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Learning Business Practices from Peers: Experimental Evidence from Small-scale Retailers in an Emerging Market *

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Abstract

This paper studies whether small-scale businesses can learn and adopt profitable practices of their successful peers. We identify such practices through a detailed business survey in urban Indonesia and disseminate the information to a randomly selected sample of small retailers through a professionally developed handbook. An orthogonal subgroup is provided additional support through business role models, and another through individualized business counseling. We find a significant increase in the adoption of profitable practices in all sub-groups of retailers. Moreover, while the handbook alone does not lead to significant performance gains, we find that supplementary role models and business counseling improve sales and profitability. The channels of impact differ, with role model recipients learning practices by observing while counseling recipients learning practices by doing. These findings show that business growth can be achieved through innovative and simple channels that are cost effective and scalable.

Keywords: Business practices, small-scale enterprises, peer effects, innovation, role models, social learning, business counseling.

JEL Codes: O12; L26; M20; O31; O33; O35; O17; M50

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I Introduction

Micro and small enterprises (MSEs) are a primary source of employment in the developing world, where typically more than half the workforce is self-employed (Gollin, 2008; Maloney, 2004; Nichter and Goldmark, 2009).¹ Understanding the barriers to growth for MSEs and policies to alleviate them is therefore an important research and policy goal.

A large body of literature highlights the external constraints small businesses face in emerging market economies, such as credit (Banerjee et al., 2015), savings (Karlan et al., 2014; Dupas and Robinson, 2013a,b), and institutional (e.g., Bardhan, 2007). A recent growing literature additionally stresses the importance of managerial and business skills for MSE growth (Bloom et al., 2010; Bruhn et al., 2010; McKenzie and Woodruff, 2017). As a result, numerous business training programs have been developed and implemented across the globe to foster entrepreneurship through better business skills. Yet, the results from these training programs have not yielded consistently positive impacts. Most research studies conclude with small and statistically insignificant effects of managerial training on sales and profits, and in particular on the adoption of business practices (McKenzie and Woodruff, 2017).

One plausible reason for the lack of success of existing training programs is that they gather very little insight about locally useful business practices. Instead, most offer formal and standardized courses on marketing and finance based on modules developed by specialized scholars from the western world. In this paper, we take a different approach to improving business skills. Our approach recognizes the value of locally relevant information as a crucial input when encouraging the adoption of business practices. Instead of teaching set courses, our study design focuses on helping businesses learn profitable practices from their successful peers. These peers are very similar to the ultimate beneficiaries in terms of business type, size, entrepreneurial characteristics, and geographic location. Moreover, our research design exploits the heterogeneity in business practices and performance across a distribution of similar businesses to generate predictors of profitability, which are then disseminated among our sample through three distinct, testable channels.

In the first stage of research, we combine a detailed quantitative business survey with qualitative interviews to identify business practices that best predict profitability among a cross-section of 1,301 small-scale retailers in urban Jakarta, Indonesia. The quantitative survey builds on the set of practices in McKenzie and Woodruff (2017) and extends this list by additional relevant practices identified in the pilot stage of the project. Through multi-variate cross-sectional regressions, we estimate the returns to each business practice and identify the ones with most predictive association with profits. The qualitative interviews help validate these results and provide additional implementation guidance for practice adoption. Ultimately, we combine the knowledge on returns and implementation guidance in a professionally developed handbook.

This handbook is the main ingredient of the randomized controlled trial (RCT) in the second stage of research. As part of this RCT, 1040 retailers out of the baseline sample are provided a free copy of the handbook while the remaining 261 serve as a control group (hereafter *Control*). We interpret the handbook treatment (hereafter *Handbook*) as a pure information shock on (i) best local business practices and (ii) implementation know-how. We interact the handbook treatment with two additional (orthogonal) experiential-learning treatments. First, a sub-set of handbook recipi-

¹In Indonesia, MSEs represent more than 99% of all firms and about 94.5% of employment (Ministry of Cooperatives and SMEs Indonesia, 2011).

ents is exposed to business role models from the Jakartan retail sector, who in a video describe their own trajectory of business growth after having implemented a subset of the best practices that are highlighted in the handbook. This treatment (hereafter *Role Models*) targets the psychological and emotional influences that are triggered through observing the successful experience of similar others (see La Ferrara, 2016, for a review). A second sub-set of handbook recipients is provided individualized business assistance by trained counselors (hereafter *Counseling*). These counselors provide one-on-one implementation guidance and troubleshooting for the business practices highlighted in the handbook, hence facilitating learning through own experience (Kolb, 1984). Finally, in order to test for complementarities we offer a third sub-set of handbook recipients both *Role Models* and *Counseling* treatments (hereafter *All Three*). Overall, this study design allows us to test different channels of disseminating relevant business information.

Our first set of results characterize the local best practices at baseline. We observe that while there is large variation in both business performance measures and business practices across our sample, there are certain types of business practices that strongly predict business profitability. For example, implementing record-keeping practices is associated with additional monthly profits of between 26% and 45%. Likewise, developing a fixed schedule for the purchase of the firm’s main products, never running out of stock of these main products, and stocking up daily rather than weekly, are associated with higher monthly profits in the range of 25% to 37%. In terms of marketing practices, consulting former customers, using discounts, and product innovation show the strongest association with business profits – adoption of one of these practices predicts an increase in profits between 23% and 29%. Finally, making business decisions together with others stands out as a particularly profitable practice, especially when the decision is about the introduction of new products and the use of new business practices, a profit increase in the range of 27% and 35%.

Our second set of results come from the impact analysis of the dissemination of interventions on business outcomes and practices. Six months after the interventions, we find no significant effects of offering the *Handbook* alone, but significant and positive effects on sales and profitability for firms assigned to *Counseling* and *All Three*. The effects are large in magnitude and economically meaningful. Businesses assigned to these two treatments increase profits by 40% (0.18 standard deviation improvement) and sales by 15% (0.12 standard deviation) over *Control*. This is equivalent to an increase in monthly profits of at least USD 330. Firms assigned to *Role Model* also increase their sales and profits with respect to *Handbook* and to *Control*, but the latter difference is not statistically significant.

We also find a significant improvement in the adoption of business practices across all experimental groups. Moreover, the channels through which social learning occurs are specific to the type of practices and treatment. Businesses assigned to *Role Model* are more likely to adopt marketing and sales practices. For example, these businesses become significantly better than *Control* at always having the top selling products in stock, offering discounts to customers, comparing sales with competitors, consulting former customers, offering new products for sale, and setting sales targets. These are all practices that can be learned by observing others’ experience, and which do not necessarily need hands-on experience. In contrast, firms assigned to *Counseling* become relatively better at record-keeping and joint decision-making, practices which, arguably, are better learned with guidance and through own experience. Compared to *Control*, these firms are more likely to calculate businesses revenues, expenses, and profits, to separate business and household finances,

and to discuss business matters with others. They are also less likely than *Control* to waste stock.

In addition, we find that none of the treatments significantly affect total expenses or the number of customers. This result, together with the high treatment impact on practice adoption, suggests that the increase in sales and profits arises from efficiency gains brought about by the adoption of better business practices.

Finally, we study heterogeneity in treatment effects and find that the retailers who benefit the most from our treatments are those who are better at implementing business practices at baseline. This finding suggests the existence of a business-skill-driven poverty trap as our soft interventions are effective only for those who are close to the poverty trap threshold.

Overall, these findings show that business growth can be achieved through innovative and simple channels that are cost effective and scalable. Moreover, we confirm that socializing peer information alone is not enough to achieve social learning, at least in our sample of Indonesian businesses. Social learning is possible when retailers are able to either observe successful peers implementing the practices or to implement the practices with personalized assistance.

The remainder of the paper is organized as follows. Section II highlights the contribution of this paper to the existing literature. Section III describes the experimental design and data. Section IV presents the results and Section V concludes.

II Framework and Hypotheses

The framework and hypotheses tested in this paper are inspired by several strands of the existing literature. Foremost, our paper relates and contributes to a growing literature imparting business skills to improve business performance of small firms (Bloom et al., 2010; Bruhn et al., 2010; McKenzie and Woodruff, 2017). Importantly, we differ from previous studies in two distinctive ways: the content of the information we provide and the way we provide it. Rather than teaching a standardized business training syllabus, we provide information and know-how about profitable local business practices utilized by peers. Instead of offering a formal business course, we disseminate the top practices in a handbook and with the help of role models and personalized counseling. This makes our study unique in several dimensions. It is low-cost, for both policy makers and beneficiaries. It is relevant, as the practices we make common knowledge are the practices we know work for this local population of small retailers. It is idiosyncratic to the local context - for instance in terms of habits and norms - and it can be replicated and scaled up without much logistical effort or substantial monetary cost. Importantly, we are able to experimentally test different channels of social learning in the context of business skills adoption.

Social learning is recognized as an important avenue of business growth, especially concerning the adoption of new technology in the agricultural sector (Foster and Rosenzweig, 1995; Munshi, 2004; Bandiera and Rasul, 2006; Conley and Udry, 2010; Beaman et al., 2015). We broaden the spectrum to study social learning of business practices among urban retailers. In addition, peer information has been used as “nudges” to effect behavioral change in areas of decision-making such as retirement savings (Beshears et al., 2015), charitable giving (Frey and Meier, 2004), water conservation (Bernedo et al., 2014), and energy use (Allcott, 2011; Costa and Kahn, 2013). Most of these studies provide information about only one particular aspect of their behavior. In this study, the information we provide from peers is more elaborate and includes several decisions that

peers make in their businesses, together with their outcomes. Moreover, our handbook synthesizes relevant practices of successful peers and provides guidance on how to adopt them.

The idea of socializing the expected returns to a particular investment is not new. Nguyen (2008) and Jensen (2010), for instance, provide statistical information on returns to education using estimates from a general population (e.g. nationwide), the former also using a role model. We differ from this literature mainly in the source we use to estimate the returns to adoption and in the type of investment on which the return is estimated. To our knowledge, we are the first providing returns to adoption on *local* rather than general business practices, and the first estimating the returns with data from the same study sample.

While the handbook forms the basis of all our experimental groups, we vary complementary interventions in order to test whether stronger peer influence through *Role Models* or stronger individualized attention through *Counseling* can further facilitate the adoption of successful practices. We hypothesize that these two facilitation methods work through different channels and affect different types of business practices.

The *Role Models* treatment relies on observing and learning from the successful experience of others. An emerging literature highlights the importance of role models in promoting positive behavior changes, especially among poor populations in the developing world (for a review, see La Ferrara, 2016). Similarly, Munshi (2004) highlights the importance of observing similar others for social learning in the context of the Indian Green Revolution. As Ray (2006, p.2) states directly: "Looking at the experiences of individuals similar to me is like running an experiment with better controls, and therefore has better content in informing my decisions." Not surprisingly, exposure to role models has been found to affect fertility and divorce in Brazil (Chong and La Ferrara, 2009; La Ferrara et al., 2012), financial knowledge and financial behavior of households in South Africa (Berg and Zia, 2017), aspirations and forward-looking behavior in rural Ethiopia (Bernard et al., 2014), and students' exam performance in Uganda (Riley, 2017). In this study, we specifically test whether role models can facilitate the adoption of successful business practices among urban business owners. We hypothesize that the practices best influenced by role models are those that can easily be observed and adopted, specifically practices related to marketing and sales.

In comparison, the *Counseling* treatment relies on learning by doing and facilitation through individual expert attention. Bruhn, Karlan, and Schoar (2017) show significant positive effects of management consulting on productivity and profits among Mexican small and medium enterprises, and corresponding improvements in financial and accounting practices. Similarly, Carpena et al. (2017), Brooks et al. (2017), and Cai and Szeidl (2016) make use of counseling to complement financial education and find positive impacts. As per this literature, we hypothesize that the practices best influenced by counseling are those that require significant learning by doing and which are harder to adopt through simple observation, such as book-keeping and accounting.

III Experimental Design and Data

A Study Location and Sample

This study is based in Jakarta, Indonesia. With a population of 10.1 million in inner Jakarta and an urban area of around 30 million ("DKI Jakarta"), Jakarta is the largest city in South-East Asia and

the economic center of Indonesia. In 2015, the city generated a nominal GDP of almost one-sixth of the total nominal GDP of Indonesia (Statistics Indonesia, 2016).

Our sample consists of traditional retail shops in Jakarta, locally called *Warung* or *Toko Kelontong*. Most of the retailers in our sample are situated in residential areas or adjacent to “wet markets” for meat, fish, and vegetables. The median business employs no more than one full-time worker who typically comes from the owner’s family. Products on offer range from staples like rice, nuts, and beans to various snacks and sweets, ready-made food, beverages, toilet and cleaning products, cigarettes, and other convenience goods. On a typical day, the median shop has 40 customers and earns total profits of USD 12.34 PPP ($mean = 23.73$). Appendix K shows pictures of two typical shops in our sample, representative in both size and appearance.

We focus on this type of retailers because they are ubiquitous in Indonesia as well as in other developing countries. In Indonesia, traditional retail businesses make up a large fraction of all MSEs: about 22% of all employees in MSEs work in retail and hospitality which makes it the second largest sector after agriculture (Ministry of Cooperatives and SMEs Indonesia, 2011). Moreover, the business model for these types of small-scale shops is very similar across firms, which is a desirable feature for the applicability of learning from peers.

B Sampling

We randomly selected 29 districts (‘Kelurahan’) out of 112 of the 144 districts in urban Jakarta.² For logistical reasons, we restricted the range of eligible districts to the urban area of Jakarta proper, excluding agglomerations in the wider Jabodetabek metropolitan area. The districts sampled are exclusively urban and residential.³ Across the 29 selected districts, we created a list of 2042 small retailers meeting the following inclusion criteria: the shop is at least $4m^2$ in size, offers at least two different product categories, and the business owner expresses interest in growing the business. Handcarts, other movable establishments, and franchise businesses of larger retail chains were excluded from the sample. The sampling procedure was the same across all districts, which involved a team of two or three enumerators. The first step in each district was to request a map of *community-level* (‘Rukun Warga’) boundaries at the office of the local district head. With the aid of this map, we avoided densely populated marketplaces to avoid spillovers and sampled only retail shops that were at a distance of at least 30 meters. Online Appendix D shows a detailed account of the sampling procedure. Out of the 2042 businesses sampled, we randomly selected 1301 for the baseline survey and left 741 firms as a back-up.

C Experimental Design and Timeline

The 1301 shops in the sample frame were randomly divided into a treatment ($N = 1040$) and control group ($N = 261$), stratified by district, gender, shop size (below $6m^2$, between 6 and $10m^2$, or above $10m^2$) and a composite score of business practices (above and below the median). A subset of the businesses who received the handbook received two additional orthogonal treatments. One set of 520 handbook recipients was invited to the screening of a role-model movie in which

²We initially selected 30 districts at random. In one of these districts, only five businesses were identified and they differed markedly from the remaining sample. Hence, they were dropped from the sample.

³Online Appendix G provides a map of the districts selected for study in the context of the wider Jabodetabek metropolitan region.

successful peers explained their own trajectory of growth adopting the top practices. A second set of 520 handbook recipients were offered individualized business assistance with trained counselors who provided specific assistance on adoption of business practices. Overall, our study consisted of four experimental treatment groups of 260 firms each: handbook only (*Handbook* group), handbook and an invitation to the movie screening (*Role Model* group), handbook and two counseling visits (*Counseling* group), and all three interventions (*All Three* group).⁴

The timing was as follows.⁵ In January 2016 we sampled the 2042 businesses. In March and April 2016 we administered the baseline survey and registered the trial of the study at the American Economic Association’s Randomized-Controlled-Trial Registry website.⁶ Interventions took place in October and November 2016 and were followed by the end-line survey held in April and May 2017. The entire project has J-PAL Europe IRB approval.

C.1 Handbook

Selection of Best Practices

We implemented a four-stage process to select the most profitable practices for businesses in our study. First, we conducted qualitative interviews with 102 retailers outside of our study sample but which were similar to the sample in terms of observable business characteristics. The purpose of these interviews was to learn about the most common and successful local business practices from the perspective of business owners and to familiarize ourselves with the various implementation processes in place. To this end, we asked a number of open ended questions in the format of a conversation, and responses were recorded and later transcribed.

Second, we used this information to develop a set of practices that we incorporated in our quantitative baseline survey instrument. For the sake of comparability and comprehensiveness, the baseline survey also included the business practices from McKenzie and Woodruff (2017), which the authors show to be relevant for small firms in seven other developing countries. In total, the baseline survey included 84 practices grouped in the following way: marketing (13 practices), stocking up (8 practices), record-keeping (27 practices), financial planning (18 practices), and joint decision-making (18 practices).

Third, we used the baseline data to estimate the economic returns of each practice, within their own sub-group of practices. To do this, we ran linear regressions of sales, profits, and the number of customers on each of the twelve sub-groups of practices using the following OLS specification:

$$Y_{1i} = \alpha + \sum_{p=1}^N \beta_p P + \delta S_i + \gamma W_i + \epsilon_i, \quad (1)$$

where Y_{1i} is a measure of business i ’s performance at baseline, $t = 1$. P is a vector of N business practices within each sub-group of practices, S_i is a measure of business i ’s size, W_i is its number of workers, and ϵ_i is a firm-level error term. As measures for business performance, we consider monthly sales (both log and levels), monthly profits (both IHS and levels), daily sales (log), daily

⁴Among the 1040 handbooks, 520 had the economic returns to the adoption of each business practice described as gains and 520 had them described as losses. Since the focus of this paper is on social learning of local practices, we leave the analysis of eventual framing effects out of the scope of this paper and pool the two framing conditions.

⁵See Online Appendix I for a detailed timeline.

⁶<https://www.socialscienceregistry.org/trials/1175>.

sales of the firm's main products (log), daily profits (IHS), and total number of customers. In total, we ran 96 regressions with the specification in equation (1), one per outcome measure on each of the twelve sub-groups of practices. Online Appendix C provides detailed tables with the results of the eight regression specifications per sub-group.

Finally, we used results from these eight regression specifications to select the top practices. We first picked the practices with statistically significant coefficients in at least six out of eight specifications. In total, 38% of the total practices (32 out of 84) satisfied this criterion. In addition, we required a top practice to have an absolute value of its regression coefficient in the top 25% of the distribution of all coefficients. This additional condition left us with 14 top practices: 2 on marketing, 3 on stocking-up, 4 on record-keeping (including profit calculation), 1 on financial planning and 3 on joint decision-making.

For these best practices the coefficient estimates from the regressions were displayed in the handbook as the estimated returns in sales and profits to the adoption of each top business practice. In Online Appendix D we provide the full list of practices mentioned in the handbook. In addition to the 14 best local practices, there were additional practices mentioned in the handbook but without explicit details on returns to adoption. These additional practices served mainly as entry points to the narrative of a chapter or as connecting points between two or more selected practices. For instance, prior to introducing record-keeping, we made readers aware that separating business from household finances can be beneficial to clearly see which transactions to track. Likewise, before introducing the practice of discussing business matters, we mentioned a range of business issues that could potentially be discussed.

Handbook Production

The handbook was written as a thorough guide on how to implement the best practices identified in the baseline survey. Due to didactic reasons, the selected practices were grouped according to five semantic themes: keeping business records, calculating profits, making stock-up decisions, attracting customers, and cooperating on business decisions, in this order.

Devoting one chapter of approximately 10-15 pages to each of the five themes, the handbook introduces local best practices in a simple way. The first page of each chapter provides a brief outline of the content. The next two pages provide brief statements that correct misperceptions on practices identified in the qualitative interviews. We subsequently highlight the returns to the practices calculated using the baseline survey. This is followed by a step-by-step guide on how to implement each theme of business practices.

The handbook emphasizes reasons to adopt and offers guidelines on how to adopt the successful practices. The text is further supported by illustrative examples, figures, tables, and pictures. Each chapter in the handbook concludes with a set of rules-of-thumb on implementation, which we gathered using information from the qualitative interviews. Throughout the handbook we stress the local origin of the data and the relevance of the information to the particular group of retailers that we treat. The handbook is written such that it can be read cover to cover as well as cursorily since all chapters are self-contained and each provides necessary and independent information. The last twelve pages of the handbook comprise a short cheat sheet, which summarizes the main points from the handbook in a step-by-step fashion. Finally, the handbook is complemented by an exercise book

providing space and structure for the business owner to start keeping business records, for instance recording a stocking-up schedule as per instructions provided in the handbook.

C.2 Movie

Selection of Role Models and Production

The business role models for our study were selected from the initial pool of 102 qualitative survey participants. At the time, we short-listed nine business owners who used the greatest number of practices within each category of McKenzie and Woodruff (2017) practices. Subsequently and in conjunction with the production of the business handbook, we conducted further in-depth interviews with these owners about their personal business trajectory and about business practices and implementation advice they regarded as crucial to achieving business growth. We ended up with a total of five shop owners to represent the local frontier of best practices in each domain as role models. These retailers regularly employed the practices identified in the handbook and agreed to explain their implementation methods and paths to success in a recorded video.

The five role models were heterogeneous in terms of shop size, gender, age, and ethnicity. This heterogeneity is important since similarity cues based on gender, age, and ethnicity have been shown to facilitate social learning besides cues of success, competence, skill, and knowledge (see, e.g., Rendell et al., 2011; Efferson et al., 2008; Chudek et al., 2013; Henrich and Gil-White, 2001; Corriveau and Harris, 2009; McElreath et al., 2008).

The movie featuring the five role models was filmed on shop site with the assistance of a professional production crew, and professional post-editing was also provided by the same production company. We were involved at each stage of implementation, including script development, test runs, filming, and post production. The end product was 25 minutes in length.

