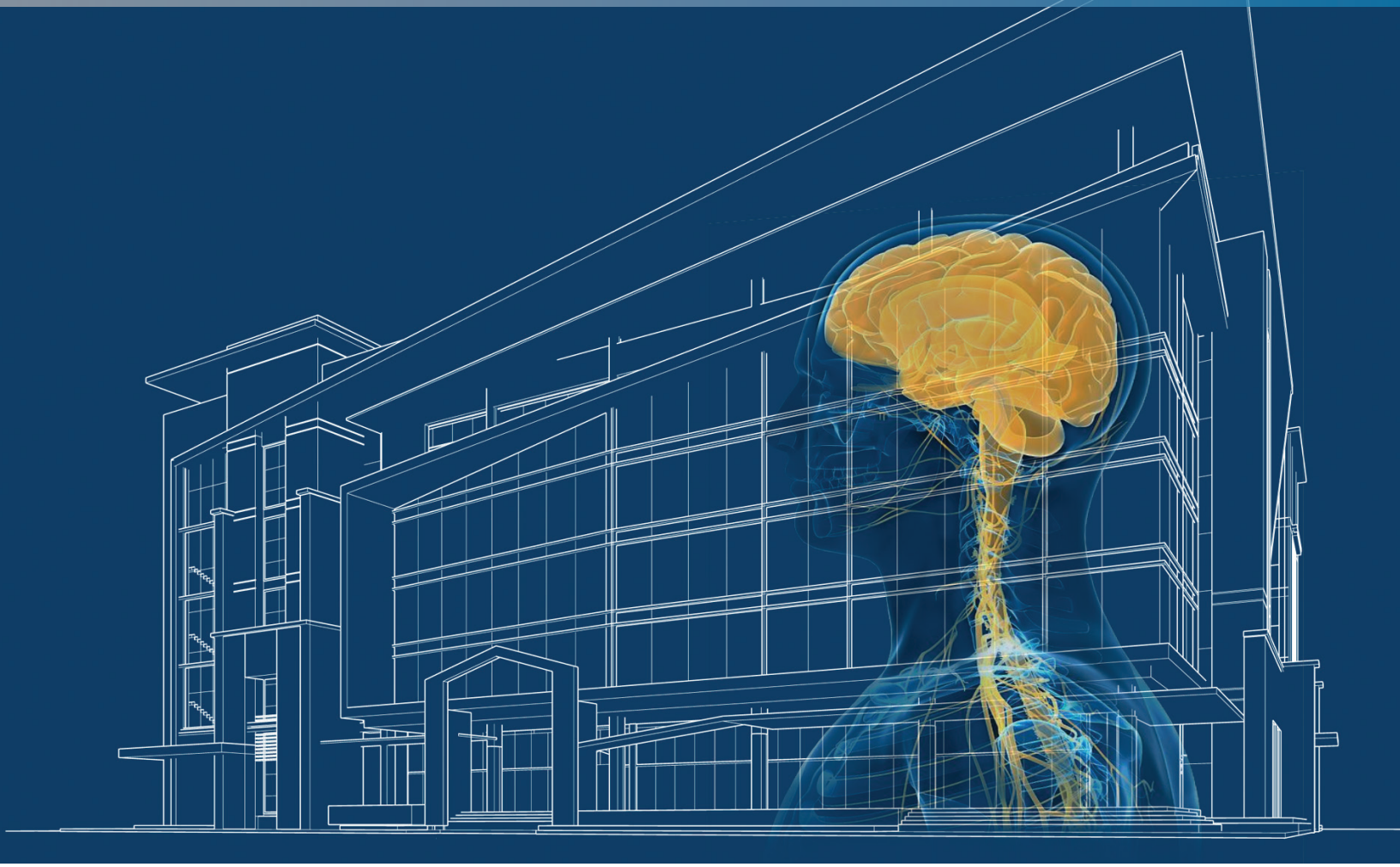
TECHNOLOGY CONTRACTING™
BUILDING WIDE SYSTEMS INTEGRATION
POWERED BY BRAINS



It takes a smart process to build a smart building

BE SMART FROM THE START

Today, the Internet of Things is driving IT standards. This means systems are better able to connect, share and optimize data across technology silos using a common communications language. And having technology throughout the enterprise helps to deliver the defined business and building outcomes.

But creating the smart, efficient, connected environment that meets your business objectives can be difficult to accomplish using a traditional construction approach. So you need to be smarter from the word "go." Constructing a more optimized building that meets energy, technology and operational objectives depends on early collaboration between the owner, design and construction teams, sharing informed, data-driven decisions about connectivity and interoperability. This is how to leverage technology to create an innovative, optimized environment that delivers connected experiences.

