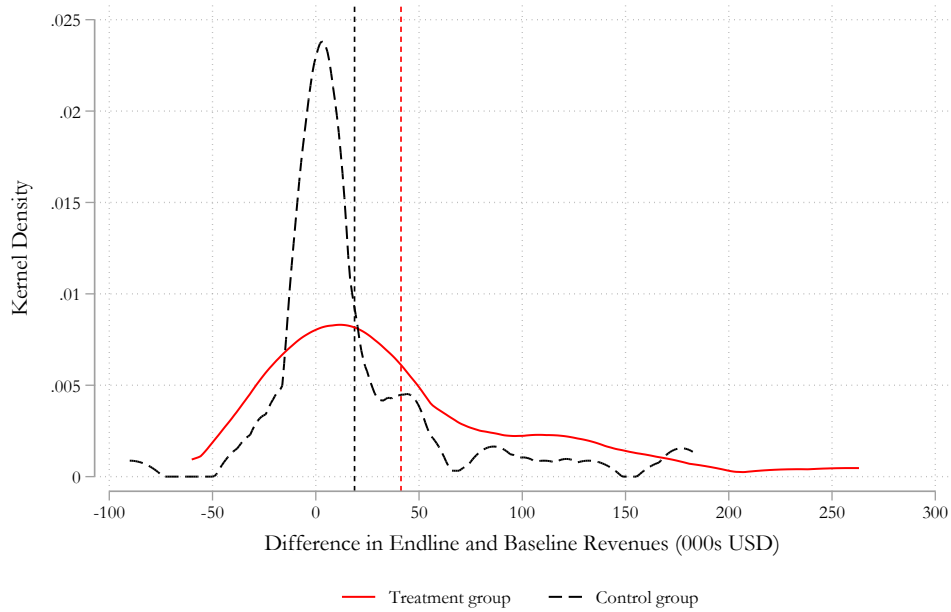
Taken together, however, the results support a central implication: rigorous measurement is an important component of the infrastructure needed for impact capital to be allocated effectively.

REFERENCES

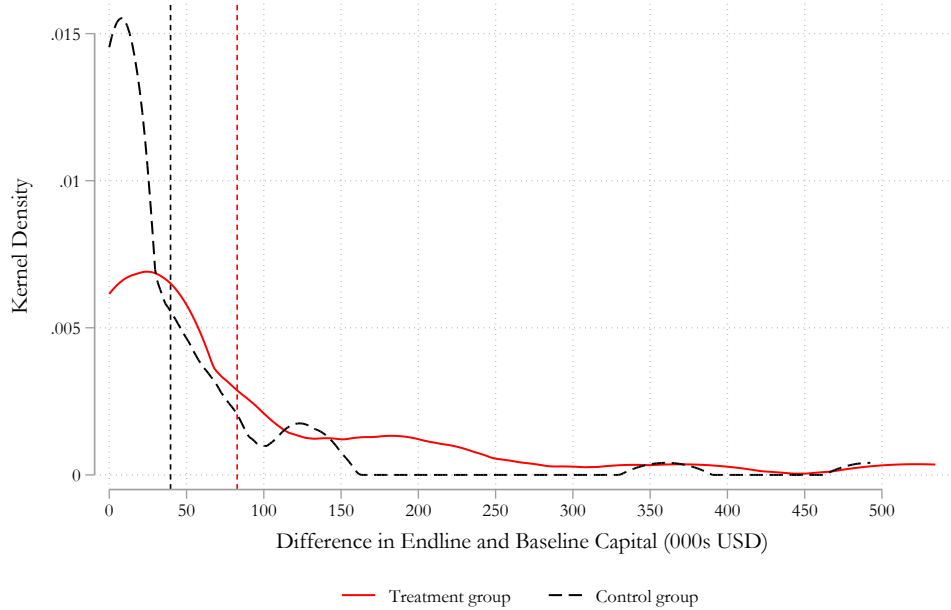
- ABADIE, A., S. ATHEY, G. W. IMBENS, AND J. M. WOOLDRIDGE (2023): “When Should You Adjust Standard Errors for Clustering?” *The Quarterly Journal of Economics*, 138, 1–35. [C](#)
- ALLCOTT, H., M. L. EGAN, P. SMEETS, AND H. YANG (2026a): “The Effects of Regulating Greenwashing: Evidence from Europe’s Sustainable Finance Disclosure Regulation (SFDR),” Tech. rep., National Bureau of Economic Research. [I](#)
- ALLCOTT, H., G. MONTANARI, B. OZALTUN, AND B. TAN (2026b): “An economic view of corporate social impact,” *The Journal of Finance*, 81, 285–328. [I](#)
- BLOOM, N., B. EIFERT, A. MAHAJAN, D. MCKENZIE, AND J. ROBERTS (2013): “Does management matter? Evidence from India,” *The Quarterly journal of economics*, 128, 1–51. [I](#)
- BONNEFON, J.-F., A. LANDIER, P. SASTRY, AND D. THESMAR (2025): “The moral preferences of investors: Experimental evidence,” *Journal of Financial Economics*, 163, 103955. [I](#)
- CAMERON, A. C., J. B. GELBACH, AND D. L. MILLER (2008): “Bootstrap-based improvements for inference with clustered errors,” *The review of economics and statistics*, 90, 414–427. [D](#)
- CAMUFFO, A., A. CORDOVA, A. GAMBARDILLA, AND C. SPINA (2020): “A scientific approach to entrepreneurial decision making: Evidence from a randomized control trial,” *Management Science*, 66, 564–586. [I](#)
- COLONNELLI, E., B. LI, AND E. LIU (2024): “Investing with the government: A field experiment in China,” *Journal of Political Economy*, 132, 248–294. [A](#)
- COLONNELLI, E., T. MCQUADE, G. RAMOS, T. RAUTER, AND O. XIONG (2023): “Polarizing Corporations: Does Talent Flow to “Good” Firms?” Tech. rep., National Bureau of Economic Research. [2](#)
- ECCLES, R. G., I. IOANNOU, AND G. SERAFEIM (2014): “The impact of corporate sustainability on organizational processes and performance,” *Management science*, 60, 2835–2857. [I](#)
- EDMANS, A. (2011): “Does the stock market fully value intangibles? Employee satisfaction and equity prices,” *Journal of Financial economics*, 101, 621–640. [I](#)
- GANS, J. S., S. STERN, AND J. WU (2019): “Foundations of entrepreneurial strategy,” *Strategic Management Journal*, 40, 736–756. [E](#)
- GREEN, D. AND B. N. ROTH (2025): “The allocation of socially responsible capital,” *The Journal of Finance*, 80, 755–781. [I](#)
- HAND, D., M. ULANOW, H. PAN, AND K. XIAO (2024): “Sizing the Impact Investing Market 2024,” Accessed: 2025-11-26. [I](#)
- HARRISON, G. W. AND J. A. LIST (2004): “Field experiments,” *Journal of Economic literature*, 42, 1009–1055. [I](#)
- HEEB, F., J. F. KÖLBEL, F. PAETZOLD, AND S. ZEISBERGER (2023): “Do investors care about impact?” *The Review of Financial Studies*, 36, 1737–1787. [I](#)
- HENDERSON, R. AND E. V. D. STEEN (2015): “Why do firms have “purpose”? The firm’s role as a carrier of identity and reputation,” *American Economic Review*, 105, 326–330. [I](#)
- HUMPHREY, J., S. KOGAN, J. SAGI, AND L. STARKS (2021): “The asymmetry in responsible investing preferences,” Tech. rep., National Bureau of Economic Research. [I](#)
- KARLAN, D. AND M. VALDIVIA (2011): “Teaching entrepreneurship: Impact of business training on microfinance clients and institutions,” *Review of Economics and statistics*, 93, 510–527. [I](#)
- KAUL, R., S. J. ANDERSON, P. K. CHINTAGUNTA, AND N. VILCASSIM (2025): “Call Me Maybe: Does Customer Feedback Seeking Impact Nonsolicited Customers?” *Marketing Science*, 44, 129–154. [I](#)
- KESSLER, J. B., C. LOW, AND C. D. SULLIVAN (2019): “Incentivized resume rating: Eliciting employer preferences without deception,” *American Economic Review*, 109, 3713–44. [I, A](#)