Movie Screening

We conducted public screenings of the movie in each of the 29 districts at a local school or other public space. All screening locations were central and accessible to all invited businesses. In order to incentivize attendance, shop owners were offered IDR 100,000 (USD 24.68 PPP) as a show-up fee. In addition, we offered two alternative screening dates in each district and sent individual text message reminders the day prior to each screening.

Each screening was followed by a facilitation session by a trained counselor who clarified any doubts and answered questions from the audience. The screening ended with a short feedback survey and payment of the show-up fee.

C.3 Counseling

For the counseling intervention, we trained local staff ourselves based on the content of the handbook. The training was conducted over three days and included classroom-style lectures as well as role play and pilot visits to retail businesses in districts external to the study. The 20 facilitators trained through this process were then randomly assigned to businesses in our study and were supervised by senior staff.

The protocol for each counseling shop visit was as follows. The facilitator first confirmed the identity of the business owner and then asked which aspects of the handbook needed clarification. Based on the owner's response, the facilitator chose one of three options. First, if the entrepreneur

had started implementing a practice but had encountered problems along the way, the facilitator would document the issues and start giving standardized implementation advice. Second, if the entrepreneur had not started implementing any practice but had made progress reading the handbook, the facilitator documented any issues with the material and then give standardized advice. Once all issues were dealt with, they would encourage the entrepreneur to go through the rest of the chapter under their supervision. Third, if the entrepreneur had not yet even started reading the handbook, the facilitator would elicit their priorities among the practices and start introducing the chapter corresponding to the most relevant practice. Each counseling session lasted approximately 40 minutes. At the end of the first visit, the entrepreneur was asked to establish goals for the implementation of a practice covered during the visit and for the study of selected material. A second visit was scheduled two weeks after the first and at the convenience of the entrepreneur. This second visit followed the same protocol as the first with the difference that the starting point was determined by the work left from the first session and the entrepreneur’s priorities elicited during that visit.

D Data and Summary Statistics

The quantitative data used in this paper comprise a baseline survey conducted in March and April 2016, and an endline survey six months later in October and November 2016. Both surveys included detailed business and demographic questions as well as behavioral measures on attitudes related to risk and time, trust, and aspirations.

Table 1 presents summary statistics from the baseline sample. Column (1) provides mean and standard-deviation values for the total sample of 1301 business, while columns (2)-(6) present them separately for businesses assigned to control and treatment groups. The table presents business owner background characteristics, business characteristics and the use of business practices. Retailers in our sample are mostly female (70.83%) and are 45.27 years old on average ($\sigma=11.31$). Educational backgrounds of the entrepreneurs are mixed, with the mean educational attainment of 9 years of schooling. 46.78% completed high-school and 4.44% graduated from college. The average firm age is 13.6 years. The average firm employs two workers and has monthly sales of 5956.74 USD PPP and monthly profits of 480.38 USD PPP. 60% of the businesses report having a family member as a business partner.

Table 2 presents the randomization checks for the baseline sample. Columns (5)-(7) present p-values for tests of differences in means between the three groups. The table shows that the randomization was successful. Out of 64 difference in means tests performed, only 3 return statistically significant differences, which would be expected in random sampling.

E Survey Attrition

There were two sources of survey attrition. Some shops closed down and a few others refused to be part of the endline survey. Table 5 presents regression analysis on survey attrition. Columns (1) and (2) study differential endline attrition based on refusals, with and without stratification controls. Columns (3) and (4) repeat the analysis for attrition based on the shop being closed.

Overall, attrition is very low. We were able to reach 92% of the sample at endline, and the small attrition rate is not correlated with treatment status.

IV Results

A Take Up

Movie Attendance

Table 3 presents the movie take-up and assessment. Out of the 520 shop owners invited to the movie screening, 260 showed up at the venue for the film screening session. This is in line with previous experiences of low take-up rates for interventions requiring attendance. In particular, evaluations of business training interventions have been fraught with weak attendance (for a review, see McKenzie and Woodruff, 2014). Drexler et al. (2014) report take-up rates comparable to ours for both a standard business training and a more intuitive rule-of-thumbs based approach. Giné and Mansuri (2014) and Bruhn et al. (2017) document problems equivalent in magnitude. Bruhn and Zia (2013) observes even lower attendance, of below 40% of invitees. Calderón et al. (2013) and Premand et al. (2016) report attendance below 70%. With the exception of the interventions by Drexler et al. (2014), costs per participant for either of these interventions are typically many times higher than the expenses per person of this study. Moreover, we find low attendance despite a meaningful show-up compensation of IDR 100,000 (USD PPP 24.68) which every invited shopkeeper in the movie treatment group was offered.

Despite the low take-up rate, according to Table 3 the feedback from the movie screening was very positive. The entrepreneurs who attended reported having learned something new, and feeling inspired and hopeful after watching the movie.

Counseling Compliance

Table 3 presents the counseling take up and its assessment. Out of the 520 shop owners offered personalized counseling sessions, 77% received the assistance once and 68% received it twice. This rather high participation rate may be due to the fact that the assistance was conducted on the premise of the entrepreneur whilst allowing for business transactions to take place. Moreover, the counsellors would visit the premise on the day and time that was most convenient for the entrepreneur, provided that it was within a three-week window after receiving the handbook. The feedback from the counseling sessions was overall positive as well.

B Impact: Estimation Strategy

We study business performance with outcome measures for profits, sales, expenses, business growth, number of employees, number of customers, loan take-up and shop size. To analyze the impact on business practices, we distinguish between practices which were directly treated in the handbook and movie screening from those which were not subject to any experimental shock. For each outcome, there are two level effects of interest: the intent-to-treat effect (ITT), the average effect of being assigned to the treatment group, and the average effect for those who actively received treatment (the Treatment on the Treated or ToT effect).

We first estimate the ITT effect on a given outcome Y using the following ANCOVA regression specification:

$$Y_{2i} = \alpha + \sum_{m=1}^4 \beta_m T_{mi} + \gamma X_{1i} + \delta V + \zeta Y_{1i} + \epsilon_i \quad (2)$$

where Y_{2i} is the outcome for business i at the endline $t = 2$ (measured using the endline survey). T is a firm-level dummy variable which is equal to one if enterprise i was assigned to a particular treatment group, while $m = 1$ to 4 represent the four types of interventions that we conducted. Since the randomization was done after stratifying by gender, shop size (micro, small, or mid-sized) and a median split of a business practice composite score, we follow Bruhn and McKenzie (2009) and include the strata dummies represented by the vector X . V represents village fixed effects, while Y_{1i} is the baseline value of the outcome of interest. ϵ_i is a firm-level error term. We code missing control variables as zero and include dummy variables to indicate missing values. Equation (2) is estimated using ordinary least squares.⁷

We present our results in two parts. First, we present effects on business profits. Then, we examine the channels through which profits could be affected by estimating the impact of our interventions on total sales, total costs, number of employees, number of customers, uses of trade credit, and most importantly, the adoption of business practices.

C Impact on Business Profits

Table 6 shows significant and positive treatment effects on business profits resulting from the distribution of the handbook in combination with personal counseling. Columns (1), (2) and (3) present the calculated monthly profits winsorized on both tails at 1%, 2.5% and 5% levels, and column (4) presents the inverse hyperbolic sine transformation (IHS) estimate for business profits, which are used instead of log of profits to account for negative and zero values. At endline, compared to the control group, businesses assigned the handbook combined with personal counseling or combined with both personal counseling and movie improve profits by 40% (Column 1) This represents an increase in profits of 0.18 standard deviation over the control group mean. In monetary terms, this implies that, on average, businesses assigned to these two treatment groups earn about USD PPP 330.00 more per month than businesses in the control group. These are fairly large effects, in terms of both statistical and economic significance.

Similarly, businesses assigned to the handbook and movie, without counseling assistance, improve profits by 17%, but this improvement is not statistically significant. The lack of statistical significance might be in part due to the fact that only half of the invited businesses attended the film screening. Notably, only receiving the handbook, without any other additional intervention, does not affect business profits at all. The point estimate is, in fact, negative. Table 6 shows the F-tests comparing the differential effects of the treatments. From this analysis it can be seen that the coefficient of handbook and movie is significantly different from the coefficient of handbook alone (at the 10% level). A similar differential effect exists between handbook plus counseling or all three interventions and handbook alone (at 1% level).

⁷This ANCOVA specification allows the regression model to determine the structure of the relationship between the baseline and end-line levels of the outcome, rather than imposing it by using differences. ANCOVA regression models of this kind are thus more efficient than difference-in-differences estimators in determining treatment effects with noisy outcome measures (McKenzie, 2012).

In a horse race between movie and counseling, our results suggest that personal counseling is more effective in changing profits as the coefficients are significantly different (at the 10% level). Finally, we test for a potential complementarity between *Role Model* and *Counseling* by comparing the sum of the effects of receiving counseling and movie separately to receiving both interventions together. We find no evidence of complementarity between counseling and role models.

D Impact on Sales, Expenses and other Business Outcomes

Tables (7)-(11) report regression analyses on business sales (Table 7), expenses (Table 8), business size (Table 9), customers (Table 10) and credit extended to customers (Table 11). We find no significant effects of the treatments on business expenses, size, number of customers, and credit. However, we find strong and significant treatment effects on business sales. As with profits, businesses that received the handbook and personal counseling increase their total sales the most. Compared to the control group, column (1) of Table 7 shows that sales in this group increase by 17%, representing a 0.12 standard deviation improvement over the control group.

The coefficient on sales for the group assigned handbook and role model is 65% smaller than that of the group assigned handbook and counseling, but is also significant at the 10%. Compared to the control group, column (3) shows that businesses assigned to handbook and role model increase their monthly sales by 13%, representing a 0.11 standard deviation improvement over the control group. This result is noteworthy despite the low attendance at the movie screenings.

Also similar to profits, receiving the handbook alone does not affect business sales. Comparing the coefficient estimate for handbook alone against the coefficient estimate for handbook and role model movie together, we see that the movie has a positive impact on firm sales. Personal counseling is even more effective in raising sales, though the difference between the coefficients on role model movie and counseling is statistically insignificant. Finally, as with profits we do not find evidence for any complementarity between *Role Model* and *Counseling*.

Overall, these results show that businesses in the counseling and/or movie group achieved higher profits than those in the control group in part due to an increase in the total amount of sales, rather than a reduction in expenses. These firms did not increase the number of customers, which suggests that they must have sold more to the same people. Indeed, most of the best practices on which the handbook and movie were based are conducive to higher sales and profits through efficiency gains that a more organized and better managed business generate. For instance, having the top selling products always in stock, offering discounts to the loyal customers, or recording every purchase and sales. We turn to these business practices in the next section.

E Impact on Business Practices

We analyze treatment impacts on business practices that are highlighted in the handbook. As with the impact on performance outcomes, we utilize regression specification 2 and report ITT effects. The ToT results, available upon request, do not differ substantially and are simply scaled up coefficients. As a placebo test, we also study changes in practices that are not mentioned in the handbook and find no treatment effects. These tables are available upon request.

We report regression analysis on record-keeping practices (Tables 14, 15 and 16), marketing (Table 17), decision-making (Table 18), stocking-up (Table 19) and financial planning (Table 20).

All experimental groups adopt new business practices as a result of the interventions. This is true even for businesses that received the handbook alone. Compared to businesses that did not receive the handbook, these businesses show a 10.5 percentage point improvement in the practice of separating household and business finances (0.21 standard deviation increase) over the control group - Table 14, Column 5), 7.2 percentage point improvement in calculating the cost of sales for main products (0.15 standard deviation increase) - Table 16, Column 4) and are 5.6 percentage points more likely to have their top selling products always in stock (Table 19, Column 2). Although this group adopted only a few practices, the treatment effects are nonetheless noteworthy considering the low intensity of the handbook treatment.

Businesses assigned to the movie or counseling groups showed significantly higher adoption rates over a wider range of business practices. Compared to the control group, these businesses were able to improve their practices in all domains: record-keeping, marketing, decision-making, stocking-up and financial planning. These high adoption rates suggest that the path to social learning in our field experiment was through experiential learning. When retailers had the opportunity to learn through the experience of others (in the *Role Model* intervention), or through their own experience in their own premises (in the *Counseling* intervention), they did change the way they organize and manage their businesses.

Firms in the *Role Model* group significantly increase the probability of adopting nine new practices. Likewise, firms in *Counseling* increased adoption of twelve new practices. And finally, firms assigned both the movie and counseling showed the highest adoption rate with eighteen practices.

We find heterogeneity across treatments in the types of practices adopted, which highlights the mechanism behind the treatment effects. Firms in the *Role Model* group were relatively more likely than firms in the *Counseling* group to adopt financial-planning and marketing practices, while firms in *Counseling* were better at adopting record-keeping and joint-decision making practices. Indeed, firms in *Counseling* show no significant improvement in financial planning practice, while firms in *Role Model* significantly improve half of these practices included in the handbook. Conversely, firms in *Role Model* show no significant improvement in any decision-making practice, while firms in *Counseling* significantly improve all three practices in this domain.

Table 20 shows that firms in the *Role Model* group improved their aggregate planning score, in particular the practice of setting sales targets where they showed significant improvement over both the *Control* group (at the 1% level) and the *Counseling* group (at the 5% level). These results are in line with role models in the movie explaining their growth trajectories through higher sales. In contrast, *Counseling* was particularly effective in improving decision-making practices (see Table 18). The aggregate score (Column 1) shows a 7.6 percentage point improvement over the control group, representing a 0.21 standard deviation increase. Firms in *Counseling* were more likely than the control group to discuss business matters with others (Column 2) (9% improvement) and to make joint decisions (28% improvement). The success of *Counseling* on joint decisions is in line with the emphasis by counselors to jointly discuss business practices and decisions with co-owners.

Finally, while firms in both groups improved their practices in marketing and record-keeping, the *Role Model* group was relatively better in adopting the marketing practices and the *Counseling* group was better at adopting record-keeping practices. Specifically, firms in *Counseling* doubled their number of record-keeping practices compared to the firms in *Role Model* treatment. These findings are in line with our hypotheses on the pathways for learning – i.e. practices that require

more guidance and hands-on experience, such as record-keeping, will benefit more from personalized counseling, whereas practices that can be improved through observing the successful experience of others, such as sales and marketing, will benefit more from business role models.

F Heterogeneous Treatment Effects

In this section, we explore whether treatment effects on business outcomes and practices differ by the degree of experience in implementing business practices at baseline. We estimate the following regression equation:

$$Y_{2i} = \alpha + \sum_{m=1}^4 \beta_m T_{mi} + \eta S_{1i} + \sum_{m=1}^4 \theta_m T_{mi} \times S_{1i} + \gamma X_{1i} + \delta V + \zeta Y_{1i} + \epsilon_i \quad (3)$$

where θ_m is the coefficient on the interaction of each treatment m with a dummy S equal to one if, at baseline, the retailer, had an aggregate practice score below median and zero if it was above median.⁸ Hence, the coefficients β_m measure the effect of treatment m for firms with above median practice score at baseline. The sum of β_m and θ_m measures the effect of treatment m on firms with below median practice score at baseline.

Table 21 to 25 present the results. Overall, we observe higher treatment effects in businesses with above median practice scores at baseline. Table 21 shows businesses who were relatively better at businesses practices and who were assigned to *Counseling* improved their monthly profits by 68% over to the control group (0.31 standard deviation improvement). This is equivalent to a sizeable increase in monthly profits of USD 563.00 PPP. A similar effect is observed for businesses assigned to *All Three* treatments, an average increase in monthly profits of USD 688.00 PPP (0.38 standard deviations improvement). In contrast, businesses who were below the median practice adoption rate at baseline did not significantly benefit from any intervention.

The same pattern can be observed for firm sales in Table 22 and the adoption of the business practices (Tables 27 to 33). For instance, retailers relatively better at baseline who are assigned to *Counseling* improved their aggregate score of record-keeping practices by 16% (0.47 standard deviations) over the control group. Changes reported by firms in the other experimental groups were nearly half the size. The aggregate effect for well-managed businesses is driven by positive changes in a number of business practices. Most notably, when given the handbook, businesses above the median of the practice were 32% (0.28 standard deviations) more likely to separate household and business finances than control firms (Table 27, Column 5) and more likely to calculate profits (34% or 0.27 standard deviations; Table 29, Column 3). When assigned to *Counseling*, these firms kept better records (Table 27, Column 3), itemized revenues and expenses (Table 28, Column 2), and tracked their purchase of stocks (Table 28, Column 5). They were also more likely to calculate profits (Table 29, Column 3) and update books at least weekly (Table 29, Column 5).

⁸The aggregate practice score is defined as the average of all McKenzie and Woodruff (2017) practices measured at baseline, and it was used to stratify the randomization.

V Conclusion

This paper shows that it is possible to improve the profitability of small firms by disseminating information on the best practices of successful peers and using low-cost facilitation methods such as role models and personalized counseling to promote adoption. While our results show improvements in sales, we do not detect changes in business expenses or the number of customers, which suggests that the improvement in performance outcomes is driven by the adoption of profitable business practices and the resulting efficiency gains. Indeed, we find that treated firms adopt up to eighteen new profitable business practices out of a total of thirty two practices in the study.

Our results further show that simply providing information on profitable local practices in the form of a handbook is not sufficient for achieving performance gains or promoting the adoption of profitable practices. Instead, we find that experiential learning in the form of business role models or personalized counseling is necessary for achieving success. We also find evidence consistent with a business-skills-based poverty trap, as our interventions are only successful for businesses who already were in the high end of the business practices distribution.

In terms of cost-benefit analysis, all interventions implemented in this study can be scaled up and replicated relatively inexpensively. The *Handbook* intervention cost approximately USD 100, the *Role Model* intervention cost and additional USD 25 and the *Counselling* cost an additional USD 25. Many of the costs are fixed and sunk, particularly the cost of developing the handbook. For any scale-up, the costs would therefore be considerably lower. The benefits that we identify after six months are up to USD 330 per month in profits, along with a high adoption rate of profitable practices. Hence, by all measures, business learning through the channels we test in this paper is feasible for scale-up and wider use.

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Tables

Table 1: **Summary Statistics**

	Total sample <i>N = 1301</i>	Control <i>N = 261</i>	HB only <i>N = 260</i>	HB & MOV <i>N = 260</i>	HB & CNSL <i>N = 260</i>	HB & MOV & CNSL <i>N = 260</i>
Firm Owner Characteristics						
Gender (Male=1)	0.29	0.29	0.30	0.29	0.30	0.28
Age	45.27 (11.31)	45.22	45.27	45.28	45.16	45.38
Education (Years)	9.39 (3.78)	9.10	9.52	9.36	9.42	9.55
Risk Preference (0 - 10 “Perfectly Risk-Seeking”)	3.73 (2.09)	3.74	3.76	3.88	3.60	3.68
Time Preference (0 - 10 “Perfect Patience”)	5.18 (2.26)	5.19	5.07	5.21	5.25	5.20
Firm Characteristics						
Firm Age (Years)	13.60 (11.79)	12.76	13.77	14.03	13.98	13.47
Family Member Is Business Partner	0.60	0.56	0.6	0.63	0.59	0.62
Total Number of Workers	2.00 (1.22)	2.03	2.05	1.9	1.99	2.04
Business Has Tax ID	0.19	0.20	0.21	0.20	0.15	0.18
Total Sales Last Month (USD PPP)	5956.74 (15667.70)	5047.34	5756.45	5820.17	5767.00	7396.25
Total Profits Last Month (USD PPP)	480.38 (701.86)	418.50	463.10	468.67	539.93	510.71
Business Practices (M&W, 2016)						
Aggregate Percentage Score	0.30 (0.14)	0.31	0.29	0.30	0.29	0.30
Marketing Subscore	0.16 (0.19)	0.16	0.15	0.17	0.15	0.17
Stocking-up Subscore	0.46 (0.30)	0.47	0.47	0.47	0.47	0.44
Record-keeping Subscore	0.46 (0.19)	0.48	0.46	0.45	0.45	0.46
Financial-planning Subscore	0.21 (0.17)	0.23	0.20	0.20	0.20	0.21

Table 2: **Sample Balance Across Interventions**

	HB only - Control <i>(p-value)</i>	HB & MOV - Control <i>(p-value)</i>	HB & CNSL - Control <i>(p-value)</i>	HB & MOV & CNSL - Control <i>(p-value)</i>
Firm owner characteristics				
Gender (Male=1)	0.611	0.825	0.68	0.867
Age	0.959	0.951	0.951	0.866
Education (Years)	0.185	0.446	0.327	0.174
Risk Preference	0.902	0.451	0.453	0.739
Time Preference	0.542	0.924	0.742	0.94
Firm characteristics				
Firm Age	0.313	0.222	0.236	0.478
Family Member Is Business Partner	0.447	0.116	0.561	0.165
Total Number of Workers	0.837	0.218	0.708	0.919
Business Has Tax ID	0.811	0.878	0.145	0.516
Total Sales Last Month (USD PPP)	0.439	0.337	0.365	0.193
Total Profits Last Month (USD PPP)	0.295	0.228	0.117	0.067*
Business practices (M&W, 2016)				
Aggregate Percentage Score	0.18	0.402	0.121	0.395
Marketing Subscore	0.529	0.345	0.709	0.517
Stocking-up Subscore	0.935	0.884	0.984	0.291
Record-keeping Subscore	0.229	0.094*	0.07*	0.254
Financial-planning Subscore	0.131	0.128	0.067	0.316

Table 3: Movie: Take Up and Assessment

	(1)	(2)	(3)
	HB & MOV (A)	HB & MOV & CNSL (B)	(A) = (B)
	<i>N=260</i>	<i>N=260</i>	<i>(p-value)</i>
Attendance			
Business Owner or Partner Attended Film Screening	0.52	0.49	0.540
Baseline respondent attended film screening	0.47	0.45	0.792
Respondent was reminded by phone	0.05	0.07	0.355
Respondent was reminded by visit to business	0.35	0.33	0.782
Distance to screening location (in decimal degrees)	0.01	0.01	0.869
Evaluation (1-4 Scale):			
Has Learned Something New	3.34	3.21	0.180
Feels Inspired	3.31	3.30	0.941
Feels Hopeful	3.60	3.42	0.043**
Feels Bored	0.83	0.97	0.430

Table 4: **Counseling: Take Up and Assessment**

	(1)	(2)	(3)
	HB & CNSL (A)	HB & MOV, & CNSL (B)	(A) = (B)
	<i>N=260</i>	<i>N=260</i>	<i>(p-value)</i>
Attendance			
<i>1st session</i>			
Business Owner or Partner Attended 1st Session	0.77	0.78	0.752
Baseline respondent attended 1st session	0.76	0.77	0.756
Recipient plans to use at least one new practice	0.37	0.47	0.021**
Recipient plans neither handbook study nor implementation	0.12	0.11	0.784
<i>2nd session</i>			
Business Owner or Partner Attended 2nd Session	0.68	0.68	0.925
Baseline respondent attended 2nd session	0.67	0.67	1
Recipient plans to use at least one new practice	0.39	0.47	0.063*
Recipient plans neither handbook study nor implementation	0.13	0.08	0.044**
Evaluation (1-4 Scale)			
Has Learned Something New	2.88	2.89	0.908
Feels Inspired	2.76	2.83	0.422
Feels Hopeful	2.88	2.97	0.312
Feels Bored	0.59	0.43	0.118

Table 5: **Endline Survey Attrition**

	Business Part of Endline (1)	Business Part of Endline (2)	Business Closed (3)	Business Closed (4)
Assigned Handbook (A)	-0.020 (0.024)	-0.022 (0.024)	0.008 (0.020)	0.011 (0.020)
Assigned Handbook & Movie (B)	-0.027 (0.025)	-0.028 (0.025)	-0.004 (0.019)	-0.003 (0.019)
Assigned Handbook & Counseling (C)	-0.020 (0.024)	-0.023 (0.024)	0.008 (0.020)	0.011 (0.020)
Assigned All Three (D)	-0.031 (0.025)	-0.036 (0.025)	-0.007 (0.019)	-0.003 (0.019)
Stratification Controls (Yes/No)	No	Yes	No	Yes
R-squared	0.001	0.032	0.001	0.036
Sample Size	1301	1301	1301	1301
Mean of Dependent Variable in Control Group	0.927	0.927	0.054	0.054
F-tests (p-value):				
Book = Book & Mov	0.767	0.836	0.567	0.480
Book = Book & Cnsl	1.000	0.972	1.000	0.996
Book = All Three	0.659	0.613	0.438	0.480
Book & Mov = Book & Cnsl	0.767	0.863	0.567	0.475

Notes: This table presents attrition analysis for the endline survey in Columns (1) and (2), and survivorship analysis for endline survey in Columns (3) and (4). The dependent variable in Columns (1) and (2) is binary and equal to 1 if the business was part of the endline survey. The dependent variable in Columns (3) and (4) is binary and equal to 1 if the business was still operational at the time of the survey. Regressions in Columns (2) and (4) include stratification controls. Robust standard errors are reported in parentheses.

