



## PROSPERITY PLATFORM

### **WHY PROSPERITY PLATFORM EXISTS**

by Ambassador (ret) Richard Swett, FAIA and Michael Rowan of Climate PROSPERITY Enterprise Solutions, LLC

Prosperity Platform is a system to reduce the waste in construction and broader building lifecycle with transparent and collaborative processes by integrating existing tools and data, and layering workflows, processes, and reporting on top of them. Prosperity Platform aims to:

- ✓ Save up to 20% in construction costs
- ✓ Reduce Between energy consumption and operating expenses by 30% and 50%.
- ✓ Improve building or community tenant businesses' profitability and sustainability
- ✓ Support achievement the UN's 17 Sustainable Development Goals for community residents and workers
- ✓ Lead the way in decarbonizing a community while being profitable and sustainable
- ✓ Produce new agriculture, clean energy and manufactured goods including new exports.

### **Background facts**

The construction industry has failed worldwide to keep pace with information technology. Consider these global facts:

- It wastes on average 20% of construction costs and 40% of energy operation costs during the lifecycle of the building.
- It produces up to 40% of the carbon emissions of the planet unnecessarily.
- The productivity gains in construction are 1% per year where manufacturing is at 10% per year.
- It is generally fragmented, opaque, uncollaborative, litigious and has a reputation for corruption.
- Through BIM (Building Information Management) the construction industry could have digitized just as manufacturing, agriculture, retail, and other industries have done. But it never has.

In a worldwide survey of the global construction industry, the McKinsey Global Initiative study done in 2017 entitled "Reinventing Construction" documented these facts. The study's conclusion is, the construction industry must digitize, fully engaging the information age. McKinsey's most powerful sentence in the 168-page study is that construction needs to adopt:

### **One Platform for All Participants for the Lifecycle of the Building.**

That is exactly what PROSPERITY PLATFORM is. CPES, working with the VIM company, has created a platform that development projects and tracks them through their lifecycle, just the way Boeing tracks its planes and Toyota tracks its cars. That's the way to make buildings



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profitable and sustainable in the present and future. Major construction projects are highly collaborative processes requiring complex negotiations to balance trade-offs between the conflicting interests of Owners, Architects, Engineers, Contractors, Subcontractors, Suppliers, Builders, Bankers, and Regulators.

- **Each stakeholder has differing motivations and priorities** - Problems and miscommunication caused by a traditionally slow, step-by-step, command and control, adversarial business model add significant inefficiencies and cost at every stage of the design, specify and build process.
- **This is seen as 'normal' and 'how it's always been done'** - While 2D and 3D digitalization of key building & construction industry, product and service data have disrupted century's old practices and revolutionized the process of presenting, viewing, and manipulating building data, the fundamental industry business model remains the same.

### **Community trends – The world is changing faster than its institutions can adapt.**

Where we once faced well-defined problems with predictable timeframes, the now global nature of rapid change, combined with the urgency of 21st-century challenges, are overwhelming conventional organizational solutions and strategies.

Building and construction is an extremely large, complex, and well-established industry estimated to account for nearly 11% of global GDP. Grounded in hundreds of years of tradition, best practices and collective experience, the industry has clearly established roles and regulations that have stood the test of time. The building and construction industry will grind out the next major waves of operational efficiency and cost reductions from process management (not better purchasing) by leveraging the hard-won lessons of world-class manufacturers and retailers.

### **Introducing the PROSPERITY PLATFORM powered by VIM and CIMS1-2-3 “Collaborative Intelligence Management System”**

PROSPERITY PLATFORM has been designed to offer owners a highly visual, standardized, cloud based, user friendly project management platform that improves purchasing, facilitates collaboration, interaction, participation & informed decision making during a building's entire lifecycle (from concept, to design, to construction – and through operations).