- KHAN, M., G. SERAFEIM, AND A. YOON (2016): “Corporate sustainability: First evidence on materiality,” *The accounting review*, 91, 1697–1724. [I](#)
- KRAMER, M. R. AND M. PORTER (2011): *Creating shared value*, vol. 17, FSG Boston, MA, USA. [I](#)
- LEE, D., E. FLOYD, Y. V. HOCHBERG, D. C. FEHDER, AND E. BAILEY-RIHAWI (2024): “Learning to quit? a multi-year field experiment with innovation driven entrepreneurs,” *Available at SSRN 4865251*. [I](#)
- LINS, K. V., H. SERVAES, AND A. TAMAYO (2017): “Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis,” *the Journal of Finance*, 72, 1785–1824. [I](#)
- McKENZIE, D., C. WOODRUFF, K. BJORVATN, M. BRUHN, J. CAI, J. GONZALEZ-URIBE, S. QUINN, T. SONOBE, AND M. VALDIVIA (2025): “Training Entrepreneurs,” *VoxDevLit*, 1. [I](#)
- SERAFEIM, G. AND K. TRINH (2020): “A framework for product impact-weighted accounts,” *Harvard Business School Accounting & Management Unit Working Paper*. [I](#)
- SERAFEIM, G., T. R. ZOCHOWSKI, AND J. DOWNING (2019): “Impact-weighted financial accounts: The missing piece for an impact economy,” *Harvard Business School*. [I](#)
- WORLD ECONOMIC FORUM AND SCHWAB FOUNDATION FOR SOCIAL ENTREPRENEURSHIP (2024): “The State of Social Enterprise: A Review of Global Data 2013–2023,” Accessed: 2025-11-26. [I](#)

FIGURE 1. Difference Between Endline and Baseline Revenues and Capital



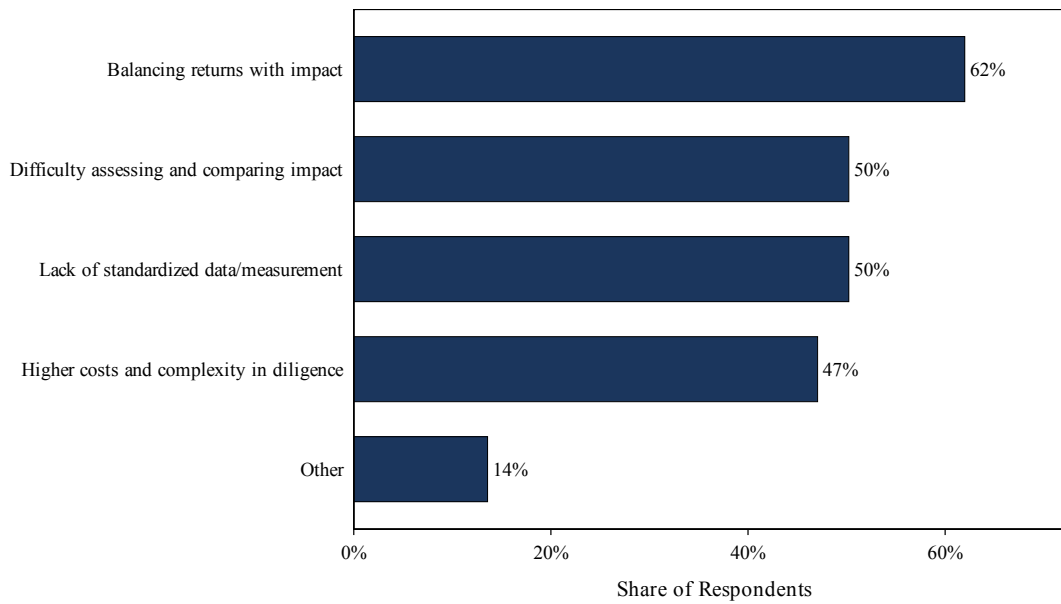
Panel A: Revenues



Panel B: Capital

Notes: The figure presents kernel densities of the difference between endline and baseline values of revenues and capital for Experiment 1. Vertical dashed lines show group means. Values are top-coded at the 95th percentile. Panel A includes 110 firms with non-missing baseline-endline revenue differences; Panel B includes 120 firms with non-missing baseline-endline capital differences.

FIGURE 2. Challenges in Impact Investing



Notes: In Experiment 2, respondents were asked: “What are the main challenges you encounter when considering impact investments? Please select all that apply.” The figure shows the share of respondents citing each challenge. The sample pools investors recruited via direct outreach and through Dynata ($N = 223$). Percentages are computed over the number of respondents who answered at least one challenge item and may therefore sum to more than 100%.

TABLE 1. Randomization Check

	Control	Treatment	
	Mean	Mean	Difference
	(1)	(2)	(3)
<i>Firm Characteristics</i>			
Firm Age (Years)	5.15	5.39	0.23
	[4.20]	[2.81]	(0.58)
Firm Stage = Minimum Viable Product	0.27	0.26	-0.00
	[0.44]	[0.44]	(0.07)
Firm Stage = Launched in Market	0.34	0.30	-0.04
	[0.48]	[0.46]	(0.07)
Firm Stage = Growth Stage	0.40	0.44	0.04
	[0.49]	[0.50]	(0.08)
B2C	0.46	0.41	-0.05
	[0.50]	[0.50]	(0.08)
Sector = Agri-Business	0.27	0.26	-0.00
	[0.44]	[0.44]	(0.07)
Sector = Health Services and Tech	0.25	0.20	-0.05
	[0.44]	[0.40]	(0.07)
Sector = Energy and Clean-tech	0.16	0.28	0.12*
	[0.37]	[0.45]	(0.06)
Sector = Education	0.06	0.09	0.03
	[0.24]	[0.28]	(0.04)
Sector = Livelihoods and Skills	0.18	0.10	-0.08
	[0.39]	[0.30]	(0.05)
Revenues FY '21-'22 (in 000s USD)	59.55	61.12	1.56
	[99.62]	[94.74]	(15.73)
Number of Employees	11.95	13.31	1.36
	[16.04]	[17.81]	(2.75)
Capital Raised (in 000s USD)	84.72	83.95	-0.78
	[150.29]	[143.43]	(23.77)
Number of Investors	3.05	2.13	-0.93
	[9.54]	[2.93]	(1.18)
<i>P-Value for Joint Difference F test:</i>			0.85
Observations	83	80	163

Notes: This table presents baseline characteristics of firms by treatment assignment. Columns 1 and 2 report means for the control and treatment groups, respectively; column 3 reports the treatment-control difference. Standard deviations are in brackets; standard errors are in parentheses. For conciseness, we omit the residual business sector.

TABLE 2. The Effect of Impact Measurement on Financial Outcomes

	Revenues		Profits > 0		Total Capital Raised	
	(1)	(2)	(3)	(4)	(5)	(6)
Post * Treat	17.49*	20.24**	-0.04	-0.01	44.87**	43.11**
	(9.34)	(9.24)	(0.09)	(0.09)	(19.09)	(19.07)
	{0.060}	{0.030}	{0.635}	{0.879}	{0.022}	{0.028}
Post	24.43***	23.81***	0.19***	0.16**	37.89***	39.64***
	(6.11)	(5.83)	(0.07)	(0.07)	(10.41)	(10.44)
	{0.000}	{0.000}	{0.009}	{0.019}	{0.000}	{0.000}
Control Pre Mean:	43.38	43.38	0.36	0.36	75.11	75.11
	[81.14]	[81.14]	[0.48]	[0.48]	[142.50]	[142.50]
N. Obs	443	443	421	421	241	241
N. Firms	120	120	121	121	121	121
Firm FE	No	Yes	No	Yes	No	Yes

Notes: This table presents the estimated treatment effects on revenues (in 000s USD), profitability, and total capital raised (in 000s USD) in Experiment 1. The dependent variable in columns 3 and 4 is an indicator equal to one if profits are positive. Odd columns estimate regression specification II.1; even columns include firm fixed effects. The treatment main effect is included in the odd-column regressions but omitted from the table. For revenues and profitability, firms can contribute up to four observations: the baseline 2021–2022 average, retrospective 2021 and 2022 values, and the endline value. Capital raised is observed at baseline and endline. Monetary values are top-coded at the 95th percentile. Control pre-means are computed in the estimation sample after top-coding. Standard errors clustered at the firm level are in parentheses; the standard deviation of the control pre-mean is in square brackets; wild bootstrap p-values are shown in curly braces. * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$.

