

Construction Management Practices Are Slowly Changing

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ABSTRACT: Many design and construction companies are looking to add long-term strategic planning concepts to their traditional arsenal of short-term project planning tools. A study developed by the author at the School of Civil and Environmental Engineering at Georgia Tech in conjunction with AECStrategies, LLC, a management consulting firm, showed that the industry is struggling with the need to move from a project-based business that emphasizes the success of projects as the key to long-term success to a strategic business that emphasizes the customer and the enterprise as the key. The trend is toward building a business that is selective in its customers, innovative in its marketing plans, hungry for new markets, eager for diversity in the talents in its workforce, and ready to formulate a plan for long-term success. Charts illustrate how small and large companies are approaching such topics as core competencies, knowledge resources, lifelong learning, financial management, and competitive advantage analyses.

Are construction companies destined to ride the waves of the economy like a boat without an engine, growing in large bursts when the economy grows and declining or failing when the economy contracts? Are construction companies going to find the motor that provides the momentum to drive through these waves and control their own future? With over 10,000 failures a year in the construction industry, it would seem that the picture of a boat without a motor best describes the businesses in this industry. However, some industry executives are beginning to challenge this assumption. The sounds of change are beginning to be heard from the offices of contractors and design firms around the country. These are not the sounds of computers and high-tech devices designed to make the industry the next convert of the dot.com age. Rather, these sounds are the words of business

and strategic management. Although the refrain of "budget and schedule" is still the king of the construction vocabulary, terms such as "strategy," "planning," "competitive advantage," and "market analysis" are breaking through the project-oriented halls of the construction office. Is this a sign of change in the industry to a greater focus on management issues? To put it differently, is this a signal that construction companies are looking to add long-term strategic planning concepts to their traditional arsenal of short-term project planning tools?

The answer to these questions is a definite maybe. In the recently released *AEC Strategic Management Practices Report*, developed by the author in the School of Civil and Environmental Engineering at Georgia Tech in conjunction with AECStrategies, LLC, a management consulting firm, these questions were studied to determine the state of strategic management practices in the construction industry. The

results of the study illustrate how some in the industry are actively looking for a way to control their futures, while others have accepted their ride through the economic waves and are philosophic about a possible crash at the bottom of a future fall.

As with most things in the construction industry, companies are taking a conservative, cautious approach to this change in their management practices. Although caution has always been a trademark of the industry, the economy at the beginning of this decade is challenging this approach. Such factors as globalization, technology, integrated economies, and a changing workforce are leaving construction companies with a simple choice: innovate and adopt long-term planning concepts or cease to be an industry leader. As stated by Clint Mays, the vice president of J.A. Jones Construction, "With the changing dynamics of the marketplace, including the Internet, multitiered ownership, and new competitors who are forcing margins down in traditional profit areas, a company that does not focus on strategic issues will find its doors closed in a very short time." Although this sounds like a harsh judgment, the 21st century business environment moves at a pace that leaves little room for hesitation. As demonstrated by the increasing number of corporate mergers and takeovers, today's industry leader can be tomorrow's industry casualty with little more than a press release and a change in business cards.

THE STRATEGIC MANAGEMENT STUDY

Focusing on the single question of whether AEC companies are adopting strategic management practices, the study provides a snapshot of the strategic thinking within the industry as it enters the global age of the 21st century. Developed over a two-year period, the study represents the practices of more than 500 companies from every sector, geographic region, and revenue category in the industry (including over a third of the top 400 construction companies and top 500 design firms named by *Engineering News-Record*). Representing the thoughts of executives from million- to billion-dollar companies, the study illustrates how one industry is struggling with the need to move from a project-based business that emphasizes the success of projects as the key to long-term success to a strategic business that emphasizes the customer and the enterprise as the key to long-term success. In other words, the trend is toward building a business that is selective in its customers, innovative in its marketing plans, hungry for new markets, eager for diversity in the talents in its workforce, and ready to formulate a plan for long-term success.

PROFILING AN INDUSTRY

The data compiled from the strategic management study tell a story of an industry in transition, but with a long journey left to travel to achieve the long-term planning results of the

Fortune 500 benchmark established in the study. As a benchmark, the Fortune 500 has set a significant bar for the construction industry to hurdle. Examples of this high level include the areas of long-term planning, where 74 percent of the Fortune 500 firms have established vision statements; market evaluation, where 93 percent of the companies actively evaluate competitors and focus on establishing long-term competitive advantages; and planning for new markets, where 98 percent of the companies have implemented plans for formally evaluating and entering new markets. In contrast, design and construction organizations are actively engaged in these activities at a rate that is 30 to 40 percent less than the Fortune 500 organizations (see figure 1).

While it is true that the Fortune 500 companies have set a high benchmark, numbers by themselves do not provide a picture that will motivate the construction industry to act or modify their practices. Rather, to convey this message, a graphical set of strategic management profiles was developed for this unique study. As pictured in the Fortune 500 profile in figure 2, the profiles capture three elements: the strategic management factors, the level of strategic management integration as evaluated by the companies, and the average implementation achieved for each strategic management factor.

