



## Why Home Building Is Now a Fact-Driven Business

The housing market meltdown — and a new era of tight credit and slow growth — has radically reshaped residential home building. Where the game used to be won or lost based on instinct and speed, it's now all about crunching the right numbers.

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Inside:

- The current housing market: an analysis
- How builders are positioning themselves to succeed in this new climate
- The hallmarks of creating a fact-driven business
- How you can become a data-driven builder

So how should home builders and developers position themselves to succeed in this new climate? The answer begins, surprisingly, on the baseball diamond.

From 1992–2006, life was good for home builders, developers, building products manufacturers and other related professionals in the U.S. Enticed by steadily rising home values and declining interest rates, builders and developers bought land and put up homes at a breathtaking rate, peaking at 1.7 million single-family housing starts in 2005.

The implosion of the housing market, followed by the worst financial meltdown since the Great Depression, has changed the playbook. In a volatile market where tight credit, skittish buyers and slow growth are the new rules of engagement, builders can no longer rely on instinct, speed and past experience when making precious investments in land and housing developments.

The National Association of Home Builders (NAHB) reports new-residential construction plummeted to just 445,000 units in 2009, a fraction of what it was in 2005. While the NAHB's 2010 revised forecast of 605,000 housing starts represents some improvement, both builders and lenders are realizing that full recovery will not be quick and success will require fresh thinking.

"I'm not seeing any real recovery from this thing until 2015," said Steve Hilton, CEO of Phoenix-based Meritage Homes, in an interview with HousingCrisis.com. "I call this home building's 'lost decade.'"

In a public radio interview on the state of residential construction, Seattle-area loan officer Chuck Hoeschen of South Sound Bank was equally direct, noting that companies now need to be much more thoughtful about what they build — and where they build it.

"It's not just, 'Hey, I want to build a house, throw it up for sale and it's gone,'" he said. "That day is gone right now and I don't know if it will ever come back. You're going to have to work for it, and put some thought and research into it."

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## Gut check

At first glance, baseball and home building might not seem to have any rational connections. But on closer inspection, one interesting parallel emerges: both baseball managers and home builders have a long tradition of relying on insider knowledge decision-making by the gut. Both professions have had a tendency to focus on subjective observations at the expense of objective, fact-based data in the heat of a key moment.

In Michael Lewis' 2003 book *Moneyball: The Art of Winning an Unfair Game*, the author reveals the trade secrets of one of baseball's most successful renegades. The book explores how Billy Beane, general manager of the Oakland A's, uses modern analytical tools to spot underrated talent and assemble a winning team with modest financial resources. In 2002, the A's won more than 100 regular season games with a paltry \$41 million payroll. The New York

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Yankees, by contrast, spent more than three times that amount in player salaries that same season. Both teams advanced to the playoffs; neither won the World Series. By that measure, Lewis' book suggests, the A's got more "bang for the buck."

Not only are baseball junkies fascinated by Beane's fact-driven leadership approach, a number of teams have taken the book to heart as management principle. Since *Moneyball* was published, at least 10 clubs in Major League Baseball have hired "sabermetric analysts" who focus on how key player performance traits contribute to runs scored, runs allowed and overall team wins.

Just as many baseball veterans claim to "know talent when they see it," a large number of home builders take equal pride in believing they "know a good piece of dirt when they see it." Before the housing market imploded, such gut-level decisions — whether well or poorly made — were masked by easy credit and steadily rising real estate valuations.

In today's construction environment, those economic luxuries no longer exist. From land acquisition to pricing, home building decisions not backed by shareable, objective data are being subjected to harsh scrutiny by creditors, shareholders and other external stakeholders. This is especially true given the powerful analytic tools now available to guide a residential construction company's course. The question isn't whether these data sets will influence the market — anyone who has spoken to a lender or investor knows they already are — the question is which builders will adopt them quickly enough to gain a competitive advantage.