TABLE 3. The Effect of Impact Measurement on Investor Interest

	Investment Interest			
	(1)	(2)	(3)	(4)
Qualitative impact statement displayed	0.093 (0.08)	0.097 (0.07)	0.096 (0.08)	0.107 (0.07)
Customer surplus below median	-0.372*** (0.09)	-0.401*** (0.07)	-0.356*** (0.09)	-0.393*** (0.07)
Customer surplus above median	0.374*** (0.09)	0.420*** (0.07)	0.371*** (0.10)	0.419*** (0.08)
High number of customers	0.057 (0.07)	0.062 (0.06)		
Young firm	-0.093 (0.06)	0.018 (0.05)		
Profitable firm	0.607*** (0.08)	0.560*** (0.06)		
Large firm	0.003 (0.07)	-0.002 (0.06)		
High revenues	0.295*** (0.06)	0.280*** (0.05)		
High capital raised	-0.051 (0.07)	-0.062 (0.06)		
No investors	-0.172** (0.07)	-0.143** (0.06)		
Observations	3,345	3,345	3,345	3,345
Mean	4.45	4.45	4.45	4.45
Unique Investors	223	223	223	223
Respondent FEs	No	Yes	No	Yes
Profile FEs	No	No	Yes	Yes
R ²	0.055	0.438	0.114	0.487
Adjusted R ²	0.053	0.396	0.064	0.417

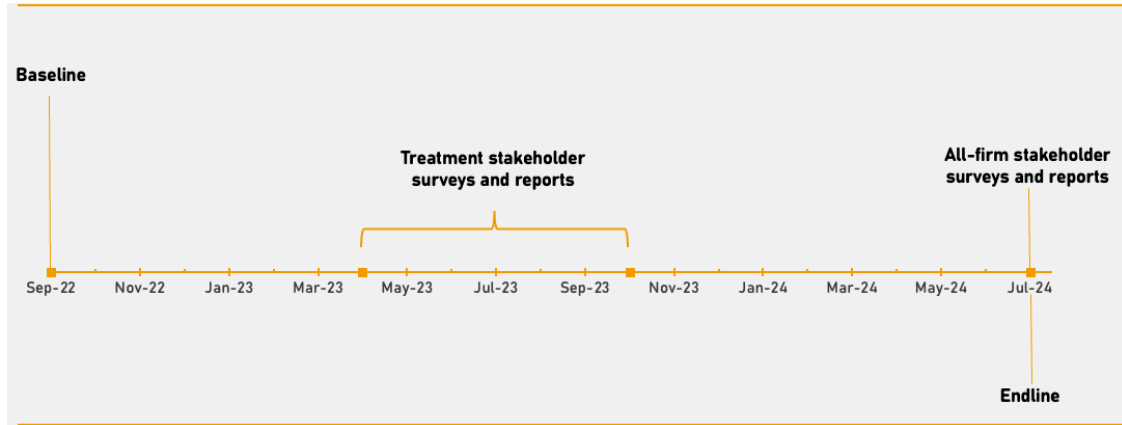
Notes: This table reports OLS estimates of the effect of social impact information on investor interest in Experiment 2. *Customer surplus above median* equals one if customer-surplus information is displayed and the profile's total customer surplus is above the median of the synthetic sample, and zero otherwise. *Customer surplus below median* equals one if customer-surplus information is displayed and the profile's total customer surplus is below the median, and zero otherwise. *Qualitative impact statement* equals one if the profile includes a qualitative non-quantified description of social impact, and zero otherwise. *Investment Interest* is measured on a 1–7 scale. The sample comprises all 223 investor respondents (65 recruited via direct outreach and 158 via Dynata). Column (1) shows the baseline OLS. Column (2) shows the regressions adding respondent fixed effects. Column (3) shows the regressions adding profile fixed effects. Column (4) shows the regressions adding profile and respondent fixed effects. We report robust standard errors. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

Supplemental Appendix for “Measuring the Impact of Impact Measurement”

Emanuele Colonnelli, Tim McQuade, Natalia Rigol, and Benjamin N. Roth

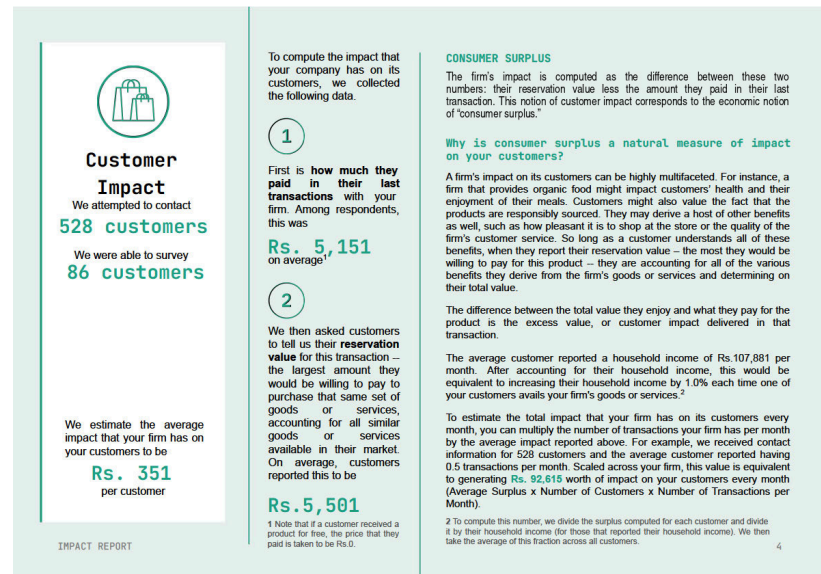
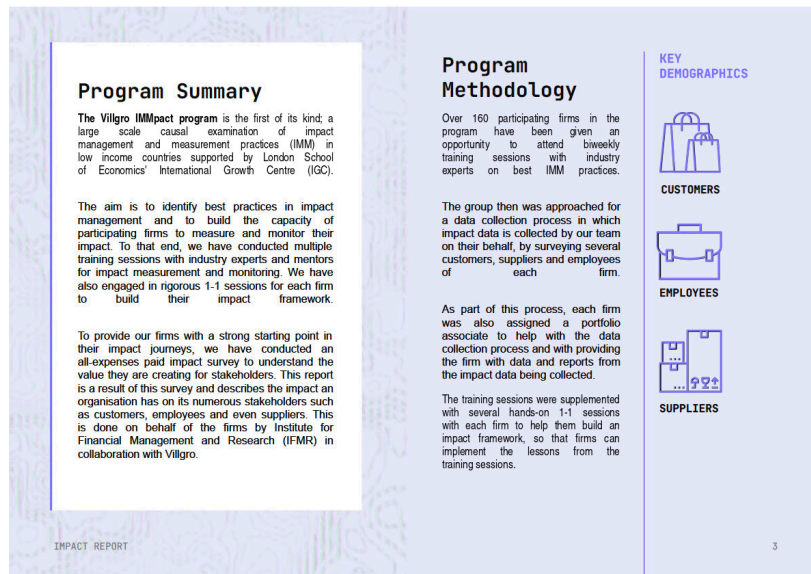
A. ADDITIONAL FIGURES

FIGURE A1. Study Timeline



Notes: The figure shows the timeline for Experiment 1. From October 2022, Villgro shared pre-readings with all startups. Between April and June 2023, all 163 startups attended a seven-session (two-hour, biweekly) impact measurement course via Zoom. Between April 2023 and October 2023, treatment firms also received 4–5 one-on-one implementation sessions focused on framework selection, indicator design, stakeholder outreach, and survey implementation, and received their impact reports. In July 2024, both treatment and control groups completed final data collection and received impact reports.

