Penn Medicine's newest medical facility will be delivered by the PennFIRST Building Design Team utilizing Advance2000’s collaborative Project Cloud Technology.

EXECUTIVE SUMMARY
Penn Medicine’s new Patient Pavilion will be delivered through an Integrated Project Delivery (IPD) process. IPD is a highly collaborative project process that produces better buildings and reduces waste throughout the design and construction phases.

IPD requires teams to work differently. For an IPD project to be successful, the Building Design Teams cannot work in isolation any longer. Teams that do not work together will not succeed. IPD requires teams working together with open communications. But, how does a multi-firm IPD project successfully work together?

Collaboration is difficult to achieve and essential to IPD project success. A borderless collaborative way to work promotes productivity and innovation. IPD projects need a way to facilitate work sharing between multiple firms to enhance communication and collaboration for the project.

Advance2000 Cloud helps firms share information, innovate and promote the use of BIM and IPD. Advance2000’s Project Cloud creates a “Virtual Co-location” that allows real time collaboration between multiple firms. Advance2000's Project Cloud solution is the engine that drives project collaboration and efficiency.

THE PENNFIRST PROJECT
The PennFIRST team was selected to plan and design a New Patient Pavilion for the University of Pennsylvania Health System (Penn Medicine). The PennFIRST team is comprised of the global healthcare design expertise of HDR, the international design talent of Foster+Partners, and the innovative engineering design capabilities of BR+A, combined with the construction management expertise of L.F. Driscoll and Balfour Beatty.

All of the PennFIRST team members, along with Penn Medicine, share an IPD contractual agreement that encourages multidisciplinary collaboration, promotes team problem solving and innovative thinking. Penn Medicine's project will be one of the nation’s largest IPD delivered healthcare projects.

Penn Medicine and the PennFIRST team will work together in a shared digital "co-location space" using the Advance2000 Project Cloud to explore new ideas in design, construction and healthcare delivery.

IPD CHALLENGES
The Advance2000 Project Cloud supports the IPD process and these key principles of IPD as outlined in the AIA Integrated Project Delivery Guide.

**IPD Principle: Collaborative Innovation and Decision Making**
Collaboration promotes innovation. When ideas are freely exchanged, innovation is the result. In an integrated project, ideas are judged on their merit, not on the author’s role or status. Key decisions are evaluated by the project team and then made, to the greatest practical extent, unanimously.
**IPD Principle: Open Communication**
IPD’s focus on team performance is based on open, direct, and honest communication among all participants. Responsibilities are clearly defined in a no-blame culture leading to quick identification and resolution of problems, not determination of liability. Disputes are recognized as they occur and promptly resolved.

**IPD Principle: Appropriate Technology**
Integrated projects often rely on cutting edge technologies. Technologies are best specified at project initiation to maximize functionality, generality and interoperability. Open and interoperable data exchanges based on disciplined and transparent data structures are essential to support IPD. Because open standards best enable communications among all participants, technology that is compliant with open standards is used whenever available.

**ADVANCE2000 PROJECT CLOUD**
Using the Advance2000 Project Cloud, the PennFIRST team can work seamlessly from any office and access all project files. All data is available in real-time from any location, using any program. Sharing resources is easy and effective in the Advance2000 Cloud, there is no weekly data swap. Up-to-date project files are available to all project team members and secured in a single location in the Advance2000 Cloud. The PennFIRST team is able to access their Revit Models and ALL project files from any device, from any location, at any time.

Advance2000’s Project Cloud allows multiple firms in different locations to share project information in real-time. Sensitive, proprietary or confidential information is always protected. Project data is backed up in multiple geographic locations. But at the same time, the Advance2000 Project Cloud uses standard technology protocols and does not require any special training or equipment.

The Advance2000 Project Cloud helped the PennFIRST project and Design Team achieve their IPD goals. The project data is centralized in a single location, secured and backed up. Productivity is up, mobility is enabled and real-time collaboration is now possible using Revit or any other project technology.

**CONCLUSION**
With the industry changing, technology allows advances in efficiency and productivity, but changes in product process and delivery are even more significant. To be successful, an integrated project requires the designer, contractor, owner and other participants on the project work in a new way. This is a significant process and cultural change for all team members. The Advance2000 Project Cloud allowed for rapid IPD project delivery, facilitated working together, advanced AEC industry knowledge, and most importantly, provided a cost-effective way to collaborate and deliver the PennFIRST Patient Pavilion Project.

For more information regarding the project details or cloud services contact Joseph Dangelo at 312-238-8254 or jdangelo@advance2000.com
CASE STUDY
PennFIRST IPD Project Cloud

PENNFIRST IPD PROJECT CLOUD

OWNER     ARCHITECT     MEP     CONTRACTOR     CM     CO-LOC OFFICE

Public Internet

Home/Job Site/Hotel

REMOTE CONNECTIVITY
• VPN Access
• Encrypted traffic

BUSINESS CHALLENGES:
Security
Communication
File Sharing / Syncing
Travel Costs
Time Zones
Resource Sharing
Document Management
Backups

ADVANCE2000 PROJECT HUB:
Work from anywhere (mobility)
Work on any device (BYOD)
Version Control
Data Safety and Security

ACCESS
• Security
• Authentication
• Role based permissions

COMPUTE
• Hi-speed VDI Desktops
• Servers
• Applications
• Collaboration Tools
• Rendering

NETWORKING
• High Speed Network 10 Gig

ADVANCE2000 PROJECT CLOUD

Firewall

VPN ACCESS

Non-VDI Consultants

Backup / DR

Project Data

Project Data Backups

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