CIMS1-2-3 is a 16 App “**Collaborative Intelligent Management System**” providing to all parties involved “step by step” comprehensive Virtual Models and Quantity Take-Off (QTO) reports (accounting specifications and costs of all objects and processes) divided into 3 main workgroups:

- **DESIGN** - Six Apps dedicated to design including concept, energy, materials intent and the construction documents;



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- **CONSTRUCTION** - Six Apps in construction including using the platform for transparent bidding and procurement as well as monitoring construction progress at four stages;
- **COMMISSIONING & OPERATIONS** - Four Apps in commissioning of the building including auditable building and energy cost analysis, facility management bidding and an operational one-year report.

All collected information remains stored in the model and can be used for maintenance, repair and change until decommissioning. PROSPERITY PLATFORM digitalized buildings can be, upon demand, comparatively analyzed for any future use.

### Key features

Compared to ten other modeling platforms, **VIM** is superior to all construction modeling platforms in the global marketplace, as the following graph illustrates:

Tools for Digitizing Buildings For Their Lifecycles	Prosperity Platform	Autodesk	VICO Office	Newforma	Proliance 5.5	Trimble (Prolog)	Architrek	ArchAdministrator	Deltek	BIM Specific	CMiC
CIMS1-2-3	✓	x	x	x	x	x	x	x	x	x	x
Market Baseline Building	✓	x	x	x	x	x	x	x	x	x	x
Multi-Models Accessibility	✓	x	x	x	x	x	x	x	x	x	x
Virtual Information Modeling	✓	x	x	x	x	x	x	x	x	x	x
Cost Estimation Software	✓	x	x	x	x	x	x	x	x	x	x
Digital Twins	✓	x	x	x	x	x	x	x	x	x	x
3D Max Plug-In	✓	x	x	x	x	x	x	x	x	x	x
Magic Leap SCGs	✓	x	x	x	x	x	x	x	x	x	x
Microsoft Power BI	✓	x	x	x	x	x	x	x	x	x	x
Structural Reports	✓	x	x	x	x	x	x	x	x	x	x
Financial Reports	✓	x	x	x	x	x	x	x	x	x	x
Environmental Reports	✓	x	x	x	x	x	x	x	x	x	x
Socio-Economic Reports	✓	x	x	x	x	x	x	x	x	x	x
Energy Analysis	✓	✓	x	x	x	x	x	x	x	x	x
Collaboration Platform	✓	x	✓	x	x	x	x	x	x	x	x
Multi-Language Software	✓	✓	x	imite	imite	x	x	x	imite	x	x
Quantity Takeoff Software	✓	✓	✓	x	x	x	x	x	x	x	✓
Revit Toolbar Plug-in	✓	NA	x	✓	x	x	x	x	x	✓	x
Building Lifecycle D-base	✓	✓	x	x	x	x	x	x	x	x	x
Bidding Module	✓	x	✓	x	✓	✓	✓	✓	✓	✓	x
Tiered Security	✓	✓	x	✓	✓	✓	✓	✓	x	x	x
4D Visualization	✓	Limite	imite	x	x	✓	✓	x	x	✓	x
Search/Archiving	✓	✓	✓	✓	x	✓	imite	imite	x	x	✓
Design Review	✓	✓	✓	✓	✓	✓	✓	x	x	✓	x
Mobile Capacity	✓	✓	✓	✓	✓	✓	✓	x	✓	x	✓
Data Integration	✓	✓	✓	✓	✓	✓	x	✓	✓	✓	✓
Dashboard	✓	✓	✓	✓	✓	✓	✓	imite	imite	x	✓
Project Manager Software	✓	✓	✓	✓	✓	✓	✓	✓	imite	✓	x
Document Control	✓	✓	✓	✓	✓	✓	✓	✓	imite	✓	✓
Email integration	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