Table 6: **Intent-to-Treat: Business Profits**

	Profits last month (win 1%) (1)	Profits last month (win 2.5%) (2)	Profits last month (win 5%) (3)	Profits last month (IHS) (4)
Assigned Handbook (A)	-161.608 (159.414)	-134.313 (128.975)	-102.205 (101.657)	0.647 (0.493)
Assigned Handbook & Movie(B)	137.115 (176.567)	111.411 (142.648)	89.721 (109.568)	0.416 (0.508)
Assigned Handbook & Counseling (C)	327.561* (168.457)	313.458** (140.865)	310.453*** (110.700)	1.041** (0.490)
Assigned All Three (D)	332.578* (183.551)	223.234 (143.686)	186.599* (110.661)	0.983** (0.490)
R-squared	0.086	0.100	0.119	0.043
Sample Size	1178	1178	1178	1178
Dependent Variable Mean in Control Group	822.722	815.045	756.498	4.022
Dependent Variable SD in Control Group	1819.867	1524.238	1185.045	5.675
F-tests (p-value):				
Book = Book & Mov	0.095	0.077	0.075	0.639
Book = Book & Cnsl	0.004	0.001	0.000	0.408
Book = All Three	0.008	0.011	0.008	0.478
Book & Mov = Book & Cnsl	0.311	0.170	0.054	0.200
Book & Mov + Book & Cnsl > All Three	0.691	0.834	0.909	0.752

Notes: This table presents analysis for business profits. Profits over the last month were estimated by calculating sales and costs. The estimates in the first three columns are winsorized on both tails at the 1%, 2.5% and 5% level respectively. Column (4) presents the inverse hyperbolic sine transformation measures for profits. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 7: **Intent-to-Treat: Business Sales**

	Sales Last Month (win 1%) (1)	Sales Last Month (win 2.5%) (2)	Sales Last Month (win 5%) (3)	Sales Last Month (Log) (4)
Assigned Handbook (A)	-275.608 (492.098)	-415.874 (403.668)	-354.072 (340.244)	-0.073 (0.076)
Assigned Handbook & Movie(B)	565.400 (532.793)	583.495 (435.262)	639.469* (367.765)	0.088 (0.082)
Assigned Handbook & Counseling (C)	991.468* (557.358)	943.405** (459.284)	978.967** (395.243)	0.154* (0.082)
Assigned All Three (D)	565.063 (531.483)	638.402 (451.989)	731.960* (387.725)	0.120 (0.083)
R-squared	0.495	0.520	0.533	0.473
Sample Size	1179	1179	1179	1179
Dependent Variable Mean in Control Group	5627.899	5331.050	5024.003	7.987
Dependent Variable SD in Control Group	7983.587	6652.356	5572.596	1.180
F-tests (p-value):				
Book = Book & Mov	0.110	0.014	0.004	0.037
Book = Book & Cnsl	0.017	0.001	0.000	0.003
Book = All Three	0.104	0.012	0.003	0.013
Book & Mov = Book & Cnsl	0.461	0.426	0.390	0.433
Book & Mov + Book & Cnsl > All Three	0.898	0.918	0.945	0.851

Notes: This table presents analysis for business sales, measured as the simple recall estimate of respondents for their sales over the last month. The estimates in the first three columns are winsorized on both tails at the 1%, 2.5% and 5% level respectively. Column (4) presents the logarithm transformation measures for sales. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 8: **Intent-to-Treat: Business Expenses**

	Total Expenses Last Month (win 1%) (1)	Total Expenses Last Month (win 2.5%) (2)	Total Expenses Last Month (win 5%) (3)	Total Expenses Last Month (Log) (4)
Assigned Handbook (A)	-47.048 (422.394)	-33.177 (324.349)	8.158 (268.730)	-0.002 (0.078)
Assigned Handbook & Movie(B)	71.258 (460.051)	224.372 (360.061)	350.486 (306.037)	0.050 (0.083)
Assigned Handbook & Counseling (C)	80.175 (453.416)	254.437 (360.374)	350.937 (306.174)	0.025 (0.083)
Assigned All Three (D)	-1.143 (450.007)	279.837 (375.212)	320.527 (319.160)	0.027 (0.082)
R-squared	0.541	0.565	0.573	0.486
Sample Size	1180	1180	1180	1180
Dependent Variable Mean in Control Group	4722.200	4451.435	4197.504	7.777
Dependent Variable SD in Control Group	6830.787	5590.931	4712.890	1.212
F-tests (p-value):				
Book = Book & Mov	0.791	0.440	0.227	0.530
Book = Book & Cnsl	0.770	0.391	0.229	0.743
Book = All Three	0.916	0.375	0.298	0.724
Book & Mov = Book & Cnsl	0.985	0.934	0.999	0.777
Book & Mov + Book & Cnsl > All Three	0.594	0.648	0.801	0.656

Notes: This table presents analysis for business expenses, measured as the simple recall estimate of respondents for their expenses over the last month. The estimates in the first three columns are winsorized on both tails at the 1%, 2.5% and 5% level respectively. Column (4) presents the logarithm transformation measures for sales. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 9: **Intent-to-Treat: Business Size**

	Number of Employees	Total Family Employees	Total Non-Family Employees	Shop size
	(1)	(2)	(3)	(4)
Assigned Handbook (A)	0.052 (0.108)	0.047 (0.101)	0.002 (0.047)	-0.125 (0.717)
Assigned Handbook & Movie(B)	0.139 (0.107)	0.160 (0.098)	-0.031 (0.047)	0.438 (0.715)
Assigned Handbook & Counseling (C)	0.032 (0.093)	0.020 (0.088)	-0.018 (0.044)	1.177 (0.820)
Assigned All Three (D)	0.006 (0.102)	0.029 (0.088)	-0.025 (0.047)	-0.222 (0.719)
R-squared	0.245	0.245	0.111	0.321
Sample Size	1181	1181	1181	1181
Dependent Variable Mean in Control Group	2.050	1.901	0.149	12.847
Dependent Variable SD in Control Group	1.173	1.108	0.476	9.054
F-tests (p-value):				
Book = Book & Mov	0.447	0.297	0.515	0.437
Book = Book & Cnsl	0.846	0.790	0.678	0.111
Book = All Three	0.678	0.857	0.590	0.892
Book & Mov = Book & Cnsl	0.292	0.150	0.779	0.359
Book & Mov + Book & Cnsl > All Three	0.878	0.877	0.355	0.955

Notes: This table presents analysis for business growth. Column (1) presents the total number of full-time employees, of which Column (2) shows employees from the firm owner's family and Column (3) those hired from outside the family. Column (4) presents the size of the shop premises in square meters. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 10: **Intent-to-Treat: Business Customers**

	Total Customers (1)	Loyal Customers (2)	Casual Customers (3)
Assigned Handbook (A)	0.664 (3.461)	1.341 (1.420)	-0.285 (2.281)
Assigned Handbook & Movie(B)	1.320 (3.099)	0.664 (1.289)	0.702 (2.095)
Assigned Handbook & Counseling (C)	2.376 (3.250)	1.868 (1.334)	0.904 (2.206)
Assigned All Three (D)	2.318 (3.401)	1.234 (1.472)	1.353 (2.224)
R-squared	0.312	0.240	0.300
Sample Size	1181	1181	1181
Dependent Variable Mean in Control Group	50.091	16.459	33.632
Dependent Variable SD in Control Group	40.875	15.834	27.300
F-tests (p-value):			
Book = Book & Mov	0.853	0.637	0.674
Book = Book & Cnsl	0.645	0.720	0.636
Book = All Three	0.671	0.947	0.518
Book & Mov = Book & Cnsl	0.751	0.367	0.929
Book & Mov + Book & Cnsl > All Three	0.613	0.741	0.532

Notes: This table presents analysis for the number of customers. Column (1) presents the total number of customers on a typical day. Column (2) shows the number of loyal customers, which are those who return regularly and at least once a week, and Column (3) shows the number of casual customers, which are all other customers. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 11: Intent-to-Treat: Business Credit

	Offered Credit or Delayed Payments to Customers (1)	Applied for Business Loan (2)	Obtained Business Loan (3)	Outstanding Loan Amount (Log) (4)
Assigned Handbook (A)	0.007 (0.031)	0.028 (0.033)	-0.015 (0.036)	0.170 (0.258)
Assigned Handbook & Movie(B)	-0.016 (0.031)	0.024 (0.033)	-0.039 (0.036)	0.102 (0.256)
Assigned Handbook & Counseling (C)	-0.019 (0.031)	-0.025 (0.032)	-0.007 (0.034)	-0.284 (0.238)
Assigned All Three (D)	0.008 (0.031)	0.003 (0.033)	0.013 (0.035)	-0.153 (0.240)
R-squared	0.152	0.140	0.130	0.161
Sample Size	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.860	0.169	0.149	1.407
Dependent Variable SD in Control Group	0.348	0.376	0.357	2.941
F-tests (p-value):				
Book = Book & Mov	0.467	0.906	0.995	0.799
Book = Book & Cnsl	0.410	0.091	0.120	0.068
Book = All Three	0.981	0.444	0.418	0.199
Book & Mov = Book & Cnsl	0.925	0.120	0.131	0.121
Book & Mov + Book & Cnsl > All Three	0.170	0.464	0.593	0.467

Notes: This table presents analysis related to business credit. Column (1) presents whether or not the entrepreneur offers any of their customers to pay for purchases at a later date. Column (2) presents whether or not in the previous 12 months the entrepreneur has applied for a business loan and Column (3) whether or not in the same time frame they have obtained a loan. Column (4) presents the logarithm of the amount of money currently owed in the form of loans. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 12: **Intent-to-Treat: Business Practices Mentioned in Handbook and/or Movie**

	Aggregate Record-Keeping Practices (Core) (1)	Aggregate Marketing Practices (Core) (2)	Aggregate Discussion Practices (Core) (3)	Aggregate Stock-up Practices (Core) (4)	Aggregate Planning Practices (Core) (5)
Assigned Handbook (A)	0.009 (0.013)	-0.002 (0.021)	-0.018 (0.031)	0.002 (0.019)	0.039 (0.032)
Assigned Handbook & Movie(B)	0.019 (0.013)	0.042* (0.022)	0.040 (0.030)	0.043** (0.019)	0.082*** (0.031)
Assigned Handbook & Counseling (C)	0.029** (0.012)	0.024 (0.020)	0.076*** (0.030)	0.029 (0.018)	0.027 (0.031)
Assigned All Three (D)	0.034*** (0.013)	0.042* (0.022)	0.061 (0.031)	0.059*** (0.019)	0.082*** (0.031)
R-squared	0.297	0.258	0.187	0.203	0.196
Sample Size	1181	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.465	0.301	0.558	0.532	0.471
Dependent Variable SD in Control Group	0.157	0.260	0.354	0.217	0.381
F-tests (p-value):					
Book = Book & Mov	0.488	0.046	0.048	0.035	0.181
Book = Book & Cnsl	0.138	0.197	0.001	0.146	0.693
Book = All Three	0.073	0.041	0.009	0.003	0.181
Book & Mov = Book & Cnsl	0.446	0.394	0.206	0.450	0.073
Book & Mov + Book & Cnsl > All Three	0.778	0.783	0.908	0.696	0.728

Notes: This table presents analysis related to business practices that are mentioned in the Handbook and/or in the movie. Column (1) presents the aggregate score for all core record-keeping practices treated by the interventions. Columns (2) to (5) show aggregate scores for marketing practices, discussion practices, stock-up practices, and financial planning, respectively. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 13: **Heterogeneity of Impact on Profits, Sales, and Business Practices Mentioned in Handbook and/or Movie**

	Profits Last Month (IHS)	Sales Last Month (Log)	Aggregate Record-Keeping Practices (Core)	Aggregate Marketing Practices (Core)	Aggregate Discussion Practices (Core)	Aggregate Stock-up Practices (Core)	Aggregate Planning Practices (Core)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assigned Handbook	1.664** (0.737)	0.120 (0.112)	0.036* (0.019)	0.042 (0.033)	0.036 (0.043)	0.035 (0.028)	0.024 (0.047)
Assigned Handbook & Movie	0.369 (0.766)	0.175 (0.127)	0.033* (0.019)	0.050 (0.032)	0.034 (0.041)	0.077*** (0.027)	0.055 (0.046)
Assigned Handbook & Counseling	1.690** (0.795)	0.263** (0.125)	0.075*** (0.020)	0.054* (0.032)	0.079* (0.043)	0.090*** (0.028)	0.032 (0.049)
Assigned All Three	2.009*** (0.753)	0.183 (0.119)	0.044** (0.020)	0.033 (0.035)	0.060 (0.044)	0.086*** (0.027)	0.080* (0.047)
Assigned Handbook × Below-median Practices Score	-1.933* (1.006)	-0.365** (0.153)	-0.050* (0.026)	-0.083** (0.042)	-0.102* (0.061)	-0.063* (0.038)	0.030 (0.065)
Assigned Handbook & Movie × Below-median Practices Score	0.075 (1.039)	-0.166 (0.168)	-0.028 (0.026)	-0.016 (0.044)	0.013 (0.061)	-0.066* (0.038)	0.052 (0.064)
Assigned Handbook & Counseling × Below-median Practices Score	-1.211 (1.021)	-0.202 (0.167)	-0.080*** (0.026)	-0.053 (0.042)	-0.008 (0.060)	-0.108*** (0.037)	-0.006 (0.065)
Assigned All Three × Below-median Practices Score	-1.874* (1.016)	-0.126 (0.166)	-0.021 (0.026)	0.012 (0.045)	-0.000 (0.062)	-0.054 (0.037)	0.006 (0.063)
Stratification Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.049	0.475	0.303	0.262	0.190	0.209	0.197
Sample Size	1178	1179	1181	1181	1181	1181	1181
Dependent Variable Mean in Control Group	4.022	7.987	0.465	0.301	0.558	0.532	0.471
Dependent Variable SD in Control Group	5.675	1.180	0.157	0.260	0.354	0.217	0.381
F-tests (p-value):							
Book + Interaction	0.688	0.017	0.407	0.123	0.133	0.275	0.233
Book & Mov + Interaction	0.518	0.940	0.743	0.261	0.296	0.680	0.014
Book & Cnsl + Interaction	0.445	0.585	0.776	0.969	0.085	0.470	0.524
All Three + Interaction	0.838	0.622	0.172	0.101	0.169	0.206	0.043

Notes: This table presents heterogeneous analysis for the main outcomes of interest: business profits and sales, as well as aggregate scores of the business practices mentioned in the handbook and/or movie. The dependent variables are described in the notes of Tables 6, 7, and 12. All the columns present regressions of profits, sales, and aggregate business-practices scores on the four experimental interventions and an interaction term which is a binary variable equal to 1 if the firm was below the median of the aggregate business practice score at baseline. The business practice score is the average of all McKenzie and Woodruff (2017) practices measured at baseline. All regressions include the interacted variables themselves as well as the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Online Appendix

A Intention-to-Treat Analysis (continuation)

Table 14: **Intent-to-Treat: Record-Keeping Practices Mentioned in Handbook and/or Movie**

	Aggregate Record-Keeping Practices (Core)	Kept Written Business Records	Have Records Needed to Obtain Business Loan	Recorded Credit to Customers	Separated Business and Household Finances	Recorded Every Purchase and Sale
	(1)	(2)	(3)	(4)	(5)	(6)
Assigned Handbook (A)	0.009 (0.013)	-0.017* (0.010)	-0.033 (0.048)	-0.015 (0.036)	0.105** (0.041)	0.021 (0.017)
Assigned Handbook & Movie (B)	0.019 (0.013)	-0.004 (0.007)	-0.043 (0.050)	-0.039 (0.036)	0.055 (0.042)	0.036* (0.019)
Assigned Handbook & Counseling (C)	0.029** (0.012)	-0.006 (0.007)	-0.030 (0.050)	-0.007 (0.034)	0.091** (0.042)	0.021 (0.016)
Assigned All Three (D)	0.034*** (0.013)	0.003 (0.005)	-0.015 (0.051)	0.013 (0.035)	0.063 (0.041)	0.023 (0.017)
R-squared	0.297	0.057	0.128	0.237	0.191	0.095
Sample Size	1181	1181	1175	1181	1181	1181
Dependent Variable Mean in Control Group	0.465	0.996	0.369	0.769	0.434	0.029
Dependent Variable SD in Control Group	0.157	0.064	0.639	0.423	0.497	0.168
F-tests (p-value):						
Book = Book & Mov	0.488	0.223	0.824	0.516	0.234	0.459
Book = Book & Cnsl	0.138	0.282	0.937	0.820	0.732	0.994
Book = All Three	0.073	0.023	0.668	0.425	0.307	0.918
Book & Mov = Book & Cnsl	0.446	0.739	0.764	0.366	0.405	0.444
Book & Mov + Book & Cnsl > All Three	0.778	0.082	0.187	0.116	0.918	0.901

Notes: This table presents analysis related to record keeping business practices that are mentioned in the Handbook and/or in the movie. Column (1) presents the aggregate score for all core record-keeping practices treated by the interventions. Columns (2) to (6) show single record-keeping practices treated by the intervention. Column (2) shows whether or not the entrepreneur reported to keep written recordings and Column (3) whether or not they have sufficient records to see whether the cash on hand would suffice to pay back a hypothetical loan. Column (4) presents whether the entrepreneur kept track of credit in the form of customers paying for their purchases at a later date, Column (5) whether or not business and household finances were kept separate, and Column (6) presents whether the business had recordings detailing every purchase and sale. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 15: **Intent-to-Treat: Record-Keeping Practices Mentioned in Handbook and/or Movie** (*Continuation*)

	Kept Formal Business Ledger (1)	Itemized Business Revenues and Expenses (2)	Tracked Product Sales (3)	Updated Records At Least Once a Week (4)	Tracked Purchase of Stocks (5)
Assigned Handbook (A)	-0.023 (0.044)	0.025 (0.038)	0.009 (0.020)	-0.001 (0.041)	-0.031 (0.032)
Assigned Handbook & Movie(B)	-0.031 (0.043)	0.092** (0.040)	0.038 (0.023)	0.046 (0.041)	0.022 (0.029)
Assigned Handbook & Counseling (C)	-0.039 (0.043)	0.096** (0.039)	0.005 (0.020)	0.036 (0.040)	0.045 (0.028)
Assigned All Three (D)	-0.010 (0.045)	0.124*** (0.040)	0.032 (0.022)	0.069* (0.040)	0.069** (0.027)
R-squared	0.094	0.156	0.090	0.055	0.073
Sample Size	1181	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.434	0.264	0.050	0.702	0.868
Dependent Variable SD in Control Group	0.497	0.442	0.218	0.458	0.339
F-tests (p-value):					
Book = Book & Mov	0.848	0.098	0.240	0.260	0.089
Book = Book & Cnsl	0.719	0.069	0.838	0.361	0.011
Book = All Three	0.770	0.015	0.340	0.085	0.001
Book & Mov = Book & Cnsl	0.869	0.920	0.157	0.812	0.392
Book & Mov + Book & Cnsl > All Three	0.166	0.864	0.632	0.591	0.485

Notes: This table is the continuation of Table 14. Columns (1) to (5) show single record-keeping practices treated by the intervention. Column (1) presents whether or not the entrepreneur used a ledger book to record business transactions, Column (2) shows whether they itemized business revenues and expenses, and Column (3) whether or not the entrepreneur tracked every sale in their recordings. Column (4) presents whether the entrepreneur added an entry to their recordings once a week or more often and Column (5) shows whether with their recordings the shop owner kept track of every product purchase.

