

CEM Business Solutions

CEM UniConstruct

<https://www.cembs.com/construction-automation/>



Microsoft
Dynamics 365

Certified

Microsoft
GOLD CERTIFIED
Partner



Industry challenges

The construction industry has one of the most complex business processes. The industry faces unpredictable weather, difficult and risky working conditions, unexplored places, and many unexpected circumstances. The industry business processes are complex right from the architecture to the project sign off. Probably, this is one of the industries which uses all sort of skills. People have to deliver their crafts on time, with authorities' approval. A small delay anywhere can have a ripple effect, snowballing to huge delays. Delays can lead to cost overrun, penalties and project losses. Worst of all, the construction industry has the highest level of mental health issues and suicide rates.



CHALLENGES

The industry size and the opportunities are large. However, there are too many unmanaged and force majeure situations leading to project losses. There are numerous processes, from RFI, RFP, RFQ, design, estimation, scheduling, subcontracting, people, material, machinery, rentals, projects plans, billing, deviations, compliance, submittals, HSE and so on. All these processes are inter-related and the primary challenge is to manage them all, simultaneously.

IDEAL SOLUTION

The ideal solution is to have a fully integrated system, which runs all business processes automatically. This includes CRM, ERP, estimation, Planning, BIM integration, HR, Payroll, Union payroll, Certified payroll, workforce accommodation, Compliance submissions and MIS reports. The system should be constantly updating with the latest technologies like IoT, AI, ML, Robotics, Mixed Reality analytics, with simple to use interface.

DESIRED OUTCOMES

The desired out comes are:

- Everyone is technology enabled
- Every process is automated
- System alerts ahead of time, for every process and records completion
- Reduce human efforts and errors
- Total visibility and satisfaction to users



CEM Business Solutions

CEM UniConstruct

UniConstruct exploits the power of Microsoft Azure, Dynamics 365 and Power platform with CEM ISV industry accelerator. This gives the contractors a comprehensive, intelligent, automated system.

CEM UniConstruct is architected to be constantly on top of the latest Microsoft technology. Some of the recent technology are Azure Synapse Analytics, DevOps, Dynamics Guide, D365 HR, Customer Insights and so on. CEM applies these innovations, for the benefits of the customers, giving the latest technology available.

Compliance is another area of strength for CEM UniConstruct. It takes care of union, WH-347 and other compliance needs.

PROJECTS CONTROL

CEM UniConstruct starts monitoring all the activities from the time customers contact you. Every activity about the customer and the requirements is recorded. Upon signing the contract, project plan, resources, costing, price etc. is moved to projects module. 'CEM Daily Log' records all events at the project sites including people and their work progress, material, machinery, submittals, weather etc. The system proactively assign and alerts the concerned parties.

RESOURCE UTILIZATION

Any construction project engages 3 primary resources; people, material and machinery. CEM's HR, Advance Project Management, Advanced Inventory Management, Project based purchase, PMV & Tools modules ensure effective utilization of your resources. The system can be configured to alert for bad weather or other situations for resources planning. Analytics are available for resources engaged review and utilization optimization.

COMPLIANCE

Construction projects need approval from the design until project completion. There are various compliance requirements related to people, unions, prevailing wage payments, health, safety, security, environment, standards, owners / owners representatives and so on. CEM UniConstruct keeps track of these compliance requirements, computes and submits relevant documents to the concerned authorities. It stores all information in the system for future reference.

Microsoft platforms & CEM UniConstruct

Microsoft Dynamics 365 with Azure, Power platform, SharePoint, MS – Project, Teams and MS – Office provides an unmatched platform for the industry. This unified platform is not available from any other technology provider. CEM has built its UniConstruct in line with this integrated platform. This means customers automatically get the latest and greatest technology available.



DYNAMICS 365 FINANCE + CEM UNICONSTRUCT

CEM UniConstruct natively integrates with Microsoft Dynamics 365 ERP F&O. The customer will get an integrated industry solution for their budgeting, estimation, billing, finance, projects, purchase, inventory, warehouse, stores, payables, receivables, cash flow, contracts, fixed assets, costing and so on.

