Top Five Trends in Managed Services
by Brian Robins

During the last 18 months we have seen a steady increase in the number of requests that we have received from architecture, engineering and construction companies to manage their software applications for them. The scope includes project design collaboration and work-sharing applications through to construction work packaging and asset management. What is motivating them is the increasing complexity of the information technology environment and the realization that while IT is an essential driver of efficiency and productivity, it is in fact not their core competence.

At the same time, the megatrends of consumer technology – social, mobile, cloud and big data – are being felt in the business world and especially enterprise IT. The consequences of this "consumerization of IT" are that expectations of usability and accessibility have been raised to levels that are beyond the reach of many firms and that IT organizations are stretched too thin.

Bentley users attend an informative discussion on industry trends.

Hence CIOs are increasingly looking to their software providers to not only sell and install software but also to manage it for them. More than that, CIOs are asking how to get the most value out of the software, what are the best practices, and what are the benchmarks for their peer group. They want to pay for results not time and materials. In certain situations, architecture, engineering and construction companies are going one step further and asking for help with document control, data quality management, and project information management and reporting. It all adds up to a strong trend towards managed services, namely the outsourcing of IT services management and project administration workflows and business processes.

So where is this all heading? What are the top five things you should look out for in the world of managed services over the next 18-24 months? Here is my short list:

#1. It's a hybrid world, after all
Many organizations are already running some of their corporate IT applications "in the cloud" including accounting applications and customer relationship management. Many CIOs and IT managers profess to have a "cloud first" or "mobile first" strategy. However when it comes to graphics-intensive modeling applications and multi-layered BIM models, it is not clear that running them and managing them in the cloud is always feasible. Also, given the huge investments in desktop applications, not every firm has the luxury of throwing them all out and starting over with a clean sheet. Most IT organizations will continue to provision a mix of on-premise and cloud software for the foreseeable future. The cloud is not a silver bullet and most IT environments will continue to be hybrid. Where you can gain an edge is by finding your optimal combination of on-premise and cloud. This may involve caching servers and delta file transfers, where only changes are transmitted from local servers to be stored in the cloud rather than entire models.

#2. One size does *NOT* fit all
One of the reasons that software-as-a-service and applications running in the cloud are so cost effective is that they are multi-tenant. This means that many companies are sharing a single instance of the software and are storing their data in the same database. Scalability is achieved because everybody is running the same application, normally the same version of the application, and the business processes and workflows are all standardized. But increasingly, organizations are opting for a private cloud, where they have greater assurance that their data is being properly safeguarded and where the CIO can pinpoint a physical server in a rack in a data center and assure the organization's project executives and program directors that their data is in safe hands. Moreover, some entities require specific configurations and want to preserve older software versions driven by published standards and dependencies. In these situations automatic software updates sometimes pose more of a headache than manual, labor-intensive, machine-by-machine upgrades. More than optimizing and streamlining standardized workflows and business processes, companies are looking for solutions that are really tailored for integrated project delivery.

#3. From cost reduction to organizational agility
The strategic objective and business justification for many IT implementations have up to now centered on cost reduction. Shaving percentages off the total installed cost or construction value has been the name of the game. An impressive catalog of case studies and project references proves the point. A look back over five years of submissions to Bentley's Be Inspired Awards turns up example after example of process improvements and efficiency gains: 15% reduction in design time; time savings of 10% in project execution; ability to manage change requests resulting in time savings of more than 80%; ability to prepare and issue engineering sets 50% quicker; 75% reduction in printing, scanning and mailing costs; plotting time reduced by 40%; and so on. But future competitive advantage will be rooted in organizational agility. The next step on the stairway to value is rapid deployment, the ability to ensure operational readiness no matter where in the world, no matter what the conditions, no matter who is part of the team. Managed services enable project cycles to be decoupled from procurement cycles and offer flexibility with predictability and cost certainty.

#4. Bridging the gap between design and operations
For many years, the industry and its value chain have been very fragmented. However just recently, huge progress has been made in bridging the gap between design and operations. There is growing awareness of the central role that information mobility plays in the lifecycle of assets and downstream asset performance. Increasingly owners are requiring asset information and building

information models to be handed over to facilities managers, operations and maintenance. The digital asset complements and co-exists with the physical asset. It is well understood that assembling the information for handover to the owner is not a task that can be scraped together in the latter stages of construction and quality assurance. It must be an activity that is an integral part of the project. How to accomplish that is the question.

Users are briefed on how to get the most out of their software investment.

Managed services are aiming to support the entire value chain, to help architecture, engineering and construction companies as well as owners and operators, to achieve true information mobility. A prime example is construction work packaging. Bentley can provision, manage, monitor and support its advanced work packaging software in a robust, cloud-computing environment. Work packaging software automates the production of construction work packages, installation work packages and testing work packages. It aggregates a variety of project information, producing reports and dashboards to give stakeholders visibility into the current project status and progress. In addition, Bentley provides specialized services for data quality management. In our experience, data quality is a key determinant of successful outcomes. Bentley takes on the responsibility for data quality not only during project set-up but also on an ongoing basis.

#5. Outcome-as-a-Service

Finally, and perhaps most significantly, the trend in managed services is towards outcomes. Typically in an IT context, success is measured in terms of reliability and availability of the software. Clearly, without software applications and tools, business simply doesn't get done. So a great deal of attention and IT budget goes into ensuring business continuity. CIOs and IT managers are held responsible for "Five 9s" meaning that systems are available 99.999% of the time. In partnering with or outsourcing to managed services providers, these targets are usually encapsulated in a service level agreement (SLA) and key performance indicators (KPIs) that are monitored closely.

However, in the future we expect to be party to more and more discussions that focus on outcomes rather than inputs. Progressive and forward-thinking architecture, engineering and construction companies are looking for a business relationship and commercial model that go beyond "pay-as-you-go" or "pay for what you use." They are looking for business results that are predictable and measurable. Whether it is getting up and running in days/hours; supporting projects in remote regions/countries; deploying a consistent toolset worldwide; improving project visibility; minimizing design and construction delays; cutting out time from review cycles; strengthening business partnerships; or avoiding disputes and disagreements. In the future, companies will look to managed services providers to take responsibility for outcomes not just service levels.

Final Thoughts

If you are an executive in a global architecture, engineering and construction company, or a local design/build firm, you are constantly thinking about how to improve your competitiveness. How can you achieve higher productivity? How can you increase your project performance? How can you improve project quality? You might be contemplating how to get to the next level of BIM. You might have asked your modeling, design and document managers how they can ensure consistent roll out.

The business value of managed services lies in transforming project delivery capabilities; access to world-class skills and technology innovation; and flexibility and scalability to take advantage of business opportunities. Managed services will continue to evolve as an effective business strategy in architecture, engineering and construction. In fact, the future of software – and the future of many industries – will increasingly look like managed services: highly specialized workflows, capabilities and business processes enabled by and underpinned by software.

About

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