FIGURE A2. Example Impact Report



In Figure 1a, we plot the last amount paid by each of the 86 customers and how much they would have been willing to pay for that transaction. The difference between these two bars is the customer surplus (we plot this difference in Figure 1b). Note that the customer surplus can be negative if a customer would not have been willing to pay the same price they paid in the last transaction.

Fig.1a Customer Willingness to Pay

Last Amount Paid
 Maximum Willing to Pay
 Number of responses- 86
 Average last amount paid- 5,191 INR
 Average willingness to pay- 6,501 INR

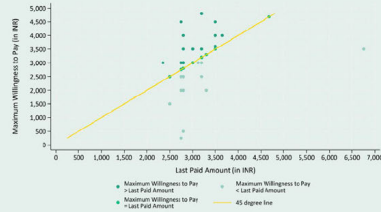
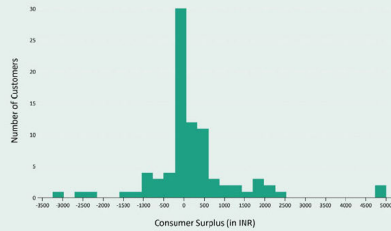


Fig.1b Customer Surplus

Customer surplus = Willingness To Pay - Last Paid
 Number of responses- 86
 Average consumer surplus- Rs. 351



IMPACT REPORT

5

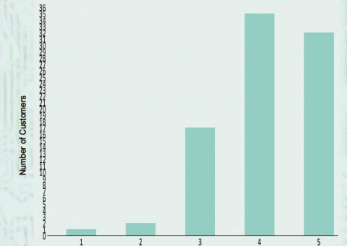
CUSTOMER SATISFACTION & RECOMMENDATION

We collected information on how satisfied your customers felt about your products and services (on a scale of 1-5) and also how likely they are to recommend your firm to their friends and family (on a scale of 1-5).

In Figure 2, we plotted a distribution of customer satisfaction. On average, customers reported 4.1 on the satisfaction scale.

Fig.2 What Is Your Level of Satisfaction With Products/Services of This Firm?

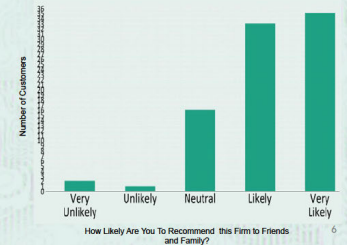
Number of responses- 86
 Average level of satisfaction- 4.1



In Figure 3, we plotted a distribution of customer recommendation. On average, customers reported 4.1 on the recommendation scale.

Fig.3 How Likely Are You To Recommend This Firm to Friends and Family?

Number of responses-86
 Average level of recommendation- 4.1



IMPACT REPORT



Employee Impact

We attempted to contact 3 employees

We were able to survey 3 employees

Of the 3 employees who responded, 1 were current employees. Unless otherwise specified, the data presented in this report will include all current and former employees who responded to the survey.

We estimate the average impact that your company has on its employees to be Rs. 2,334 per employee.

IMPACT REPORT

To compute the impact that your company has on its employees, we collected the following data.

1

First is their current monthly salary. Among respondents, the average monthly salary was

Rs. 16,667

2

We then asked employees to tell us their reservation salary – the smallest monthly salary they would be willing to accept to continue working at your firm, accounting for all of their other employment options. On average, employees reported this to be

Rs. 14,333

EMPLOYEE SURPLUS

The firm's impact is computed as the difference between these two numbers: employees' current salary less their reservation salary. This notion of employee impact corresponds to the economic notion of "employee surplus."

Why is employee surplus a natural measure of impact on your employees?

Employee surplus is similar to consumer surplus but applied to the context of employment. It represents the extra value or benefit that employees receive from their jobs beyond what they have to sacrifice, such as their time and effort.

Just as a customer's value of your goods or services is multifaceted, employees may derive many types of benefits from working at your firm, beyond their salary. These may include the quality of the work, the culture and mission of the organization, and other non-monetary amenities. An employee's reservation salary captures how much money they would require to work at the firm, taking into account all of the relevant considerations including what they could earn elsewhere, and the various non-monetary benefits they enjoy at your firm. The difference between what you pay them and their reservation salary is then the value, or impact, that you deliver to them in excess of what they would require to continue doing the work.

In essence, employee surplus measures the satisfaction and overall benefit that employees derive from their work, considering factors like wages, job perks, and other non-monetary rewards.

For the average employee who responded to the survey, employee surplus amounts to 12.2% of their monthly salary. Thus far, we have reported surplus of all employees who responded to the survey. If, instead, we limited the analysis to current employees who responded to the survey, their average employee surplus is 5,000. This amounts to 16.7% of their current monthly salary.

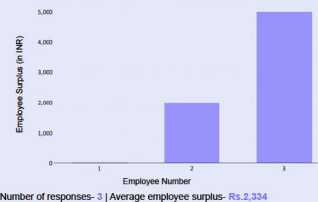
7

In Figure 1, we plot the surplus reported by each of the 3 employees so that you can observe how the surplus varies across respondents. Note that unlike in the customer surplus report in which we show the price paid and the surplus, we do not plot salary and surplus together. We do not display these data because of confidentiality concerns – displaying the salary of individual employees, particularly in a small sample, could make an employee identifiable and therefore violate the confidentiality of their individual responses.

To estimate the total impact that your firm has on its employees, you can multiply the number of employees your firm currently has by the average impact reported above. Your firm provided contact information for 3 employees (excluding founders and upper management). Scaled across your firm, this value is equivalent to generating Rs. 7,001 worth of impact on your employees every month.

Fig.1 Employee Surplus

Employee surplus = current salary - minimum salary willing to accept



IMPACT REPORT

EMPLOYEE SATISFACTION & RECOMMENDATION

We collected information on how satisfied your employees felt about their jobs (on a scale of 1-10, with higher numbers indicating higher satisfaction) and also how likely they are to recommend working at your firm to their friends and family (on a scale of 1-5, with higher numbers indicating higher recommendation).

In Figure 2, we plotted a distribution of employee satisfaction. On average, employees reported 9.3 on the satisfaction scale.

Fig.2 What Is Your Level of Satisfaction With Your Job?

Number of responses- 3
 Average level of satisfaction- 9.3

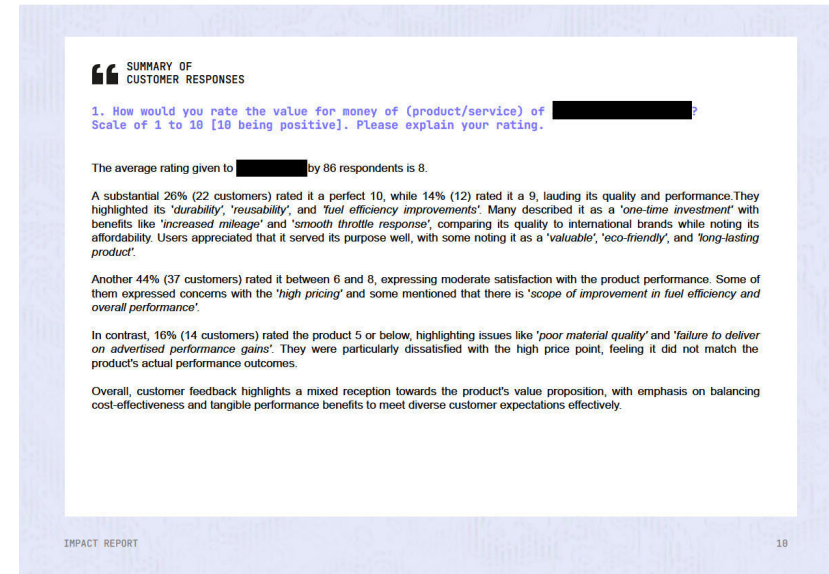


In Figure 3, we plotted a distribution of employee recommendation. On average, employees reported 4.3 on the recommendation scale.

Fig.3 How Likely Are You To Recommend Working At The Firm to Friends and Family?

Number of responses- 3
 Average level of recommendation- 4.3





Notes: This figure displays an example of the impact report from Experiment 1. The report summarizes firm-specific data collected from customers, employees, and suppliers, and presents measures of customer, employee, and supplier surplus. It also explains how these surplus measures can be interpreted as indicators of social impact. Names and identifying information have been redacted to preserve firm confidentiality.

