

Visionaries:

How today's leaders are using future contingencies to plan strategically

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“We didn’t see it coming.” For many firms, financial regulators and homeowners, the 2007 housing bubble and subsequent recession blind sided their confidence, cutting short an era of unprecedented growth and good fortune. But some people were prepared. Some even sounded the alarm. How was it they saw the downturn coming?

Knowing what is going to happen is quite different to being prepared for an eventuality. In a new era underpinned by sustained economic uncertainty, business leaders are learning to insure themselves against an unpredictable future. Keeping an eye on movements and events both within the industry and beyond its bounds can lessen the surprise factor, but the complicated nature of the worldwide economy and associated governmental responses reinforce the fallibility of forecasts.

Such pervasive uncertainty can paralyze leadership, or lead to improvised, ineffective and costly decisions. Instead, leaders need to be a few steps ahead of the game. By looking at a range of possible outcomes — scenarios — and developing a strategic response for each, companies can reduce the shock of industry shifts, and minimize crisis-mode decision-making. First popularized by Shell Oil in the 1970s, scenario planning is experiencing a revival, driven by risk-averse, action-driven CEOs.

There is a method to creating plausible, vivid future scenarios, drawing on the key drivers that impact your business today. In changing the frame of focus from a single outlook on the future to an array of contrasting possible futures, business leaders may find they notice things that were previously on their periphery. But above all, scenarios impress upon leaders the need to prepare for any number of outcomes, and to detect and respond to changes in their environment. Indeed, it is the fiduciary responsibility of every firm’s Board of Directors to ensure that this kind of scanning and planning is going on, led by the CEO. Firms that emphasize anticipation of and adaptability to changing circumstances will not only survive the changes the design and construction industry is undergoing, but thrive on those shifts. This paper discusses some of the different methods leading design and construction firms have used to explore scenario planning in the context of both internal and external change.

Anticipation and Adaptation

Founded in 1940 in San Francisco, Degenkolb Engineers is the oldest and largest seismic engineering firm in the United States. Chris Poland, who has been CEO of Degenkolb Engineers since 1990, has used scenario planning since 2006 to evaluate perhaps the best example of an unpredictable driver of business: earthquakes. “I noticed in our planning process that we didn’t know how to think about the distant future,” Poland recalls, “and scenario planning really gave us

“We tend to extrapolate from past events, but are largely incapable of processing completely novel situations.”

Chris Poland, CEO,
Degenkolb Engineers

an opportunity to look out. You’re not trying to guess the future, you’re just writing down what might happen in areas of interest to you so that you can better position yourself for where you’re headed.”

Key leadership skills evolve over time, but it is crucial that today’s CEO is capable of anticipating and preparing for future change and creating a plan for the firm to adapt in response. While most firms view natural disasters like earthquakes as somewhat of a “black swan” event, each firm’s business is dependent on the performance of certain metrics – state budget allocations, raw materials costs, availability of labor, fuel excise receipts, private capital liquidity, development licenses, and so on. And for every company leader today, the pace and magnitude of the economic recovery comprises a vast uncertainty. As with earthquakes, there are experts on hand willing to offer predictions about the next significant shift in the economy, but these are ultimately educated guesses. Studies have shown that in booming times, we have a short memory for moments of bust, and an outsized belief in growth. Conversely, during a recession, predictions about the recovery are typically more pessimistic than is the reality. We tend to extrapolate from past events, but are largely incapable of processing completely novel situations.

To deal with these biases and to respond to a world in flux, today’s leaders need greater flexibility built into their planning efforts, and a greater sensitivity to change. Indeed, they need to anticipate and prepare for different contingencies. This is where scenario planning provides a powerful input for strategic planning.

Through drafting and visualizing several different outcomes based on the trajectory of key variables, leaders can rehearse for tomorrow, creating action-driven strategic plans for each. When one scenario emerges, the firm is poised to mobilize the corresponding plan, and to adapt its business units, operations and geographical focus to a new game.

