

Nominee: WhiteSpider

Nomination title: ea4 Enterprise Architecture Framework as applied to Parsons Brinckerhoff's new Cloud Infrastructure and Data Centre Environment

WhiteSpider specialises in providing consultancy, strategic advice, and practical support in enterprise service architectures, using industry-recognised specialists who are qualified to the highest levels and with extensive real-world experience.

The company helps organisations to standardise their IT and communications infrastructures by using a unique new service framework - ea4 - developed specifically with the needs of global enterprises in mind. One such organisation is Parsons Brinckerhoff, a global consulting and engineering firm that assist public and private sector clients in the planning, design, construction and operation of major infrastructure projects - from roads and bridges to dams and power stations- throughout the world.

Organisations such as Parson Brinckerhoff, and many others that WhiteSpider has helped, typically grow and develop in a relatively unstructured fashion to meet immediate tactical needs and respond to changing financial considerations. This, coupled with the dramatic changes in the technologies and devices used in the enterprise in recent years, often leads to fragmentation and a lack of overall coherent structure.

WhiteSpider's ea4 framework responds to this and helps CIOs and their businesses to restore structure into their infrastructure and transform their IT service architecture to meet the changing needs of their businesses.

ea4 operates on the basis that the easiest way to reduce the complexity of providing and managing IT services and applications at a global level is to use reference models and standards to allow consolidation of highly diverse systems. This allows costs to be controlled, IT systems to be aligned to the needs of the business and the use of a governance model that ensures compliance with regulatory requirements and legislation.

ea4 combines four services to provide a comprehensive approach to the needs of global enterprises:

- Enterprise Auditing
- Enterprise Architecture
- Enterprise Alignment
- Enterprise Assessment

Ea4 in Action - helping Parsons Brinckerhoff remove the risk from its Data Centre and Enterprise Infrastructure

Parsons Brinckerhoff (PB) was suffering from a problem common in many established enterprises where IT infrastructure has grown with the company. The need to respond to growing demands by adding new technologies had resulted in a piecemeal infrastructure with the associated risks, inefficiencies and inflated costs.

The company had been having issues for some time with power outages, makeshift server room arrangements and legacy equipment which could no longer be maintained. Its systems were under-utilised and difficult to manage. The arrival of Hurricane Sandy in October 2012, and the near-disastrous flooding of the primary Data Centre in Carlstadt, New Jersey, served to highlight the level of risk that the company faced. With increasing single point of failure events and a site that was both unsuitable for future development and nearing the end of its lease, Hurricane Sandy was the final straw that brought forward the company's plans for consolidation and migration of its systems, with the aim of creating a private cloud platform and a fully maintained data centre, proofed against disasters and with built-in resiliency.

Using the company's ea4 framework for enterprise, WhiteSpider was able to engage quickly with the PB team and carry out a high level audit of the service environment, dependencies, locations and user footprint. The information from the audit provided valuable insight for WhiteSpider to plan PB's migration and transformation strategy, including the size, type and location of a co-located data centre provider and informed the details of the procurement process which WhiteSpider also helped PB to manage.

WhiteSpider also used the knowledge gained from the audit to inform the process of designing a new, agile service delivery platform for PB based on the creation of its own private cloud infrastructure. This was followed by a staged migration for PB's various sites, bringing all the company's IT systems and data centre facilities into one consolidated infrastructure, including a new design and infrastructure for the company's HQ, moving many of its servers and consolidating into a smaller space. PB was able to vacate its premises in Carlstadt and move to its new co-located data centre environment, with economies of scale and the cost advantages of co-location.

The results at Parsons Brinckerhoff speak for themselves: a fragmented environment has been transformed into a coherent, reliable, scalable and future-proof architecture that delivers greater performance at a fraction of the operating cost.

The project has already shown significant gains in terms of cost, performance and manageability. Benefits include the reduction in overall complexity, with five storage platforms reduced to one and a 70% virtualisation of the system. The consolidation of servers into the purpose-built ROBO Room (Remote Office Branch Office) has freed costly real estate space, whilst servers are housed in more appropriate conditions with better

cooling and power supply. Cooling requirements have already reduced by 80%, power consumption by two-thirds (66%), and the server room footprint is down from 108 sq meters to just 15 sq metres, a reduction of 88%, a cost saving of some \$600,000 per year.

Resiliency has also improved and the overall performance available to users is significantly greater, with the capability for up to 10 Gbps to the desk. In addition, availability of the new service environment has now reached the desired five-nines on a 24/7/365 basis, due to the elimination of risk, oversubscription, device failure and power outages, plus new maintenance contracts around new technologies.

WhiteSpider designed the new environment in line with industry best practice and therefore it is more agile around service delivery, easier to operate and manage, and integrates seamlessly with legacy equipment and components. As a result it is delivering substantial cost savings, including operating and maintenance costs and streamlined time to deliver new services.

Parsons Brinckerhoff is just one example of the value that WhiteSpider is bringing to major data centre and infrastructure projects. Others include major clients in the financial/banking sector, Formula 1 motor racing and the insurance industry, to name a few.

Why nominee should win

- WhiteSpider is a relatively new company that brings together a group of experts with many years of experience and the passion and commitment to make a difference to their customers
- WhiteSpider's experts make a point of really understanding their customers and their operations, resulting solutions reduce complexity and create efficiency
- Within the first year of operation the company has achieved around £1M turnover – testament to the quality of service and the market for WhiteSpider's expertise
- WhiteSpider's ea4 approach is bringing tangible, measurable results in terms of performance and cost savings to its customers