



# Impact Measurement Case Study

## CEMEX PATRIMONIO HOY



**Target Beneficiaries:**  
Low-income households

**LOCATION:**  
Mexico



**Sector:** Housing

**Business model:** CEMEX is a global building materials company that provides high-quality products and reliable services to customers and communities in more than 50 countries. Its inclusive business, Patrimonio Hoy, provides construction materials, financing and technical assistance tailored to the needs and budgets of low-income customers across Latin America.

## THE OBJECTIVE

Patrimonio Hoy sought a baseline assessment of housing, education, health, and financial indicators via pilot surveys of new customers in the cities Guadalajara and Leon in Mexico. The company aims to understand the impact of improved housing materials and construction on home security and functionality, home businesses and housing value. Patrimonio Hoy is also assessing its potential impact on improved health and education due to better housing conditions – especially for children – and women empowerment.

## HOW IT WORKS

### 1 ASSESSING READINESS



Patrimonio Hoy is a progressive-stage business with medium readiness for measuring impact. It conducts regular economic data reporting and qualitative impact checks, and has significant resources and capacity. However, the marketing team has indirect and infrequent contact with customers through which they can conduct data collection, creating logistical and financial challenges to integrating impact measurement in its daily operations.

**54%** of surveyed customers live below USD 2.50 per day based on 2005 purchasing power parity in Mexico.

The proportion of customers seeking professional construction services increased by over **50%** from a 2012 assessment that found 35% of customers were self-building without any technical assistance.

**23%** of customers have improved their economic status via home-based businesses.

Clients average **2.4** people per room in their homes, suggesting that overcrowding is less of an issue than assumed.

**72%** of clients seeking technical support from Patrimonio Hoy are women – over half are mothers.

**23%** reported safety concerns pre-construction, compelling the company to consider focusing more on materials for protection.

### 2 PLANNING AND DESIGN



Customer surveys focused on measuring the quality, functionality, size, safety and density of housing units. Key impact indicators included education, health, gender and financial inclusion.

### 4 ANALYSING DATA AND REPORTING

### 3 MONITORING IMPACT

A comprehensive survey was designed for new Patrimonio Hoy customers, including those who have received technical assessments but not their building materials, as well as those who have received their first delivery of building materials.

## RESULTS

An initial pilot baseline survey was conducted in areas near Patrimonio Hoy headquarters in Guadalajara and nearby Leon. The company is using the initial pilot sample to adjust, diversify and improve its data collection tools and scaling-up processes, and plans to use its initial sample as a baseline for impact evaluation in the pilot area.

# About CEMEX Patrimonio Hoy

CEMEX is a global building materials company that provides high-quality products and reliable services to customers and communities in more than 50 countries. CEMEX has a rich history of improving the well-being of those it serves through innovative building solutions, efficiency advancements, and efforts to promote a sustainable future. During the late 1990s, the company identified low-income urban and suburban areas as both a potential growth market and an opportunity to deliver social impact. To pursue these opportunities, CEMEX created Patrimonio Hoy as a subsidiary inclusive business<sup>1</sup> in 1998. Patrimonio Hoy enables those with low startup capital and income to afford high-quality materials and technical assistance. It was designed around the “self-building” approach employed in many low-income communities.

To promote its products, Patrimonio Hoy conducts door-to-door promotion in community markets, schools and hospitals, along with social media marketing and sales through local retailers, who are

mostly unskilled women from target communities. Residents become *socios* (partners) when they make their first weekly payment to conduct a comprehensive technical and financial assessment, resulting in a customized home improvement and financing plan. *Socios* then make weekly payments over time as materials are delivered by local retailers. This allows economies of scale to be passed on to consumers, reducing the cost of goods relative to purchasing retail. Patrimonio Hoy also provides access to its network of contractors and helps *socios* with land ownership and other administrative hurdles.