FIGURE A3. Example Company Profile (Baseline)

Ecosphere

About the Company

The company provides sustainable soil enhancers that restore soil fertility through organic means. Their products focus on improving the microbial ecosystem in the soil, promoting healthier crop growth with reduced environmental impact. By offering affordable solutions to farmers, they help boost productivity, reduce water usage, and enhance the resilience of crops against climate stresses, making their approach suitable for a wide range of agricultural practices across India.

Company Information

Headquarters:	New Delhi, Delhi
Primary Industry:	Agri-Business
Sub Industry:	Sustainable Agri-Inputs
Target Market:	Farmers
Incorporation Year:	2015
Business Model:	Non-profit Organization
Type of Buyer:	Primarily Businesses

Key Financials

No. Investors:	1	Total capital raised:	\$ 38.7 K	(₹ 32.2 L)
No. Customers:	450	Revenues in 2024:	\$ 10.4 K	(₹ 8.7 L)
No. Employees:	80	Profits in 2024:	\$ 2.6 K	(₹ 2.2 L)

Social Impact

Average monthly income per customer:	\$ 560	(₹ 46,656)
% of customers earning less than \$5/day:	31-50	%

Team

Co-Founder:	Master of Science in Engineering, IIT
--------------------	---------------------------------------

Notes: This figure shows an example of a synthetic company profile used in the Experiment 2 (Type I). Each profile contains general company information (headquarters, sector), team characteristics (founder education), and key financials (revenues, profits, number of investors). The Social Impact section displays baseline customer demographics: average monthly income per customer and the percentage of customers earning less than \$5 per day. This baseline profile (Type I) contains no additional impact signal beyond these demographic measures. Alternative treatments add either a qualitative impact statement (Type II) or quantitative customer surplus metrics (Types III–IV) to this section (see Figure A4).

FIGURE A4. Social Impact Signal Treatments

Social Impact

Average monthly income per customer: \$ 1.4 K (₹ 1.1 L)
 % of customers earning less than \$5/day: 11-20 %

Panel A: Basic Metrics (Type I)

Social Impact

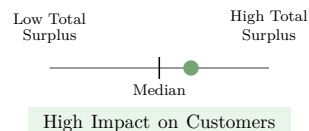
Average monthly income per customer: \$ 494 (₹ 41,102)
 % of customers earning less than \$5/day: 11-20 %

Impact Overview: The company has significantly reduced environmental impact by supplying biodegradable hospital-grade cleaning products, supporting healthcare facilities in adopting eco-friendly practices. This has contributed to a noticeable reduction in waste and improved sustainability in healthcare environments.

Panel B: Qualitative Statement (Type II)

Social Impact

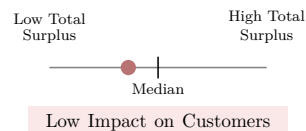
Average monthly income per customer: \$ 1.8 K (₹ 1.5 L)
 % of customers earning less than \$5/day: 0 %
 Total customer surplus: \$ 21.1 K (₹ 17.6 L)



Panel C: Total Customer Surplus (Type III)

Social Impact

Average monthly income per customer: \$ 485 (₹ 40,395)
 % of customers earning less than \$5/day: 31-50 %
 Average customer surplus: \$ 92 (₹ 7,693)
 Average customer surplus (% of income): 20.5 %
 Total customer surplus: \$ 776 (₹ 64,618)



Panel D: Total and Average Customer Surplus (Type IV)

Notes: This figure displays the four Social Impact section variants used in Experiment 2. Panel A shows the baseline customer demographics only, with no additional impact signal (Type I). Panel B shows a qualitative statement describing the firm’s social impact (Type II). Panel C presents total customer surplus only (Type III). Panel D presents total customer surplus, average customer surplus, and average customer surplus as a percentage of income (Type IV). The color-coded sidebar indicates whether the firm’s total customer surplus falls above (green) or below (red) the median of the synthetic company sample. In the experimental design, non-impact profile sections were held fixed within a profile; see Figure A3 for the baseline profile structure.

B. ADDITIONAL TABLES

TABLE B1. Attrition Check

	Control	Treatment	
	Mean	Mean	Difference
	(1)	(2)	(3)
<i>Firm Characteristics</i>			
Firm Age (Years)	5.17	5.41	0.25
	[2.85]	[2.72]	(0.94)
Firm Stage = Minimum Viable Product	0.29	0.38	0.10
	[0.46]	[0.50]	(0.15)
Firm Stage = Launched in Market	0.24	0.33	0.10
	[0.44]	[0.48]	(0.14)
Firm Stage = Growth Stage	0.48	0.29	-0.19
	[0.51]	[0.46]	(0.15)
B2C	0.57	0.38	-0.19
	[0.51]	[0.50]	(0.16)
Sector = Agri-Business	0.14	0.19	0.05
	[0.36]	[0.40]	(0.12)
Sector = Health Services and Tech	0.33	0.24	-0.10
	[0.48]	[0.44]	(0.14)
Sector = Energy and Clean-tech	0.19	0.29	0.10
	[0.40]	[0.46]	(0.13)
Sector = Education	0.05	0.14	0.10
	[0.22]	[0.36]	(0.09)
Sector = Livelihoods and Skills	0.19	0.14	-0.05
	[0.40]	[0.36]	(0.12)
Revenues FY '21-'22 (in 000s USD)	104.41	59.59	-44.82
	[134.32]	[117.45]	(42.76)
Number of Employees	19.94	18.18	-1.77
	[24.67]	[30.63]	(9.37)
Capital Raised (in 000s USD)	119.24	97.07	-22.17
	[175.87]	[203.53]	(66.09)
Number of Investors	2.33	2.00	-0.33
	[2.52]	[4.06]	(1.14)
<i>P-Value for Joint Difference F test:</i>			0.39
Observations	21	21	42

Notes: This table presents the baseline characteristics of firms that did not answer the endline survey by treatment assignment. Columns 1 and 2 report means for the control and treatment groups, respectively; column 3 reports the treatment-control difference. Standard deviations are in brackets; standard errors are in parentheses. For conciseness, we omit the residual business sector.

TABLE B2. The Effect of Impact Measurement on Financial Outcomes: Restricting to Baseline Average

	Revenues		Profits > 0		Total Capital Raised	
	(1)	(2)	(3)	(4)	(5)	(6)
Post * Treat	18.86*	22.49**	0.00	-0.01	44.87**	43.11**
	(11.18)	(11.02)	(0.12)	(0.12)	(19.09)	(19.07)
	{0.097}	{0.046}	{0.994}	{0.950}	{0.022}	{0.028}
Post	21.71***	18.78***	0.04	0.07	37.89***	39.64***
	(6.65)	(6.46)	(0.08)	(0.08)	(10.41)	(10.44)
	{0.001}	{0.002}	{0.595}	{0.419}	{0.000}	{0.000}
Control Pre Mean:	46.10	46.10	0.50	0.50	75.11	75.11
	[83.40]	[83.40]	[0.50]	[0.50]	[142.50]	[142.50]
N. Obs	229	229	213	213	241	241
N. Firms	119	119	119	119	121	121
Firm FE	No	Yes	No	Yes	No	Yes

Notes: This table replicates the analysis in Table 2 restricting the sample for revenues and profitability to two observations per firm: the baseline 2021–2022 average and the endline value; retrospective 2021 and 2022 observations are excluded. The dependent variable in columns 3 and 4 is an indicator equal to one if profits are positive. Odd columns estimate regression specification II.1; even columns include firm fixed effects. The treatment main effect is included in the odd-column regressions but omitted from the table. Capital raised is unchanged and observed at baseline and endline. Monetary values are top-coded at the 95th percentile. Control pre-means are computed in the estimation sample after top-coding. Standard errors clustered at the firm level are in parentheses; the standard deviation of the control pre-mean is in square brackets; wild bootstrap p-values are shown in curly braces. * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$.

