



ModularDesign+

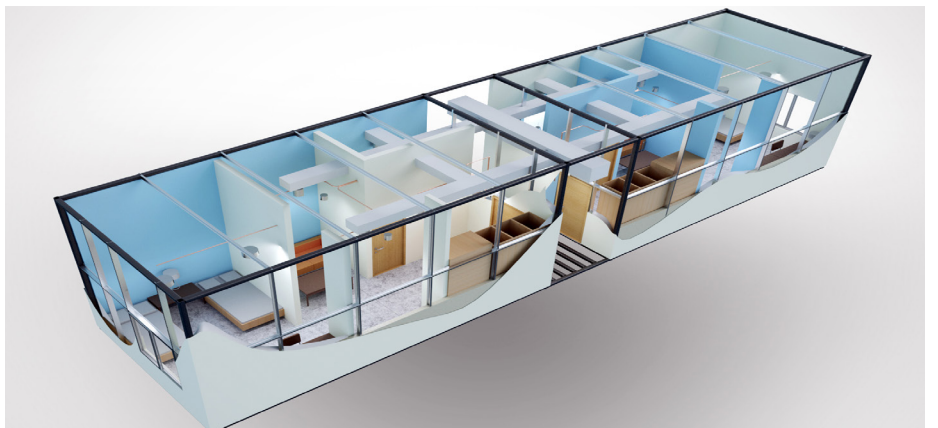
Just Push a Few Buttons!

All you have to do is push a few buttons and it is changed, right?.

As a practicing Architect of 22 years I cannot tell you how many times I have heard that since the introduction of Computer Aided Drafting (CAD) Software. The truth is, there are many nights when I was still up at the office around 2:00am hammering through design changes for a meeting the next day when I wish that was true, though considered Taboo in the Architectural world. The problem with early CAD is just that, while it helped aid in the speed of making changes over traditional hand drafting, it was still only a tool that had to

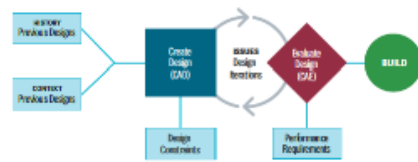
be manually operated to transfer information and ideas from the creator's head, ultimately to paper.

I am happy to say times have changed! With the latest in generative design software, we are now able to create numerous design solutions in the time it would have previously taken to just schedule a meeting to present one design idea. At ModularDesign+ (MD+) we are not only changing the way we deliver projects through our prefabricated modular solutions we are also enhancing the way projects are designed utilizing creative thinking and generative design software.



TRADITIONAL COMPONENT DESIGN PROCESS

Characterized by many evaluation iterations



SOURCE: CMDATA

MD+ is always seeking not only a faster way, but a better way providing more value to our customers, creating a higher quality solution while compressing construction schedules and reducing cost.

Utilizing generative design software, we are able to capture all of our client's goals, specifications, design thoughts and other relevant information to set design parameters, no different than a traditional design process. The difference, much like the first calculator to a mathematician, is the software can produce hundreds of alternative solutions in the time a traditional designer could produce one or two. This provides our customers with more options to evaluate from the early conceptual design phase in a matter of minutes, rather than days or weeks, to determine the ultimate direction they want to go with their project.

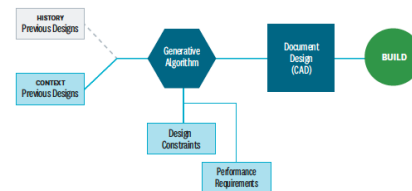
While providing numerous alternative solutions, this does not take the design control /creativity away from the Architect or Engineer. The process is typically applied to the repetitious design elements, i.e. sleeping rooms, exam rooms etc.. that can make up 80-85% of the overall project and take up the most time reconfiguring in the design stages. This leaves the design team more time to focus on the more critical elements of the project. The software can also be used to evaluate a large number of solutions from programming, to site layout, to building and unit configuration, even elevation studies, in a very short amount time. The possibilities are almost endless and can

lead to concept solutions the designer may not even think of or thought would not otherwise work without spending countless hours or days manually drawing them out first.

“Modular design of volumetric units is a field based on very straightforward rules of efficiency, structural load tracing, repetition, and standardization that makes it an ideal candidate for uniting parametric design and generative design. On a building-wide scale, projects using this type of compartmentalized short-span structural system and its repeating modules have the ability to use generative design to layout entire sites with pre-engineered units and do the bulk of documentation in hours or days instead of weeks or months.” (Bryan Morrison, AIA – MD+ Design Studio Leader).

GENERATIVE DESIGN PROCESS

Optimization should directly create feasible and buildable designs

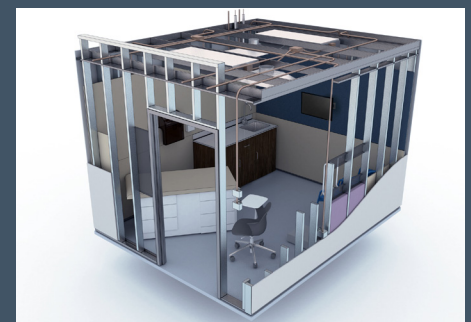


SOURCE: CMDATA

As we look to the future, our world is changing at a faster rate every day, with it we must change. This includes one of the oldest professions in the world, Architecture. The human touch in design will never go away, nor should it, however we must adapt to work with tools that are developed to help us become better at what we do. Can you imagine a housing framer still using a nail and a hammer opposed to the pneumatic framing hammer? When I first came into the profession in the late 90's, 2D CAD was just starting to

be taught in school, now 3D CAD is the practice standard. In fact, I only recall one professor who knew how to use CAD in my college and very few veteran Architects using it in practice, many claiming “it would never last”, or “it was a fad”.

At ModularDesign+ we do not hold to traditional standards; we seek to always break the mold and create new ways to develop project delivery methods that will help our clients. We do not care if it is taboo in the profession or will turn the industry upside down. We simply seek to innovate and deliver a better project, faster at less cost without compromising our client's goals. Please give us a call and see how we can help bring your project delivery to the forefront of the industry, saving you time and money in the process.



Sean Studzinski
President