Table 16: **Intent-to-Treat: Record-Keeping Practices Mentioned in Handbook and/or Movie** (*Continuation*)

	Tracked Prices of Different Suppliers	Tracked Loan Payments Due	Calculated Business Profits	Calculated Cost of Sales for Main Products	Updated Business Profits At Least Once a Week
	(1)	(2)	(3)	(4)	(5)
Assigned Handbook (A)	-0.067 (0.042)	0.016 (0.035)	0.050 (0.043)	0.072* (0.041)	0.044 (0.039)
Assigned Handbook & Movie(B)	-0.019 (0.041)	-0.037 (0.033)	0.022 (0.042)	0.093** (0.042)	0.044 (0.038)
Assigned Handbook & Counseling (C)	-0.036 (0.041)	-0.008 (0.034)	0.087** (0.042)	0.131*** (0.040)	0.101*** (0.039)
Assigned All Three (D)	0.040 (0.040)	-0.031 (0.033)	0.030 (0.043)	0.116*** (0.041)	0.035 (0.038)
R-squared	0.145	0.106	0.158	0.112	0.084
Sample Size	1181	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.665	0.186	0.388	0.616	0.211
Dependent Variable SD in Control Group	0.473	0.390	0.488	0.487	0.409
F-tests (p-value):					
Book = Book & Mov	0.271	0.125	0.499	0.606	1.000
Book = Book & Cnsl	0.473	0.498	0.388	0.135	0.152
Book = All Three	0.011	0.176	0.640	0.270	0.832
Book & Mov = Book & Cnsl	0.693	0.378	0.115	0.349	0.148
Book & Mov + Book & Cnsl > All Three	0.052	0.385	0.906	0.968	0.977

Notes: This table is the continuation of Tables 14 and 15. Columns (1) to (5) show single record-keeping practices treated by the intervention. Column (1) presents whether or not in their records the entrepreneur kept track of prices of at least two suppliers, Columns (2) shows whether they recorded outstanding credit payments owed to them, and Column (3) whether or not the entrepreneur reported to calculate business profits of any kind. Column (4) presents whether the entrepreneur calculated the cost to the business of each of the shop's main products and Column (5) shows whether they calculated business profits of any kind once a week or more often.

Table 17: Intent-to-Treat: Marketing Practices Mentioned in Handbook and/or Movie

	Aggregate Marketing Practices (Core)	Consulted with Former Customers	Offered Discount to Loyal and Bulk Customers	Offered a New Product For Sale	Elicited Customer Demand for New Products	Introduced Special Sales Offers
	(1)	(2)	(3)	(4)	(5)	(6)
Assigned Handbook (A)	-0.002 (0.021)	-0.010 (0.028)	-0.002 (0.041)	-0.018 (0.042)	0.031 (0.041)	-0.002 (0.029)
Assigned Handbook & Movie(B)	0.042* (0.022)	0.051 (0.031)	0.089** (0.042)	0.024 (0.042)	0.040 (0.042)	0.041 (0.032)
Assigned Handbook & Counseling (C)	0.024 (0.020)	0.017 (0.029)	0.089** (0.041)	0.036 (0.042)	-0.008 (0.041)	0.009 (0.029)
Assigned All Three (D)	0.042* (0.022)	0.055* (0.031)	0.085** (0.041)	0.021 (0.042)	0.057 (0.042)	0.032 (0.030)
R-squared	0.258	0.095	0.170	0.147	0.121	0.118
Sample Size	1181	1181	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.301	0.112	0.360	0.612	0.298	0.124
Dependent Variable SD in Control Group	0.260	0.315	0.481	0.488	0.458	0.330
F-tests (p-value):						
Book = Book & Mov	0.046	0.044	0.033	0.331	0.831	0.179
Book = Book & Cnsl	0.197	0.344	0.028	0.208	0.325	0.710
Book = All Three	0.041	0.031	0.040	0.363	0.516	0.264
Book & Mov = Book & Cnsl	0.394	0.287	0.995	0.775	0.240	0.311
Book & Mov + Book & Cnsl > All Three	0.783	0.611	0.941	0.742	0.328	0.657

Notes: This table presents analysis related to marketing business practices that are mentioned in the Handbook and/or in the movie. Column (1) presents the aggregate score for all core marketing practices treated by the interventions. Columns (2) to (6) show single marketing practices treated by the interventions. Column (2) presents whether or not in the previous three months the entrepreneur reached out to former customers to ask why they quit buying and Column (3) whether or not in the same time frame they offered at least one discount for purchases in bulk or by loyal customers. Column (4) shows whether in the previous 12 months the entrepreneur introduced at least one new product, Column (5) whether or not in the previous three months the interviewee got in touch with customers asking what they would like to see on offer, and Column (6) presents whether in the previous three months the entrepreneur tried to attract new customers with any special offer. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 18: **Intent-to-Treat: Decision-Making Practices Mentioned in Handbook and/or Movie**

	Aggregate Discussion Practices (Core) (1)	Discussed Business Matters with Others (2)	Made Joint Decisions on Business Matters (3)
Assigned Handbook (A)	-0.018 (0.031)	-0.044 (0.036)	0.012 (0.041)
Assigned Handbook & Movie(B)	0.040 (0.030)	0.032 (0.034)	0.054 (0.042)
Assigned Handbook & Counseling (C)	0.076*** (0.030)	0.071** (0.032)	0.088** (0.042)
Assigned All Three (D)	0.061** (0.031)	0.027 (0.034)	0.106** (0.043)
Stratification Controls	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes
R-squared	0.187	0.138	0.140
Sample Size	1181	1181	1181
Dependent Variable Mean in Control Group	0.558	0.798	0.318
Dependent Variable SD in Control Group	0.354	0.403	0.467
F-tests (p-value):			
Book = Book & Mov	0.048	0.029	0.301
Book = Book & Cnsl	0.001	0.001	0.062
Book = All Three	0.009	0.043	0.025
Book & Mov = Book & Cnsl	0.206	0.214	0.418
Book & Mov + Book & Cnsl > All Three	0.908	0.951	0.727

Notes: This table presents analysis related to decision-making practices that are mentioned in the Handbook and/or in the movie. Column (1) presents the aggregate score for the core decision-making practices treated by the interventions. Columns (2) shows whether or not the entrepreneur reported to have ever discussed any business matter with another person and Column (3) whether they have ever jointly made any business decision. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 19: **Intent-to-Treat: Stock-up Practices Mentioned in Handbook and/or Movie**

	Aggregate Stock-Up Practices	Top Selling Products Always in Stock (Yes/No)	Stock Wastage Each Week (Proportion of Sales)	Adjusted Stock Based on Product Profitability (Yes/No)	Traced Purchase of Stocks (Yes/No)	Negotiated Lower Prices with a Supplier (Yes/No)	Compare Product Prices and Quality Across Suppliers (7)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assigned Handbook (A)	0.002 (0.019)	0.056* (0.030)	-0.002 (0.001)	0.036 (0.042)	-0.031 (0.032)	-0.003 (0.035)	-0.042 (0.044)
Assigned Handbook & Movie(B)	0.043** (0.019)	0.073** (0.029)	-0.002 (0.001)	0.054 (0.043)	0.022 (0.029)	0.022 (0.036)	0.052 (0.044)
Assigned Handbook & Counseling (C)	0.029 (0.018)	0.050* (0.030)	-0.003** (0.001)	0.002 (0.042)	0.045 (0.028)	0.058 (0.037)	0.001 (0.043)
Assigned All Three (D)	0.059*** (0.019)	0.038 (0.030)	-0.002** (0.001)	0.122*** (0.043)	0.069** (0.027)	0.033 (0.036)	0.042 (0.043)
R-squared	0.203	0.079	0.067	0.139	0.073	0.114	0.174
Sample Size	1181	1181	1178	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.532	0.709	0.003	0.417	0.868	0.190	0.475
Dependent Variable SD in Control Group	0.217	0.342	0.018	0.494	0.339	0.393	0.500
F-tests (p-value):							
Book = Book & Mov	0.035	0.516	0.909	0.688	0.089	0.492	0.028
Book = Book & Cnsl	0.146	0.846	0.053	0.430	0.011	0.089	0.296
Book = All Three	0.003	0.522	0.246	0.051	0.001	0.300	0.042
Book & Mov = Book & Cnsl	0.450	0.401	0.377	0.237	0.392	0.320	0.235
Book & Mov + Book & Cnsl > All Three	0.696	0.983	0.077	0.142	0.485	0.817	0.572

Notes: This table presents analysis related to stock-up practices that are mentioned in the Handbook and/or in the movie. Column (1) presents the aggregate score for all core stock-up practices treated by the interventions. Columns (2) to (7) show single stock-up practices treated by the interventions. Column (2) presents whether or not the entrepreneur never runs out of stock of their three best-selling products. Column (3) shows the total value of all goods disposed at the end of a typical week as a fraction of total sales. Column (4) presents whether the entrepreneur has ever adjusted their level of inventory according to the profits earned from a product and Column (5) whether the shop owner has ever tracked purchases of their stocks. Column (6) shows whether or not in the previous three months the entrepreneur has tried to renegotiate prices with at least one of their suppliers and Column (7) whether in the same time frame product prices and/or quality were ever compared across different suppliers. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 20: **Intent-to-Treat: Financial Planning Practices Mentioned in Handbook and/or Movie**

	Aggregate Planning Practices (Core)	Reviewed Financial Performance to Identify Areas of Improvement	Set Sales Target	Compared Target versus Actual Monthly Sales
	(1)	(2)	(3)	(4)
Assigned Handbook (A)	0.039 (0.032)	0.027 (0.043)	0.053 (0.042)	0.038 (0.043)
Assigned Handbook & Movie(B)	0.082*** (0.031)	0.064 (0.041)	0.114*** (0.042)	0.063 (0.044)
Assigned Handbook & Counseling (C)	0.027 (0.031)	0.037 (0.042)	0.025 (0.041)	0.012 (0.043)
Assigned All Three (D)	0.082*** (0.031)	0.086** (0.041)	0.075* (0.041)	0.089** (0.043)
R-squared	0.196	0.127	0.158	0.129
Sample Size	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.471	0.628	0.351	0.434
Dependent Variable SD in Control Group	0.381	0.484	0.478	0.497
F-tests (p-value):				
Book = Book & Mov	0.181	0.385	0.160	0.572
Book = Book & Cnsl	0.693	0.807	0.509	0.554
Book = All Three	0.181	0.157	0.601	0.245
Book & Mov = Book & Cnsl	0.073	0.527	0.037	0.248
Book & Mov + Book & Cnsl > All Three	0.728	0.601	0.860	0.413

Notes: This table presents analysis related to financial planning practices that are mentioned in the Handbook and/or in the movie. Column (1) presents the aggregate score for all core financial-planning practices treated by the interventions. Column (2) shows whether or not the entrepreneur reported to review their financial performance and analyse where there are areas for improvement at least monthly, Column (3) whether they have a sales target over the next year, and Column (4) presents whether or not the shop owner compared their sales target against actual sales performance at least monthly. All regressions include the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

B Analysis of Heterogeneity of Impact (*Continuation*)

C Baseline Regressions for the Selection of Business Practices

Table 21: **Heterogeneity of Impact on Business Profits**

	Profits Last Month (win 1%) (1)	Profits Last Month (win 2.5%) (2)	Profits Last Month (win 5%) (3)	Profits Last Month (IHS) (4)
Assigned Handbook	101.772 (236.586)	155.300 (186.763)	150.855 (151.606)	1.664** (0.737)
Assigned Handbook & Movie	315.330 (250.163)	270.866 (197.109)	222.695 (156.072)	0.369 (0.766)
Assigned Handbook & Counseling	563.021** (260.711)	584.382*** (218.828)	539.848*** (174.317)	1.690** (0.795)
Assigned All Three	688.445** (279.864)	514.713** (214.324)	406.547** (163.937)	2.009*** (0.753)
Assigned Handbook × Below-median Practices Score	-505.947 (327.916)	-554.196** (264.954)	-483.445** (208.178)	-1.933* (1.006)
Assigned Handbook & Movie × Below-median Practices Score	-345.887 (352.210)	-309.632 (277.889)	-258.338 (215.022)	0.075 (1.039)
Assigned Handbook & Counseling × Below-median Practices Score	-442.584 (359.610)	-497.439* (296.983)	-420.112* (231.472)	-1.211 (1.021)
Assigned All Three × Below-median Practices Score	-653.047* (380.596)	-541.858* (294.854)	-412.103* (224.699)	-1.874* (1.016)
R-squared	0.089	0.105	0.124	0.049
Sample Size	1178	1178	1178	1178
Dependent Variable Mean in Control Group	822.722	815.045	756.498	4.022
Dependent Variable SD in Control Group	1819.867	1524.238	1185.045	5.675
F-tests (p-value):				
Book + Interaction	0.067	0.029	0.017	0.688
Book & Mov + Interaction	0.902	0.847	0.813	0.518
Book & Cnsl + Interaction	0.606	0.652	0.418	0.445
All Three + Interaction	0.888	0.891	0.971	0.838

Notes: This table presents heterogeneous analysis for business profits. The dependent variables are described in the notes of Table 6. All the columns present regressions of profits on the four experimental interventions and an interaction term which is a binary variable equal to 1 if the firm was below the median of the aggregate business practice score at baseline. The business practice score is the average of all McKenzie and Woodruff (2017) practices measured at baseline. All regressions include the interacted variables themselves as well as the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 22: **Heterogeneity of Impact on Business Sales**

	Sales Last Month (win 1%) (1)	Sales Last Month (win 2.5%) (2)	Sales Last Month (win 5%) (3)	Sales Last Month (Log) (4)
Assigned Handbook	287.114 (774.559)	-97.915 (618.486)	-93.076 (519.937)	0.120 (0.112)
Assigned Handbook & Movie	1354.643 (829.101)	1135.531* (653.629)	1079.087* (553.673)	0.175 (0.127)
Assigned Handbook & Counseling	1064.947 (894.702)	1129.591 (753.923)	1120.826* (637.966)	0.263** (0.125)
Assigned All Three	451.258 (758.699)	396.016 (625.502)	484.316 (543.616)	0.183 (0.119)
Assigned Handbook × Below-median Practices Score	-1071.545 (1002.658)	-604.276 (820.795)	-494.920 (692.194)	-0.365** (0.153)
Assigned Handbook & Movie × Below-median Practices Score	-1518.667 (1071.149)	-1061.751 (854.402)	-845.072 (723.338)	-0.166 (0.168)
Assigned Handbook & Counseling × Below-median Practices Score	-205.596 (1164.150)	-351.652 (973.598)	-266.305 (825.984)	-0.202 (0.167)
Assigned All Three × Below-median Practices Score	138.956 (1068.844)	381.193 (899.803)	399.464 (773.679)	-0.126 (0.166)
R-squared	0.497	0.522	0.535	0.475
Sample Size	1179	1179	1179	1179
Dependent Variable Mean in Control Group	5627.899	5331.050	5024.003	7.987
Dependent Variable SD in Control Group	7983.587	6652.356	5572.596	1.180
F-tests (p-value):				
Book + Interaction	0.215	0.190	0.194	0.017
Book & Mov + Interaction	0.809	0.896	0.625	0.940
Book & Cnsl + Interaction	0.245	0.197	0.100	0.585
All Three + Interaction	0.432	0.229	0.108	0.622

Notes: This table presents heterogeneous analysis for business sales. The dependent variables are described in Table 7 notes. All the columns present regressions of sales on the four experimental interventions and an interaction term which is a binary variable equal to 1 if the firm was below the median of the aggregate business practice score at baseline. The business practice score is the average of all McKenzie and Woodruff (2017) practices measured at baseline. All regressions include the interacted variables themselves as well as the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 23: **Heterogeneity of Impact on Business Expenses**

	Total Expenses Last Month (win 1%) (1)	Total Expenses Last Month (win 2.5%) (2)	Total Expenses Last Month (win 5%) (3)	Total Expenses Last Month (Log) (4)
Assigned Handbook	211.274 (633.120)	-19.644 (479.351)	9.340 (408.758)	0.100 (0.116)
Assigned Handbook & Movie	427.376 (734.798)	277.795 (558.256)	403.546 (487.921)	0.083 (0.134)
Assigned Handbook & Counseling	-327.713 (728.772)	-150.931 (606.184)	9.813 (527.830)	0.027 (0.139)
Assigned All Three	-258.764 (670.967)	-121.239 (563.806)	-94.220 (492.045)	0.005 (0.121)
Assigned Handbook × Below-median Practices Score	-486.097 (835.188)	-18.947 (651.217)	4.019 (546.460)	-0.192 (0.160)
Assigned Handbook & Movie × Below-median Practices Score	-682.444 (930.890)	-100.655 (720.201)	-99.875 (615.680)	-0.064 (0.172)
Assigned Handbook & Counseling × Below-median Practices Score	655.174 (935.480)	694.540 (753.501)	589.589 (641.870)	-0.010 (0.173)
Assigned All Three × Below-median Practices Score	439.581 (909.650)	713.219 (765.238)	735.242 (652.882)	0.032 (0.164)
R-squared	0.543	0.566	0.574	0.487
Sample Size	1180	1180	1180	1180
Dependent Variable Mean in Control Group	4722.200	4451.435	4197.504	7.777
Dependent Variable SD in Control Group	6830.787	5590.931	4712.890	1.212
F-tests (p-value):				
Book + Interaction	0.623	0.930	0.970	0.395
Book & Mov + Interaction	0.655	0.700	0.422	0.854
Book & Cnsl + Interaction	0.581	0.228	0.105	0.871
All Three + Interaction	0.769	0.247	0.130	0.735

Notes: This table presents heterogeneous analysis for business expenses. The dependent variables are described in Table 8 notes. All the columns present regressions of expenses on the four experimental interventions and an interaction term which is a binary variable equal to 1 if the firm was below the median of the aggregate business practice score at baseline. The business practice score is the average of all McKenzie and Woodruff (2017) practices measured at baseline. All regressions include the interacted variables themselves as well as the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 24: **Heterogeneity of Impact on Business Size**

	Total Employees (1)	Total Family Employees (2)	Total Non-Family Employees (3)	Shop size (4)
Assigned Handbook	0.121 (0.157)	0.067 (0.147)	0.051 (0.069)	-0.311 (0.993)
Assigned Handbook & Movie	0.318* (0.172)	0.298* (0.155)	0.025 (0.073)	1.280 (1.016)
Assigned Handbook & Counseling	0.044 (0.138)	-0.049 (0.129)	0.070 (0.071)	1.495 (1.072)
Assigned All Three	0.080 (0.178)	0.050 (0.134)	0.046 (0.087)	-0.349 (0.989)
Assigned Handbook × Below-median Practices Score	-0.134 (0.222)	-0.040 (0.208)	-0.095 (0.095)	0.337 (1.479)
Assigned Handbook & Movie × Below-median Practices Score	-0.344 (0.220)	-0.266 (0.201)	-0.108 (0.097)	-1.620 (1.464)
Assigned Handbook & Counseling × Below-median Practices Score	-0.042 (0.186)	0.104 (0.175)	-0.158* (0.091)	-0.562 (1.628)
Assigned All Three × Below-median Practices Score	-0.141 (0.217)	-0.040 (0.179)	-0.132 (0.102)	0.180 (1.411)
R-squared	0.247	0.248	0.113	0.322
Sample Size	1181	1181	1181	1181
Dependent Variable Mean in Control Group	2.050	1.901	0.149	12.847
Dependent Variable SD in Control Group	1.173	1.108	0.476	9.054
F-tests (p-value):				
Book + Interaction	0.933	0.849	0.504	0.980
Book & Mov + Interaction	0.845	0.797	0.184	0.741
Book & Cnsl + Interaction	0.984	0.645	0.130	0.441
All Three + Interaction	0.609	0.933	0.099	0.869

Notes: This table presents heterogeneous analysis for business growth. The dependent variables are described in Table 9 notes. All the columns present regressions of business growth on the four interventions and an interaction term which is a binary variable equal to 1 if the firm was below the median of the aggregate business practice score at baseline. The business practice score is the average of all McKenzie and Woodruff (2017) practices measured at baseline. All regressions include the interacted variables themselves as well as the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 25: **Heterogeneity of Impact on Business Customers**

