

CONCEPTS

Tools to Ensure Project Success



Benefiting clients while simplifying processes and aiding design.

As a premier design firm, FTCH is constantly identifying, evaluating, and acquiring tools to simplify processes and aid in design. Tools like virtual reality and FacilityWISE assist the design process from within a new building or renovation project; building information modeling (BIM) and 3D scanning help us maximize efficiency; 3D printing enables us to brainstorm effectively; and cost estimation services ensure projects are on budget from the start.

VIRTUAL REALITY

With our higher education clients, we've found drawings and models only get the design process so far. By putting on the light blocking, surround-sound goggles, clients become the end user, exploring how a space will feel beyond how it looks on paper. This is next-level involvement in the design process.

VR technology grants our designers access into the virtual worlds their sketches describe, walking them through their drawings as each element animates. This immersive experience helps them identify design discrepancies and easily make necessary adjustments. Using this technology helps ensure quality work, avoid potential design problems, and illustrate the design beyond a two-dimensional drawing or time-consuming model.

FACILITYWISE

FTCH developed FacilityWISE to help our clients significantly reduce construction costs, increase operational efficiency, and realize simpler design and construction solutions. Our detailed discovery process and item-by-item review of a prototype scope and design creates countless opportunities for cost savings – both first costs and long-term performance costs.

Some of our major national chain clients who implemented solutions have enhanced their designs and reduced costs by as much as 25-30 percent. These cost savings, factored across a prototype roll-out program, result in millions of dollars saved each year.

WE NATURALLY GRAVITATE TOWARD INNOVATIVE, ECONOMICAL, AND ROBUST SOLUTIONS.



BIM

When it comes to new construction, BIM offers a comprehensive approach to the entire design, construction, and maintenance process. BIM allows us to quickly create and review multiple design scenarios and easily interpret options, all from a single model. This upfront planning eliminates errors and corrections throughout construction, leading to better specifications, estimates, schedules, and compliance – resulting in significant savings.

3D SCANNING

We continually search for creative ways to help our clients achieve success – 3D laser scanning is an important tool we use to fully grasp the current project state during the planning process.

Traditional surveying methods are less safe and accurate than the 3D scanning process, which uses light detection and LiDAR measurement techniques to quickly and accurately collect data on the size and shape of an object or environment without sacrificing worker safety or survey accuracy.

3D PRINTING

BIM and VR technologies elevate the human experience; however, there is still significant value in seeing a building in model form. Our 3D printing equipment allows us to produce models in house, saving time and money. With 3D models, we can efficiently work through initial design meetings, evaluate different options, and determine what works best for the end user.

COST ESTIMATION

Reliable cost estimates are a vital tool when evaluating a project's feasibility from the start. This is effective across countless project types and sizes – not specific to architectural design alone. Our experience has shown proper implementation of project controls, including estimating and scheduling, helps ensure planned project costs and target schedules are met.

VR, FacilityWISE, BIM, 3D scanning, 3D printing, and cost estimation alone represent the potential for efficiency and robust solutions. In the hands of FTCH's professionals, their potential is realized to the benefit of our clients and their project's success.