TABLE B3. The Effect of Impact Measurement on Type of Capital Raised

	Equity		Debt		Grant	
	(1)	(2)	(3)	(4)	(5)	(6)
Post * Treat	18.58** (8.06) {0.016}	18.03** (8.03) {0.021}	10.11** (4.76) {0.033}	9.86** (4.76) {0.038}	11.19 (8.26) {0.181}	10.56 (8.26) {0.210}
Post	5.99*** (2.10) {0.001}	6.55*** (2.05) {0.000}	5.55** (2.35) {0.005}	5.80** (2.37) {0.002}	15.47*** (4.64) {0.000}	16.09*** (4.66) {0.000}
Control Pre Mean:	27.70 [76.39]	27.70 [76.39]	9.74 [26.64]	9.74 [26.64]	28.51 [61.16]	28.51 [61.16]
N. Obs	241	241	241	241	241	241
N. Firms	121	121	121	121	121	121
Firm FE	No	Yes	No	Yes	No	Yes

Notes: This table presents estimated treatment effects on equity, debt, and grant capital raised (measured in 000s of USD) in Experiment 1. Odd columns implement regression specification II.1; even columns include firm fixed effects. The treatment main effect is included in the odd-column regressions but omitted from the table. Monetary values are top-coded at the 95th percentile. Control pre-means are computed in the estimation sample after top-coding. Standard errors clustered at the firm level are in parentheses; the standard deviation of the control pre-mean is in square brackets; wild bootstrap p-values are shown in curly braces. * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$.

TABLE B4. Synthetic Company Profile Components

Variable (Probability)	N	Options (Unconditional Probability)	Restrictions
Panel A: Company Information			
Headquarters City (1.0)	10	Mumbai/Pune/Navi Mumbai (0.25); Bangalore/Bengaluru (0.15); Chennai (0.10); Noida/Kanpur/Lucknow and other UP cities (0.12); Hyderabad (0.12); New Delhi (0.06); Bhubaneswar (0.05); Jaipur/Jodhpur (0.05); Gurugram/Gurgaon (0.05); Thiruvananthapuram/Alappuzha/Calicut (0.05)	State is selected conditional on the chosen city.
Headquarters State (1.0)	10	Maharashtra; Karnataka; Tamil Nadu; Uttar Pradesh; Telangana; Delhi; Odisha; Rajasthan; Haryana; Kerala	State is not drawn from raw probabilities. Instead, it is assigned deterministically based on the city drawn: each city maps to exactly one state.
Primary Industry (1.0)	7	Agri-Business (0.28); Health & Health Services (0.23); Energy & Cleantech (0.15); Education & Skill Development (0.15); Waste Management (0.09); E-Commerce (0.05); Sheltertech (0.05)	—
Sub-Industry (1.0)	7	Farm Equipment/Organic Food Products/Sustainable Agri-Inputs; Maternal & Fetal Care/Eco-friendly Hygiene and Personal Care/Medical Equipment; Renewable Energy/Solar Panel Technology/Electric Mobility; Digital Learning Platform/Employment & Professional Development; Water Management/Waste Management & Repurposing; Sustainable Retail Products; Housing & Construction	Sub-industry is not drawn from raw probabilities. Instead, it is assigned conditionally based on the Primary Industry drawn.
Target Group (1.0)	5	Farmers/Urban Consumers (Agri-Business); Urban Consumers/Women (Health); Urban Consumers (E-Commerce); Schools/B2B (Education); B2B/Urban Consumers/Rural Consumers/MSEs (Generic, default)	Target group is not drawn from raw probabilities. The default is “Generic”; if Primary Industry is Agri-Business, Health, E-Commerce, or Education, the target group is replaced by the industry-specific category. If Sub-Industry is Medical Equipment, the target group is set to “B2B” regardless of industry.
Year of Incorporation (1.0)	3	2010–2016 (0.20); 2017–2019 (0.50); 2021–2024 (0.30)	—
Business Model (1.0)	3	For-profit Organization (0.80); Non-profit Organization (0.10); Social Impact Hybrid Model (0.10)	—

Continued on next page

Table B4 (continued)

Variable (Probability)	N	Options (Probability)	Restrictions
Type of Buyer (1.0)	4	Primarily Government (0.05); Primarily Businesses (0.46); Primarily Individuals (0.35); Mixed Buyers (0.14)	—
Panel B: Key Financials			
Number of Investors (1.0)	5	0 (0.30); 1 (0.25); 2–3 (0.25); 4–5 (0.11); 6–11 (0.09)	If Year of Incorporation is 2024, capped at 5 investors. If Total Capital Raised > 0, then Number of Investors > 0.
Number of Customers (1.0)	7	1–10 (0.18); 11–50 (0.18); 51–100 (0.12); 101–500 (0.20); 501–1,000 (0.03); 1,001–10,000 (0.15); 10,001–30,000 (0.15)	If Revenues < \$60k, capped at 1,000 customers. If Year of Incorporation is 2024, capped at 500 customers.
Number of Employees (1.0)	7	1 (0.07); 2–5 (0.30); 6–10 (0.20); 11–20 (0.23); 21–50 (0.10); 51–100 (0.05); 101–500 (0.05)	If Year of Incorporation is 2024, capped at 50 employees. If Revenues < \$10k, capped at 10 employees.
Total Capital Raised (1.0)	8	\$0 (0.10); \$0–10k (0.10); \$10–30k (0.12); \$30–60k (0.14); \$60–120k (0.10); \$120–240k (0.20); \$240–500k (0.12); \$500k–1.5M (0.12)	Values displayed in both USD and INR. If Year of Incorporation is 2023 or 2024, capped at \$120k. If Number of Investors = 0, then Total Capital Raised = 0.
Revenues (1.0)	7	\$1–10k (0.20); \$10–30k (0.20); \$30–60k (0.15); \$60–120k (0.10); \$120–300k (0.20); \$300–600k (0.10); \$600k–1.5M (0.05)	Values displayed in both USD and INR. If Year of Incorporation is 2024, capped at \$120k. If Total Capital Raised = 0, then Revenues ≤ \$300k.
Profits (1.0)	8	Negative (0.18); \$0 (0.05); \$0–1k (0.03); \$1–5k (0.10); \$5–10k (0.22); \$10–20k (0.22); \$20–60k (0.10); \$60–120k (0.10)	Values displayed in both USD and INR. Distribution shown applies when Revenues > \$120k. For lower revenues, profits follow a different distribution ensuring Revenues always exceed Profits.
Panel C: Team			
Team Size (1.0)	3	1 founder (0.40); 2 founders (0.40); 3 founders (0.20)	—
Founder 1 Role (1.0)	3	Founder & CEO (0.33); Founder (0.33); Co-Founder (0.33)	—
Founder 2 Role (1.0)	5	Co-Founder (0.50); CFO/CEO/COO/CTO (0.25); Co-Founder & CTO/CFO (0.25)	Shown only if Team Size ≥ 2.

Continued on next page

Table B4 (continued)

Variable (Probability)	N	Options (Probability)	Restrictions
Founder 3 Role (1.0)	2	Co-Founder (0.80); Co-Founder & COO/CTO/CFO (0.20)	Shown only if Team Size = 3.
Founder Education (1.0)	4	Undergraduate (0.35); Master's degree (MSc/MTech/IIT) (0.35); MBA (IMBA/IIM/INSEAD/Kellogg) (0.20); PhD (0.10)	All founders are assigned the same education tier.
Panel D: Social Impact			
Average Customer Surplus (1.0)	9	\$0 (0.17); \$0–2 (0.12); \$2–5 (0.15); \$5–10 (0.11); \$10–25 (0.17); \$25–50 (0.11); \$50–150 (0.11); \$150–250 (0.04); \$250–500 (0.02)	Values displayed in both USD and INR.
Average Monthly Income (1.0)	6	\$100–200 (0.06); \$200–500 (0.13); \$500–1k (0.14); \$1–1.5k (0.45); \$1.5–2k (0.10); \$2–4.5k (0.12)	—
Average Number of Transactions (1.0)	5	0.1–1 (0.40); 1.1–2 (0.25); 2.1–3 (0.15); 3.2–5 (0.10); 6–15 (0.10)	—
Customer Surplus as % of Income (1.0)	4	0–5% (0.40); 5–10% (0.30); 10–20% (0.20); 20–30% (0.10)	Set to zero if Average Customer Surplus = 0. Distribution shown applies when Average Customer Surplus > \$25. For lower values, 80% probability is assigned to the 0–5% bucket, 10% to 5–10%, and 10% to 10–20%.
% Customers Earning <\$5/day (1.0)	6	0% (0.37); 0–10% (0.05); 11–20% (0.10); 21–30% (0.10); 31–50% (0.25); 51–80% (0.13)	If Average Monthly Income < \$200, available options are 31–50% and 51–80% only. If Average Monthly Income > \$1k, excludes 31–50% and 51–80% options.