DYNAMICS 365 HR + CEM UNICONSTRUCT

CEM UniConstruct HR, Payroll, Union Payroll, Certified Payroll, T & A, Daily Log, Recruitment, Manpower housing modules are fully integrated with Dynamics 365 HR product to empower HR departments.

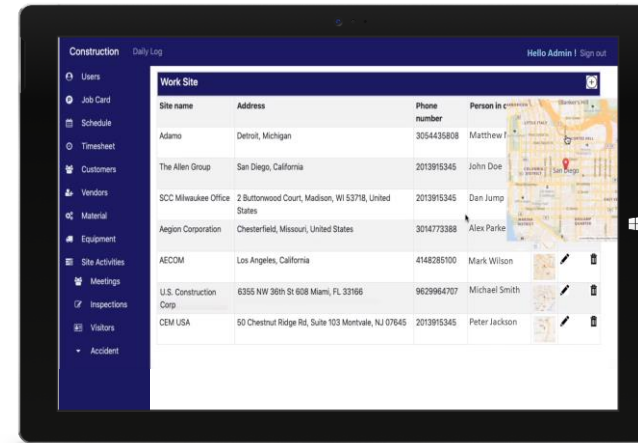
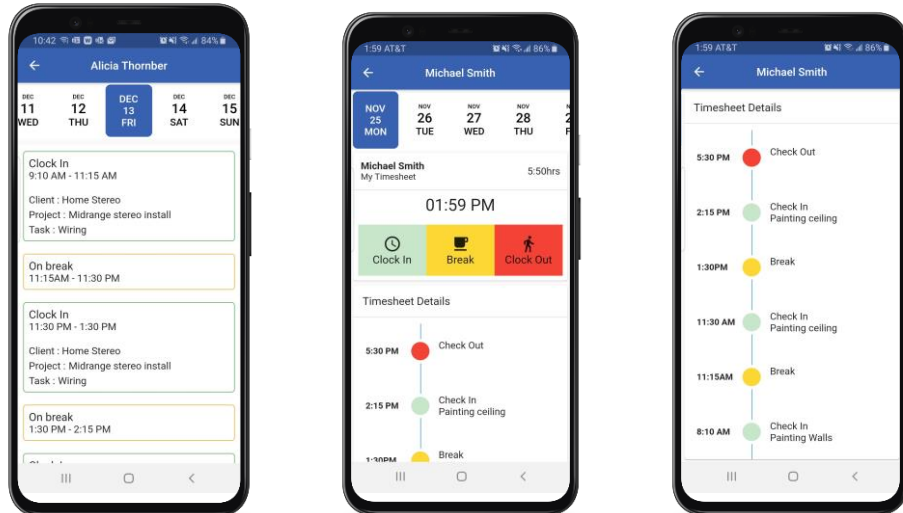
POWER PLATFORM + CEM UNICONSTRUCT

Microsoft power platform today provides a wide array of tools including business intelligence, 'low code no code' programming, workflow automation, virtual agents, analytics and so on. Many UniConstruct SaaS modules are built using this Microsoft Power platform. They can be integrated directly and also through CDS (Common Data Services). CEM UniConstruct is hosted on Microsoft Azure cloud, thereby enjoying the full power Azure security, performance, uptime, compliance, local geography access, GDPR and other compliance, analytics, integrations and so on. This gives flexibility, agility and future assurance to customers.

UniConstruct – An Azure Cloud software

Product offering

- SaaS solution built on **Microsoft** Azure/D365/ PowerApps platform, the best in class
 - ERP + CRM + BI + HR + Payroll + Construct
 - Estimation, Bidding, Project billing, Payments & Receipts
 - Daily Log / Task List / Punch list for the work site
 - Timesheet for workers, crew and equipment
 - Project tasks management, Submittals & Transmittals
 - Union payroll & Certified Payroll
 - Integration (IoT) to BIM, equipment, material, suppliers & more
- Scalable native **cloud** architecture
- Multi device & Multi language
- Connectivity to marketplace for Construction resources



Customer benefits

- Simplicity – Simplicity – Simplicity
- Pay per user / usage
- Futuristic technologies with monthly updates
- Connect employees, subs, vendors & customers
- No virus or downtime or ransomware
- Any form factor – Mobile, Tablet, Laptop or Desktop
- Just a device needed – Nothing else – No servers or cables
- Lower training costs
- Easy life for people
- Part of User group community – Growth mindset
- Happy people → Happy Managers → Happy owners

