




EMPOWERED DECISION-MAKING WITH ERP SOFTWARE

WHAT CONSTRUCTION
EXECUTIVES NEED TO KNOW



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INTRODUCTION

Informed decision-making is the key to success. That's why important company data should be easily accessible at all times with top-quality Enterprise Resource Planning (ERP) software. "ERP" is a type of overarching software, built to collect and manage complex sets of company data—but all ERPs are not created equal. We've found that forward-thinking executives understand this fact and choose an ERP solution with careful consideration. Other executives relegate choosing their data systems to the IT department, potentially wasting countless hours and delaying the decision-making process.

Every player in project delivery and the decision-making process needs to properly store and access the right information at the right time: That's why smart business leaders look for reliability, power and seamless interconnectivity when switching ERP systems. Too many organizations sacrifice these invaluable benefits when bridging together a set of passable solutions.

Smart executives take every advantage they can get. They streamline operations, cut down on wasted time and deliver results with a superior ERP solution.

This report highlights the importance of executive involvement in choosing an ERP solution. Learn how smart construction-industry leaders are moving towards superior strategy with ERP.

ABOUT THE STUDY

This report was conducted by Vellum Marketing in the spring of 2016 on behalf of CMiC. It studied representatives of construction companies in the United States and Canada.





ERP SOFTWARE: AN EXECUTIVE DECISION

The construction industry grows as its technology evolves. Pressure is building for industry leaders to improve data access in the office and in the field. CEOs, business owners and executive teams are demanding efficient access to a wide range of data so they can make the right strategic decisions in real time. Smart business leaders take ERP into their own hands to maximize efficiencies with their overarching business strategy in mind.

Still, ERP software is often selected and managed by internal IT departments. During our study, many senior executives deferred ERP-related questions to their IT departments. When asked, many said they didn't know enough about ERP to answer for themselves. In fact, only 12% of final survey respondents were C-suite or senior executives; 67% represented IT and 21% represented other functions.

This lack of knowledge at the leadership level presents a potential risk, especially in the construction industry. ERP represents a company's information backbone, reaching into all areas of a business. That's why a single misstep by the IT department can waste countless hours across departments. For example, many IT departments try to bridge together several software solutions. In doing so, they create unnecessary steps—like information double-entry—that often leads to inefficiency or worse: inconsistency. Time is wasted on data input and human error is increased. Executives are forced to spend more time looking through multiple reports in different formats. Project completion and decision making is slowed down or disrupted, risking a company's profits and reputation.


GENERIC & INDUSTRY-SPECIFIC ERP

ERP software can be complex. There is a wide assortment of options and countless sources of information when it comes to ERP. Simply put, ERP was created to help manage a complex function like finance or inventory. The software evolved over time to accommodate new functions and industries. Many construction companies today use "generic" ERP solutions. These solutions are not built specifically for the construction industry, so they lack industry-specific tools. These tools manage and automate processes for contractor services, field operations, health and safety management and other construction-industry needs. Without these specific construction industry tools, many companies are not maximizing the return on their software investment.

WHY SHOULD TODAY'S BUSINESS LEADERS LEARN ERP?

High-level executives understand high-level strategy. Smart leaders take control of company-wide data access to empower key players and ensure operational success across the enterprise.

Cloud-based data storage brings advantages and risks. Executives who leverage ERP are able to assess and mitigate these risks to ensure the integrity of their corporate and customer information.





CURRENT SITUATION – CONSTRUCTION INDUSTRY

INDUSTRY PERCEPTIONS: ERP & SOFTWARE SOLUTIONS

In the past, implementing a new ERP system was a time consuming and expensive prospect. Many companies back then—and today—have been reluctant to make the change, even when their systems becomes obsolete.

Construction leaders expect long lasting ERP solutions, but they must consider their organization's evolving needs over time. Even small changes in the industry can impact the way an organization runs. To stay ahead of the curve, ERP vendors must adapt to their clients' needs.

In recent years, software capabilities have improved and the needs of the industry have evolved to match. CMiC, for example, has improved its product over the past 40 years, always considering the customers' needs. It's that kind of dedication that smart construction leaders rely on to surpass their competitors.

CURRENT SOFTWARE SOLUTIONS


Microsoft is one of the dominant players across all industries including the construction sector. 68% of our respondents are using some Microsoft software for management. Programs like Office Suite only offer a partial solution: They lack the overarching interconnectivity and functionality of a unified solution. Most of our respondents are bridging multiple products to support their businesses.

ISSUES THAT AFFECT TODAY'S CONSTRUCTION INDUSTRY

More than 56% of the organizations surveyed are running their business on multiple stand-alone systems and participants said this is a major issue for their companies. Multiple systems are proving to be inefficient and costly due to complex interfaces between systems and all the necessary upgrades. Implementation, while always time consuming, is even more challenging with software that may have duplicate processes, duplicate entry points and difficult or incomplete reporting mechanisms.

Other top issues affecting the industry included the following: RFI's take too much time (32%); Too much effort is spent to get accurate information to the right people (29%); Current software is slowing companies down (21%); Generic solutions are inefficient compared to construction-specific software (21%); Functionality of the current software hinders decision-making (18%).