Johnson Controls

We're critical from the beginning, so you're not critical in the end

As the single point of responsibility for technology integration from start to finish, Johnson Controls provides critical continuity throughout pre-construction, implementation, installation and service. When you involve us as the technology contractor early in the concept through design-assist phases, we're able to guide and manage the process. This brings an enterprise-wide perspective to the planning, design, installation, integration, and service of building, business/IT and specialty systems. And our vertical market expertise allows us to understand the unique challenges, regulations and compliance issues within each market.

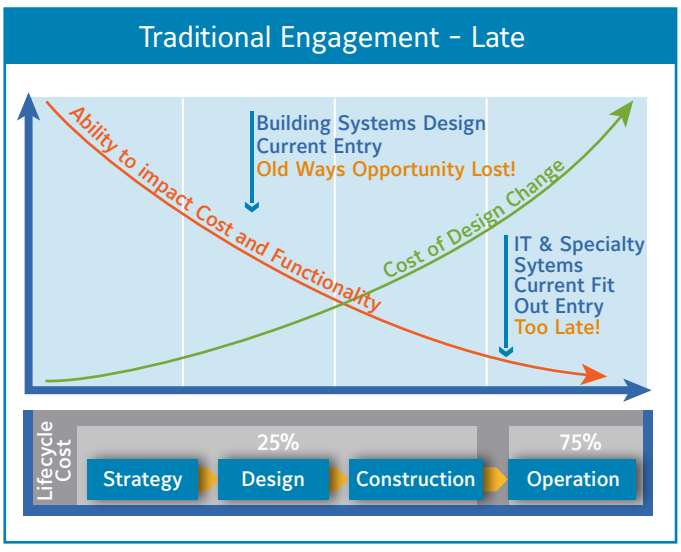
Technology Contracting™ can save time, reduce risk and decrease construction and operating costs while ensuring that technology is deployed and integrated in an orderly manner to achieve desired outcomes. Integrating technology after the systems have been installed and construction is complete is a more costly, difficult and time consuming process than if it had been planned for early on.

The benefits of Technology Contracting™:

- **Reduces risk and finger-pointing.** The technology contractor acts as a single point of responsibility for planning, design, installation, integration, commissioning and service.
- **Saves time.** Effective project management means that all vendors work with clear direction and coordination.
- **Cuts capital costs.** The technology contractor avoids unnecessary duplication of infrastructure and systems, cutting first costs by 8-12%.
- **Reduces construction costs.** Better coordination means less duplication of effort and infrastructure, fewer change orders and faster commissioning.
- **Cuts operating costs.** A large percentage of a building's lifecycle costs accrue after construction. Intelligently deployed technology saves energy, reduces maintenance and aids workflow and worker productivity, cutting operational and utility expenses by 10-15%.
- **Enables system interoperability** and takes advantage of opportunities for intelligent integration.

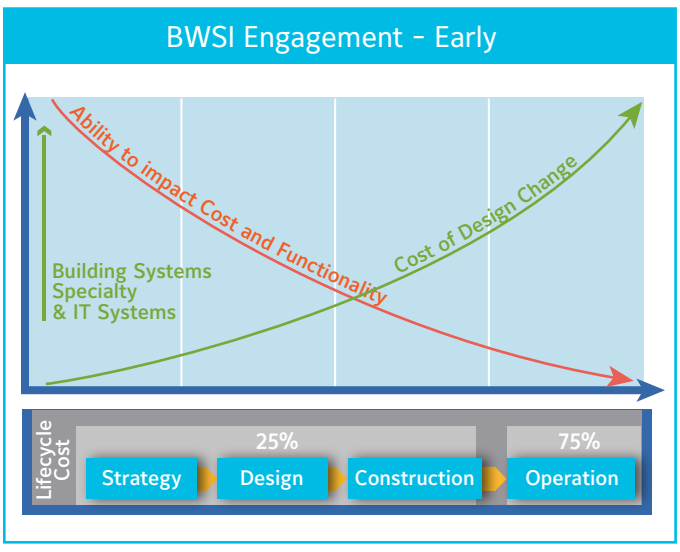
Building Wide Systems Integration Early Engagement Value

Traditional Engagement - Late



- Building needs delivered
- Budgets not optimized
- Customer expectation for a smart building not met