Who stands to gain the most? The truth is there's opportunity at every level in the industry. According to the federal Bureau of Labor Statistics, U.S. home builders accounted for about 12 percent of all construction employment in 2008, not counting specialty trade contractors such as masons, plumbers and electricians. While there are a handful of large national builders, the industry is highly fragmented. By some estimates, there are between 150,000 to 170,000 home builders in the U.S., most of which have 50 or fewer employees.

While these companies differ in size and scope, every home builder can benefit from the use of fact-based decision tools to aid profitability and growth. Looking at how the big builders are already doing this provides insight into how research tools can be used to improve growth prospects.

## Consumer modeling comes home

Packaged goods manufacturers use consumer modeling to reduce financial risk and improve the market performance of new products. Why shouldn't builders?

This is the idea behind Bloomfield, Mich.-based Pulte Group's own customer segmentation model, Targeted Consumer Group methodology. Teams apply the methodology to key decisions ranging from strategic land acquisitions and home design offerings all the way down to music selections for different model home settings. More recently, Pulte used

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Targeted Consumer Group methodology to guide its 2009 acquisition of Centex Homes, giving the Michigan-based builder a strong entry-level brand to complement its existing offerings for move-up and active adult consumers. Due in large part to these moves, Pulte consistently ranks in the top tier of the New Home Builder Customer Satisfaction Survey conducted annually by J.D. Power and Associates.

Meritage Homes is another big builder whose operations are increasingly dependent on a strategic, comprehensive analysis of the latest market data. Based on research that revealed many consumers are more cash-strapped — yet environmentally aware — than ever before, Meritage has doubled down on an intriguing bet: offering energy-efficient homes for a reasonable price.

In a suburban Phoenix development, Meritage is selling new homes that promise to save consumers up to 80 percent on heating and cooling costs over standard code-built properties. Early reports show those homes, which also qualify for significant federal and state tax credits, are outselling competitive properties by a 3-to-1 margin. For these reasons, Atlanta-based Beazer Homes is also aggressively pursuing the “affordable green” model, and other builders are likely to follow suit. These successful ventures all have their roots not in a “good guess,” but in the facts that come from data-driven analysis.

## Making a forecast and checking it twice

During the housing boom, home builders were often judged by the success of past projects. Moving forward, local and national industry leaders are much more likely to be builders equipped with data tools to help accurately predict economic trends and wisely choose development opportunities. This is especially crucial in the face of subtle demographic shifts that often elude mass media coverage.

In his 2010 book, *Foreclosing the Dream: How America's Housing Crisis is Changing Our Cities and Suburbs*, University of Virginia demographer William Lucy uses extensive research to show that foreclosures in 2008 and 2009 occurred more frequently in exurban and outer suburbs than in central cities or close-in suburbs. He attributes this pattern to less demand for large exurban houses, fewer households headed by persons age 30 to 45 who traditionally have been prime home buyers for households with children at home, and more attraction to convenience and variety in central cities. Contrary to conventional wisdom, central cities from 2000 to 2008 tended to outperform suburban income and housing values in the 35 largest U.S. metropolitan areas.

It's shifts like these that are catching the attention of many construction leaders, including Sheryl Palmer, president and CEO of Taylor Morrison, a Scottsdale, Ariz. home builder operating in the southwestern U.S.

“Right now, we're trying to get greater perspective on what the economy has done to consumers and how that is changing their perceptions on homeownership,” said Palmer

during a recent interview with HousingCrisis.com. “Think about the up-and-coming generation of folks, in which 50 percent see themselves traveling internationally to work. Or, what about the ‘boomerang kids’ who are coming back home? What will that mean for homeownership decisions? We’re exploring all of that.”

## Looking beyond the competition

A critical mistake home builders often make is to focus only on the number of units a competitor builds, or on the lot pipeline in nearby developments. That narrow view excludes other market-moving influences, such as foreclosure properties, existing housing and fluctuations in local economic conditions. For that reason, tapping into multiple data points can be the difference between making or losing money.