	Total Customers (1)	Loyal Customers (2)	Casual Customers (3)
Assigned Handbook	5.705 (6.399)	3.897 (2.535)	2.543 (4.214)
Assigned Handbook & Movie	3.424 (5.475)	1.875 (2.253)	1.681 (3.659)
Assigned Handbook & Counseling	2.389 (5.949)	1.935 (2.437)	1.086 (4.019)
Assigned All Three	-0.865 (5.141)	0.476 (2.137)	-1.129 (3.437)
Assigned Handbook × Below-median Practices Score	-9.444 (7.260)	-4.832 (2.979)	-5.287 (4.755)
Assigned Handbook & Movie × Below-median Practices Score	-4.054 (6.437)	-2.331 (2.670)	-1.890 (4.365)
Assigned Handbook & Counseling × Below-median Practices Score	-0.270 (6.958)	-0.307 (2.855)	-0.386 (4.717)
Assigned All Three × Below-median Practices Score	5.280 (6.844)	1.164 (2.924)	4.178 (4.502)
R-squared	0.315	0.244	0.302
Sample Size	1181	1181	1181
Dependent Variable Mean in Control Group	50.091	16.459	33.632
Dependent Variable SD in Control Group	40.875	15.834	27.300
F-tests (p-value):			
Book + Interaction	0.258	0.533	0.203
Book & Mov + Interaction	0.847	0.743	0.927
Book & Cnsl + Interaction	0.552	0.269	0.774
All Three + Interaction	0.323	0.410	0.288

Notes: This table presents heterogeneous analysis for business customers. The dependent variables are described in Table 10 notes. All the columns present regressions of expenses on the four interventions and an interaction term which is a binary variable equal to 1 if the firm was below the median of the aggregate business practice score at baseline. The business practice score is the average of all McKenzie and Woodruff (2017) practices measured at baseline. All regressions include the interacted variables themselves as well as the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 26: **Heterogeneity of Impact on Business Credit**

	Offered Credit or Delayed Payment to Customers (Yes/No) (1)	Applied for Business Loan (Yes/No) (2)	Obtained Business Loan (Yes/No) (3)	Outstanding Loan Amount (log) (4)
Assigned Handbook	0.029 (0.038)	0.029 (0.050)	0.015 (0.049)	-0.105 (0.408)
Assigned Handbook & Movie	-0.014 (0.041)	0.042 (0.051)	0.038 (0.051)	-0.148 (0.408)
Assigned Handbook & Counseling	-0.010 (0.042)	-0.049 (0.051)	-0.043 (0.048)	-0.934** (0.384)
Assigned All Three	0.016 (0.040)	-0.026 (0.050)	-0.014 (0.050)	-0.287 (0.398)
Assigned Handbook × Below-median Practices Score	-0.042 (0.061)	-0.000 (0.068)	0.032 (0.065)	0.525 (0.528)
Assigned Handbook & Movie × Below-median Practices Score	-0.004 (0.063)	-0.034 (0.067)	-0.012 (0.065)	0.484 (0.522)
Assigned Handbook & Counseling × Below-median Practices Score	-0.018 (0.062)	0.040 (0.066)	0.049 (0.062)	1.124** (0.495)
Assigned All Three × Below-median Practices Score	-0.015 (0.061)	0.051 (0.066)	0.037 (0.063)	0.283 (0.491)
Stratification Controls	Yes	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes	Yes
R-squared	0.152	0.142	0.131	0.165
Sample Size	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.860	0.169	0.149	1.407
Dependent Variable SD in Control Group	0.348	0.376	0.357	2.941
F-tests (p-value):				
Book + Interaction	0.784	0.525	0.267	0.202
Book & Mov + Interaction	0.709	0.852	0.530	0.294
Book & Cnsl + Interaction	0.549	0.827	0.878	0.532
All Three + Interaction	0.998	0.557	0.553	0.989

Table 27: Heterogeneity of Impact on Record-keeping Practices Mentioned in Handbook and/or Movie

	Aggregate Record-keeping Practices (Core)	Kept Written Business Records	Have Records Needed to Obtain Business Loan	Recorded Credit to Customers	Separated Business and Household Finances	Recorded Every Purchase and Sale
	(1)	(2)	(3)	(4)	(5)	(6)
Assigned Handbook (A)	0.036* (0.019)	-0.025* (0.015)	0.041 (0.063)	0.024 (0.051)	0.139** (0.062)	0.006 (0.027)
Assigned Handbook & Movie (B)	0.033* (0.019)	0.000 (0.003)	0.007 (0.064)	-0.034 (0.053)	0.077 (0.061)	0.050 (0.033)
Assigned Handbook & Counseling (C)	0.075*** (0.020)	0.002 (0.004)	0.112* (0.068)	0.044 (0.047)	0.167** (0.066)	0.028 (0.031)
Assigned All Three (D)	0.044** (0.020)	-0.001 (0.003)	0.011 (0.064)	0.060 (0.049)	0.057 (0.063)	0.027 (0.032)
Assigned Handbook × Below-median Practices Score	-0.050* (0.026)	0.015 (0.020)	-0.142 (0.095)	-0.074 (0.073)	-0.064 (0.083)	0.026 (0.034)
Assigned Handbook & Movie × Below-median Practices Score	-0.028 (0.026)	-0.008 (0.015)	-0.095 (0.095)	-0.010 (0.073)	-0.042 (0.085)	-0.026 (0.038)
Assigned Handbook & Counseling × Below-median Practices Score	-0.080*** (0.026)	-0.013 (0.013)	-0.247** (0.100)	-0.091 (0.068)	-0.129 (0.088)	-0.012 (0.035)
Assigned All Three × Below-median Practices Score	-0.021 (0.026)	0.006 (0.009)	-0.056 (0.094)	-0.086 (0.069)	0.004 (0.084)	-0.008 (0.036)
Stratification Controls	Yes	Yes	Yes	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.303	0.060	0.134	0.239	0.194	0.097
Sample Size	1181	1181	1175	1181	1181	1181
Dependent Variable Mean in Control Group	0.465	0.996	0.369	0.769	0.434	0.029
Dependent Variable SD in Control Group	0.157	0.064	0.639	0.423	0.497	0.168
F-tests (p-value):						
Book + Interaction	0.407	0.458	0.153	0.322	0.176	0.112
Book & Mov + Interaction	0.743	0.594	0.226	0.379	0.556	0.201
Book & Cnsl + Interaction	0.776	0.364	0.065	0.328	0.505	0.343
All Three + Interaction	0.172	0.511	0.539	0.593	0.264	0.261

Table 28: **Heterogeneity of Impact on Record-keeping Practices Mentioned in Handbook and/or Movie** (*Continuation*)

	Kept Formal Business Ledger (1)	Itemized Business Revenues and Expenses (2)	Tracked Product Sales (3)	Updated Records At Least Once a Week (4)	Tracked Purchase of Stocks (5)
Assigned Handbook (A)	0.018 (0.065)	0.096 (0.062)	-0.003 (0.038)	0.059 (0.062)	0.009 (0.042)
Assigned Handbook & Movie(B)	0.028 (0.066)	0.064 (0.063)	0.043 (0.043)	0.108* (0.059)	0.068* (0.037)
Assigned Handbook & Counseling (C)	0.037 (0.069)	0.150** (0.065)	-0.021 (0.039)	0.083 (0.063)	0.064* (0.038)
Assigned All Three (D)	-0.044 (0.068)	0.125* (0.065)	0.006 (0.041)	0.131** (0.061)	0.081** (0.036)
Assigned Handbook × Below-median Practices Score	-0.078 (0.088)	-0.134* (0.078)	0.023 (0.042)	-0.115 (0.084)	-0.076 (0.064)
Assigned Handbook & Movie × Below-median Practices Score	-0.114 (0.088)	0.054 (0.081)	-0.010 (0.047)	-0.119 (0.082)	-0.088 (0.060)
Assigned Handbook & Counseling × Below-median Practices Score	-0.129 (0.089)	-0.093 (0.082)	0.045 (0.044)	-0.090 (0.083)	-0.038 (0.056)
Assigned All Three × Below-median Practices Score	0.053 (0.091)	-0.005 (0.083)	0.046 (0.046)	-0.115 (0.080)	-0.026 (0.053)
Stratification Controls	Yes	Yes	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes	Yes	Yes
R-squared	0.099	0.161	0.092	0.058	0.075
Sample Size	1181	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.434	0.264	0.050	0.702	0.868
Dependent Variable SD in Control Group	0.497	0.442	0.218	0.458	0.339
F-tests (p-value):					
Book + Interaction	0.315	0.409	0.268	0.321	0.156
Book & Mov + Interaction	0.139	0.019	0.096	0.836	0.654
Book & Cnsl + Interaction	0.094	0.234	0.204	0.900	0.514
All Three + Interaction	0.889	0.019	0.013	0.761	0.154

Table 29: **Heterogeneity of Impact on Record-keeping Practices Mentioned in Handbook and/or Movie** (*Continuation*)

	Tracked Prices of Different Suppliers	Tracked Loan Payments Due	Calculated Business Profits	Calculated Cost of Sales for Main Products	Updated Business Profits At Least Once a Week
	(1)	(2)	(3)	(4)	(5)
Assigned Handbook	-0.098*	-0.041	0.134**	0.082	0.113*
	(0.057)	(0.057)	(0.064)	(0.058)	(0.061)
Assigned Handbook & Movie	-0.062	-0.099*	0.103	0.073	0.089
	(0.057)	(0.052)	(0.063)	(0.060)	(0.059)
Assigned Handbook & Counseling	-0.035	-0.036	0.223***	0.192***	0.196***
	(0.061)	(0.059)	(0.065)	(0.057)	(0.065)
Assigned All Three	0.016	-0.083	0.097	0.143**	0.093
	(0.056)	(0.057)	(0.066)	(0.058)	(0.062)
Assigned Handbook × Below-median Practices Score	0.060	0.108	-0.160*	-0.020	-0.132*
	(0.084)	(0.071)	(0.087)	(0.083)	(0.079)
Assigned Handbook & Movie × Below-median Practices Score	0.083	0.120*	-0.157*	0.038	-0.088
	(0.084)	(0.067)	(0.085)	(0.086)	(0.077)
Assigned Handbook & Counseling × Below-median Practices Score	0.005	0.057	-0.240***	-0.103	-0.168**
	(0.083)	(0.072)	(0.086)	(0.081)	(0.082)
Assigned All Three × Below-median Practices Score	0.045	0.096	-0.130	-0.048	-0.110
	(0.080)	(0.070)	(0.087)	(0.083)	(0.080)
Stratification Controls	Yes	Yes	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes	Yes	Yes
R-squared	0.146	0.109	0.164	0.115	0.088
Sample Size	1181	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.665	0.186	0.388	0.616	0.211
Dependent Variable SD in Control Group	0.473	0.390	0.488	0.487	0.409
F-tests (p-value):					
Book + Interaction	0.535	0.120	0.660	0.298	0.697
Book & Mov + Interaction	0.731	0.614	0.344	0.065	0.985
Book & Cnsl + Interaction	0.598	0.583	0.759	0.117	0.577
All Three + Interaction	0.284	0.732	0.571	0.109	0.733

Table 30: **Heterogeneity of Impact on Marketing Practices Mentioned in Handbook and/or Movie**

	Aggregate Marketing Practices (Core)	Consulted with Former Customers	Offered Discount to Loyal and Bulk Customers	Offered a New Product For Sale	Elicited Customer Demand for New Products	Introduced Special Sales Offers
	(1)	(2)	(3)	(4)	(5)	(6)
Assigned Handbook	0.042 (0.033)	0.015 (0.050)	0.012 (0.062)	-0.015 (0.056)	0.166*** (0.063)	0.056 (0.053)
Assigned Handbook & Movie	0.050 (0.032)	0.088 (0.054)	0.036 (0.062)	0.011 (0.054)	0.148** (0.063)	0.036 (0.050)
Assigned Handbook & Counseling	0.054* (0.032)	-0.012 (0.051)	0.113* (0.065)	0.062 (0.055)	0.096 (0.068)	0.064 (0.055)
Assigned All Three	0.033 (0.035)	0.075 (0.055)	0.030 (0.064)	-0.059 (0.057)	0.129** (0.066)	0.080 (0.056)
Assigned Handbook × Below-median Practices Score	-0.083** (0.042)	-0.047 (0.057)	-0.025 (0.083)	-0.004 (0.084)	-0.257*** (0.084)	-0.110* (0.060)
Assigned Handbook & Movie × Below-median Practices Score	-0.016 (0.044)	-0.070 (0.065)	0.101 (0.085)	0.025 (0.084)	-0.209** (0.085)	0.008 (0.064)
Assigned Handbook & Counseling × Below-median Practices Score	-0.053 (0.042)	0.043 (0.062)	-0.035 (0.084)	-0.039 (0.083)	-0.194** (0.086)	-0.098 (0.063)
Assigned All Three × Below-median Practices Score	0.012 (0.045)	-0.035 (0.065)	0.096 (0.085)	0.138* (0.084)	-0.140 (0.085)	-0.089 (0.064)
Stratification Controls	Yes	Yes	Yes	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.262	0.098	0.174	0.150	0.130	0.123
Sample Size	1181	1181	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.301	0.112	0.360	0.612	0.298	0.124
Dependent Variable SD in Control Group	0.260	0.315	0.481	0.488	0.458	0.330
F-tests (p-value):						
Book + Interaction	0.123	0.253	0.804	0.759	0.090	0.058
Book & Mov + Interaction	0.261	0.621	0.017	0.572	0.276	0.254
Book & Cnsl + Interaction	0.969	0.376	0.138	0.698	0.055	0.265
All Three + Interaction	0.101	0.253	0.023	0.187	0.840	0.790

Table 31: **Heterogeneity of Impact on Decision-making Practices Mentioned in Handbook and/or Movie**

	Aggregate Discussion Practices (Core) (1)	Discussed Business Matters with Others (2)	Made Joint Decisions on Business Matters (3)
Assigned Handbook	0.036 (0.043)	-0.007 (0.047)	0.087 (0.063)
Assigned Handbook & Movie	0.034 (0.041)	0.058 (0.042)	0.023 (0.063)
Assigned Handbook & Counseling	0.079* (0.043)	0.067* (0.040)	0.101 (0.068)
Assigned All Three	0.060 (0.044)	0.043 (0.042)	0.097 (0.067)
Assigned Handbook	-0.102* (0.061)	-0.070 (0.072)	-0.142* (0.083)
Assigned Handbook & Movie	0.013 (0.061)	-0.049 (0.068)	0.060 (0.086)
Assigned Handbook & Counseling	-0.008 (0.060)	0.002 (0.063)	-0.024 (0.088)
Assigned All Three	-0.000 (0.062)	-0.031 (0.067)	0.012 (0.088)
Stratification Controls	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes
R-squared	0.190	0.140	0.145
Sample Size	1181	1181	1181
Dependent Variable Mean in Control Group	0.558	0.798	0.318
Dependent Variable SD in Control Group	0.354	0.403	0.467
F-tests (p-value):			
Book + Interaction	0.133	0.151	0.310
Book & Mov + Interaction	0.296	0.868	0.150
Book & Cnsl + Interaction	0.085	0.154	0.161
All Three + Interaction	0.169	0.810	0.056

Table 32: **Heterogeneity of Impact on Stock-up Practices**

	Aggregate Stock-Up Practices	Top Selling Products Always in Stock (Yes/No)	Stock Wastage Each Week (Proportion of Sales)	Adjusted Stock Based on Product Profitability (Yes/No)	Traced Purchase of Stocks (Yes/No)	Negotiated Lower Prices with a Supplier (Yes/No)	Compare Product Prices and Quality Across Suppliers
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assigned Handbook	0.035 (0.028)	0.074* (0.043)	-0.004 (0.002)	0.061 (0.063)	0.009 (0.042)	0.049 (0.059)	-0.014 (0.064)
Assigned Handbook & Movie	0.077*** (0.027)	0.089** (0.042)	-0.004** (0.002)	0.038 (0.065)	0.068* (0.037)	0.061 (0.059)	0.135** (0.062)
Assigned Handbook & Counseling	0.090*** (0.028)	0.072 (0.044)	-0.004** (0.002)	0.071 (0.067)	0.064* (0.038)	0.108* (0.064)	0.139** (0.066)
Assigned All Three	0.086*** (0.027)	0.061 (0.045)	-0.005** (0.002)	0.127* (0.065)	0.081** (0.036)	0.084 (0.062)	0.083 (0.063)
Assigned Handbook × Below-median Practices Score	-0.063* (0.038)	-0.035 (0.060)	0.004 (0.003)	0.046 (0.086)	-0.076 (0.064)	-0.099 (0.071)	-0.056 (0.088)
Assigned Handbook & Movie × Below-median Practices Score	-0.066* (0.038)	-0.031 (0.058)	0.005** (0.003)	0.031 (0.088)	-0.088 (0.060)	-0.076 (0.073)	-0.160* (0.089)
Assigned Handbook & Counseling × Below-median Practices Score	-0.108*** (0.037)	-0.040 (0.060)	0.003 (0.002)	-0.115 (0.087)	-0.038 (0.056)	-0.091 (0.079)	-0.240*** (0.089)
Assigned All Three × Below-median Practices Score	-0.054 (0.037)	-0.042 (0.061)	0.004* (0.002)	-0.012 (0.087)	-0.026 (0.053)	-0.094 (0.075)	-0.082 (0.087)
R-squared	0.209	0.080	0.075	0.141	0.075	0.116	0.180
Sample Size	1181	1181	1178	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.532	0.709	0.003	0.417	0.868	0.190	0.475
Dependent Variable SD in Control Group	0.217	0.342	0.018	0.494	0.339	0.393	0.500
F-tests (p-value):							
Book + Interaction	0.275	0.338	0.997	0.800	0.156	0.203	0.247
Book & Mov + Interaction	0.680	0.147	0.667	0.238	0.654	0.720	0.685
Book & Cnsl + Interaction	0.470	0.424	0.209	0.418	0.514	0.704	0.084
All Three + Interaction	0.206	0.655	0.680	0.045	0.154	0.808	0.986

Notes: This table presents heterogeneous analysis for stock up practices. The dependent variables are described in Online Annex E. All the columns present regressions of stock up practices on the four experimental interventions and an interaction term which is a binary variable equal to 1 if the firm was below the median of the aggregate business practice score at baseline. The business practice score is the average of all McKenzie and Woodruff (2017) practices measured at baseline. All regressions include the interacted variables themselves as well as the baseline value of the dependent variable and stratification controls. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table 33: **Heterogeneity of Impact on Financial-Planning Practices Mentioned in Handbook and/or Movie**

	Aggregate Planning Practices (Core) (1)	Reviewed Fin. Performance to Identify Areas of Improvement (2)	Set Sales Target (3)	Compared Target vs. Actual Monthly Sales (4)
Assigned Handbook	0.024 (0.047)	-0.008 (0.058)	0.050 (0.064)	0.025 (0.064)
Assigned Handbook & Movie	0.055 (0.046)	0.037 (0.057)	0.113* (0.064)	-0.003 (0.065)
Assigned Handbook & Counseling	0.032 (0.049)	-0.013 (0.062)	0.067 (0.068)	0.027 (0.068)
Assigned All Three	0.080* (0.047)	0.076 (0.056)	0.103 (0.065)	0.067 (0.066)
Assigned Handbook × Below-median Practices Score	0.030 (0.065)	0.068 (0.085)	0.005 (0.085)	0.026 (0.087)
Assigned Handbook & Movie × Below-median Practices Score	0.052 (0.064)	0.051 (0.083)	0.001 (0.086)	0.128 (0.089)
Assigned Handbook & Counseling × Below-median Practices Score	-0.006 (0.065)	0.089 (0.086)	-0.071 (0.086)	-0.017 (0.088)
Assigned All Three × Below-median Practices Score	0.006 (0.063)	0.023 (0.082)	-0.049 (0.084)	0.041 (0.088)
Stratification Controls	Yes	Yes	Yes	Yes
Control for Baseline Level of Outcome	Yes	Yes	Yes	Yes
R-squared	0.197	0.128	0.159	0.131
Sample Size	1181	1181	1181	1181
Dependent Variable Mean in Control Group	0.471	0.628	0.351	0.434
Dependent Variable SD in Control Group	0.381	0.484	0.478	0.497
F-tests (p-value):				
Book + Interaction	0.233	0.338	0.319	0.389
Book & Mov + Interaction	0.014	0.144	0.043	0.038
Book & Cnsl + Interaction	0.524	0.197	0.939	0.864
All Three + Interaction	0.043	0.096	0.312	0.062

Table C.1: Baseline Regressions on McKenzie and Woodruff (2017) Marketing Practices

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
See competitor prices	-0.15* (0.09)	-285.09 (184.18)	-0.21** (0.09)	-21.28 (16.18)	-0.23** (0.10)	-0.09 (0.09)	-0.17** (0.09)	-5.41* (2.85)
See competitor products	-0.15* (0.09)	-103.52 (195.89)	0.02 (0.09)	2.58 (16.45)	-0.13 (0.10)	-0.13 (0.09)	0.02 (0.08)	0.71 (3.38)
Ask customers: products	0.19*** (0.06)	227.68* (131.80)	0.18*** (0.06)	21.12* (11.91)	0.21*** (0.07)	0.20*** (0.06)	0.18*** (0.06)	6.30** (2.52)
Contact former customers	0.25*** (0.08)	512.17*** (178.58)	0.23*** (0.07)	47.43*** (15.05)	0.23*** (0.08)	0.20*** (0.07)	0.20*** (0.07)	3.27 (3.58)
Ask supplier: bestseller	-0.02 (0.06)	-111.41 (128.08)	0.03 (0.06)	6.97 (11.99)	-0.06 (0.07)	0.02 (0.06)	0.08 (0.06)	0.67 (2.17)
Win customer: discount	0.16** (0.08)	342.23* (181.58)	0.03 (0.08)	12.27 (15.33)	0.15* (0.09)	0.15** (0.07)	0.03 (0.08)	11.44** (4.62)
Advertize	0.28* (0.16)	543.91 (381.31)	0.06 (0.14)	-14.51 (24.49)	0.25 (0.18)	0.40*** (0.15)	0.08 (0.13)	15.01 (10.78)
Constant	7.35*** (0.08)	826.87*** (179.81)	5.15*** (0.07)	104.96*** (13.70)	4.07*** (0.08)	3.27*** (0.08)	1.96*** (-0.06)	24.82*** (2.60)
R ²	0.14	0.14	0.09	0.09	0.12	0.14	0.08	0.06
N	1287	1287	1264	1264	1298	1304	1270	1300

Notes: This table presents the results of the OLS regression analysis specified by eq. 1 using baseline data. The dependent variables are different measures of businesses sales, profits and customers. Monthly Sales Composite (Columns 1 and 2) is the average value of the self-reported sales from last month, the self-reported sales on a typical day multiplied by 30 and the self-reported sales on a typical day for top 7 products multiplied by 30. Monthly Profits Composite (Columns 3 and 4) is the average value of the self-reported profits from last month, the calculated profits from last month and the self-reported profits on a typical day multiplied by 30. Calculated profits from last month are self-reported sales minus the sum of self-reported expenses. The other measures are self-explanatory. *IHS* refers to the inverse hyperbolic sine transformation of the outcome and *win 1%* means that the variable is winsorized on both tails at the 1%. The independent variables are the marketing practices defined by McKenzie and Woodruff (2017). For a description of all the practices see Online Appendix E. All regressions include shop size and number of workers as firm-level control. Robust standard errors are reported in parentheses. Statistically significant p-values are highlighted by: * (10% significance level), ** (5% significance level), and *** (1% significance level).

