Agile Partnerships Drive IoT Success
Scalable IoT Integrations Demand Professional Service Partners Steeped in Agile Design, Development and Deployment

The 451 Take

According to 451 Research data, 69% of enterprises deploying IoT technology expect to increase professional services IoT spending over the next two years.¹ It is now commonplace for enterprises to partner with an IoT professional service partner, whether decision-makers expect to buy platform and tools to execute their projects or build from scratch. Professional service firms are sought after to tackle complex requirements efficiently and at scale. Typically, enterprise buyers work with a range of partners on IoT projects, and, increasingly, they expect to work with several IT-focused professional service firms (see figure below). Many organizations are finding that service partners that can showcase IoT technology in a pilot project may not have the full range of skills needed to roll that technology out across a broad range of existing infrastructure and applications with their varied requirements.

IT-Focused Professional Service Firms – Large and Specialized – Play Critical IoT Role

Q: Which professional services vendors does your organization use for IoT implementations? Select all that apply (n=110)
Q: Which would you consider using in the future for IoT? (n=106)
Q: You indicated your organization has purchased or plans to purchase professional services from the following vendors for IoT projects. Are these existing suppliers or new vendors specifically for supporting IoT? Base: Respondents that purchased/plan to purchase services from the mentioned vendor. (IT vendor consulting/SI arms n=88; large global IT/SI firms n=73; boutique/specialized industry vertical consultants n=64; global mgmt. consulting/strategy firms n=61; OT vendor consulting/SI arms n=59.)


In particular, enterprise buyers are wanting to source software engineering expertise alongside systems integration skills and data and analytics capabilities. While many systems integrators have digital practices with these skill sets, it is often necessary to also draw on specialist professional service partners with proven IoT expertise to get the project to deliver business value from pilot to production.


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Business Impact

Enterprises typically use a mix of IoT technology implementation partners. No single vendor can claim to deliver a complete IoT implementation by itself. Indeed, 61% of enterprises are using two to five vendors to help with IoT implementations. Given the number of moving parts in an IoT project, there is a clear requirement for professional technology service players to help design, build and integrate systems.

IT realizes that it does not have the skills resources required to get IoT projects to production. Forty-eight percent of enterprises are facing an IoT skills shortage, and a further 39% expect to face a skills shortage as their IoT initiatives expand. Early concerns on the IoT skills front were about the need for new skills altogether, such as data science capabilities to deliver insights and know-how for managing new sensors, types of connectivity and security requirements. Now, enterprises face the added challenge of finding team members to help scale their deployments.

Experience leads to a search for partners that can add value. The IoT market is exploding in terms of vendors and offerings, so enterprise clients need help in determining what works and what does not work at scale in such a fast-growing fragmented environment. Enterprises with IoT project experience looking to expand deployment need a systems integrator that understands the practical challenges as they get into production, including the need to work with a variety of existing IT infrastructures, applications and cloud services in different geographies.

New technology requirements come to the surface as projects move from pilot to production. Fifty-five percent of enterprises tell us that pilots are taking longer to get to production than they were a year ago, often because IoT infrastructure and applications are more complex and challenging to deploy than expected. They find that what works at a proof-of-concept level will often not directly translate into a real-world system.

Requirement for specialist partners is growing. Many professional service firms have digital transformation skills in cloud technology, big data and machine learning, but experts that can combine the agile software engineering model, toolsets and stacks with a deep understanding of industrial product development processes are much rarer. One factor that is clear from 451 research findings is that prior experience is the key to mitigating pilot purgatory. This is creating a growing requirement to work with specialist partners that have proven IoT engineering experience so are able to offer expertise based on delivery of complex use cases that can demonstrate ROI.

Looking Ahead

Over two-thirds of enterprises expect to increase their spending on professional service partners in the next two years. The reasons for investing in professional service partnerships for IoT projects vary from the co-creation of a long-term strategy to plugging specific technical skills gaps. Technology skills, regional expertise and vertical industry requirements are all factors driving increased professional service partnerships going forward. While many IoT projects may begin with the support of the service arms of IT companies, as those projects move to deployment, additional engineering and integration capabilities are required from partners. Given the top reasons provided by enterprise buyers for adding or changing professional service partners, specialist service providers are becoming the not-so-secret ingredient for delivering successful IoT projects.


Very develops end-to-end connected ecosystems with industrial and commercial partners who are determined to take the guesswork out of machine maintenance, utilization, and optimization. Our deep commitment to design thinking ensures clients can recognize near-term value and prove the case — by building scalable IoT systems that can nimbly adapt as market and customer needs evolve.

If you’ve found yourself declaring “we don’t know what we don’t know” and your team is ready for a gritty, long-term partner who is obsessed with driving business outcomes, we’d love to learn more about your IoT journey.