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Despite a housing market that was running full speed ahead in 2005, Reston, Va.-based Stanley Martin Homes used a combination of past experience and market research to make two significant course corrections. First, the upscale regional builder began planning a new line of top-quality “jewel box” homes — ranging between 2,550 and 3,400 square feet — while phasing out its larger estate home offerings. Just as importantly, company leaders also stopped new construction in exurban areas, instead focusing energy on close-in development to key metropolitan areas in northern Virginia.

Those decisions, made at a time when most competitors were still building large, exurban properties, paid big dividends. While Stanley Martin did have to cut its workforce to navigate the housing downturn, the company posted eight consecutive quarters of sales growth through the first quarter of 2010. That trend has put the builder on track to have its best sales year since 2000.

## Hallmarks of a fact-driven business

By its very nature, construction is a high-touch, hands-on business. However, leading residential construction firms are finding that third-party research and data support tools can help them actually get closer to their customers’ core needs, wants and motivations.

In a 2006 *Harvard Business Review* article titled, “Competing on Analytics,” author Thomas Davenport reviewed the core elements of 32 American companies that have made substantial investments in collecting, analyzing and acting upon data. Based on that research, Davenport has identified the top 10 characteristics of fact-driven organizations:

- 1 They go wide. They apply sophisticated information systems and rigorous analysis not only to their core capability, but also to a range of functions as varied as marketing and human resources.

In fact-driven organizations, fact-based decision-making is not only a best practice but also a part of company culture.

- 2 It's a strategic focus. The senior executive team not only recognizes the importance of analytics, but also makes its development and maintenance a primary focus.
- 3 It's a culture thing. In fact-driven organizations, fact-based decision-making is not only a best practice but also a part of company culture that's constantly emphasized and communicated by senior executives.
- 4 They hire for it. They hire not only people with analytical skills — but a lot of people with *the very best* analytical skills — and consider them a key to success.
- 5 Data is managed at the top. They not only employ analytics in almost every function and department but also consider it so strategically important that it is managed at the enterprise level.
- 6 Proprietary metrics are key. Not only do they have expert number crunchers in house, they create proprietary metrics to match their own business processes.
- 7 They share. Fact-driven organizations use copious data and in-house analysis, and share it with customers and suppliers.
- 8 Test and learn. They avidly consume data and seize every opportunity to generate information, creating a “test and learn” culture based on numerous small experiments.
- 9 They're always building. They not only have committed to competing on analytics but also have been building their capabilities for several years.
- 10 Data is central to their story. Finally, they not only emphasize the importance of analytics internally, but also make quantitative capabilities part of the company's story — shared in the annual report and in discussions with financial analysts.

## Balancing the inside/outside game

Does a heavy focus on analytics, or fact-based decision-making, replace internal methods used by home builders to evaluate trends? Absolutely not. In fact, the most successful players in the “new normal” residential construction environment will be those who embrace multiple forms of data and integrate it into their strategic decision-making.

At Meritage, CEO Hilton said the firm used to analyze land deals solely by viewing tracts and rounding up brochures from competitors' nearby sales centers. Then the builder would sketch out housing products that would undercut rivals on price. Today, Meritage balances its inside, “feet-on-the-street” savvy with real-time home transaction data — giving it a much stronger, factual baseline on which to make development decisions.

“We can put a polygon around a submarket that's got some good sales going and be much smarter about a lot of things,” Hilton said in an interview with HousingCrisis.com.

“For instance, you can zero in on which realtors are the producers in a market and focus on working with those few folks versus a scatter shot realtor effort.”

# A need to embrace change

While corporate cultures differ from one home builder to the next, one constant element is a powerful sense of independence. That trait can be extremely useful in launching and growing a business. On the other hand, it can present a barrier to change unless leaders truly buy in and “walk the talk” with team members. Such was the dilemma facing Robert Bowman, president of Charter Homes and Neighborhoods in Lancaster, Pa., when he saw the need for a strategic course correction in mid-2006.