While Patrimonio Hoy previously conducted one-off impact assessments and submitted monthly economic performance reports, the company engaged BIMS to pilot more regular and integrated impact measurement. Its management was interested in measuring improvements in the space, safety, quality, and utilization of homes; and the resulting impacts on health, wealth, education, and gender inclusion.

## Step 1: Assessing readiness

Assessing internal readiness for impact measurement is a critical first step in determining what data to collect, how to collect them and how to use them.<sup>2</sup> A wide variety of tools are available for businesses to measure, manage and report on their social and environmental impacts, ranging from those generating quick feedback to those requiring longer timeframes for showing systemic impact. In assessing a company’s readiness to measure its impact, BCtA considers its business maturity and capacity, which is determined based on the company’s clarity of purpose, data-driven culture and resources available for monitoring and data collection.

While Patrimonio Hoy has been operational for 19 years, the inclusive business is at the progressive

stage, having recently begun expanding to Nicaragua, the Dominican Republic, Costa Rica, and Colombia. The company engaged BIMS to expand its data collection and analysis to enable more regular, in-depth impact measurement and track social returns over time. The company was primarily interested in its direct impacts on customers and their families, as well as the broader economic impacts on target communities resulting from increased property values.

Patrimonio Hoy conducted an initial impact assessment in 2007, produced an impact framework in 2012 with a university partner and in 2013 published a case study highlighting its impact on children. The company’s marketing department also elicits frequent testimonials from

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1 Inclusive businesses are commercially viable business ventures that engage people living at the base of the economic pyramid – people with less than USD 10 per day in 2015 purchasing power parity – as consumers, producers, suppliers, distributors of goods and services, and employees.

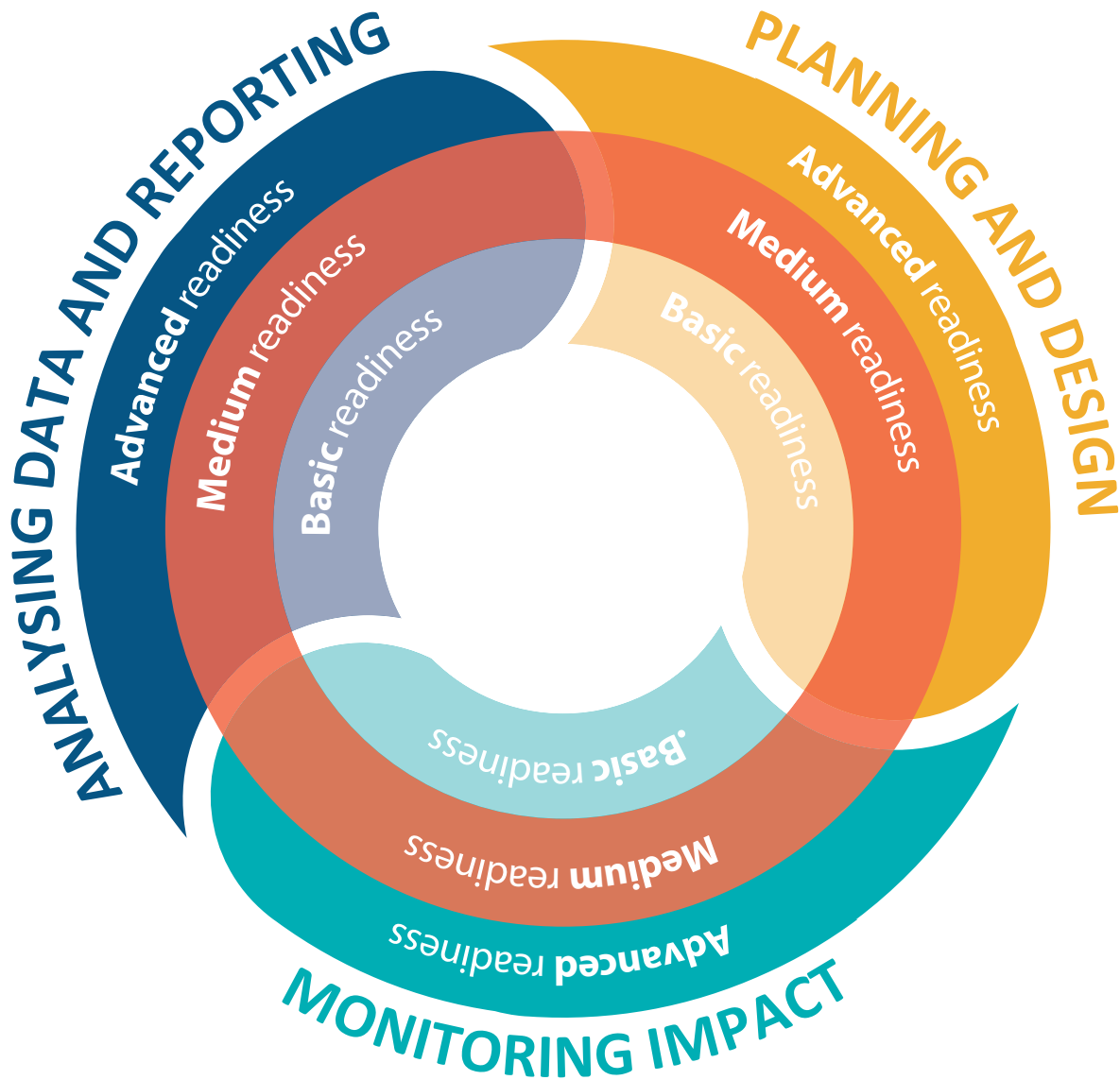
2 In this case study, ‘impact measurement’ refers to the measurement of inclusive businesses’ social, economic and environmental performance.