To interpret the profile, the reader should focus on whether or not individual boxes in the profile are solid or blank. Ideally, an industry profile would consist of all solid boxes in either column 6 or 7. This profile would indicate that an organization is fully implementing or measuring every strategic management factor. Although the Fortune 500 profile does not quite reach the ideal condition, it fulfills the two most important criteria. First, the profiles indicate that all companies believe they have at least developed formal

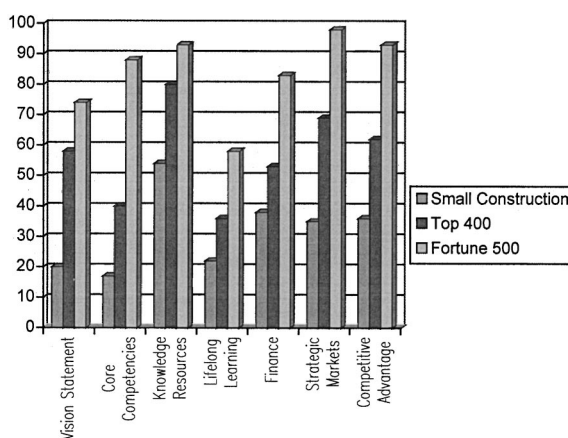


Figure 1. Percentage of Fortune 500, Top 400 ENR Construction Companies, and Small Construction Companies Focusing on the Implementation of Strategic Management Factors

	1 Not Aware	2 No Plan	3 Concept Stage	4 Plan Develop- ment	5 Initially Implemented	6 Fully Implemented	7 Measured
Core Competencies							
Knowledge Resources							
Lifelong Learning							
Finance							
New Markets							
Competitive Analysis							

Figure 2. Strategic Management Profile for the Benchmark Fortune 500, Characterized By a Narrow, Mostly Solid Profile

strategic plans, resulting in a profile that is graphically narrow in width. Second, the profile boxes are almost completely filled in, the exception being the lifelong learning issue. As an aside, even the values in these boxes narrowly missed the implementation threshold.

THE CONSTRUCTION INDUSTRY PROFILE

As seen in the profile of the top 400 contractors in figure 3, the top construction companies have some ground to make up to achieve the results of the nation's largest organizations. The profile highlights the variability in focus areas within the industry. First, the profile is graphically very wide, with values in every column except the first. This indicates that companies believe their strategic management integration ranges from awareness of the concept to full measurement. Uniformity within the group is minimal, as organizations are all over the implementation spectrum. Second, the profile indicates very selective attention areas by the industry. Although knowledge resources, finance, and markets receive significant attention, the areas of core competencies, lifelong learning, and competition receive equally little attention. Is this a reflection of the industry's traditional emphasis on financial management of projects, or is it a reflection of the need for greater attention to changing market conditions?

In comparison with the top 400 contractors named by

ENR, figure 4 illustrates the strategic management profile for the smaller construction organizations (under \$10 million revenue). Although many observations can be made concerning this profile, probably the best statement is that these organizations need to place some emphasis on obtaining a motor for their trips through the economic waves. As illustrated by the width of the profile, the organizations in this category assess their strategic management efforts at every point on the integration scale. However, of greater concern is the lack of solid boxes in the profile. With no single area of strength, the small contractors are setting themselves up for a difficult transition to the new business environment. With little attention to the long-term focus of strategic planning, these organizations are facing a reality of either living on project-to-project basis or possibly closing their doors as part of industry consolidation.

The final profile of interest here is the profile of the top 500 design firms as defined by *ENR*. Do design firms have better management practices than construction companies? Do the traditional project management skills of the construction company provide an advantage over the design emphasis of engineering and architectural firms? Based on the current study, the answer to these questions is no on both accounts. The design firm profile is similarly wide and similarly variable when compared with the largest construction

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Competitive Analysis							

Figure 3. Strategic Management Profile for the Top 400 Construction Companies, Characterized by a Wide, Variably Focused Profile

companies. However, differences do exist in the focus areas. The design firms place greater emphasis on core competencies and competition and less on finance. However, as an overall profile, neither group is threatening to raise the strategic management bar set by the Fortune 500 organizations.

THE MEANING OF THE NUMBERS

Hundreds of companies have been studied and their responses compiled into numeric and graphical representations. What is the message that should be taken away by a construction industry executive? In short, it comprises balance and aggressiveness. A broad spectrum of strategic issues must be addressed by today's organization if it intends to be prepared for waves that come from every direction. Internal issues such as establishing a vision and preparing the workforce for change are essential for building a solid company foundation or powering the motor. As with a building, even if those outside the organization admire the facade, the lack of a good foundation will ultimately result in failure. For an organization, this foundation has three critical components: vision, infrastructure, and preparation. The vision provides the road map and directions for the organization's journey in the business environment. The infrastructure, including both personnel and technology, provides the resources required to complete the journey. And finally, the preparation provided by an educated workforce provides the stability and continuity required to undertake an extended

journey by ensuring that employees are prepared to lead the organization along its intended path.