Notes: This table describes the components of synthetic company profiles used in the Experiment 2. Column 1 lists each variable with its inclusion probability in parentheses. Column 2 reports the number of possible options for each variable. Column 3 lists the available options with their respective sampling probabilities. Column 4 describes any restrictions or conditional dependencies between variables. All monetary values are displayed in both USD and INR (Indian Rupees) in the profiles.

TABLE B5. Variable Definitions for Regression Analysis

Variable	Definition
Social Impact Variables	
Customer surplus above median	Indicator equal to 1 if total customer surplus is above the median (conditional on customer-surplus information being displayed), 0 otherwise.
Customer surplus below median	Indicator equal to 1 if total customer surplus is below the median (conditional on customer-surplus information being displayed), 0 otherwise.
Surplus displayed	Indicator equal to 1 if customer surplus information was displayed in the profile, 0 otherwise.
Qualitative impact statement displayed	Indicator equal to 1 if a qualitative social impact statement was displayed in the profile, 0 otherwise.
Financial Performance	
Profitable Firm	Indicator equal to 1 if the company reported positive profits, 0 otherwise.
High revenues	Indicator equal to 1 if annual revenues exceed \$50,000, 0 otherwise.
High capital raised	Indicator equal to 1 if total capital raised exceeds \$55,000, 0 otherwise.
Company Characteristics	
Young firm	Indicator equal to 1 if the company was founded after 2020, 0 otherwise.
Large firm	Indicator equal to 1 if the company has 10 or more employees, 0 otherwise.
High number of customers	Indicator equal to 1 if the number of customers is above the median, 0 otherwise.
No investors	Indicator equal to 1 if the company has not yet received external investment, 0 otherwise.

Notes: All variables listed here are binary indicators derived from randomized profile attributes for Experiment 2. Social impact variables (*Customer surplus above median*, *Customer surplus below median*, and *Qualitative impact statement displayed*) correspond to the main regressors $CS_{H,j}$, $CS_{L,j}$, and S_j in Equation III.1. The remaining profile characteristics correspond to the control vector X_{jk} . Median thresholds are calculated within the sample of generated profiles. See Section III.B for details on profile construction and randomization.

TABLE B6. The Effect of Impact Measurement on Investor Interest, by Recruitment Channel

	Direct Outreach				Dynata			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Qualitative impact statement displayed	0.078 (0.15)	0.079 (0.14)	0.092 (0.16)	0.096 (0.15)	0.105 (0.09)	0.108 (0.07)	0.134 (0.09)	0.128* (0.07)
Customer surplus below median	-0.266* (0.14)	-0.276** (0.13)	-0.152 (0.18)	-0.171 (0.16)	-0.414*** (0.10)	-0.445*** (0.08)	-0.424*** (0.10)	-0.453*** (0.09)
Customer surplus above median	0.639*** (0.16)	0.654*** (0.14)	0.509*** (0.19)	0.524*** (0.18)	0.294*** (0.09)	0.329*** (0.08)	0.313*** (0.10)	0.360*** (0.09)
High number of customers	-0.161 (0.12)	-0.102 (0.11)			0.150** (0.07)	0.125** (0.06)		
Young firm	0.096 (0.11)	0.097 (0.10)			-0.077 (0.07)	-0.006 (0.06)		
Profitable firm	0.389*** (0.13)	0.324** (0.13)			0.686*** (0.09)	0.659*** (0.08)		
Large firm	0.147 (0.13)	0.076 (0.12)			-0.071 (0.08)	-0.041 (0.07)		
High revenues	0.493*** (0.12)	0.467*** (0.11)			0.201*** (0.07)	0.208*** (0.06)		
High capital raised	-0.009 (0.12)	-0.009 (0.11)			-0.058 (0.07)	-0.088 (0.06)		
No investors	-0.179 (0.12)	-0.098 (0.11)			-0.197** (0.08)	-0.161** (0.07)		
Observations	975	975	971	971	2,370	2,370	2,370	2,370
Mean	3.44	3.44	3.45	3.45	4.87	4.87	4.87	4.87
Unique Investors	65	65	65	65	158	158	158	158
Respondent FEs	No	Yes	No	Yes	No	Yes	No	Yes
Profile FEs	No	No	Yes	Yes	No	No	Yes	Yes
R ²	0.063	0.304	0.225	0.439	0.068	0.387	0.163	0.460
Adjusted R ²	0.054	0.247	0.056	0.256	0.064	0.340	0.095	0.371

Notes: This table reports OLS estimates of the effect of social impact information on investor interest, separately by recruitment channel for Experiment 2. *Customer surplus above median* equals one if customer-surplus information is displayed and the profile's total customer surplus is above the median of the synthetic sample, and zero otherwise. *Customer surplus below median* equals one if customer-surplus information is displayed and the profile's total customer surplus is below the median, and zero otherwise. *Qualitative impact statement* equals one if the profile includes a qualitative non-quantified description of social impact, and zero otherwise. *Investment Interest* is measured on a 1–7 scale. Columns (1)–(4) restrict to the 65 respondents recruited via direct outreach (Direct Outreach); columns (5)–(8) restrict to the 158 respondents recruited via Dynata. Within each subsample, column specifications follow the same order as Table 3: baseline OLS, respondent fixed effects, profile fixed effects, and respondent and profile fixed effects. We report robust standard errors. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

TABLE B7. The Effect of Impact Measurement on Investor Interest: Matchmaking Sample

	Investment Interest			
	(1)	(2)	(3)	(4)
Qualitative impact statement displayed	0.093 (0.09)	0.097 (0.07)	0.090 (0.09)	0.094 (0.07)
Customer surplus below median	-0.374*** (0.09)	-0.402*** (0.07)	-0.357*** (0.10)	-0.405*** (0.08)
Customer surplus above median	0.345*** (0.09)	0.389*** (0.07)	0.355*** (0.10)	0.405*** (0.08)
High number of customers	0.092 (0.07)	0.060 (0.06)		
Young firm	-0.111* (0.07)	-0.002 (0.05)		
Profitable firm	0.633*** (0.08)	0.583*** (0.07)		
Large firm	-0.015 (0.07)	-0.000 (0.06)		
High revenues	0.261*** (0.07)	0.267*** (0.06)		
High capital raised	-0.054 (0.07)	-0.074 (0.06)		
No investors	-0.157** (0.07)	-0.125** (0.06)		
Observations	3,135	3,135	3,135	3,135
Mean	4.52	4.52	4.52	4.52
Unique Investors	209	209	209	209
Respondent FEs	No	Yes	No	Yes
Profile FEs	No	No	Yes	Yes
R ²	0.056	0.426	0.121	0.479
Adjusted R ²	0.053	0.383	0.068	0.406

Notes: This table replicates the main specification of Table 3, restricting to 209 respondents: the 158 Dynata respondents and the 51 private outreach respondents who consented to participate in the matchmaking process in Experiment 2. The 14 private outreach respondents who did not consent are excluded. *Customer surplus above median* equals one if customer-surplus information is displayed and the profile's total customer surplus is above the median of the synthetic sample, and zero otherwise. *Customer surplus below median* equals one if customer-surplus information is displayed and the profile's total customer surplus is below the median, and zero otherwise. *Qualitative impact statement* equals one if the profile includes a qualitative non-quantified description of social impact, and zero otherwise. *Investment Interest* is measured on a 1–7 scale. Column (1) shows the baseline OLS. Column (2) shows the regressions adding respondent fixed effects. Column (3) shows the regressions adding profile fixed effects. Column (4) shows the regressions adding profile and respondent fixed effects. We report robust standard errors. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels (two-tailed), respectively.