Effective response strategies to the scenarios will depend on solid business intelligence; on being able to anticipate what changes in certain metrics mean for their firm, resulting in fast, effective decision-making. Periodic meetings with built-in report mechanisms can get the firm in the habit of evaluating the external environment and assist leaders in making operational decisions in a timely manner. What constitutes business intelligence will vary from firm to firm, and will involve not only numbers and projections, but also insight into the markets and geographies relevant to that firm. Lastly, scenario planning is a valued tool for cultural growth in companies whose strategic plan may have stagnated, or whose staff is disengaged. Scenarios offer CEOs a multi-dimensional view on the future, and provide a stimulating background for discussions with current and future leaders about where the company is headed, and how the firm can better position itself for future success.

Four Ways to Use Scenario Planning (Case Studies)

FMI spoke with four leaders of construction and design firms to see how they have used scenario planning in the past to strengthen the strategic resolve of their companies.

a. Vetting new strategies: Mike Yeoman, COO, Perteet Engineering

During a 2010 ACEC conference in Washington state, Mike Yeoman, COO of Perteet Engineering, was a participant in a scenario planning session run by FMI. Enthused by a fresh

approach to strategic planning, Yeoman brought an FMI consultant into his firm, to work with a group of 12 to apply and tailor the scenarios developed by FMI and a consortium of industry leaders (see sidebar for more details) to Perteet’s specific situation and community.

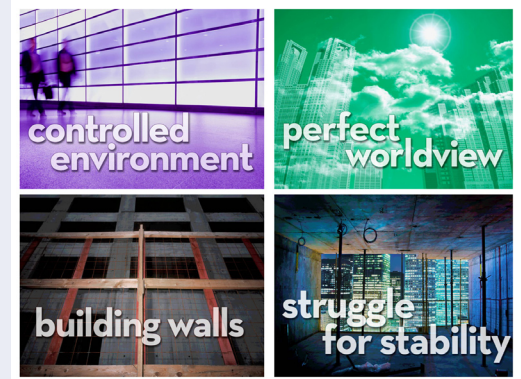
“We actually came away with opportunities that we are exploring as a result of that,” says Yeoman. “The scenarios really do lay out four different economies of what’s going to happen. So the idea was, for instance, in a down economy, there are still opportunities, so where are they and what are they?” Yeoman says that the scenario planning exercise led the team to look at moving into utility and structural engineering. “I fully expect we will add an additional discipline or two between now and this time next year.”

From looking at how the firm would best respond to different futures, Perteet was able to identify common strategies that covered multiple scenarios. Focusing on the political implications of project startups from the perspective of different entities was one such strategy. The firm also made the decision to invest in market analyses for the utility and structural engineering markets to ascertain the viability of expanding the scope of their services. For Yeoman, the scenarios allowed the group to play out different strategies. “Not knowing what the world was going to be like, the idea of having vetted these options against more than one future gives us some confidence that we can adapt what we’re doing as we move forward.”

Yeoman also feels that the process was a valuable training tool for up-and-coming leaders. “It has been getting these people up to speed on what has been happening and giving them a view for the future on where we want to take it.” In particular, one of the challenges of leadership, dealing with so many moving parts during a time of such uncertainty, is diffused by a longer-term focus. Says Yeoman, “When you’re fighting alligators and putting out the fires, that’s all you can concentrate on for the moment. We don’t want to get to the end of the year and say, ‘Oh, we just put out 26 fires.’ We want to say we’re prepared for what the fire is going to be next year.”

b. Rehearsing for the future: George Palko, President, Great Lakes Construction

For Great Lakes Construction Company, when it came time to update the company’s three-year strategic plan, the pace of economic change and uncertainty led President George Palko to contemplate a planning exercise with greater flexibility – scenario planning. A two-day scenario planning workshop was preceded by in-depth data gathering, including detailed interviews with the firm’s top twelve executives, a written survey completed by around 60 of the staff, and market research into the firm’s top six markets. Palko explains that after digesting all the data, the strategic planning group formulated a pessimistic scenario and optimistic scenario, then strategized the steps they would take and the timeframe within which they would take the steps. “It turned out to be very beneficial, because it opened a lot of eyes in the group



AEC Futures Study

In the fall of 2008, FMI kicked off a collaborative, industry-wide research study to deepen insights into key trends and fundamental drivers shaping the AEC industry over the next decade, through 2020. To gain a better understanding of possible futures, the FMI team set out to develop alternative scenarios to take a different, but not implausible, look at the associated implications for the AEC industry. The research team devised a progressive study to move the industry beyond the current situation into a speculative tomorrow, involving over 50 industry experts in the process.