individual *socios* while company architects collect critical baseline housing data during their initial technical and financial assessments. However, prior to engaging BIMS, this data was not aggregated, synthesized or tracked over time to enable broader impact measurement.

While the company has a large, well-resourced and high-capacity team of staff, impact measurement is not integrated into its operations. The company therefore exhibited a medium level of readiness to begin impact measurement, as shown in the figure below:

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### Patrimonio Hoy's Impact Measurement Readiness



# Step 2: Planning and design

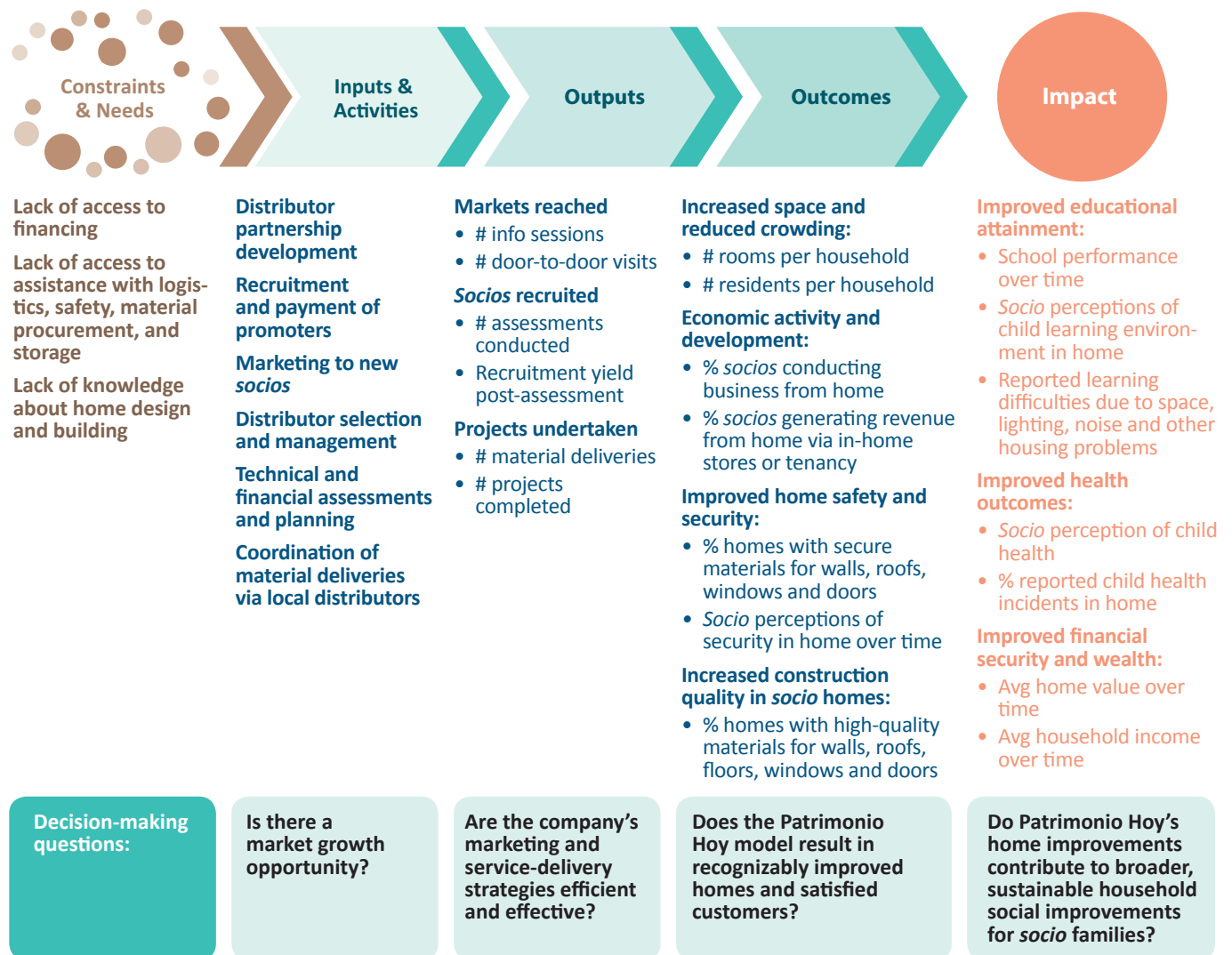
The planning step involves developing an Impact Value Chain<sup>3</sup> that links business goals, strategies and operations to outcomes and impact related to the Sustainable Development Goals (SDGs).<sup>4</sup> CEMEX is committed in playing a leading role in advancing constructive change. Achieving the SDGs is strategically relevant from a growth standpoint, as their attainment fosters new business opportunities, builds markets and relationships, and improves our quality of life.

The Impact Value Chain is the basis for developing impact indicators that address the needs identified in the previous step. Impact Value Chains guide

companies in determining what to measure and where to collect data by mapping business goals, strategies and operations against outcomes related to the SDGs. In the words of Henning Alts, Patrimonio Hoy's Marketing Manager, expanded social impact measurement was needed *"not only to show data about the company's impacts, but to get new insights from the data and from the process of collecting it in order to strengthen our services"*.

An abridged version of Patrimonio Hoy's Impact Value Chain, with a limited number of social impact metrics, is presented here:

## Patrimonio Hoy's Impact Value Chain



3 The Impact Value Chain integrates multiple approaches such as Theory of Change, Results Chain, logframes and business value chains.

4 Adopted in September 2015 by all United Nations member states, the SDGs are a set of 17 global goals and 169 targets related to key development issues facing society today. Countries aim to achieve them by 2030.

## Step 3: Monitoring impact

To monitor impact, BIMS recommends that companies continuously collect data on operations and social performance. Businesses can access data from individuals or from secondary sources like invoices, inventories, customer registrations, market research reports, social media, surveys and polls. Identifying sources of data is critical for developing data-collection plans using the Impact Value Chain.