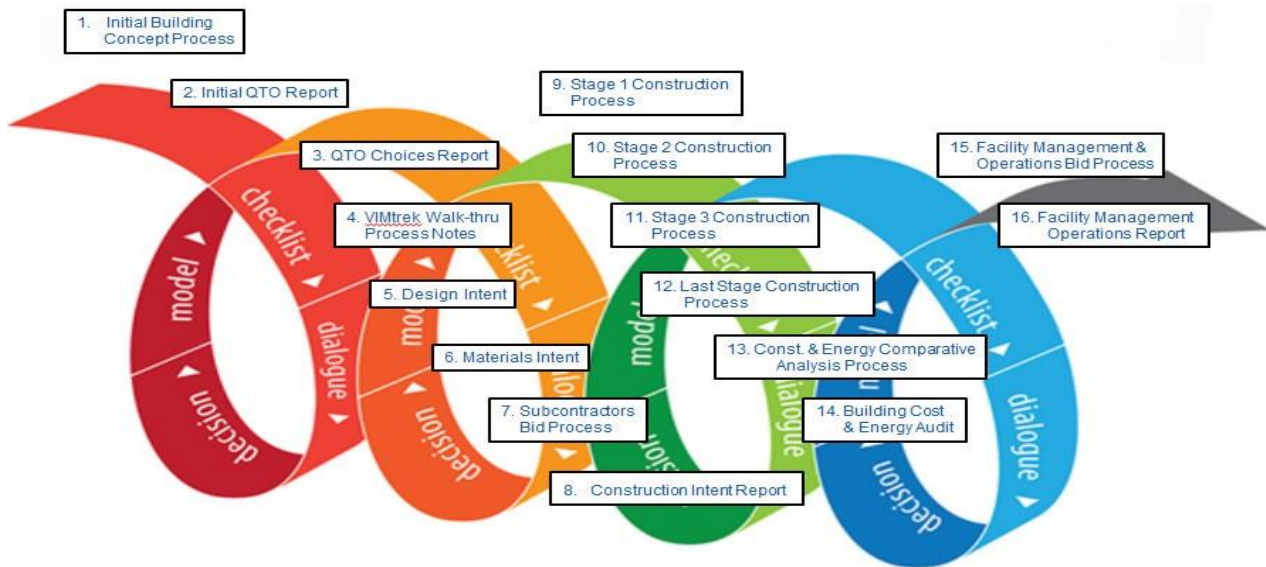
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### CIMS1-2-3 – How it works

The Collaborative Intelligence Management Systems (CIMS1-2-3) has three parts:

CIMS1 monitors, measures, and memorizes the conditions of a project at 16 different intervals (1 per App) during the life of a project, from concept to operations. Each App, when executed, collects data, defines the conditions of the project at that time and produces a report that is auditable by the financial institutions that are supporting the project. The 16 Apps are ordered along the lines of the following chart:

**16 real-time Apps** known as **CIMS1-2-3** combine with the VIM platform, facilitate transparent and accountable collaboration of building designers, constructors and operators who all use the same user friendly interactive navigable platform (on cell phones, tables, laptops, etc.) as a communication-and-control tool for all construction processes during the entire lifecycle of the building.



Grounded in over 150 years of proven experience from a group of industry leaders, CIMS1-2-3 (Collaborative Intelligence Management System) is a fourth-generation electronic communications medium.

They are ordered in such a way as to allow for a checklist of information to be collected, followed by a dialogue of appropriate stakeholders to determine if the project is proceeding according to plan, which leads to decisions made that ensure tasks are being altered or corrected to maximize the project schedule and budget. Then, the decisions are entered into the 4D PROSPERITY PLATFORM model to see if they are producing the desired results, and if so, are implemented in the project workflow either in the office or at the site, depending upon the stage of the project.