The steering committee – a team comprised of leaders from firms working domestically and internationally in architecture, engineering and construction – charted a course for the study, and then helped recruit a broader “advisory group” that provided a more wide-ranging context for identifying and dissecting industry trends. After several months of data collection, synthesis, communication and debate, the framework was in place for constructing the four future scenarios. Given a test-run at several industry events, the four future scenarios proved highly effective in a strategic discussion setting because they were perceived to be “valid” – each contingency exists in the world today in some form – and sufficiently distinct. Participants in focus groups ranged from ambitious AEC up-and-comers to seasoned industry leaders and entrepreneurs. Their input was used to refine and adjust the final scenarios.

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George Palko, President,
Great Lakes Construction

to go through the scenario plan of what had to happen, when it had to happen, and what the consequences of doing nothing would ultimately be.”

The group met once a month to review targets and evaluate the two forecasts. “It forced us to meet, it forced us to measure things, and it forced us to set a timeline to react or not react, and we followed it very diligently,” says Palko. Ultimately, Palko credits the exercise with preventing losses “upwards of a million dollars. “With the proper planning we avoided that,” he explains, “and the importance of ending up in the black in the eyes of the bank and the bonding company, and showing employees the result of being proactive instead of reactive is, I think, going to pay big dividends.”

Several big decisions rested on the knowledge and insight that the scenario planning process gave the team. For example, instead of purchasing additional equipment, the group opted to pursue grants to clean up the emissions of their existing equipment. Having the data to back his decisions was also beneficial, says Palko. “It wasn’t just coming out of my mouth; here was actual data from different associations that said, ‘Here’s what you guys can expect.’ And now people can see the results and benefits of early planning, I think it will be an easier sell.” Great Lakes plan to institute a similar planning effort for 2011, spelling out all the actions they need to employ if certain eventualities present themselves. “Scenario planning laid those kinds of things out for us,” says Palko. “It forced us to react quickly.”

c. Preparing for seismic shifts: Chris Poland, CEO, Degenkolb

In 2006, precipitated by a transition in leadership, Chris Poland, CEO of Degenkolb, created the “sixth-generation committee” within his 70-year-old engineering firm. Poland, who counts himself a member of the “fourth-generation,” says that he invited the sixth-generation professionals into the scenario planning process to “think about what the firm would look like in 30 years, as a first step to getting the next generation of people involved.”

The committee plotted two key variables for the firm on two axes. The first variable was the economy, with outcomes ranging from very robust to weak. The second variable was incidence of a large domestic earthquake, which has a direct and immediate impact on business volume for Degenkolb. From these two variables, four scenarios were created. “We really came to a realization that we had to do something about expanding our service areas and our market reach in areas that were not dependent on earthquakes occurring,” says Poland. “In the past,” he explains, “we’d always focused on advocating for seismic mitigation and our emergency response responsibilities where structural engineers play a key role in getting a community back on its feet. We also realized that when major earthquakes occur, there is an opportunity to reach out to new clients and industries that have instantly become interested in earthquake performance.”

While earthquakes result in a spike in demand for Degenkolb’s engineering services, there are also long term implications. The company is heavily involved in the reconstruction of California’s hospitals due to seismic regulations that came out of the 1994 Northridge Earthquake. Poland says the company has been able to forecast demand based on legislative deadlines and react accordingly. By the year 2013, they knew that the state regulations required that all buildings that could collapse in earthquakes be decommissioned, and by 2030, the hospitals were required to reconstruct, strengthen or rebuild all buildings so that they could operate

after a major earthquake. The experience has shown the possibility for significant changes in public policy related to seismic strengthening following a major earthquake that need to be considered in the scenarios.