Many companies have already collected data that can be used for impact measurement, so BIMS suggests that they first determine if they can

analyse existing data. If additional data are needed, it is important for companies to consider how new sources can be integrated or merged with existing data sets.

The Patrimonio Hoy marketing team's core interest was assessing its impact on customers based on a comparison between key housing indicators prior to construction and after project completion. Prior to construction, significant data on housing quality and construction were already being collected by the company's architects during technical and financial assessments. However, this was done using paper forms that did not include the health and education metrics the marketing team was interested in.

Due to resource constraints, it was deemed impractical to incorporate a social component into the technical and financial assessment or to train Patrimonio Hoy technical staff on mobile survey technology. Instead, a new survey was developed building on the technical assessment form. The survey was conducted through both direct questionnaires and observation of their housing conditions.

### Survey implementation

Engagement with BIMS was conceived as a pilot and baseline study to be conducted in areas around Patrimonio Hoy headquarters in Guadalajara and neighboring Leon. Patrimonio Hoy sought to assess the feasibility of conducting in-person data collection with clients and to test the effectiveness of its customer survey tool. If the process and tool proved practical, data collection could be scaled across markets elsewhere in Mexico. Subsequently, the same survey tool could be used in Guadalajara and Leon to collect baseline data for impact measurement. For the pilot, Patrimonio Hoy focused on new customers yet to begin construction or very early in the process. This included 550 customers in Guadalajara and 300 in Leon, with representative target samples of 230 and 170, respectively.

Rather than deploying full-time staff and integrating the data collection into existing processes, Patrimonio Hoy utilized third-party data collectors recruited from local universities. Students were trained on survey content, objectives, and collection technology, and provided with customer lists for outreach. The students' lack of experience combined with time limitations and challenges in accessing customers ultimately limited the final sample to 317 – 54 percent (171) from Leon and 46 percent (146) from Guadalajara. Access challenges may have also created sample bias: the customers surveyed comprised those who were at home, available and willing to complete the survey.



## Step 4: Analysing data and reporting

While the purpose and usability of social-impact data vary for each inclusive businesses, the outputs of impact measurement are used to answer one or more of the following questions:

1. Who is being impacted?
2. How are they being impacted?
3. What are the drivers contributing to or limiting this impact?
4. How can this impact be scaled up and linked to the SDGs?

### Who is being impacted?

Patrimonio Hoy *socios* are low-income households in Mexico and other Latin American countries. According to the survey results, in and around uadalajara, *socio* households earn an average of USD 18 per day. With an average of 4.4 people per household, the average per-person household earnings are roughly USD 4. And according to the Progress out of Poverty Index, 54 percent of individual *socios* live below USD 2.5 per day based on 2005 purchasing power parity. Nevertheless, Marketing Manager Mr. Alts believes that the company, “needs to expand and disperse the data collection going forward, as we suspect very different results in the south of Mexico in terms of crowding and the quality of housing construction”. He emphasized that income inequality is high in Mexico, and Guadalajara and Leon are relatively developed and industrialized areas. Once measurements are included in daily operations across the country – especially areas like Oaxaca and Chiapas – the aggregate data will provide better insights into how average clients are being impacted.

### How are they being impacted?

The survey sample was largely composed of clients who had not yet begun construction and those who had received only one material delivery. The company now intends to review and refine its data collection process and instruments, and to collect more data to track impact after projects are completed. Analysis of the pilot sample suggests the opportunity for impact, particularly on safety, security and health: 23 percent of respondents reported feeling unsafe in their homes and 41 percent reported health problems linked to their housing conditions. The leading health issues were respiratory, linked to dust and contamination (13 percent).

There is also potential for increasing earnings through home-based businesses and tenancy: only 5.3 percent currently rent space in their homes, while 19 percent operate informal shops or businesses from their homes. Education is less of an issue than expected, with only 10.4 percent reporting issues with studying or learning related to housing conditions.