Such external issues as new markets and competitive advantage provide the opportunity for organizations to drive toward their intended goals. Often overlooked by the industry, external issues represent the tough questions for an executive. As stated in the report, many executives are hesitant to examine the markets in which the organization is operating or to carefully assess the competitive advantage that their own organization has established over its competitors. Why does this hesitation exist? The answer is a reluctance by organizations to face the reality that their markets and customers may have changed or moved in another direction. The comfort of a traditional market may be threatened if an organization finds that it has to change to meet the needs of the new economy. Unfortunately, this position often leads to a state of affairs where the organization has no warning or protection against a change in the waves. The cost is a very tough fall into the bottom of the wave or into the statistics compiled on failed businesses.

Finally, the issue of aggressiveness provides a fitting conclusion to this article. Undertaking the moves required to achieve strategic management progress may be painful for some organizations, but this discomfort should be tempered by the thought that the organization is setting in place an aggressive road map for the future. As stated by Clint Mays, "Strategy will provide the differentiator between companies

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Figure 4. Strategic Management Profile for the Small Construction Companies, Characterized by a Wide, Mostly Empty Profile

that are viewed by owners as commodities and those that emerge as profitable industry leaders.”

ON-LINE BENCHMARKING PROVIDES ORGANIZATIONAL INSIGHTS

If your organization is having difficulty determining where to start on the path to enhanced strategic management practices, your organization is in good company. Although many of the more than 500 companies analyzed in the strategic management study have started down the road of strategic management, the number that have reached the implementation or measurement stage remains limited at best. Far more common is the stage where companies want to start the strategic management process but fail to pinpoint the strategic areas that require the greatest attention. Like a person entering a new city without a map, the organization that begins the strategic management process without a particular direction is bound to end up expending significant energy before finally realizing that it is hopelessly lost.

Providing AEC organizations with this direction is the focus of the on-line benchmarking system developed by AECStrategies, LLC. Based on the data collected in the strategic management study, the on-line benchmark incorporates the questions and data used in the original study. Through the Web site, organizations can fill out an on-line questionnaire at www.aecstrategies.com that will instantly provide an evaluation of their strategic management practices.

With options to generate benchmarks against an industry sector, the entire AEC industry, regional competition, revenue category competition, or the Fortune 500, the on-line benchmarking system provides organizations with on-line feedback regarding their strategic management strengths and weaknesses.

Based on a 1:100 scale, the benchmark provides overall, internal, and external benchmarks against the selected groups. Additionally, a percentile rating provides organizations with an insight into where they stand versus their competition. This is important because while a benchmark score of 75 may seem like a good rating for an organization, if the competition is scoring in the 80s or above, the 75 no longer appears to be so strong. Of greater importance, these numbers provide a strong indicator to executives showing where they need to place immediate resources to strengthen particular strategic weaknesses. The benchmark provides a starting road map to strategic management implementation.

Although this focus on strategic management benchmarking is in its early stage, it is foreseeable that on-line benchmarking will become another dimension in the prequalification process or in the selection of subcontractors. For public-sector and private-sector owners alike, the strategic management benchmark will provide insights into the management practices of the organizations they partner with to complete projects. Based on these insights, it is plausible to foresee an industry where organizations that are prepared

for long-term success will develop strategic advantages over their tradition-bound, project-focused competition.

PROFILE OF J.A. JONES CONSTRUCTION

Can an organization with century-old roots and traditions as a general contractor transform itself into a modern, strategically focused organization? Can this organization focus a group of national operating divisions on a single vision statement and set of goals? These are the questions that many individuals asked when J.A. Jones Construction embarked on a focused effort to establish strategic goals and transform itself into a strategically managed organization. A national construction company founded in the late 1800s in Charlotte, North Carolina, J.A. Jones has grown into a national organization with annual revenues exceeding \$1.3 billion. However, like many construction companies, J.A. Jones faced the problem of transforming itself from a company that emphasized project management into one that emphasizes markets and customers.

As summarized by Bob Hambright, the president of J.A. Jones Construction, the key to success for today's construction company is to learn from other industries, focus on strategic resources, and build better management processes. Reflecting on the industry, he says, "We must stop taking risks that we do not control or cannot price. If we are successful at changing the way the construction community does business, then we will be providing our customers with

greater value and we can then insist on improved margins."

Given this as a guiding statement, Jones faced the problem of changing the idea of success into tangible reality. To achieve this reality, Jones turned to strategic planning and management as an alternative to traditional, project-oriented management practices. Incorporating leading-edge concepts such as balanced scorecard implementation, strategic market evaluation, customer analysis, and strategic finance analysis, the Jones organization focused its national employee base on a single set of vision statements. Through a yearlong effort, this strategic focus is starting to show tangible results.

An organization that was traditionally geographic in focus and independent in the regions has transformed itself into an organization that focuses its efforts on emerging markets and national centers of excellence that reflect strategic and competitive advantages. With a focus on increased profitability and enhanced operating procedures, Jones has set its sights on building sustainable competitive advantages and differentiators over the next 100 years of operations. This transformation is summarized by Clint Mays, the company's vice president: "Our customers are looking for strategic partners; therefore we must demonstrate our commitment to focusing on strategic issues as the basis for mutual success."

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