THE REALITY: Even legacy solutions provided by a cutting edge ERP provider may be obsolete. Regular upgrades are essential to avoid serious inefficiencies and reduce risks. Even companies with access to upgrades often delay or fail to implement them due to time or resource constraints.





Are there any other issues not mentioned that affect your company?

“Yes, a lot of the software has a lot of over lapping features and choosing one is not always easy. Another one is that pulling information together from different sources is very difficult, doing it in a quick way is a challenge.”

- Survey respondent, March 2016

INTEGRATED (ALL-IN-ONE) SOLUTIONS

An “all-in-one” or “integrated” ERP makes it easier to store and access data, often using interconnected applications and a common database. 94% of our respondents felt that an integrated solution would be beneficial to their company (9% slightly beneficial, 24% somewhat, 32% very, 29% extremely). Respondents perceive the following benefits: improved communication; reduced time on duplicate data entry; better access to information; enhanced reporting capabilities; error and cost reduction.

Surprisingly, very few individuals were aware of all-in-one solutions and software that was specific to the construction industry except those who were already using CMiC.

Perceived challenges noted were time to train and implement, the cost of switching and a lack of understanding regarding the approach. Security and risk were listed as a top benefit but also as a challenge due to a concern around potential loss of data and hacking.

All in all, the benefits outweigh the challenges: 90% of our respondents feel that their leadership stakeholders would be interested in an integrated solution (21% slightly interested, 24% somewhat, 21% very, 24% extremely).





CURRENT PERCEPTIONS TOWARD CLOUD-BASED SOLUTIONS

INDUSTRY PERCEPTIONS

Our study found that cloud-based systems are already present in company's software. E-mail was identified as the function most commonly hosted in the cloud, followed by human resource management and project management. Over half of our respondents (52%) believe that the construction industry is lagging behind in its adoption of cloud technology.

Companies today are rapidly moving towards cloud-based solutions. According to a recent online Forbes magazine, a 2015 PwC (PricewaterhouseCoopers LLP) survey predicts "Investment in cloud based ERP software will double in 2016 while investment in traditional ERP systems will decline over 30%." Their analysis shows that licensing revenues for non-cloud ERP systems have been in decline since 2013.

BENEFITS OF CLOUD ADOPTION

Cloud adoption improves access to information, especially for those in the field. When implemented well, cloud adoption can lower IT costs and improve communication across key players and departments. Anytime, anywhere, secure access with mobile internet access ensures real time information updates for better decision making and less down time waiting for approvals and job details.

Our survey respondents cited a number of key benefits for cloud adoption in the construction industry: planned disaster recovery, reduced security risk and faster upgrades were the top three cited.

"Cloud computing can be a game-changer for your enterprise—but it's also rife with misinformation. A confusing array of cloud definitions and erroneously identified "cloud" solutions are but a couple of obstacles that stand in the way of cloud computing becoming a staple in your business technology (BT) portfolio"

- Forrester, *Cloud Services are Transforming your business—Act Now to Thrive.*
August 24, 2015.



CHALLENGES OF CLOUD ADOPTION

Some IT leaders express concern that speed and performance will suffer when multiple organizations use the same cloud environment. A secured AWS system, similar to those used by large financial institutions, helps alleviate this concern. More will be discussed on risk later in this paper.





DEFINITIONS OF ERP DEPLOYMENT

ON PREMISE

With an on premise model, a company owns the software and hardware. This provides the most control but it also comes with a large investment.

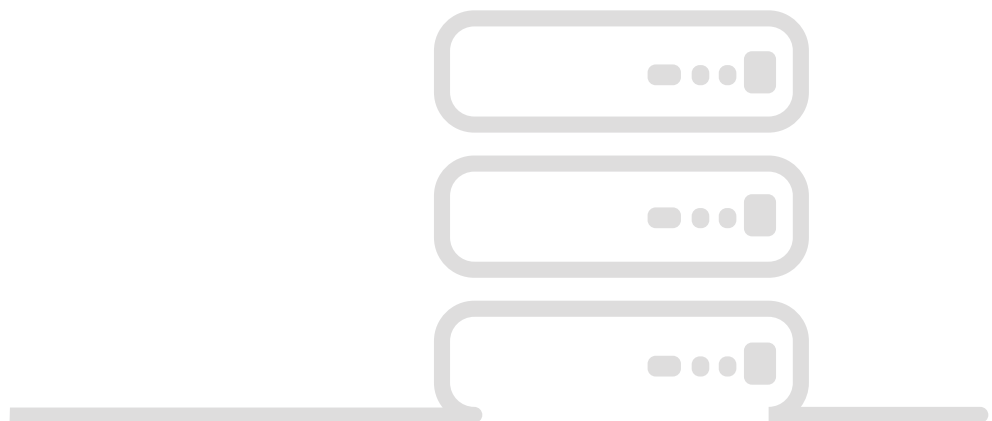
- **Own** the software and hardware
- Largest **investment**
- More **control**

BENEFITS TO ON PREMISE

Before cloud adoption became available, an on-premises server—at your company location—was the only choice available to store applications, share files and run your email service. There are no hosting fees with an on-premise system and organizations can upgrade their software without relying on a cloud service for security and support.