Table C.2: Baseline Regressions on **Additional Marketing Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Compare prices	0.05 (0.06)	174.07 (144.87)	0.08 (0.06)	12.36 (11.97)	0.07 (0.07)	0.03 (0.06)	0.09 (0.06)	5.67* (3.03)
Compare sales	-0.20*** (0.06)	-375.54*** (107.14)	-0.08 (0.06)	-8.36 (10.37)	-0.22*** (0.06)	-0.15*** (0.05)	-0.07 (0.05)	-2.87 (2.08)
Discuss new products	-0.01 (0.10)	-61.73 (214.65)	0.02 (0.10)	1.51 (18.75)	-0.04 (0.11)	0.09 (0.09)	0.08 (0.09)	-3.01 (2.11)
Discuss new suppliers	-0.14 (0.17)	-354.89 (224.51)	0.07 (0.16)	3.01 (35.84)	-0.11 (0.19)	-0.00 (0.17)	0.12 (0.16)	-5.28 (4.82)
Discuss best-sellers	-0.12* (0.07)	-323.34** (135.65)	0.00 (0.07)	-4.90 (12.86)	-0.15* (0.08)	-0.05 (0.07)	0.01 (0.07)	-0.81 (2.49)
Give discounts	0.40*** (0.05)	681.83*** (117.08)	0.29*** (0.05)	43.26*** (9.82)	0.37*** (0.06)	0.35*** (0.05)	0.26*** (0.05)	7.46*** (2.06)
Constant	7.29*** (0.08)	737.30*** (176.12)	5.07*** (0.07)	97.14*** (13.72)	4.00*** (0.08)	3.22*** (0.08)	1.90*** (0.06)	24.39*** (2.49)
R ²	0.16	0.16	0.10	0.09	0.13	0.15	0.09	0.05
N	1289	1289	1266	1266	1300	1306	1272	1302

Notes:

Table C.3: Baseline Regressions on **McKenzie and Woodruff (2017) Stocking Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Negotiate supplier price	0.09 (0.07)	407.95** (174.52)	0.06 (0.07)	19.57 (14.21)	0.08 (0.08)	0.09 (0.07)	0.08 (0.07)	2.83 (2.89)
Compare suppliers	0.20*** (0.05)	162.89 (105.54)	0.16*** (0.05)	23.97*** (9.27)	0.16*** (0.06)	0.18*** (0.05)	0.13*** (0.05)	5.93*** (1.66)
No out-of-stocks	0.03 (0.05)	117.86 (107.17)	0.10* (0.05)	11.86 (9.57)	0.05 (0.06)	0.04 (0.05)	0.10* (0.05)	0.91 (1.73)
Constant	7.24*** (0.09)	647.66*** (195.19)	5.01*** (0.08)	89.31*** (15.07)	3.94*** (0.09)	3.19*** (0.09)	1.85*** (0.07)	23.04*** (3.00)
R ²	0.12	0.13	0.08	0.08	0.10	0.12	0.08	0.04
N	1286	1286	1263	1263	1297	1303	1269	1299

Notes:

Table C.4: Baseline Regressions on **Additional Stocking Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
All OOS weekly	0.05 (0.06)	66.51 (128.81)	0.00 (0.06)	3.62 (11.64)	0.03 (0.07)	0.01 (0.06)	-0.01 (0.06)	-2.01 (2.11)
Any stocked up late	-0.25*** (0.07)	-294.95** (134.33)	-0.27*** (0.07)	-36.91*** (10.73)	-0.28*** (0.08)	-0.28*** (0.06)	-0.26*** (0.07)	-7.50*** (2.05)
All by fixed schedule	0.26** (0.13)	810.67** (390.14)	0.25** (0.12)	62.52** (29.91)	0.22 (0.13)	0.31** (0.13)	0.27** (0.12)	1.35 (3.35)
All stocked up weekly	-0.48*** (0.08)	-582.94*** (151.42)	-0.37*** (0.08)	-47.52*** (12.60)	-0.49*** (0.09)	-0.50*** (0.08)	-0.33*** (0.08)	-9.90*** (1.94)
All stocked up daily	0.32*** (0.11)	652.83** (291.78)	0.19* (0.11)	34.49 (23.47)	0.27** (0.12)	0.41*** (0.09)	0.20** (0.10)	5.60 (3.79)
Constant	7.43*** (0.09)	910.29*** (192.04)	5.25*** (0.07)	119.93*** (14.19)	4.14*** (0.09)	3.39*** (0.08)	2.07*** (0.06)	29.37*** (2.66)
R ²	0.15	0.14	0.10	0.09	0.13	0.17	0.10	0.04
N	1289	1289	1266	1266	1300	1306	1272	1302

Notes:

Table C.5: Baseline Regressions on **McKenzie and Woodruff (2017) Record Keeping Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Written records	0.28*** (0.07)	303.47*** (114.05)	0.26*** (0.06)	31.25*** (9.42)	0.33*** (0.07)	0.26*** (0.06)	0.27*** (0.06)	-2.20 (3.25)
Record purchase & sale	-0.12 (0.09)	-359.76* (202.10)	0.12 (0.09)	15.92 (20.54)	-0.13 (0.10)	-0.14 (0.09)	0.11 (0.09)	0.11 (4.11)
Use records: see liquidity	-0.04 (0.06)	-18.30 (146.11)	-0.06 (0.06)	-8.31 (12.07)	-0.08 (0.07)	-0.02 (0.06)	-0.04 (0.06)	3.29 (3.00)
Use record: check any sale	0.02 (0.05)	-4.90 (113.46)	0.03 (0.05)	-2.84 (9.62)	0.04 (0.06)	0.02 (0.05)	0.00 (0.05)	1.13 (1.88)
Main products: costs	0.20*** (0.06)	391.15*** (100.25)	0.17*** (0.06)	26.32*** (9.48)	0.19*** (0.07)	0.18*** (0.06)	0.12** (0.06)	4.74** (2.15)
Main products: mark-up	0.06 (0.07)	23.21 (140.12)	0.08 (0.07)	13.41 (10.66)	-0.00 (0.07)	0.13** (0.07)	0.11* (0.06)	-0.10 (1.89)
Monthly expenses budget	0.10 (0.09)	377.15 (238.84)	0.08 (0.09)	28.91 (20.51)	0.07 (0.10)	0.13 (0.09)	0.10 (0.09)	9.52* (5.39)
Use record: pay back loan	0.35*** (0.07)	655.88*** (154.07)	0.36*** (0.06)	65.86*** (13.82)	0.36*** (0.07)	0.32*** (0.06)	0.34*** (0.06)	7.36** (3.00)
Constant	6.91*** (0.11)	239.06 (208.58)	4.73*** (0.10)	46.89*** (16.59)	3.63*** (0.11)	2.84*** (0.11)	1.56*** (0.09)	22.46*** (3.32)
R ²	0.16	0.16	0.13	0.122	0.14	0.16	0.13	0.06
N	1252	1252	1232	1232	1262	1267	1238	1263

Notes:

Table C.6: Baseline Regressions on **Additional Record Keeping Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Ledger book	0.12* (0.06)	63.86 (123.05)	0.12** (0.06)	11.19 (10.80)	0.09 (0.07)	0.08 (0.06)	0.11* (0.06)	2.11 (2.64)
Collect receipts	0.19*** (0.06)	391.46*** (129.39)	0.22*** (0.06)	35.44*** (10.92)	0.19*** (0.07)	0.10* (0.06)	0.20*** (0.06)	2.97 (2.14)
Record twice a week	0.23*** (0.05)	383.92*** (106.20)	0.19*** (0.05)	32.74*** (9.36)	0.22*** (0.06)	0.18*** (0.05)	0.15*** (0.05)	5.12*** (1.90)
Supplier prices	-0.02 (0.07)	93.01 (164.99)	-0.01 (0.07)	1.84 (13.61)	-0.02 (0.08)	-0.03 (0.07)	-0.01 (0.07)	-0.92 (2.44)
Brand prices	-0.07 (0.08)	-287.62* (169.62)	-0.02 (0.08)	-10.36 (14.81)	-0.08 (0.08)	-0.02 (0.07)	-0.02 (0.07)	-0.91 (2.60)
Product purchases	0.03 (0.06)	-44.56 (125.16)	0.04 (0.05)	-2.02 (10.51)	0.01 (0.06)	0.03 (0.05)	0.04 (0.05)	-0.89 (1.77)
Sales	-0.06 (0.11)	-120.70 (263.45)	0.19* (0.11)	37.21 (24.54)	-0.08 (0.12)	-0.03 (0.11)	0.19* (0.10)	-0.08 (4.47)
Asset purchases	-0.03 (0.08)	49.29 (180.44)	0.09 (0.09)	27.29 (18.92)	-0.07 (0.09)	-0.03 (0.08)	0.10 (0.08)	1.18 (3.03)
Total stock	-0.08 (0.11)	-200.36 (225.99)	-0.12 (0.11)	-23.11 (23.11)	-0.12 (0.12)	-0.03 (0.11)	-0.07 (0.11)	7.37 (6.12)
Payables: suppliers	0.22*** (0.06)	320.05** (136.02)	0.07 (0.06)	16.09 (12.44)	0.24*** (0.07)	0.13** (0.06)	0.03 (0.06)	2.51 (2.42)
Payables: loans	0.00 (0.07)	136.39 (164.62)	0.08 (0.07)	16.02 (14.32)	0.05 (0.08)	0.02 (0.07)	0.10 (0.07)	0.06 (2.85)
Salary and other costs	-0.01 (0.05)	-96.52 (102.32)	-0.01 (0.05)	-3.53 (9.08)	-0.03 (0.05)	-0.01 (0.05)	0.02 (0.05)	0.36 (1.64)
Receivables: customers	0.40*** (0.06)	476.29*** (120.11)	0.36*** (0.06)	39.70*** (9.87)	0.44*** (0.07)	0.36*** (0.06)	0.33*** (0.06)	1.58 (2.07)
Receivables: family	0.05 (0.09)	295.44 (214.81)	0.06 (0.09)	28.73 (20.91)	0.05 (0.09)	0.06 (0.09)	0.07 (0.09)	4.23 (3.41)
Constant	6.85*** (0.09)	242.91 (189.16)	4.68*** (0.09)	50.56*** (14.40)	3.55*** (0.10)	2.89*** (0.09)	1.54*** (0.08)	21.68*** (2.85)
R ²	0.19	0.164	0.15	0.12	0.17	0.17	0.14	0.04
N	1289	1289	1266	1266	1300	1306	1272	1302

Notes:

Table C.7: Baseline Regressions on **Additional Record Keeping Practices: Profit Calculation**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Factor in no costs	0.029 (0.085)	192.542 (196.946)	0.058 (0.082)	16.101 (17.225)	0.036 (0.091)	0.048 (0.080)	0.070 (0.078)	1.549 (4.799)
Factor in all costs	0.418*** (0.119)	828.692*** (297.431)	0.445*** (0.113)	89.580*** (27.667)	0.377*** (0.131)	0.366*** (0.110)	0.449*** (0.109)	8.193* (4.412)
Calculate daily	0.239*** (0.063)	308.621** (143.712)	0.306*** (0.059)	46.407*** (13.105)	0.238*** (0.068)	0.196*** (0.060)	0.258*** (0.058)	6.142** (3.095)
Change inventory based on profits per item	0.052 (0.052)	101.243 (111.515)	0.042 (0.052)	6.555 (9.588)	0.074 (0.058)	0.081* (0.049)	0.053 (0.050)	0.506 (2.016)
Change inventory based on supplier prices	0.046 (0.052)	109.947 (109.808)	0.079 (0.051)	16.792* (9.343)	0.028 (0.056)	0.087* (0.049)	0.111** (0.049)	1.135 (2.035)
Constant	7.262*** (0.088)	664.519*** (191.012)	5.046*** (0.074)	88.633*** (14.033)	3.960*** (0.090)	3.194*** (0.086)	1.857*** (0.065)	24.678*** (2.760)
R ²	0.13	0.14	0.11	0.10	0.11	0.13	0.10	0.03
N	1289	1289	1266	1266	1300	1306	1272	1302

Notes:

Table C.8: Baseline Regressions on **McKenzie and Woodruff (2017) Financial Planning Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Review firm performance	0.04 (0.06)	25.45 (119.04)	0.07 (0.06)	11.40 (9.81)	0.04 (0.06)	0.10* (0.05)	0.07 (0.05)	2.72* (1.58)
Sales targets (next year)	0.03 (0.06)	-5.10 (127.32)	0.06 (0.06)	1.80 (10.40)	-0.00 (0.07)	0.05 (0.06)	0.05 (0.06)	0.74 (1.94)
Compare to target monthly	0.14** (0.06)	237.82* (122.47)	0.16*** (0.06)	26.88*** (10.38)	0.13** (0.07)	0.12** (0.06)	0.17*** (0.06)	3.70** (1.84)
Cost budget (next year)	0.27*** (0.07)	383.27** (164.63)	0.29*** (0.07)	57.38*** (16.35)	0.29*** (0.08)	0.29*** (0.07)	0.26*** (0.07)	8.42*** (3.01)
Annual profit/loss statement	0.48** (0.21)	1235.42* (684.22)	0.35* (0.19)	88.97* (47.55)	0.50** (0.21)	0.47** (0.22)	0.32* (0.19)	10.66 (10.59)
Annual cash-flow statement	-0.42 (0.28)	-820.76 (673.89)	-0.32 (0.25)	-52.57 (56.89)	-0.42 (0.29)	-0.38 (0.26)	-0.31 (0.23)	-13.10 (9.86)
Annual balance sheet	0.70** (0.30)	1651.98 (1008.09)	0.38 (0.26)	55.68 (68.44)	0.69** (0.34)	0.76*** (0.29)	0.44* (0.27)	5.97 (16.33)
Annual income/cost sheet	0.09 (0.18)	169.06 (446.43)	0.28* (0.16)	61.95 (43.54)	0.06 (0.19)	-0.04 (0.17)	0.21 (0.16)	16.57 (17.00)
Constant	7.23*** (0.09)	669.06*** (194.45)	5.01*** (0.08)	85.34*** (14.88)	3.93*** (0.09)	3.15*** (0.09)	1.83*** (0.07)	22.36*** (2.88)
R ²	0.15	0.15	0.12	0.13	0.13	0.15	0.12	0.06
N	1279	1279	1257	1257	1290	1296	1263	1292

Notes:

Table C.9: Baseline Regressions on **Additional Financial Planning Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Has assortment with low diversification	0.202*** (0.054)	440.202*** (121.996)	0.147*** (0.055)	33.806*** (10.901)	0.199*** (0.058)	0.262*** (0.052)	0.163*** (0.053)	1.319 (1.851)
At least 5 new products in last 12 months	0.354*** (0.065)	718.222*** (176.462)	0.279*** (0.062)	44.376*** (13.063)	0.341*** (0.071)	0.345*** (0.061)	0.250*** (0.061)	6.029*** (2.249)
Has products to dispose at week's end	0.060 (0.073)	149.057 (181.524)	-0.079 (0.073)	-14.941 (12.403)	0.058 (0.082)	0.021 (0.068)	-0.077 (0.069)	-0.933 (2.976)
Changes inventory based on demand	0.162*** (0.054)	247.349** (100.658)	0.132** (0.055)	24.753*** (9.484)	0.123** (0.058)	0.153*** (0.051)	0.118** (0.053)	1.626 (2.219)
Changes inventory based on shelf space	0.130** (0.056)	217.225** (104.952)	0.095 (0.058)	9.564 (10.020)	0.149** (0.061)	0.118** (0.053)	0.087 (0.055)	4.612** (2.157)
Changes price based on demand	-0.012 (0.081)	21.295 (185.692)	0.004 (0.076)	-1.152 (15.723)	0.007 (0.090)	-0.028 (0.077)	0.030 (0.074)	-2.953 (2.449)
R ²	0.158	0.161	0.098	0.095	0.130	0.160	0.093	0.036
N	1289	1289	1266	1266	1300	1306	1272	1302

Notes:

Table C.10: Baseline Regressions on **Additional Financial Planning Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Give trade credit	0.26*** (0.08)	279.93* (156.72)	0.16** (0.07)	15.45 (12.92)	0.30*** (0.08)	0.29*** (0.07)	0.19*** (0.07)	1.25 (2.61)
Interest on TC	0.14* (0.08)	282.37 (218.73)	0.14* (0.09)	24.01 (18.61)	0.07 (0.09)	0.17** (0.08)	0.12 (0.08)	3.86 (4.04)
Separate finances	-0.04 (0.05)	-89.92 (99.81)	-0.01 (0.05)	2.38 (8.97)	-0.07 (0.05)	-0.02 (0.05)	0.02 (0.05)	2.96 (1.81)
Loan obtained (last 12 months)	0.04 (0.07)	-50.37 (132.67)	0.09 (0.07)	9.32 (12.67)	0.04 (0.07)	0.05 (0.07)	0.13** (0.06)	-0.46 (2.19)
Constant	7.14*** (0.10)	648.54*** (222.47)	5.02*** (0.09)	94.65*** (17.21)	3.82*** (0.11)	3.05*** (0.10)	1.79*** (0.09)	24.26*** (3.28)
R ²	0.12	0.12	0.07	0.07	0.10	0.12	0.08	0.03
N	1289	1289	1266	1266	130	1306	1272	1302

Notes:

Table C.11: Baseline Regressions on **Joint Decision Making Practices**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Discuss with family	0.15** (0.06)	139.63 (119.77)	0.13** (0.06)	16.11* (9.75)	0.10 (0.06)	0.20*** (0.06)	0.12** (0.06)	2.28 (2.48)
Discuss with business friend	0.09 (0.10)	-53.25 (206.05)	0.081 (0.11)	14.92 (22.07)	0.10 (0.10)	0.06 (0.10)	0.06 (0.10)	-0.85 (2.90)
Decide with any counterpart	0.25*** (0.05)	441.72*** (116.52)	0.27*** (0.05)	44.22*** (10.07)	0.28*** (0.06)	0.19*** (0.05)	0.25*** (0.05)	8.88*** (2.13)
Constant	7.19*** (0.09)	640.03*** (189.66)	5.01*** (0.08)	87.58*** (14.03)	3.91*** (0.09)	3.13*** (0.09)	1.84*** (0.07)	22.77*** (2.40)
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.14	0.13	0.10	0.09	0.12	0.13	0.09	0.05
N	1289	1289	1266	1266	1300	1306	1272	1302

Notes:

Table C.12: Baseline Regressions on **Additional Practices on Joint Decision Making**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Discuss sales	0.16** (0.07)	372.91** (169.80)	0.18*** (0.07)	33.25** (13.66)	0.18** (0.08)	0.15** (0.07)	0.18*** (0.07)	4.33** (2.01)
Discuss selling prices	0.17*** (0.06)	237.22 (144.38)	0.21*** (0.06)	33.28*** (12.79)	0.18** (0.07)	0.19*** (0.06)	0.20*** (0.06)	2.53 (1.87)
Discuss best-sellers	0.04 (0.08)	200.76 (140.27)	0.08 (0.08)	8.67 (13.21)	0.07 (0.08)	0.03 (0.07)	0.09 (0.07)	1.59 (2.47)
Discuss financing	0.04 (0.10)	222.50 (137.29)	0.08 (0.09)	15.07 (14.57)	0.13 (0.10)	0.01 (0.09)	0.08 (0.09)	-3.31* (1.85)
Discuss buying prices	0.22*** (0.08)	301.28 (194.58)	0.26*** (0.08)	41.49** (17.43)	0.25*** (0.09)	0.10 (0.08)	0.22*** (0.08)	4.73* (2.41)
Discuss practices	0.13* (0.08)	83.68 (138.27)	0.08 (0.08)	12.05 (13.65)	0.12 (0.08)	0.13* (0.07)	0.06 (0.07)	3.32 (2.86)
Discuss business plan	0.24*** (0.07)	285.34* (145.49)	0.30*** (0.08)	57.08*** (15.71)	0.23*** (0.08)	0.29*** (0.06)	0.29*** (0.07)	14.18*** (4.11)
Constant	7.27*** (0.08)	747.95*** (183.83)	5.05*** (0.07)	92.19*** (13.85)	3.97*** (0.09)	3.21*** (0.08)	1.88*** (0.06)	23.88*** (2.48)
R ²	0.13	0.13	0.10	0.10	0.11	0.12	0.09	0.05
N	1289	1289	1266	1266	1300	1306	1272	1302