“We simply weren’t delivering on our promise of offering a great buyer experience, and our ‘willingness to refer’ numbers started to fall off,” said Bowman during an October 2010 interview with HousingZone.com. “I really don’t have a great answer for why that happened, other than we stopped thinking it was important.”

In its strategic planning process, Charter leaders concluded that while customer referrals were desirable, the real power resided with customers who were “highly enthusiastic” about interactions with the builder. That discovery led to “The Charter Way,” a ground-up renovation of all customer-facing processes during the home buying experience.

## These changes included:



Creating “neighborhood building teams” that stay with customers from initial sale to post-closing activities.



Convening weekly management meetings to review relationships with each customer during the building process.



Assembling an “Experience Team,” to meet with homeowners reporting negative experiences. After that meeting, this team routes a summary of the conversation to all other Charter employees for feedback and additional conversation.

As a result of that course correction, Charter’s “willingness to refer” rate has jumped from 80 percent in 2006 to 92 percent this year. That has allowed the company to maintain pricing while growing gross margin.

# Size doesn’t matter

Because builders come in all shapes and sizes, they each have different ways in which they might benefit from using fact-based tools to aid strategic decisions. With that in mind, here’s a quick look at data tools that might add the most value for national, midsized and local builders.

A key challenge for **national builders** is to wisely select the best property investment opportunities in current and potential markets. At minimum, this requires that builders have access to a consistent set of facts on each site, analyzing location, price points, consumer segments and potential volume vs. required margin. In addition, national builders benefit from data tools that offer complete visibility of specific housing markets. This data should provide consistent insights into all types of home sales, including the demographics of local home buyers and fact-based forecasts on local market growth potential. To accomplish these goals, it's important that national builders connect with a market intelligence provider that can deliver consistent, comprehensive coverage of all of their markets.

**Midsized builders** often compete with their national counterparts within local markets, but typically work within a more limited geographic footprint. Still, given the size of their businesses and dependence on strong performance within multiple markets, these companies also rely on fact-based data. This includes the use of tools to track the competition, analyze local pressures from foreclosure and resale markets, and understand changing demographics that help them design housing products that appeal to optimal target buyers.

While most **smaller builders** usually focus on a single market, their operational scope can vary dramatically — from custom firms that produce 10 or fewer homes a year to larger producers that may put up as many as 100 units in entry- or mid-priced developments. For these companies, fact-based data is all about local activity. This may include demographic trends among prospective buyers, foreclosure and resale activity, income shifts by ZIP code, or patterns in commercial development that may influence future residential housing growth.

At the end of the day, hard-won personal experience is the most important asset in a builder's business portfolio. By adding fact-based data to the mix, residential construction companies more confidently manage economic turmoil and build a strong foundation for long-term growth.

## Ready to become a data-driven builder?

At [housingintelligence.com](http://housingintelligence.com), you'll find a wealth of information on becoming a data-driven builder, including access to Housing IntelligencePro, the most complete, single-source data and analytics solution for the housing industry. Track over 90 percent of housing activity across the U.S. in near-real-time.

### About Jonathan Smoke

As executive director, research, Jonathan Smoke manages the market intelligence products and services that Hanley Wood provides to clients of the Market Intelligence division as well as the research content delivered through Hanley Wood's magazines, websites and conferences. Jonathan has spent the last 16 years in the housing industry, primarily consulting with or working inside national public builders leading technology, strategy and market research teams.

### About Hanley Wood Market Intelligence

Hanley Wood Market Intelligence (HWMI) is the housing industry's leading provider of rich data and analytical services on residential real estate development and new-home construction. It is a division of Hanley Wood, LLC, the premier media company serving housing and construction.

HWMI customers include home builders, developers, lenders, and building-product manufacturers who use HWMI products and services to make critical business decisions on everything from pricing strategy and construction financing to geographic expansion and target marketing. Through proprietary software products and research reports, HWMI also provides customers with analysis of key trends affecting the housing market.