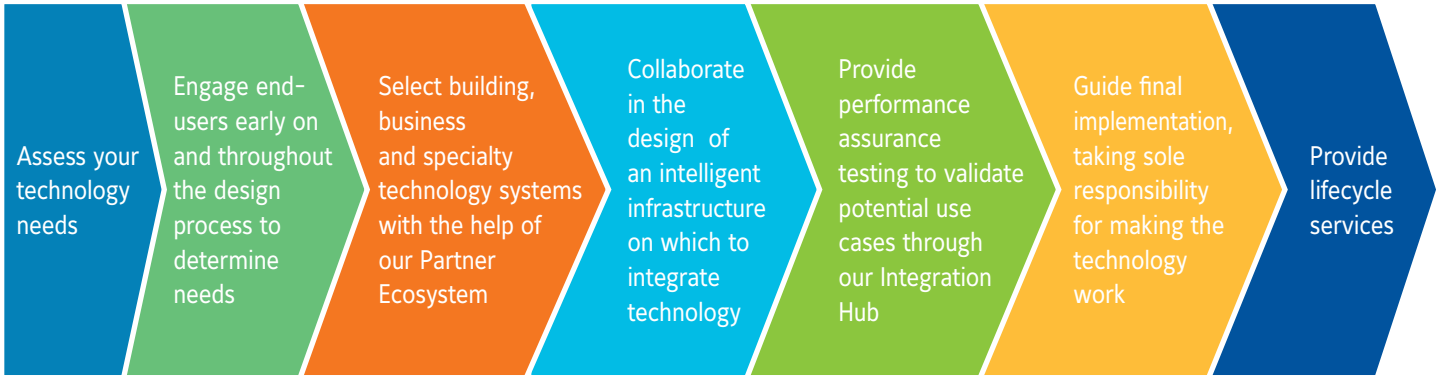
BWSI Engagement - Early



- Building and business needs delivered
- Budgets optimized
- Customer outcomes delivered

The Technology Contracting™ Process

Technology Contracting™ uses a methodology that integrates product, process and people. Johnson Controls will:



Planning Phase

Johnson Controls' technology experts guide key stakeholders – owner, representatives of different business units and departments, contractors, consultants, architects – through design-assist processes meant to uncover priorities and maximize every dollar spent. We then work with the design/construction project team to select and implement the technologies determined as essential for delivering the planned environment that meets occupants' needs.

Design-Assist Phase

During the design process, Johnson Controls collaborates with the design team to optimize the layout and integration of systems and technologies required to meet the owner's desired outcomes. When all of the potential systems and technologies are identified the design and Johnson Controls teams make product selections to maximize the efficiency, integration, interoperability and lifecycle service of technology systems. Moving these decisions to the earliest phase of the design process drives consensus, mitigates construction risk, and results in fewer change orders during construction and systems installation.

Installation and Integration Phase

We leverage our Partner Ecosystem of manufacturers, distributors and value added resellers to bring proven, repeatable, best-in-class technologies to customers' new construction, retrofit or technology refresh projects. We've assembled a network of industry leaders with the experience, expertise and innovative services and solutions needed to create the connected environment that meets your energy, technology and operational objectives, while reducing your cost and risk.

Commissioning Assistance Phase

Commissioning is a systematic process of testing to make sure all building systems perform according to the design intent and the owner's operational needs. We work hand-in-glove with the commissioning agent, because the commissioning process begins in the design phase of the project. The process ensures that commissioning considerations are planned into the selection and integration of systems, that the customer's business processes are fully supported, and that the building, business and specialty systems are integrated into a single operating model. Functional documentation, wire diagrams, and use case validation all contribute to the successful commissioning of the building prior to occupancy and makes the process significantly more streamlined for the commissioning agent.

Service Phase

No one knows your technology systems, network and equipment better than the team responsible for the integration and installation of them. Because the commissioning assistance process benchmarks performance, Johnson Controls is able to easily identify and optimize systems that have ceased to operate at acceptable performance levels.

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Smart contracting means we deliver your vision of a smart building

Johnson Controls has been designing and delivering converged technology solutions for more than a decade. Our proven methods achieve complex technology convergence in a way that simplifies, optimizes, and reduces technology cost and risk. In fact, the Technology Contracting™ model typically lowers first costs by 8-12% because you avoid duplication of infrastructure and systems. And in the long term, decreases operational and utility expenses by 10-15% because the technology is deployed intelligently.

Put a technology plan in place that includes an infrastructure that supports any future innovations while protecting your existing investment. Let Johnson Controls help you bring your vision to life.

To learn more about how Johnson Controls can bring the benefits of building wide systems integration to your next building, please visit: http://www.johnsoncontrols.com/buildings/services-and-support/systems-integrations

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