### What are the drivers contributing to or limiting this impact?

Patrimonio Hoy believes that its key contribution to impact will be through its construction materials and technical assistance – made affordable through its unique distribution and financing model. Its products and services are intended to improve the quality of housing, with resulting social impacts including economic and gender inclusion, health and education.

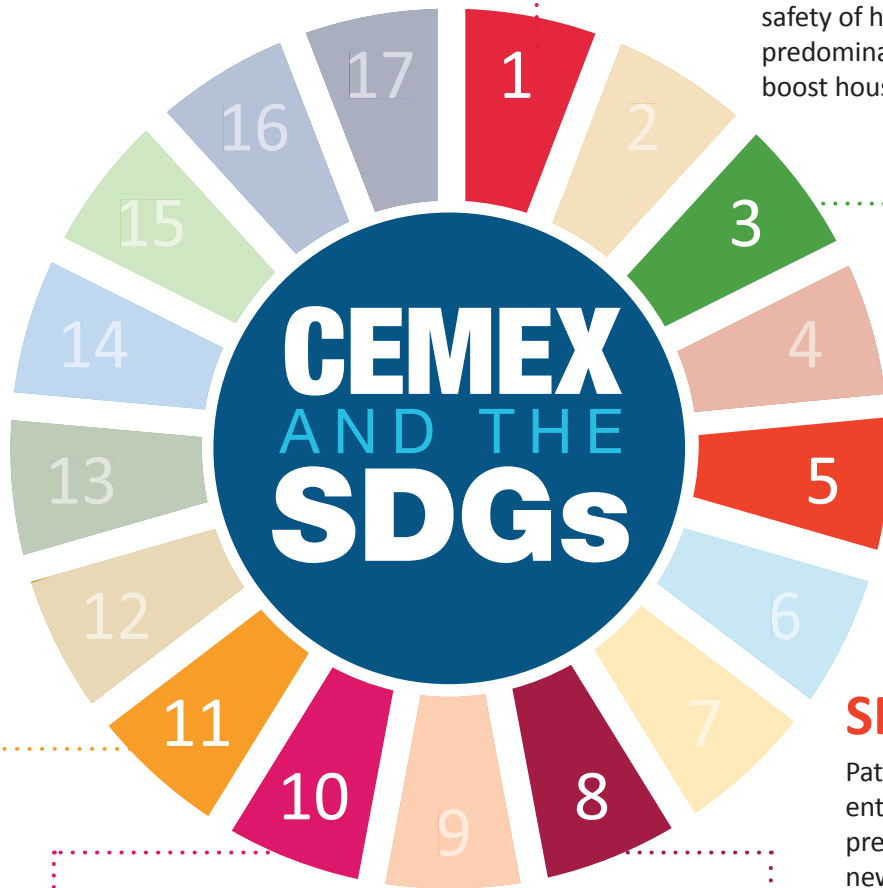
But despite offering financing products and drastically reduced up-front costs relative to traditional construction businesses, the company believes that the key to increased impact will be to develop long-term relationships with clients such that they undertake several projects at once, or in succession, over many years.

### How can this impact be scaled and linked to SDGs?

Despite current impacts on local providers and promoters, Patrimonio Hoy believes that more streamlined operations will increase affordability and help it to achieve scale. This may include promoting and selling directly through CEMEX distribution channels and online, lowering investment and operational costs.



While its delivery model may change, the company's impact framework has already helped it to plan and monitor social impact in order to contribute to the SDGs. As part of its Impact Value Chain, the company identified the following SDGs that are aligned with its intended impact:



## SDG 1 NO POVERTY

The Patrimonio Hoy model is designed to enable low-income families to invest in renovations without deepening their poverty. It aims to increase the quality and value of customers' homes, increasing customer financial stability and quality of life. The company is now assessing whether increasing the space, quality, and safety of home construction will increase the predominance of home-based businesses that boost household incomes.