Notes:

Table C.13: Baseline Regressions on **Additional Practices on Joint Decision Making**

	Monthly Sales Composite (IHS, win 1%) (1)	Monthly Sales Composite (win 1%) (2)	Monthly Profits Composite (IHS, win 1%) (3)	Monthly Profits Composite (win 1%) (4)	Sales Normal Day (IHS, win 1%) (5)	Sales Normal Day Top Products (IHS, win 1%) (6)	Profits Normal Day (IHS, win 1%) (7)	Number of Customers Normal Day (8)
Sales	0.38*** (0.13)	758.51** (317.40)	0.26** (0.12)	38.51* (23.01)	0.40*** (0.13)	0.33*** (0.11)	0.27** (0.11)	6.17* (3.64)
Selling prices	0.17** (0.08)	249.61 (173.61)	0.13* (0.08)	16.57 (14.66)	0.22** (0.09)	0.11 (0.08)	0.11 (0.07)	4.31* (2.52)
Best-sellers	0.09 (0.09)	8.08 (181.08)	0.15 (0.09)	13.48 (16.84)	0.01 (0.10)	0.08 (0.09)	0.09 (0.09)	3.07 (2.79)
Finance	0.04 (0.16)	252.67 (337.81)	0.14 (0.15)	40.65 (32.91)	0.02 (0.17)	-0.02 (0.15)	0.20 (0.14)	0.46 (3.98)
Buying prices	0.24 (0.15)	465.56 (399.48)	0.49*** (0.12)	82.50** (33.99)	0.18 (0.16)	0.25* (0.15)	0.43*** (0.13)	2.61 (4.06)
New products	0.30** (0.13)	630.45** (303.90)	0.35*** (0.13)	73.71** (28.76)	0.31** (0.15)	0.26** (0.12)	0.35*** (0.12)	13.02* (6.66)
Practices	0.26** (0.12)	706.62** (307.58)	0.27** (0.11)	56.04** (23.08)	0.27** (0.12)	0.20* (0.11)	0.28*** (0.10)	13.95* (7.78)
Business plan	0.18** (0.08)	221.08 (188.57)	0.24*** (0.08)	31.96* (17.29)	0.23** (0.09)	0.16* (0.09)	0.18** (0.08)	6.28** (2.70)
Constant	7.29*** (0.09)	728.07*** (194.44)	5.10*** (0.07)	99.37*** (14.17)	3.99*** (0.09)	3.26*** (0.09)	1.93*** (0.06)	24.56*** (2.71)
R ²	0.13	0.14	0.10	0.10	0.11	0.12	0.09	0.05
N	1289	1289	1266	1266	1300	1306	1272	1302

Notes:

D Selection of Local Best Practices

		Number of specifications significant ^a	Adoption effect size ^b		Handbook		Movie
			Monthly sales (composite, IHS)	Monthly profits (composite, IHS)	Returns to adoption	Mention	Mention
Marketing							
Coefficients from Regression Table C.1							
Visits competitors to see prices	M1	5	-0.152	-0.205			
Visits competitors to see products	M2	1	-0.151	0.023			
Asks customers for new products	M3	8	0.189	0.180			✓
<i>Asks former customers why quit buying</i>	<i>M4</i>	7	<i>0.245</i>	<i>0.226</i>	✓	✓	✓
Asks suppliers for well-selling products	M5	0	-0.023	0.034			
Attracts customers with special offer	M6	5	0.160	0.034			✓
Advertizes for the business	M7	2	0.275	0.056			
Coefficients from Regression Table C.2							
Compares prices with competitors	<i>M_{add}1</i>	1	0.048	0.083			
Compares sales with competitors	<i>M_{add}2</i>	4	-0.204	-0.078			
Has discussions about new products	<i>M_{add}3</i>	0	-0.007	0.024			
Has discussions about suppliers	<i>M_{add}4</i>	0	-0.136	0.071			
Has discussions about best-sellers	<i>M_{add}5</i>	3	-0.124	0.004			
<i>Gives any discount</i>	<i>M_{add}6</i>	8	<i>0.401</i>	<i>0.294</i>	✓	✓	✓
Stocking up							
Coefficients from Regression Table C.3							
Negotiates price with suppliers	B1	1	0.087	0.063		✓	
Compares suppliers on product quality	B2	7	0.195	0.159		✓	
Does not run out of stock	B3	2	0.033	0.102		✓	
Coefficients from Regression Table C.4							
Experiences weekly stock-outs for top 3	<i>B_{add}1</i>	0	0.045	0.003			
<i>Stocks up late for any of top 3</i>	<i>B_{add}2</i>	8	<i>-0.250</i>	<i>-0.266</i>	✓	✓	✓
<i>Has fixed stock-up schedule for top 3</i>	<i>B_{add}3</i>	6	<i>0.263</i>	<i>0.247</i>	✓	✓	✓
<i>Stocks up top 3 at most weekly</i>	<i>B_{add}4</i>	8	<i>-0.483</i>	<i>-0.366</i>	✓	✓	
Stocks up top 3 at least daily	<i>B_{add}5</i>	6	<i>0.323</i>	0.187			

		Number of specifications significant ^a	Adoption effect size ^b		Handbook		Movie
			Monthly sales (comp, IHS)	Monthly profits (comp, IHS)	Returns to adoption	Mention	Mention
Record-keeping							
Coefficients from Regression Table C.5							
<i>Keeps written business records</i>	<i>R1</i>	7	0.283	0.259	✓	✓	✓
Records every purchase and sale	R2	1	-0.117	0.119		✓	✓
Can use records to check cash on hand	R3	0	-0.043	-0.063			
Uses records to check sales of product	R4	0	0.024	0.030			
Works out costs of main products	R5	8	0.202	0.165			
Knows products with most profits per item	R6	2	0.061	0.076			
Has written monthly expenses budget	R7	1	0.096	0.078			
<i>Can use records to service potential loan</i>	<i>R8</i>	8	0.351	0.358	✓	✓	
Coefficients from Regression Table C.6							
Keeps records in ledger book	<i>R_{add}1</i>	3	0.116	0.121		✓	✓
Keeps collection of loose receipts	<i>R_{add}2</i>	7	0.189	0.215		✓	
Records any transaction at least twice weekly	<i>R_{add}3</i>	8	0.228	0.191		✓	✓
Records prices of different suppliers	<i>R_{add}4</i>	0	-0.024	-0.014			
Records prices of different brands	<i>R_{add}5</i>	1	-0.065	-0.018			
Records product purchases	<i>R_{add}6</i>	0	0.031	0.037		✓	✓
Records product sales	<i>R_{add}7</i>	2	-0.064	0.185		✓	✓
Records asset purchases	<i>R_{add}8</i>	0	-0.029	0.093			
Records total stocks	<i>R_{add}9</i>	0	-0.082	-0.117			✓
Records outstanding payments to suppliers	<i>R_{add}10</i>	4	0.216	0.069		✓	
Records outstanding payments for loans	<i>R_{add}11</i>	0	0.002	0.075			
Records salaries and other costs	<i>R_{add}12</i>	0	-0.007	-0.007		✓	
<i>Records outstanding payments by customers</i>	<i>R_{add}13</i>	7	0.401	0.361	✓	✓	
Records outstanding payments by family	<i>R_{add}14</i>	0	0.049	0.055		✓	
Coefficients from Regression Table C.7							
Mistakes sales for profits	<i>R_{add}15</i>	0	0.029	0.058			
<i>Calculates profits considering all costs</i>	<i>R_{add}16</i>	8	0.418	0.445	✓	✓	✓
<i>Calculates any profits daily</i>	<i>R_{add}17</i>	8	0.239	0.306		✓	✓
Changes inventory based on profits per item	<i>R_{add}18</i>	1	0.052	0.042			
Changes inventory based on buying price	<i>R_{add}19</i>	3	0.046	0.079			

		Number of specifications significant ^a	Adoption effect size ^b		Handbook		Movie
			Monthly sales (comp, IHS)	Monthly profits (comp, IHS)	Returns to adoption	Mention	Mention
Financial planning							
Coefficients from Regression Table C.8							
Reviews and analyses financial performance	F1	2	0.039	0.067			
Has sales target set for next year	F2	0	0.027	0.056			
Compares target with sales at least monthly	F3	8	0.135	0.155			
Has cost budget for next year ^c	F4	8	0.267	0.294			
Issues annual profit/loss statement ^c	F5	7	0.479	0.346			
Issues annual cash-flow statement	F6	0	-0.422	-0.321			
Issues annual balance sheet	F7	4	0.698	0.382			
Issues annual income and expenditure sheet	F8	1	0.088	0.283			
Coefficients from Regression Table C.9							
Has assortment with low diversification	F_{add1}	7	0.202	0.147			
<i>Introduced at least 5 new products</i>	F_{add2}	8	<i>0.354</i>	<i>0.279</i>	✓	✓	
Has products to dispose at week's end	F_{add3}	0	0.060	-0.079			
Changes inventory based on demand	F_{add4}	7	0.162	0.132			
Changes inventory based on shelf space	F_{add5}	5	0.130	0.095			
Changes prices based on demand	F_{add6}	0	-0.012	0.004			
Coefficients from Regression Table C.10							
Allows certain customers to pay later	F_{add7}	6	0.263	0.156			
Takes interest from customers who pay later	F_{add8}	3	0.137	0.142			
Separates household and business finances	F_{add9}	0	-0.040	-0.005		✓	✓
Obtained at least 1 loan in last 12 months	F_{add10}	1	0.036	0.088			

		Number of specifications significant ^a	Adoption effect size ^b		Handbook		Movie
			Monthly sales (comp, IHS)	Monthly profits (comp, IHS)	Returns to adoption	Mention	Mention
Joint Decision-making and Discussions							
Coefficients from Regression Table C.11							
Discusses business with family members	J1	5	0.148	0.130		✓	
Discusses business with business friends	J2	0	0.091	0.081		✓	
<i>Discusses business matters with anyone</i>	J3	8	0.253	0.272	✓	✓	
Coefficients from Regression Table C.12							
Discusses business sales	J4	8	0.163	0.182		✓	
Discusses selling prices	J5	6	0.169	0.206		✓	
Discusses best-selling products	J6	0	-0.040	0.084		✓	
Discusses financing opportunities	J7	1	-0.039	-0.077		✓	
Discusses buying prices	J8	6	0.218	0.263		✓	
Discusses business practices	J9	2	0.132	0.075		✓	
Discusses business plan	J10	8	0.237	0.295			
Coefficients from Regression Table C.13							
Joint decisions on business sales ^c	J11	8	0.383	0.263			✓
Joint decisions on selling prices	J12	4	0.169	0.132			✓
Joint decisions on best-sellers	J13	0	0.090	0.151		✓	
Joint decisions on financing opportunities	J14	0	0.042	0.140		✓	
Joint decisions on buying prices	J15	4	0.239	0.487		✓	
<i>Joint decisions on new products</i>	J16	8	0.299	0.345	✓	✓	
<i>Joint decisions on business practices</i>	J17	8	0.256	0.270	✓	✓	
Joint decisions on business plan	J18	7	0.183	0.236			

Notes: For a description of all the practices, see Online Appendix E.

^aNumber of specifications significant refers to the number of times the coefficient for a given variable reached significance in predicting a measure of business performance within equation (1). A pass is given if the score is equal to or greater than six.

^bAdoption effect size refers to the absolute size of the coefficient on two composite scores of monthly sales and profits. A pass is given if both values lie within the top 25% of the distribution of effect sizes among all practices for which the threshold values are .239 for monthly sales and .211 for monthly profits. In that case, the effect sizes are displayed in the handbook as the estimated returns to adoption in sales and profits. Beyond this set of core practices, some others get a brief mention.

^cThese three practices meet the selection criteria but were not treated. After re-visiting a sub-set of the firms that reported using this practice, we realized that they had not understand these two questions.

E List of all Business Practices Measured

Name of the Practice	Label	Survey question	Definition	Best Practices
Visits competitors to see prices	<i>M1</i>	In the last 3 months, have you visited at least one of your competitors' businesses to see their selling price?	Simple dummy (yes/no)	
Visits competitors to see products	<i>M2</i>	In the last 3 months, have you visited at least one of your competitors' businesses to see what products they have available for sale?	Simple dummy (yes/no)	
Asks customers for new products	<i>M3</i>	In the last 3 months, have you asked existing customers if there are other products or brands they would like you to sell?	Simple dummy (yes/no)	
Asks former customers why they quit buying	<i>M4</i>	In the last 3 months, have you talked with at least one former customer to find out why they have stopped buying from your shop?	Simple dummy (yes/no)	✓
Asks suppliers for well-selling products	<i>M5</i>	In the last 3 months, have you asked any of your supplier about which products sell the best?	Simple dummy (yes/no)	
Attracts customers with special offer	<i>M6</i>	In the last 3 months, have you tried to attract customers with a special offer?	Simple dummy (yes/no)	
Advertizes for the business	<i>M7</i>	In the last 6 months, have you ever advertised your shop in any way?	Simple dummy (yes/no)	
Adjusts prices to competitors	<i>M_{add1}</i>	In the last 3 months, have you changed prices for any of the following reasons? a) Different price charged by competitor b) More/less buyers than normal for that product c) Discount for bulk purchases d) Discount for loyal customers e) Discount for stocks in need to be sold quickly	Simple dummy (yes if a=1, otherwise no)	
Compares sales with competitors	<i>M_{add2}</i>	Do you compare your own firm's sales performance with your competitors?	Simple dummy (yes/no)	
Has discussions about new products	<i>M_{add3}</i>	What kind of business topics do you discuss with other people? a) Sales b) Selling price c) Best-selling products d) Discounts e) Promotion, marketing, advertizing f) Government funding g) Other financing opportunities h) Arisan ("ROSCAs") i) Supplier(s) j) Purchasing prices k) New brands or products l) Business practices m) Business plan	Simple dummy (yes if k=1, otherwise no)	

Name of the Practice	Label	Survey question	Definition	Best Practices
Has discussions about suppliers	<i>M_{add4}</i>	n) Market trends o) Business rumors p) Security-related issues q) Most profitable products r) Assets owned s) New assets t) Others (see above: <i>M_{add3}</i>)	Simple dummy (yes if i=1, otherwise no)	
Has discussions about best-sellers	<i>M_{add5}</i>	(see above: <i>M_{add3}</i>)	Simple dummy (yes if c=1, otherwise no)	
Gives any discount	<i>M_{add6}</i>	(see above: <i>M_{add1}</i>)	Simple dummy (yes if c=1 OR d=1 OR e=1, otherwise no)	✓
Negotiates price with suppliers	<i>B1</i>	In the last 3 months, have you tried to negotiate with any of your suppliers for a lower price of particular product?	Simple dummy (yes/no)	
Compares suppliers on product quality	<i>B2</i>	In the last 3 months, have you compared the prices or quality offered by alternate suppliers to the business' current suppliers?	Simple dummy (yes/no)	
Does not run out of stock	<i>B3</i>	Does your business run out of stock monthly or more often?	Simple dummy (yes/no)	
Experiences weekly stock-outs for top 3	<i>B_{add1}</i>	How often are products out of stock when customers ask for them? a) Never b) Annually or less often c) 2-3 times a year or more often d) Monthly or more often e) Bi-weekly or more often f) Weekly or more often g) 2-3 times a week or more often h) Daily	Simple dummy (yes if f=1 OR g=1 OR h=1 for all top 3 products of the shop)	
Stocks up late for any of top 3	<i>B_{add2}</i>	How do you stock up products? a) No fixed schedule, whenever products are out of stock b) No fixed schedule, whenever products are almost out of stock c) Fixed schedule, plus when products are out of stock d) Fixed schedule, plus when products are almost out of stock e) Whenever an item of the product was sold	Simple dummy (yes if a=1, otherwise no)	✓
Has fixed stock-up schedule for top 3	<i>B_{add3}</i>	(see above: <i>B_{add2}</i>)	Simple dummy (yes if c=1 OR d=1, otherwise no)	✓

Name of the Practice	Label	Survey question	Definition	Best Practices
Stocks up top 3 at most weekly	<i>B_{add4}</i>	How often do you usually stock up? a) Monthly or more often b) Bi-weekly or more often c) Weekly d) 2-3 times a week e) 4-5 times a week f) Daily g) More than once a day	Simple dummy (yes if a=1 OR b=1 OR c=1, otherwise no)	✓
Stocks up top 3 at least daily	<i>B_{add5}</i>	(see above: <i>B_{add4}</i>)	Simple dummy (yes if f=1 OR g=1, otherwise no)	
Keeps written business records Records every purchase and sale Can use records to check cash on hand	<i>R1</i> <i>R2</i> <i>R3</i>	Do you keep written business records? Do you record each purchase and sale of your business? Are you able to use your records to see how much cash your business has available at any point in time?	Simple dummy (yes/no) Simple dummy (yes/no) Simple dummy (yes/no)	✓
Uses records to check sales of product	<i>R4</i>	Do you regularly use your records to know whether sales of a particular product are increasing or decreasing?	Simple dummy (yes/no)	
Works out costs of main products	<i>R5</i>	Do you work out the costs to the business of each main product you sell?	Simple dummy (yes/no)	
Knows products with most profits per item	<i>R6</i>	Do you know your three products with the highest profit per item selling in your business?	Simple dummy (yes/no)	
Has written monthly expenses budget	<i>R7</i>	Do you have a written budget which states how much you have to pay each month for rent, electricity, equipment maintenance, transport, advertising, and other indirect costs to business?	Simple dummy (yes/no)	
Can use records to service potential loan	<i>R8</i>	Imagine you wanted to take out a bank loan for your business and you needed to check if you can pay the monthly rates. Do you have records showing whether you have enough money each month after paying all business expenses?	Simple dummy (yes/no)	✓
Keeps records in ledger book	<i>R_{add1}</i>	What kind of business records do you keep? a) Electronic records (phone, computer, etc.) b) Ledger book or equivalently organized notes c) Disorganized notes d) Orderly filed receipts e) Loose receipts f) Other g) None	Simple dummy (yes if a=1 OR b=1, otherwise no)	

Name of the Practice	Label	Survey question	Definition	Best Practices
Keeps collection of loose receipts	<i>R_{add2}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if e=1, otherwise no)	
Records any transaction at least twice weekly of customers	<i>R_{add3}</i>	Do you regularly make notes or keep documents to keep track of any of the following? a) Purchasing prices b) Prices of equivalent products from different brands c) Product purchases d) Product sales e) Asset purchases (e.g., shelves, cashier machine, vehicles, etc.) f) Total stocks g) Outstanding supplier payments h) Loan payments due or debts accrued i) Salary payments j) Other costs to the business (rent, fees, taxes, electricity, etc.) k) Customer debt ("paying later") l) Money lent to family members/employees	Simple dummy (yes if k=1, otherwise no)	
Records prices of different suppliers	<i>R_{add4}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if a=1, otherwise no)	
Records prices of different brands	<i>R_{add5}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if b=1, otherwise no)	
Records product purchases	<i>R_{add6}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if c=1, otherwise no)	
Records product sales	<i>R_{add7}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if d=1, otherwise no)	
Records asset purchases	<i>R_{add8}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if e=1, otherwise no)	
Records total stocks	<i>R_{add9}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if f=1, otherwise no)	
Records outstanding payments to suppliers	<i>R_{add10}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if g=1, otherwise no)	
Records outstanding payments for loans	<i>R_{add11}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if h=1, otherwise no)	
Records salaries and other costs	<i>R_{add12}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if i=1, otherwise no)	
Records outstanding payments from customers	<i>R_{add13}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if k=1, otherwise no)	✓
Records outstanding payments from family	<i>R_{add14}</i>	(see above: <i>R_{add1}</i>)	Simple dummy (yes if l=1, otherwise no)	

Name of the Practice	Label	Survey question	Definition	Best Practices
Mistakes sales for profits	<i>R_{add15}</i>	How do you calculate profits? (Open question) a) Only from the sales (no calculation) b) Sales minus product purchases c) Sales minus product purchases minus some other business expenses d) Sales minus all business expenses (salaries, rent, electricity, interest, etc.)	Simple dummy (yes if a=1, otherwise no)	
Calculates profits considering all costs	<i>R_{add16}</i>	(see above: <i>R_{add15}</i>)	Simple dummy (yes if d=1, otherwise no)	✓
Calculates any profits daily	<i>R_{add17}</i>	How often do you calculate the profits made by your business? a) Never b) Bi-annually or more often c) Annually or more often d) Monthly or more often e) Bi-weekly or more often f) Weekly or more often g) 2-3 times a week or more often h) Daily	Simple dummy (yes if h=1, otherwise no)	✓
Changes inventory based on profits per item	<i>R_{add18}</i>	Do you ever adjust your level of inventory based any of the following reasons? a) Change in customer demand b) Shelf space c) Purchasing prices d) Profits per item	Simple dummy (yes if d=1, otherwise no)	
Changes inventory based on buying price	<i>R_{add19}</i>	(see above: <i>R_{add18}</i>)	Simple dummy (yes if c=1, otherwise no)	
Reviews and analyses financial performance	<i>F1</i>	Do you review your financial performance and analyze where there are areas for improvement at least on a monthly basis?	Simple dummy (yes/no)	
Has sales target set for next year	<i>F2</i>	Do you have a target set for sales over the next year?	Simple dummy (yes/no)	
Compares target with sales at least monthly	<i>F3</i>	Do you compare your sales achieved to your target at least monthly?	Simple dummy (yes/no)	
Has cost budget for next year	<i>F4</i>	Do you have a budget for the anticipated costs your business will have to pay over the next year?	Simple dummy (yes/no)	
Issues annual profit/loss statement	<i>F5</i>	Do you have an annual profit and loss statement?	Simple dummy (yes/no)	
Issues annual cash-flow statement	<i>F6</i>	Do you have an annual statement of cash flow?	Simple dummy (yes/no)	
Issues annual balance sheet	<i>F7</i>	Do you have an annual balance sheet?	Simple dummy (yes/no)	
Issues annual income and expenditure sheet	<i>F8</i>	Do you have an annual income/expenditure statement?	Simple dummy (yes/no)	