TABLE B8. The Effect of Impact Measurement on Investor Interest: Continuous Surplus Measures

	Investment Interest			
	(1)	(2)	(3)	(4)
Log total customer surplus	0.108*** (0.01)	0.116*** (0.01)		
Log average customer surplus			0.176*** (0.05)	0.210*** (0.04)
Log customer income			0.070 (0.11)	0.097 (0.10)
High number of customers	-0.011 (0.11)	-0.002 (0.10)	0.321** (0.15)	0.409*** (0.13)
Young firm	-0.108 (0.10)	-0.007 (0.09)	-0.059 (0.15)	0.173 (0.14)
Profitable firm	0.434*** (0.13)	0.424*** (0.11)	0.181 (0.18)	0.158 (0.17)
Large firm	-0.002 (0.11)	-0.013 (0.10)	-0.261 (0.17)	-0.139 (0.15)
High revenues	0.278*** (0.10)	0.182** (0.09)	0.352** (0.15)	0.408*** (0.14)
High capital raised	-0.059 (0.11)	-0.070 (0.10)	-0.237 (0.16)	-0.057 (0.14)
No investors	-0.170 (0.12)	-0.083 (0.10)	-0.104 (0.16)	0.026 (0.15)
Observations	1,338	1,338	696	696
Mean	4.43	4.43	4.36	4.36
Unique Investors	223	223	116	116
Respondent FEs	No	Yes	No	Yes
Profile FEs	No	No	No	No
R ²	0.072	0.498	0.050	0.476
Adjusted R ²	0.066	0.394	0.038	0.362

Notes: This table reports the coefficients of OLS regressions estimating the effect of firm variables on investment interest for Experiment 2. The variable *Log total customer surplus* represents the total customer surplus in USD (logged), while *Log average customer surplus* and *Log customer income* denote the logged values of average customer surplus and customer income, respectively. *Investment Interest* is measured on a scale of 1–7. We report robust standard errors. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels (two-tailed), respectively. Columns 1 and 2 use profiles in which total customer surplus is displayed. Columns 3 and 4 restrict to respondents assigned to the Type IV display, which includes average customer surplus and customer income (see Figure A4).

C. DETAILS OF THE IMPACT MEASUREMENT AND MANAGEMENT COURSE

Course Scope and Experimental Role

This appendix describes the common Impact Measurement and Management (IMM) course offered to all 163 participating social enterprises in the Villgro IMMfact program. The course was delivered by Villgro representatives together with faculty from Harvard Business School and the University of Chicago Booth School of Business. It was common to treatment and control firms and was designed to hold fixed exposure to IMM concepts, language, and certification. The randomized intervention studied in the paper was not course attendance. Rather, random assignment determined whether firms also received the implementation layer: one-on-one support to choose a framework, define indicators, plan stakeholder outreach, collect stakeholder-level data, and synthesize the results in a personalized impact report.

The course ran from April to June 2023 in seven two-hour sessions held over Zoom approximately every other week. A founder or member of the executive team was expected to attend the majority of sessions. Course materials were supplemented with pre-readings, worksheets, recordings, and templates distributed over email and WhatsApp. The participants were early- and growth-stage Indian social enterprises operating across sectors such as agribusiness, health, energy and clean technology, education, livelihoods, and skills. The design therefore emphasized practical tools that could be used by firms with limited measurement capacity and heterogeneous business models.

Learning Objectives and Pedagogy

The course objective was to move firms from general impact language to a practical plan for measuring and managing impact. Participants were asked to articulate the impact they sought to create, identify the stakeholders affected by their business, select metrics that were relevant to those stakeholders, and understand how stakeholder data could be collected and communicated. The course framed IMM as both an accountability practice and a managerial practice: firms could use impact data to demonstrate value to investors, donors, employees, and customers, but also to learn about demand, customer segments, product value, and operational risks.

Sessions combined conceptual instruction, short examples, and applied exercises. Several exercises were drawn from the same sequence used in the Harvard Business School elective course Data for Impact and from practitioner resources used in social enterprise IMM. The pedagogy emphasized direct stakeholder data and quantitative evaluation, while recognizing that young firms often face tight resource constraints. The course therefore presented a menu of measurement approaches rather than a single mandatory template.

Core Content

The first block introduced the meaning and business value of impact measurement. Participants distinguished impact measurement—identifying and quantifying the positive and negative effects of a business on people or the planet—from impact management, which uses those data to increase positive effects and mitigate negative ones. The sessions explained why entrepreneurs, investors, and other stakeholders may value impact data. Examples highlighted how measurement can support trust and reputation, investment readiness, revenue growth, operational efficiency, and strategic alignment.

The second block focused on theory of change. Firms were asked to map the path from business activities to outputs, outcomes, and longer-run social or environmental impact. The course emphasized that a theory of change should make assumptions explicit: for example, a product delivered to a target population does not automatically imply that the product is used, that it changes behavior, or that it improves welfare. Participants worked through the logic of inputs, activities, outputs, outcomes, and impact, and were encouraged to view the theory of change as a living document that could be updated as evidence accumulated.

The third block introduced impact key performance indicators and standardized metric frameworks. Participants learned that most firms already track operational KPIs, and that impact KPIs extend this logic to outcomes for customers, employees, suppliers, communities, or the environment. The course introduced the Global Impact Investing Network's IRIS+ framework and the five dimensions of impact—what, who, how much, contribution, and risk—as a way to choose comparable, sector-specific metrics linked to impact objectives. The course also emphasized right-sizing: startups were encouraged to select a small number of metrics closely tied to their business model, stakeholder needs, and decision-making uses. For environmentally oriented firms, examples included life-cycle assessment concepts and metrics such as carbon emissions, water use, waste, and resource use.

The fourth block covered direct stakeholder measurement, including Lean Data-style short surveys. Participants discussed how to ask customers, employees, suppliers, and other stakeholders about their experiences with a product or service; how to keep surveys short enough to reduce respondent burden; how to write questions that could be understood in local languages; and how to plan stakeholder outreach while respecting confidentiality and consent. This block connected measurement design to practical implementation choices, including sampling, contact lists, survey scripts, data quality, and the tradeoff between depth and feasibility.

The fifth block introduced an economic approach to stakeholder surplus. The course explained two limitations of many impact KPIs. First, changes in stakeholder outcomes need not be caused by the enterprise, because the same customers might have experienced similar changes for other reasons. Second, multiple outcomes are hard to compare without a common unit. The surplus approach addresses these issues by asking what value stakeholders receive relative to their next-best

alternative. For customers, the course defined customer surplus as willingness-to-pay net of price. For employees, it introduced employee surplus as compensation net of reservation compensation, allowing for the non-wage value of work. For suppliers, the analogous measure compares payments from the enterprise to the supplier's next-best alternative. Participants learned how transaction data and stakeholder survey responses could be combined to produce firm-level estimates of value created for different stakeholder groups.

The final block addressed communication and reporting. Participants discussed how quantified metrics, narrative descriptions, and methodological transparency can be combined in reports, investor materials, and internal dashboards. The course encouraged firms to report not only headline numbers, but also definitions, the stakeholder population measured, data collection methods, limitations, and how the firm intended to use the findings. The communication module stressed that generic impact language is less informative than clearly defined metrics tied to a theory of change and supported by stakeholder data.

Course Outputs

By the end of the course, firms were expected to have a shared IMM vocabulary, a draft theory of change or impact hypothesis, a preliminary set of candidate metrics, and an understanding of how stakeholder surveys and impact reports could be designed. The common course did not, by itself, provide firm-specific impact reports or research-team-administered stakeholder surveys during the study period. Those activities were part of the randomized implementation package. Treatment firms later received individualized support to translate the course concepts into firm-specific indicators, stakeholder outreach plans, data collection, and personalized reports. Control firms received the same course exposure and certification, but did not receive the implementation support, stakeholder surveys, or report until the end of the study. This boundary is central to the experimental design: the treatment contrast isolates the effect of moving from IMM training to practical implementation, rather than the effect of classroom exposure alone.