Since initiating the process of scenario planning, says Poland, “We’ve moved a long way down the road on our leadership transition and have annually modified our five year Business Plan based on the scenarios. We have in there the next steps for the new markets we’re reaching out to diversify ourselves, so we’re not entirely dependent on a robust economy and earthquakes.” Now that the scenarios are almost five years old, Poland says the Board is looking forward at things like market diversity, services offered, reaction to major earthquakes here and abroad, strategic locations of offices in the future, and potentially updating the scenarios. “We have been thinking about what to do with an offshore earthquake since there is a growing interest in international work.” He says, “When do you update the scenarios? Do you wait for the next generation to update it? We’ll be finding that out.”

Poland also emphasizes the importance of involving different generations in the scenario planning effort. “I probably have 25 or 30 percent of our firm involved in some kind of planning activity, not because we need all that help, but because we need all those people to dream about what they want the firm to be, and then be a part of making it that.”

d. Capitalizing on intelligence: Ken Wightman, CEO, David Evans Enterprises

For Ken Wightman, CEO of David Evans Enterprises, the global recession of 2007 wasn’t unforeseen – he’s been doing scenario planning in his firm since 2000. But, he admits, “We’d anticipated it was going to be happening in 2010.” For Wightman, scenario planning has been an ideal tool to get leadership to “look out over the chaos and focus on the things that will impact you in the future.” Following the dramatic change in landscape after the recession, Wightman and his team created new scenarios in 2009, to help them see beyond the immediate wreckage.

The scenarios are presaged on two variables: availability of funding and progressiveness of clients. Wightman says that the scenario planning team “created the imagery” around the four resulting scenarios, and looked at the critical factors common to multiple scenarios, around which strategic planning efforts were focused. Part of the strategic planning, according to Wightman, was asking “Okay, if this is what we want to be in ten years, how do we put the tactics in place, and what do those need to be?” Sketching out the firm’s actions in advance of market shifts has been crucial to David Evans Enterprises’ success, he argues. “I like that it doesn’t set an unalterable direction, because we don’t know what is going to be happening, and if you aren’t able to react to those changes in a quick and timely manner, you’re going to get passed by.”

A critical component in deriving value from the scenarios was monitoring external developments, so that if circumstances began to approximate one of the scenarios, the associated actions could be implemented. “You find your leading economic indicators, and each industry will look at different things,” explains Wightman. “You have to realize there are so many things lurking out there in three to five years, but you also have to be so reactive to things today. You have to be able to do both.”

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Degenkolb Engineers

One of the reasons Wightman has stuck with scenario planning for a decade now is its applicability to a traditionally near-sighted industry. “The biggest thing is getting people to think in that strategic long-term view,” he says. “Engineers are geared to such linear processes, that you do A and B and the outcome is C.” As his firm’s composition changes – both in overall size, and in terms of generational fit – Wightman feels that scenario planning provides a framework for learning about both the firm and the industry. “It’s a great learning, sharing experience for your leadership staff to go through together,” and, he says, “it allows the team to create smart strategies that say, ‘OK, these are the things we’re going to do now because they’re no brainers, and these are the things we’re going to watch out for, and as we see things changing, we’re going to react in this way.’”

Conclusion

The goal posts are always shifting. Competitors jostle, break away and fall behind, customers want something new, and the interaction of government, the economy and international trade exact a complex transition on the overall business environment. The savvy corporate leader will be cognizant of subtle changes in competition, customer demands, the business climate, and the makeup of their own company. The quickening pace of change will ensure that new leaders emerge from the field, and that former mainstays disappear altogether. Tomorrow’s leaders are bound to be those capable of anticipating and adapting to this all-encompassing change.

There is no one right way to plan for the future, rather, finding out which drivers and indicators have the most impact on your firm will be a starting point. From there, you will need to look at ways to gather business intelligence, and build an adaptive culture within the leadership team. The leaders interviewed by FMI for this paper have all demonstrated their investment in the next generation of leaders – after all, long-range planning will involve succession management.

