Cemex and the Low-Income Construction Market[1] By Anne Coughlan and Rick Kolsky

GUADALAJARA, Mexico – The poorest people here live in small houses constructed from raw cinder blocks or more flimsy materials like cardboard and corrugated sheet metal. About half of Guadalajara's 5 to 6 million residents live in homes that hug a network of pitted, unpaved roads in unplanned settlements surrounding the city and blending into the countryside. Nearly all of the houses appear to be under construction. Thin lattices of iron rebar sprout from the rooflines. Bristling like industrial antennae, they announce the owners' intent to expand their houses upward and outward, adding more rooms to ease crowded conditions. Typically, however, almost a decade passes before a homeowner completes a new room.

"Most of the houses aren't finished and have only one or two rooms per family," says Consuelo Silva, a resident of the Mesa Colorada settlement on the northern outskirts of Guadalajara. "Most families have at least six to ten members, and these rooms are occupied by the bedrooms and a kitchen." Families in these neighborhoods tend to be resigned to making little progress on their home expansion efforts and thus to suffering the ill effects of crowding.

Cemex was founded in 1906 in the northern state of Nuevo Leon as Mexico's first cement company. Cement is

the principal ingredient for construction in developing countries, representing around 30% of the materials cost for a home. For nearly 90 years, Cemex operated like a typical Mexican corporation in Mexico's highly-protected markets. Until the mid-1990s, it could afford to be relatively passive and slow-moving, because

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competition between the handful of domestic cement companies was rather slack, and they competed primarily on price rather than service. By 1998, CEMEX had become the third-largest cement manufacturer in the world and the 10th largest company in Mexico, with total sales of $7.2 billion. Its production capacity was about 80 million tons per year (about 27 million tons in Mexico, or about 34% of its total business). CEMEX's Mexico market share was 52%. The company employed 25,000 people in over 30 countries, and had an equity market capitalization of $9.4 billion.

The desires of individual consumers received scant attention from the cement companies. Instead, the companies catered to a small number of large-scale "business-to-business" customers: the government, construction companies, value-added resellers that convert raw cement to building blocks and other structural elements, and distributors that operate warehouses and stores.

The very concept of marketing to consumers was new. "Prior to this time it had just been promotional items: key chains, cups, etc.," Moreno said. Further, it came as a surprise to CEMEX's management that as much as 40% of its cement bags were being purchased by customers in marginalized regions that CEMEX did not reach directly, a segment that had received scant attention up to this point by CEMEX. In fact, during Mexico's economic crisis in 1994, when the value of the peso crashed, Cemex noticed that the revenues from its big-ticket sales to traditional large-scale customers, and to middle- and upper-income individuals, dropped by 50 percent, but sales to its low- income, do-it-yourself homebuilder customers dropped only 10 to 20 percent. Although the average value of a sale to a low-income customer is miniscule, their numbers are enormous compared to Cemex's better-heeled customers. This makes low-income communities a more stable market that is less affected by the cyclical fluctuations of the economy.

So, in 1998, Cemex embarked on a strategy of learning how to tap the enormous markets of low-income customers in developing countries by studying how to do business with the poor in Mexico, where 60 percent of the population earned between $10 and $50 per day. In particular, Cemex sent a team of researchers to the outskirts of Guadalajara to study the low-income homebuilders, a neglected "last consumer segment." 50 percent of homebuilders in low-income communities do their own construction rather than hire a mason to help them. These do-it-yourself homebuilders are outside the formal economy, living in burgeoning informal settlements, and left to fend for themselves. People who built their own homes usually did it gradually, adding one wall and eventually one room at a time over several years. CEMEX estimated that there were 16 million self-built homes in Mexico and projected that this segment added almost 2 million new rooms each year. People seldom had land titles and often lacked basic services such as electricity, sewerage, garbage collection, potable water, and pavement[2]. Significantly, they account for about 40 percent of cement consumption in Mexico and have potential to be a market worth $500-600 million annually – a conservative estimate according to Cemex.