## SDG 3 GOOD HEALTH AND WELLBEING

Patrimonio Hoy's impact framework emphasizes quality home construction as necessary for reducing health issues. Baseline results show that 41 percent of health issues were related to housing. This includes respiratory illnesses and exposure to weather among those who had not completed renovations.

## SDG 5 GENDER EQUALITY

Patrimonio Hoy promoters are almost entirely women, most of whom were previously unemployed, providing new revenue streams for women and their families. Of all surveyed clients, 72 percent were also women, demonstrating the critical role played by women in household financial management. By working directly with women, the Patrimonio Hoy model enhances their financial inclusion; its focus on enabling home-based businesses also empowers underemployed women.

## SDG 10 REDUCED INEQUALITIES

Patrimonio Hoy believes that low-quality housing and a lack of capital for making improvements contribute to the cycle of poverty, limiting low-income families' capacity to increase the value of their assets and achieve upward mobility. By circumventing these limitations, Patrimonio Hoy hopes to provide a clearer and more reliable path towards household economic growth and equality.

## SDG 11 SUSTAINABLE CITIES AND COMMUNITIES

Low-quality housing reduces the safety, inclusiveness, resilience and sustainability of developing communities. As Patrimonio Hoy continues to drive improvements in housing quality, it hopes to contribute to the overall safety of cities.

## SDG 8 DECENT WORK AND ECONOMIC GROWTH

The Patrimonio Hoy distribution model supports employment and economic development within target communities by hiring local women as promoters and providing steady, secure demand for local suppliers.

# Lessons learned from impact measurement

**Continuous and evaluative measurement is necessary to generate actionable insights and may require different approaches in the short and long term.**

Patrimonio Hoy's pilot began with a baseline survey of new customers around Guadalajara. To evaluate its impact on these customers, the company plans to continue data collection to establish a midline and endline as customers complete their projects.

In the short term, Patrimonio Hoy is exploring monitoring approaches that allow for less costly and more regular data collection. The survey used during the pilot required one hour with each customer to complete, and the data collection model was costly and difficult to manage. Instead, the company is considering remote mobile channels such as SMS to deliver short, frequent surveys.

**The final output of impact measurement is not the numbers, but the insights generated from those numbers; the final goal is not analysis but action.**

While true impact takes time to measure, preliminary insights were quickly gleaned from the baseline sample:

- Only 21 percent of customers were building entirely on their own, while 45.5 percent had some help and 33.6 percent fully paid for construction by hiring local masons. These data challenged the assumption of self-building approaches being predominant in low-income

markets. Patrimonio Hoy has since considered how it can expand services and generate new revenue by offering construction support services.

- Of those surveyed, 23 percent felt unsafe in their homes, emphasizing doors and windows as points of vulnerability. Patrimonio Hoy is now considering what products to offer in order to improve the integrity of homes.

**Impact measurement can be integrated into existing processes and mainstreamed across teams to ensure sustainable and efficient data collection.**

Patrimonio Hoy's marketing team was eager to mainstream impact measurement across technical departments. Field training and deployment created unique opportunities to present the pilot study to technical team leaders. Technical staff also helped to translate technical assessment forms into simple questions that customers and student data collectors could easily understand. However, no impact data collection was integrated into the technical assessments and no one from the technical teams participated in the data collection. The student data collectors had little or no technical knowledge or experience in housing construction, which limited the speed, accuracy and confidence of client engagement and survey completion. To achieve greater efficiency and effectiveness during data collection, Patrimonio Hoy is going to improve the survey and fully integrate data collection into its technical and operative processes, and capitalize on its architects as customer liaisons.

*Business Call to Action (BCtA) aims to accelerate progress towards the Sustainable Development Goals (SDGs) by challenging companies to develop inclusive business models that engage people at the base of the economic pyramid – people with less than USD 10 per day in 2015 purchasing power parity – as consumers, producers, suppliers, distributors of goods and services, and employees.*

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