Scenario planning ties together several leadership skills crucial for navigating unfamiliar territory: insight, communication and pragmatism. The more time you spend on scenario planning, the stronger the inferences you will be able to make about your position in the market. Similarly, the more you have rehearsed and planned for future outcomes, the better you will be mobilized to react favorably when the time comes. Anticipation of change will be crucial as firms position themselves for the major shifts that occur not just in the next few years, but through the next decade. The firms that survive will be practiced adaptors, led by insightful executives poised to make the best decisions for their company. ■

For more information on how FMI can help you tackle the acute challenges facing your firm, please contact: **Briston Blair**, Consultant, at 919.785.9293 or bblair@fminet.com, or **Steve Isaacs**, PE, Associate AIA, Managing Director, at 707.252.2054 or sisaacs@fminet.com

Scenarios and leadership

The purpose of scenario planning is to process “knowns” and “unknowns” so as to elicit a view on what is possible for the future. It is the responsibility of the board and the CEO to prioritize the planning effort, and to drive participation of the firm at large. Without adequate leadership, this exercise will yield little or no action, or see strategy veer off on a tangent. A leader needs to drive the discussion, and push the team to identify common strategies that apply to more than one scenario. Ultimately, they need to formulate an action plan. Following are a few pointers on using scenario planning, intended to clarify the leap from “What if?” to “What now?”

Contrast more than one uncertainty – To get a richer sense of future possibilities, look at two or more key drivers of your business. Through looking at the ways these variables might interact in the future, you can narrow down the scope of plausibility, and learn more about the way they drive your business.

Illustrate the scenarios – Once you have a sense of possible outcomes, work to sketch out everything about how that future looks. Give it a catchy name so that the scenario planning team can understand the tenets of that scenario by shorthand when working to create adaptation strategies in response to it.

Don't discount outliers – While one or two of your scenarios will seem more likely, and one or two will seem wholly unlikely, it is important that you address the less-likely contingencies. Looking at how your firm would perform in a drastically different environment can reveal important insights into the strengths and weaknesses of your firm.

Keep the vision clear — The idea of scenario planning isn't to reinvent the firm at every spin of the wheel, but to fashion a more robust and adaptable firm that can survive any number of twists and turns in the coming years. Subsequent strategic planning should return to the idealized vision of where the firm would like to be in 10 years, and work back through the contingencies to uncover ways to position the firm for such an outcome.

Track progress against the scenarios — Having finished a vigorous scenario planning session, you will have action plans in place that chart the firm's response to different outcomes. Although some strategies will be “no brainers” that set the firm in good stead for all eventualities, you will want to track the indicators that show which direction the future is moving in. If one scenario appears to be coming true, the plan might be adjusted to better respond to that contingency.

Update the scenarios — As part of a long-term effort, scenarios can be updated from time to time to reflect obvious and broad changes in the industry. As uncertainties are reduced, you may see that one scenario is now more or less impossible, and wish to create an alternate scenario that better reflects the drivers of your business moving forward.

Build an inquisitive culture – Training your staff to keep tuned to subtle events and indices is an important part of building a firm able to adapt to the routine changes in the economy and industry. Familiarizing yourself with relevant indicators, involving yourself in industry dialogues, and investing in market studies are all key elements of visionary leadership. Over time, you will learn to “see” change and adapt more efficiently.

Engage with the drivers of your business – The success of scenario and strategic planning is dependent on there being an ongoing “dialogue” with the firm's customers and other influential stakeholders (agency and government officials, vendors, community leaders, media, etc.). Although an awareness of these factions is necessary, participation in those realms will mean the difference between merely watching change and actually influencing it.

About FMI

FMI is the largest provider of management consulting, investment banking and research to the engineering and construction industry. We work in all segments of the industry providing clients with value-added business solutions, including strategy development; market research and business development; leadership and talent development; project and process improvement; and mergers, acquisitions and financial consulting.



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