[2] "Patrimonio Hoy: A Financial Perspective," Segel, Chu, and Herrero, HBS Case Study 9-207-059, March 26, 2007.

But before it could successfully enter this market, Cemex needed to figure how to help do-it-yourself homebuilders overcome their resignation about not being able to improve their housing in a timely manner. The team discovered that only one in seven low-income families completes a room each year, and the average family takes more than 20 years to finish a small four-room house, that typically consists of a kitchen, bathroom, bedroom and a second bedroom that doubles as a family's common space. In contrast, most of these homebuilders “intended” to build a new room every year, a classic “value conflict,” where good intentions are no guarantee of good outcomes.

This discouraging rate of progress reflects the many obstacles that low-income homebuilders face. Banks and other businesses will not engage with poor residents of informal settlements where the legal status of their property ownership is murky, and residents cannot document assets, collateral, references or regular sources of income.

So poor people here, as elsewhere in the world, use a traditional method for saving money: they form a savings club or tanda. Typically, women form groups of ten persons who each make a small, weekly contribution of about 100 pesos (US$10) to a pool for a period of ten weeks. Each week, one member of the tanda is selected by lottery to receive the entire pool until every member has taken the pool once.

While studying low-income communities in Mexico, the Cemex team found that most families never join tandas, either because of inertia or trust concerns. Further, 70 percent of women who participated in tandas were saving money to construct improvements on their homes. But only 10 percent actually spent the money on building materials. Those who did complete a room spoke of building their “patrimony,” something of value to pass down to future generations. For most, however, the money was spent before a family even received it. What little can be saved in poor communities typically gets claimed for unanticipated emergencies, loans to friends and family, planned and impromptu celebrations, and cerveza to take the edge off a tough workweek.

Often, a person's social status in low-income Mexican communities is measured not so much by wealth or assets, but by "social capital" – a person's reputation and participation in the life of the community.

The challenges of putting aside enough money to buy a 50kg bag of cement – often more than a full day’s wages – are great. The average do-it-yourself homebuilder in Mexico spends US$1,000-1,500 and takes seven years to build an average size room of 100-square-feet once they start saving. In the past, homeowners attempted to hoard materials as a hedge against runaway price inflation, but because they lacked adequate storage they lost materials to theft and spoilage. A bag of cement left lying on the ground in front of a house will soon be rendered useless by rain, hardening before it can be put to use.

Typically, in these low-income communities, the quality of building materials purchased in small lots is poor – dealers give customers leftovers from their larger orders, charge high, often unlisted, prices, and expect families to pick up materials often by wheelbarrow. Most of the building supply dealers in these neighborhoods run very small solo operations in dilapidated shacks on street corners, where little merchandising is evident, prices are rarely posted and often negotiated, and service is a four-letter word. Unfortunately, location is everything to these consumers who lack the means to transport bulky construction materials very far. Proximity, variety, and availability were about the only service features evident for many of these dealers.

To make matters even worse, most do-it-yourself homebuilders lack construction skills, and therefore often waste materials by failing to specify the exact quantities they require. Home design and construction tends to be haphazard and suffers from substandard circulation patterns, structural integrity, ventilation and lighting.

Furthermore, when it came to buying, these dealers tended to play one supplier off against the other for a better deal, in terms of price discounts and extended terms. And, APASCO, Cemex's primary competitor, had set up sales locations closer to these low- income neighborhoods.

The team discovered that these low-income communities are pervaded by a sense of resignation that extends to the station of life to which a person is born, fate, and an inability to reconcile traditional values – such as making expenditures for communal celebrations – with modern aspirations, such as a nice home, financial planning and asset accumulation. "Their mental model is 'We cannot do it, we cannot have a better life. This is my life, this has been my parents' life, and this will be my children's life'," one team member lamented.