Contractors Are Staying Competitive by Following Construction Planning Best Practices
• Context in relation to the 4 “Cs” (Climate, Customers, Competitors, Company)
• Industry Trends and Strategic Thinking
• Productivity Risks
• Pre-job Planning Essentials
• Implementing Change
• Planning, Planning, Planning
• Earned Value
Key factors of business environments are analyzed based upon internal and external influences. FMI Consulting, a leading consultancy firm for contractors, has developed a framework for contractors to help them effectively analyze their business environment, taking in account the concept of the “4 C’s”.

FMI’s Development Framework of the 4 Cs:

CLIMATE
- Political & economic trends
- Societal & technology trends
- Global events

COMPANY
- Internal survey and interviews
- Quantitative analytics
- Existing strategy review

COMPETITORS
- Strategy & positioning
- Strengths & weaknesses

CUSTOMERS & MARKETS
- Trends in their businesses
- Buying behaviors
- Market sizing & trend analysis
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FRAMEWORK OF THE 4C’S

Climate  Cust/Mkts  Competitors  Company

Major themes emerging from strategy review

Major Theme A

- B
- 

Major Theme ?

Strategy Options

Strategy Themes

Strategy Themes

Strategy Themes

Strategy Themes

image credit: FMI
The Construction industry is strongly impacted by external factors and global trends. One of the biggest trends the industry faces is a strategy for surviving a VUCA. According to the Harvard Business Review, “VUCA is acronym for Volatility, Uncertainty, Complexity, and Ambiguity and is commonly used in business as a catchall to say “it’s crazy out there.”

The Harvard Business Review has put together a guide to help organizations thrive in a VUCA world.

- Changing Nature of the Industry
- Rethinking OTMS
- Strategy for a VUCA World
- Globalization
- Modularization and Prefabrication
- Lost Generation
- Productivity 2.0
- Trade Unions
- Convergence E&C
- Federal Construction

### Complexity

**Characteristics:** The situation has many interconnected parts and variables. Some information is available or can be predicted, but the volume or nature of it can be overwhelming to process.

**Example:** You are doing business in many countries, all with unique regulatory environments, tariffs, and cultural values.

**Approach:** Restructure, bring on or develop specialists, and build up resources adequate to address the complexity.

### Volatility

**Characteristics:** The challenge is unexpected or unstable and may be of unknown duration, but it’s not necessarily hard to understand; knowledge about it is often available.

**Example:** Prices fluctuate after a natural disaster takes a supplier off-line.

**Approach:** Build in slack and devote resources to preparedness—for instance, stockpile inventory or overbuy talent. These steps are typically expensive; your investment should match the risk.

### Ambiguity

**Characteristics:** Causal relationships are completely unclear. No precedents exist; you face “unknown unknowns.”

**Example:** You decide to move into immature or emerging markets or to launch products outside your core competencies.

**Approach:** Experiment. Understanding cause and effect requires generating hypotheses and testing them. Design your experiments so that lessons learned can be broadly applied.

### Uncertainty

**Characteristics:** Despite a lack of other information, the event’s basic cause and effect are known. Change is possible but not a given.

**Example:** A competitor’s pending product launch muddies the future of the business and the market.

**Approach:** Invest in information—collect, interpret, and share it. This works best in conjunction with structural changes, such as adding information analysis networks, that can reduce ongoing uncertainty.
Once construction firms have identified external factors and trends that will directly impact the organization, they can then begin identifying the opportunity. The opportunity is generally categorized by percent improvement, the 8-hour day, and the percent increase profitability.

FMI’s philosophy and approach is to look at the well-rounded opportunity, which means looking at all of the information that can impact crew productivity and ultimately project profitability. Those factors include; crew support, materials, adequate training, tools, manpower, constructive feedback, equipment, removal of obstacles, and adequate information exchange. Once an organization has pinpointed these critical factors, they can begin to build out a process that will work for the company.
THE LEAN PROJECT MANAGEMENT PROCESS

- Pre-Job Planning
- Post-Job Review
- Exit Strategy
- Daily Huddle
- Short-Interval Planning

Productivity
WHAT DOES THE IDEAL PLANNING PROCESS LOOK LIKE?

Field Hand-Off Documents
Estimator PM Provides the Following:
1. Prints
2. Specifications
3. Scope of work
4. Contract of Synopsis
5. Preliminary Budget
6. Preliminary Schedule
7. Contract Information

Notification of Project Award

Invite the foreman to field hand-off meeting with one week notice (minimum three weeks prior to mobilization)

Conduct Field Hand-Off Meeting (minimum two weeks prior to mobilization)

Estimator

Project Manager
It’s the foreman’s job to identify the tools needed to complete the projects. It’s the organization and ultimately the C-Suite’s job to identify the tools that will make the project manager and the organization successful. Technology plays a critical role in the success. Integrated Enterprise Resource Planning (ERP) systems enable project managers, executives and the accounting department to accurately track projects. Having effective tools to track job progress and project profitability will help the organization better identify their opportunity for success.
Construction is a game of inches. Margins are tight and bids are competitive. The risk of being a commodity and/or easily outsourced is high. Companies need to differentiate their departments to ensure they can win bids in the future - with margins that make it worth the effort. That’s right, it’s not just about winning the bid, it’s about understanding if the margins will create profits at the end of the day when the project is complete.
BUSINESS INTELLIGENCE & BIG DATA

Wikipedia definition – Data Mining
The computational process of discovering patterns in large data sets involving methods at the intersection of artificial intelligence, machine learning, statistics, and database systems.

Wikipedia definition – Big Data
The term for a collection of data sets so large and complex that it becomes difficult to process using on-hand database management tools or traditional data processing applications.

Wikipedia definition – Business Intelligence (BI)
A set of theories, methodologies, architectures, and technologies that transforms enormous amounts of data into meaningful and useful information for business purposes.
About Viewpoint Construction Software

Viewpoint is a global provider of innovative construction-specific software solutions and services that offer the AEC and owner communities the tools they need to improve project profitability and visibility, manage risk, and effectively collaborate with project owners and the entire project team. Viewpoint solutions include everything needed from preconstruction to construction and facilities maintenance, and are offered on a variety of platforms including Cloud, Mobile, SaaS and On Premises. Headquartered in Portland, Oregon, USA, and with offices in the UK, Australia and Canada, Viewpoint has become the technology partner of choice, with customers located across the globe in more than 28 countries which include more than 30 percent of the ENR 400, and partnerships with more of the top 50 mechanical and electrical contractors in the United States than any other construction software provider. For more information, please visit www.viewpoint.com or 800.333.3197 for more information.

FMI Consulting
Knowledge • Expertise • Relationships

FMI is a leading 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.

• Strategic Advisory
• Market Research and Business Development
• Leadership and Talent Development
• Project and Process Improvement
• Mergers, Acquisitions and Financial Consulting†
• Compensation Benchmarking and Consulting
• Risk Management Consulting

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