POTENTIAL CONCERNS FOR ON PREMISE

Running an in-house server is resource intensive: it requires an upfront cost including equipment and software, ongoing internal IT and consistent upgrades and licences.



DEFINITIONS OF ERP DEPLOYMENT CONT.

CLOUD BASED DEPLOYMENT

Cloud-based deployments typically offer “software as a service” (SaaS): the software is provided on an ongoing basis through the internet, instead of on-site. CMiC offers public and private cloud options as well as a traditional on premise setup. Both cloud options offer the same fully-integrated platform that you’d get with the on premise deployment.



1) PRIVATE CLOUD

In a private cloud system (also referred to as single-tenant), your company uses the cloud application independently. This method offers individual customization and tailored upgrades.

- **Hosted** by service provider (subscription-based)
- **Dedicated** resources
- **Secure** access anytime, anywhere

The private cloud solution is ideal for companies with many virtual workers and/or many workload variations. You won’t need a large team of in-house IT experts to manage the cloud, so you can spend resources on other projects. The cloud approach is scalable, depending on your business requirements.

POTENTIAL CONCERNS FOR PRIVATE CLOUD

A private cloud offers superior control and accessibility, but at a slightly higher cost than a public cloud.



2) PUBLIC CLOUD

A public cloud deployment is also known as a multi-tenant cloud. This method involves a number of companies that share a cloud-based environment and access the same software application. Each business has access only to its own private data and system.

- **Hosted** by service provider, (subscription-based)
- **Shared** resources
- Most **cost effective** model (only pay for usage)

The public cloud approach excels in cost-efficiency. Like the private cloud, you won’t need much internal IT support to benefit from the ERP. Typically, there are fewer customizations which ultimately allows for a faster implementation for your company.

POTENTIAL CONCERNS FOR PUBLIC CLOUD

The public cloud option does not offer as much control as the private cloud.



FUTURE – CONSTRUCTION INDUSTRY

82%

OF COMPANIES WOULD CONSIDER
CHANGING TO CLOUD BASED
SERVICES IN THE FUTURE

CLOUD ADOPTION

82% of the companies surveyed discussed making a change from their current software to cloud-based services—with 48% seriously considering a change. Of these, 58% are planning to make a move within the next 12 months and an additional 38% are planning on adoption within the next 1-2 years.

There is a time investment required, and it can be challenging, but respondents are interested in moving more functions—if not all functions—to the cloud. They are especially interested in gaining 24/7 cloud access to email, project management and customer support. Other desired functions include materials management, procurement and logistics.

Based on our survey, it seems that most organizations in the industry do not have all the information needed to consider making a change and this may be keeping them from evaluating and implementing new ERP. Companies are realizing that even as they consider their options, the options are changing.

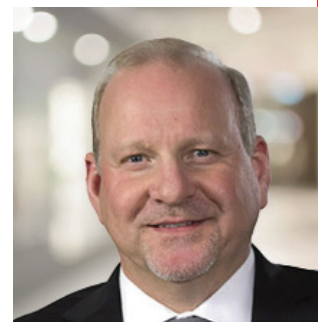
Executives aren't able to move forward with an informed technology-based strategy. This delay in the industry has created an opportunity for smart leaders to gain a serious edge on their competition. Leaders are searching for an integrated solution along with vendors who can support that integration.

There is cost and time investment required but implementing a single cohesive ERP system will provide copious benefits for a company in need of a stronger, leaner back-end management solution. To maximize efficiency across your organization, look for a flexible and user-friendly interface that displays real-time analytics and aids communication seamlessly.

The feedback is clear: construction-industry leaders want construction-industry tech. This is where working with partners—software providers and deployment experts who exclusively focus on the construction industry—can help. The key is to find a vendor with the necessary expertise and resources to mitigate risk and ease your company through a successful transition.

“CMiC provides the most comprehensive, advanced and integrated software ever created for the construction industry. With one unified financial database underpinning the whole, CMiC customers feel more confident in the data they access, more productive in the hours they work and most comforted knowing that their teams are empowered to make the best collaborative business decisions today and for the future. Our goal is to help sophisticated construction leaders scale their businesses with the smartest software for the construction industry.”

- Gord Rawlins, President





ABOUT CMiC

CMiC is the leading provider of all-in-one enterprise software solutions for construction and capital project firms. CMiC's powerful software is designed to increase efficiency across teams and departments by streamlining processes and improving communication. Our clients make smart decisions with real-time information from key players in the office and the field. For over four decades, CMiC has developed detailed insight into the unique business needs of the construction industry and partnered with some of the world's largest and most technologically progressive firms, managing over \$100 billion in projects along the way. Smart leaders depend on smart technology. That's why they work with CMiC.



For more information on an integrated 24/7 accessible construction-specific ERP software solution call CMiC at 416.736.0123 or visit cmicglobal.com

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