This keeps errors and omissions from occurring after the project has begun construction, the

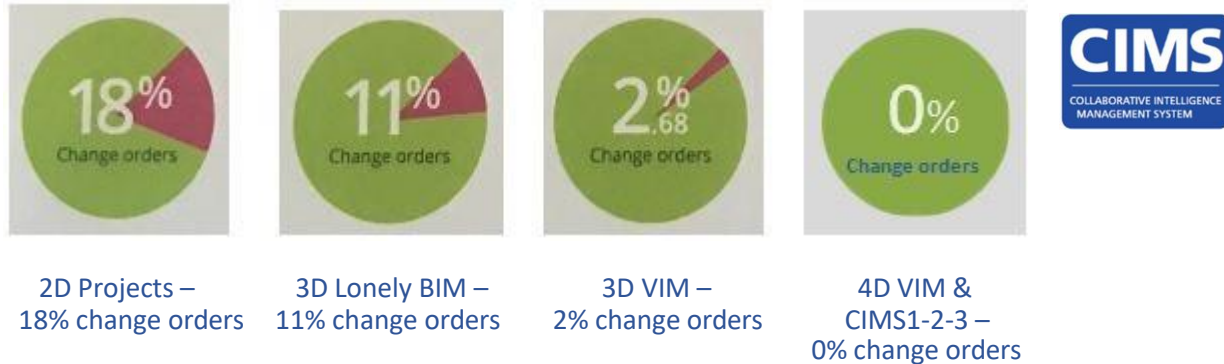


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most costly time to make adjustments or mistakes.

### Quantifiable Measurements of Change Order Reductions using 4D Collaborative VIM & CIMS1-2-3

These features can provide team collaboration and real time data that greatly impact design, materials use, construction, cost, and operations, as the data show:



CIMS2 monitors, measures, and memorizes the economic activities and conditions of a project taking place within the spaces created in CIMS1, be they rooms, buildings, or entire communities.

CIMS3 monitors, measures, and memorizes the social activities and conditions of a project taking place in the spaces described above and issues reports on performance using the seventeen UN Sustainable Development Goals, (SDGs), and three additional goals on ownership as identified by the PROSPERITY PLATFORM.

### CIMS benefits & gains

Through the use of the CIMS1-2-3 Apps and subsequent modeling, Change Orders are reduced from 11% in conventional BIM construction to less than 2% using the CIMS1-2-3 analytics and modeling platform in the PROSPERITY PLATFORM. This will help projects:

- ✓ Reduce construction costs by up to 20%
- ✓ Reduce energy consumption and operating expenses by 30% and 50%
- ✓ Improve building or community tenant businesses' profitability and sustainability
- ✓ Achieve the UN's 17 Sustainable Development Goals for community residents and workers
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### Competitive cost-benefit comparison

Worldwide, Digital/IT costs of a building's construction average in the range of 3% of the Construction Cost. A fully digitized building of Prosperity Platform will cost the same. The difference is in the outcomes: huge losses, waste and pollution in the conventional case, and huge benefits economically, socially, and environmentally in the digital case.



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### **About PROSPERITY PLATFORM**

PROSPERITY PLATFORM was founded by a group of veteran expert professionals coming from very different, yet complimentary sectors that include architecture, information technology, economics, environmental and energy analysis, research, communications, and cybersecurity.

Two companies are at the heart of PROSPERITY PLATFORM – Climate PROSPERITY Enterprise Solutions, LLC founded by Ambassador (ret) Richard Swett, FAIA and Michael Rowan, (See [www.climateprosperitysolutions.com](http://www.climateprosperitysolutions.com)), and VIMaec founded by Arol Wolford (See [www.vimaec.com](http://www.vimaec.com)).

PROSPERITY PLATFORM’s model solves the smart city challenge by creating organic buildings, projects, and infrastructure, that not only depict the built environment in real-time, but also analyzes, measures, and enhances the community’s Quality of Life through the 4D virtualization & collaboration process.

PROSPERITY PLATFORM creates **DIGITAL IDENTITY** for “really smart communities” in a “living and interactive 4D model” that allows a virtual reality representation of all new projects and their integration into the existing environment using project insurance methodology for budget control. Through the Internet, the community involvement facilitates the acceptance as the future can be virtually envisioned before it becomes reality, which improves everyone’s Quality of Life.