All In One Construction Solution

CEM UniConstruct

Azure



Azure Machine Learning



Cognitive Services



IoT Hub



Conversations as a Platform



Azure Analytics

Dynamics 365



Sales



Customers Service



Marketing



Finance



Project Service Automation



Operations

HR, Payroll & Construct



Microsoft AppSource

Advanced Project

Advanced Payroll

Materia &I Equipment

Union Payroll

Advanced Inventory

Certified Payroll

Subcontracting

HR

Daily Log (Mobile)



Daily log Apps

Workers

Activities

HR

Equipment

Material

Subcontractors

HSS

Visitors

Weather

Inspections

Transmittals & submittals



Common Data Model



Other Data Sources

Competition comparison

1 Our product is a native cloud solution built for the industry exclusively, on latest Microsoft technologies

3 Extensive 'All in One' feature set, unparalleled in the industry (see below for competitor comparison)

2 Mobile first User Experience brings visibility and agility from construction worker all the way to the back office

4 Deep Microsoft Azure/D365 Integration leveraging cloud best practices

Industry leaders

Features	Feature Description	xlbrix	Sage	Procore	ViewPoint	Delttek
Product	Daily Log / Worksite Tasks	✓	✓	✓	✓	×
Product	Timesheet for Workers, Crew & Equipment	✓	✓	✓	✓	✓
Product	Project accounting and Finance	✓	✓	×	✓	✓
Product	Configurable Menus and reports	✓	×	×	×	×
Product	Subcontractor Management	✓	✓	×	×	×
Product	Configurable Workflows	✓	×	×	×	×
Technical	Latest and greatest technology from Microsoft	✓	×	×	×	×
Technical	Native Data integration	✓	×	×	×	×
Technical	Multi-Tenant SaaS Solution	✓	×	×	×	×
Technical	Multi-Device (Desktop, Mobile & Tablet App)	✓	×	✓	✓	×
Technical	User friendly Interface	✓	×	✓	×	×
Technical	Scalability and multi Company	✓	×	×	×	×
Technical	Reporting Dashboard using Power BI	✓	×	×	✓	×
Technical	Azure Active Directory (for Security)	✓	×	×	×	×

Customer success: Granite Construction

Granite construction is a large construction company with thousands of employees that delivers large projects for construction, energy oil and gas industries. Granite uses Microsoft Azure cloud, Dynamics 365, SharePoint (Document Management), Office 365, Microsoft 365 and, CEM UniConstruct. CEM modules include Advanced Project Management, Advanced Inventory Management, Advanced Procurement Management, Ready Mix Concrete, Rate Contract, Assets, Tools, PMV (Plant, Machinery, Vehicle), labor accommodation, PowerBI analytics and more.

Granite, Microsoft and CEM journey started over a decade ago with AX2009. Granite kept constantly upgrading with the latest technologies and presently is using D365 with CEM UniConstruct.



EFFICIENCY

“We are a very efficient organization. We pay enormous attention to details. Our estimation, costing, planning, and control team is about half the size of many of our competitors. We want our IT to be implemented in a way that it continuously improves these.”

COST CONTROL

“We had our assets and resources spread all over the project sites. Now, with a clarity on numbers, every project manager is conscious of the cost.

Equipment and assets are brought on site, only when needed, instead of being stored on the site indefinitely. We can see better results because of such technology.”

OPERATIONS CONTROL

“In this digital world, keeping up with advancements in technology is necessary for a company’s growth. We wanted the latest technology to be incorporated as frequently as possible, Microsoft upgrades its Dynamics 365 ERP every month. Business is always competitive. Technology gives us the edge and we trust Microsoft and CEM for that.”

ABOUT CEM

Microsoft
GOLD CERTIFIED
Partner

 Available on
Microsoft AppSource



PRODUCTS

ERP | Payroll | HR | Construct

SERVICES

Cloud services | Implementation | Upgrade | support

Schedule a demo for CEM UniConstruct

Get a free trial: [Contact US](#)

Call for more information: +1 201 391-5345

Ask a question via email: <https://www.cembs.com/construction-automation/>

