The State of Project Extranets

As I write this, it is the summer solstice - the longest day of the year. Of course, today's economic conditions make it seem like it may be a long year, too.

Many years ago, there were dozens of CAD systems available for the design team. Over the years, most have failed and many of their features have been consolidated into the few CAD packages we now have to choose from.

At the A/E/C show this year, it is clear that Project Extranets have gone through the same transition. Whether it's due to less available venture capital, questionable business plans or simple consolidation and buyouts is unclear to me - but the result is a smaller group of tools to choose from. In fact, with the reduced numbers of Project Extranets and CAD tools available the entire trade show seemed much smaller than earlier years.

At the same time, Microsoft is releasing a very interesting new product: SharePoint Portal Server. SharePoint Portal Server will run on existing Windows2000 servers, and allows relatively simple installation of effective business collaboration tools. If you can set up a test web server on Windows2000, you owe it to yourself to check out a trial version at http://www.microsoft.com/sharepoint/evaluation/trial/default.asp. Microsoft Office XP has built-in tools that integrate with portal server, but are not necessary for daily use of the tool. As long as your web server has a full-time connection to the Internet, the team using the tool can be located anywhere with Internet access.

Some time ago, I complained that each Project Extranet existed as a world unto itself, and could not transfer or share information with other similar products. That situation does not seem to have changed yet for those specific to the AEC industry - even though many other business to business services are relying on data sharing technologies like XML and handheld PDA's.

The reasons for my complaint were twofold. First, I wanted each team member office to be able to choose their own software - based upon it's appropriateness for each office. An engineer's office has a different set of priorities and needs than a subcontractor's office.

The second reason was that a project has different needs (and different team members) at different stages of development. At predesign and design phases, the contractor is often not yet selected, and the design team needs cad overlay sharing, action lists, decision tracking, document sharing for specs, etc. During construction phases, we have change orders, RFI's, and subcontractor management tools for contractors. After construction, there may be opportunities for Facilities Management, Lease Management, Work Order tracking, and maintenance schedules.

There are other robust collaborative team workspace applications that have been developed for the general business project team. You should consider these tools for the predesign and design phases.

TeamSpace at www.flypaper.com is a service that costs $12 per user per month, and has received good reviews by the business community.

So - Pre Construction is design-team oriented, Construction is Contractor oriented, and Post Construction is owner/operator oriented.

At the moment, all of the Project Extranets I see are developed for the Construction phase and are therefore contractor oriented. Several suggest that they have an abbreviated version of their product for the design team which can then be rolled over to their more complete product for the Construction phase - as if the design team has the same (or simpler) needs as the Construction needs. I don't see the design teams needing an abbreviated version of a contractor tool. I think we need a different set of tools with appropriate connections to the Contractor's toolset.

With a simple FTP site on the Internet, most design teams can share base plans and cad overlays using the file-sharing features of most modern cad programs, but change tracking remains a struggle. Design decisions and the discussions leading up to them need to be documented. Action lists need to be maintained and tracked - and integrated into on-line meeting minutes. Cartoon sets might be maintained for coordination and may be used to monitor progress. Equipment and material selections need to be shared with the team, with active change notification, and of course progress prints need to be posted and distributed. Some of these needs can be accommodated using features of project Extranets - some cannot.

Similarly, how can we extend the use of all this information to post-construction uses for the client? Does it require reentry of information to a completely separate toolset? Using current Facility Management tools, it would require exactly this kind of reentry - overlaid on imported CAD files.

Perhaps it's understandable that the available toolsets in current Project Extranets deal with the most capital-intensive phase of project development (Post Construction costs are cumulatively higher, of course, but over a much longer period of time) and we need to be able to use Project Extranets during the construction phase - but we need a more appropriate design team toolset for the early phases of our work.

Team Collaboration is a powerful tool, and the ubiquitous Internet makes it possible. Since the AEC Project Extranets seem to cater specifically to the Construction Phase, perhaps more generic business Team Collaboration tools (coupled with a simple FTP site and modern CAD for drawing sharing) will be as effective as any AEC Extranet for the design phases - until something more specific to the design trades is developed.

Let me know your experiences with Project Extranets during pre-design and design job phases.

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