Name of the Practice	Label	Survey question	Definition	Best Practices
Has assortment with low diversification	F_{add1}	What are the seven product categories which contribute the most to your sales? On a typical day, how much in sales do you earn from each product category?	Continuous (Proportion of sales from top 3 in sales from top 7 products)	✓
Introduced at least 5 new	F_{add2}	In the past 12 months, how many new products did you introduce?	Simple binary (yes if ≥ 5 , otherwise no)	
Has products to dispose at week's end	F_{add3}	Do you usually have unsold products to dispose at the end of the week?	Simple dummy (yes/no)	
Changes inventory based on demand	F_{add4}	(see above: R_{add18})	Simple dummy (yes if $a=1$, otherwise no)	
Changes inventory based on shelf space	F_{add5}	(see above: R_{add18})	Simple dummy (yes if $b=1$, otherwise no)	
Changes prices based on demand	F_{add6}	(see above: M_{add1})	Simple dummy (yes if $b=1$, otherwise no)	
Allows certain customers to pay later	F_{add7}	Do you accept delayed payment from your customers?	Simple dummy (yes/no)	
Takes interest from customers who pay later	F_{add8}	Do you charge your customers more for paying later?	Simple dummy (yes/no)	
Separates household and business finances	F_{add9}	Do you have separate accounts for your personal finances (household savings, personal expenses, etc.) and for your business finances?	Simple dummy (yes/no)	
Obtained at least one loan in last 12 months	F_{add10}	In the past 12 months, how many times have you obtained a loan?	Simple dummy (yes if ≥ 1 , otherwise no)	
Discusses business with family members	$J1$	With whom do you discuss your business most often? a) Family member b) Personal friend c) Business friend in neighborhood d) Business friend outside of neighborhood e) Supplier f) Local official ("Kepala RT/RW/Kelurahan") g) Preman h) No one		✓
Discusses business with business friends	$J2$	(see above: $J1$)	Simple dummy (yes if $c=1$ OR $d=1$, otherwise no)	
Discusses business matters with anyone	$J3$	(see above: $J1$)	Simple dummy (yes if $a=1$, otherwise no)	

Name of the Practice	Label	Survey question	Definition	Best Practices
Discusses business sales	<i>J4</i>	What kind of business topics do you discuss with other people? a) Sales b) Selling price c) Best-selling products d) Discounts e) Promotion, marketing, advertizing f) Government funding g) Other financing opportunities h) Arisan (“ROSCAs”) i) Supplier(s) j) Purchasing prices k) New brands or products l) Business practices m) Business plan n) Market trends o) Business rumors p) Security-related issues q) Most profitable products r) Assets owned s) New assets t) Others	Simple dummy (yes if a=1, otherwise no)	
Discusses selling prices	<i>J5</i>	(see above: J4)	Simple dummy (yes if b=1, otherwise no)	
Discusses best-selling products	<i>J6</i>	(see above: J4)	Simple dummy (yes if c=1, otherwise no)	
Discusses financing opportunities	<i>J7</i>	(see above: J4)	Simple dummy (yes if f=1 OR g=1, otherwise no)	
Discusses buying prices	<i>J8</i>	(see above: J4)	Simply dummy (yes if j=1, otherwise no)	
Discusses business practices	<i>J9</i>	(see above: J4)	Simply dummy (yes if l=1, otherwise no)	
Discusses business plan	<i>J10</i>	(see above: J4)	Simple dummy (yes if m=1, otherwise no)	

Name of the Practice	Label	Survey question	Definition	Best Practices
Joint decisions on business sales	<i>J11</i>	What kind of business decisions do you make with other people? a) Sales b) Selling price c) Best-selling products d) Discounts e) Promotion, marketing, advertizing f) Government funding g) Other financing opportunities h) Arisan (“ROSCAs”) i) Supplier(s) j) Purchasing prices k) New brands or products l) Business practices m) Business plan n) Market trends o) Business rumors p) Security-related issues q) Most profitable products r) Assets owned s) New assets t) Others	Simple dummy(yes if =1, otherwise no)	
Joint decisions on selling prices	<i>J12</i>	(see above: J11)	Simple dummy (yes if b=1, otherwise no)	
Joint decisions on best-sellers	<i>J13</i>	(see above: J11)	Simple dummy (yes if c=1, otherwise no)	
Joint decisions on financing opportunities	<i>J14</i>	(see above: J11)	Simple dummy (yes if f=1 OR g=1, otherwise no)	
Joint decisions on buying prices	<i>J15</i>	(see above: J11)	Simple dummy (yes if j=1, otherwise no)	
Joint decisions on new products	<i>J16</i>	(see above: J11)	Simple dummy (yes if k=1, otherwise no)	✓
Joint decisions on business practices	<i>J17</i>	(see above: J11)	Simple dummy (yes if l=1, otherwise no)	✓
Joint decisions on business plan	<i>J18</i>	(see above: J11)	Simple dummy (yes if m=1, otherwise no)	

Notes: This table presents all the business practices that were measured in the baseline and the end-line surveys. Column 1 shows the practice short-name used in our analysis. Column 2 shows the practices label. Column 3 presents the exact questions asked in the surveys to measure each practices. Column 4 shows the way each practice was defined for the analysis and Column 5 shows whether the practice was selected as best practice.

F Best Practices

Name of the Practice	Label	Survey question
Asks former customers why quit buying Gives any discount	<i>M4</i> <i>Madd6</i>	In the last 3 months, have you talked with at least one former customer to find out why they have stopped buying from your shop? In the last 3 months, have you changed prices for any of the following reasons? ... c) Gave discount for bulk purchases d) Gave discount for loyal customers e) Gave discount for stocks that needed to be sold quickly
Stocks up late for any of top 3	<i>Badd2</i>	How often are products out of stock when customers ask for them? a) Never ...
Has fixed stock-up schedule for top 3	<i>Badd3</i>	How do you stock up products? ... c) Fixed schedule, plus when products are out of stock d) Fixed schedule, plus when products are almost out of stock ...
Stocks up top 3 at most weekly	<i>Badd4</i>	How often do you usually stock up? a) Monthly or more often b) Bi-weekly or more often c) Weekly ...
Keeps written business records Can use records to service potential loan	<i>R1</i> <i>R8</i>	Do you keep written business records? Imagine you wanted a bank loan for your business and you needed to check if you are able to pay the monthly rates. Do you have records showing whether you have enough money each month after paying all business expenses?
Records outstanding payments by customers	<i>Radd13</i>	Do you regularly note down or keep documents to keep track of any of the following? ... l) Customer debt ("paying later") ...
Calculates profits considering all costs	<i>Radd16</i>	How do you calculate profits? (Open question) ... d) Sales minus all expenses
Introduced at least 5 new products	<i>Fadd2</i>	In the past 12 months, how many new products did you introduce?
Discusses business matters with anyone	<i>J3</i>	Have you discussed your business with other people?
Joint decisions on new products	<i>J16</i>	k) New product or brand
Joint decisions on business practices	<i>J17</i>	l) Business practices ...

Notes: This table presents the thirteen local practices which returns to adoption are informed in the handbook. Column (1) provides the label of the practices used in the regression tables. Column (2) shows the short label given to each practice and Column (3) provides the survey question asked to identify the practice. The returns to adoption of each of these practices are provided in Annex D.

G Maps of Study Area

Figure 1: Distribution of Retailers in Jakarta (White=Treated; Black=Control)

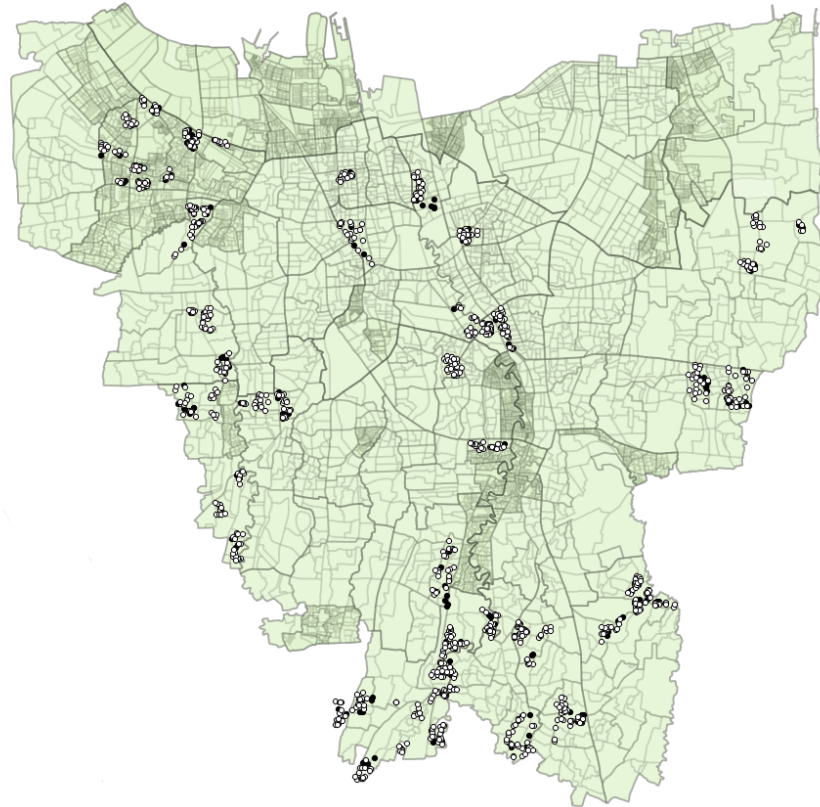


Figure 2: Example Treatment Distribution across Retailers: Village Pegangsaan

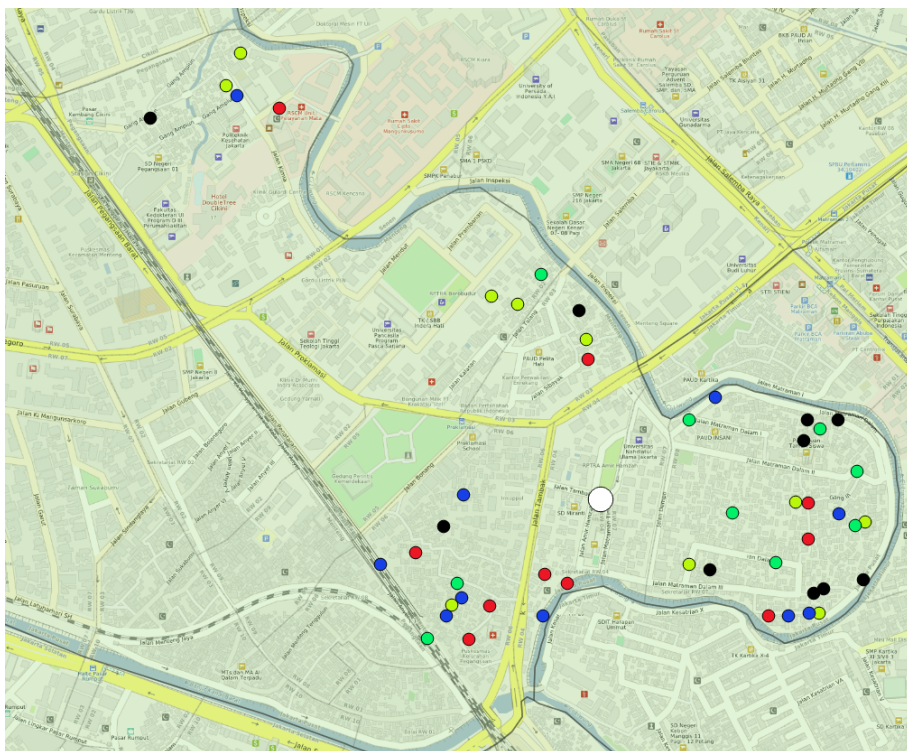
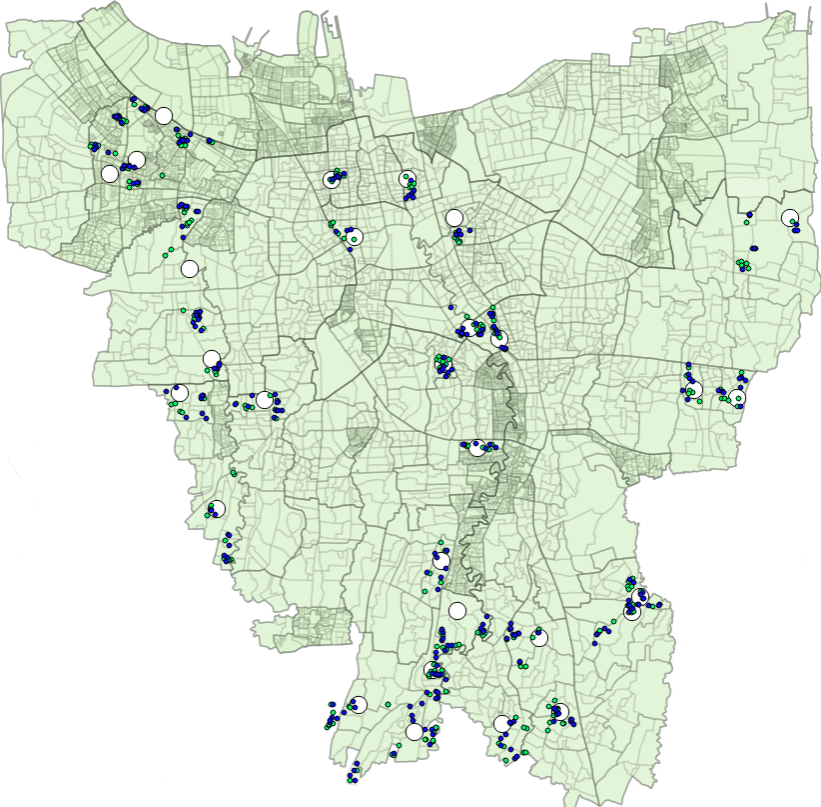


Figure 3: Movie Screening Locations (big white) and Firms invited to the movie

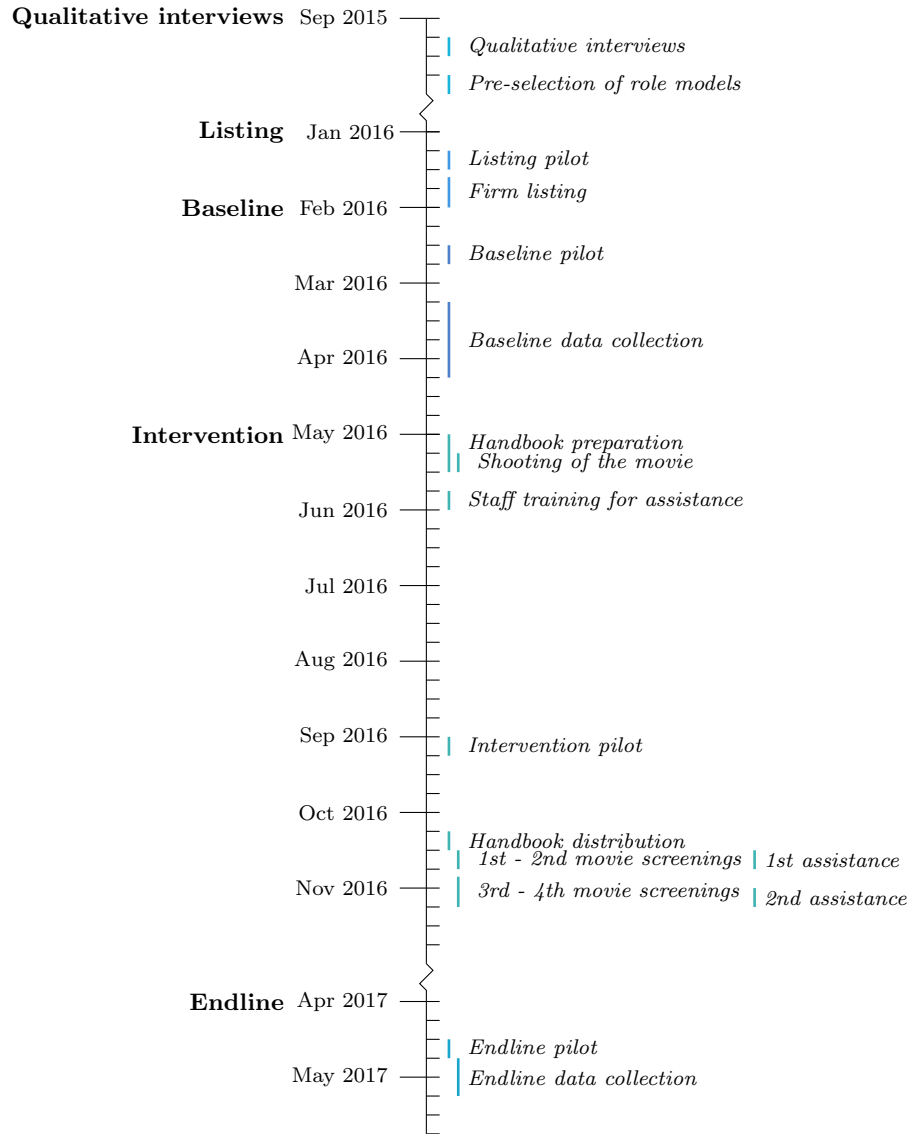


H Sampling Protocol

1. In the order given by the randomized list of selected villages, move into a village by approaching the respective head of the village.
2. Obtain a list of all communities within the respective village and their boundaries.
3. Generate a second list that contains these communities in random order.
4. Move into a village according to the randomized list and, within each village, approach the owner of every shop that satisfies the following criteria:
 - (a) The shop is at a distance of at least 30 meters to any other shop already listed.
 - (b) The shop is not a mere handcart or not otherwise easily moved.
 - (c) The shop is at least 4 m^2 in size
 - (d) The shop offers products from at least 2 product categories out of the following list:
 - i. Perishables (vegetables, fruits, eggs, rice, etc.)
 - ii. Pre-packaged food
 - iii. Soft-drinks and packaged drinks
 - iv. Snacks
 - v. Tobacco
 - vi. Medicine
 - vii. Cleaning products
 - viii. Personal care
 - ix. DIY products
 - (e) The shop owner professes an aspiration to grow their business.
5. Conditional upon the shop owner consenting, conduct the interview.
6. Within the respective community, continue interviewing the owners of all shops that satisfy above mentioned criteria.
7. If at any time the number of shops interviewed within the respective village equals or exceeds 67, continue interviewing all shops within the communities already moved into, but do not begin sampling in any new community within that village.
8. If and when the total number of shops interviewed equals or exceeds 2000, continue interviewing all shops within the village until the number of shops interviewed within the respective village equals or exceeds 67, in which case you continue interviewing all shops within the communities already moved into, but do not move into any new community within that village (just as outlined above).

I Project Timeline

FIGURE 1: STUDY TIMELINE



Notes: This figure explains the timeline of study. Each phase of study is differentiated by line colors. For movie screenings, only kelurahans with low attendance that held third and fourth movie screenings.

J Experimental Design

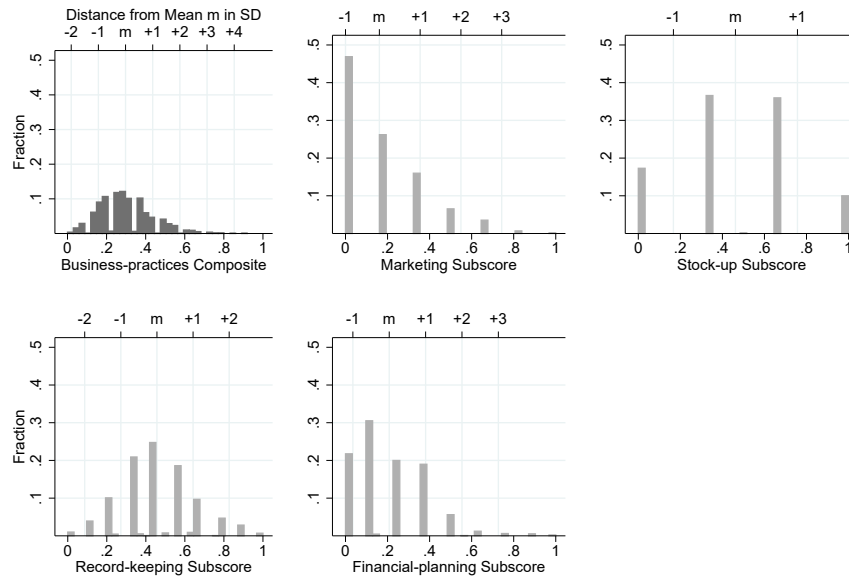
Total Sample								
1301 firms								
Control 261 firms	Handbooks							
	1040 firms							
	Returns to Adoption Framing							
	<i>Positive</i>				<i>Negative</i>			
	520 firms				520 firms			
	Role Model Movie							
	<i>Yes</i>		<i>No</i>		<i>Yes</i>		<i>No</i>	
260 firms		260 firms		260 firms		260 firms		
Counseling Assistance								
<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	
130	130	130	130	130	130	130	130	
firms	firms	firms	firms	firms	firms	firms	firms	

K Businesses Pictures

Figure 4: Pictures of two shops representative of the sample of small-scale retail businesses in this study



L Heterogeneity of Business Practices Across Firms at Base- line



Business-practices Composite Score and All Subscores According to McKenzie and Woodruff (2017)