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The modern day architect
Multi-faceted, multi-talented

Technology change is a phenomenon that businesses have had to deal with for many years. It comprises a spectrum from minor software upgrades, to complete IT estate replacement through to more recent innovations, like the migration to cloud-based infrastructures or the adoption of social computing.

While the actual details of the technical change will vary greatly, the drivers typically remain the same – supporting delivery of the corporate strategy and, in parallel, promoting efficiency and cost reduction.

One important trend driving change in businesses is the insatiable expansion of the digital channel. With more consumers and businesses spending more of their day-to-day lives online, the potential to reach a larger and broader market base has never been stronger. In addition, people have more options for browsing online than ever and the improving quality of the user experience resulting from the new devices also reinforces consumers' habits of devoting more time to the online realm.
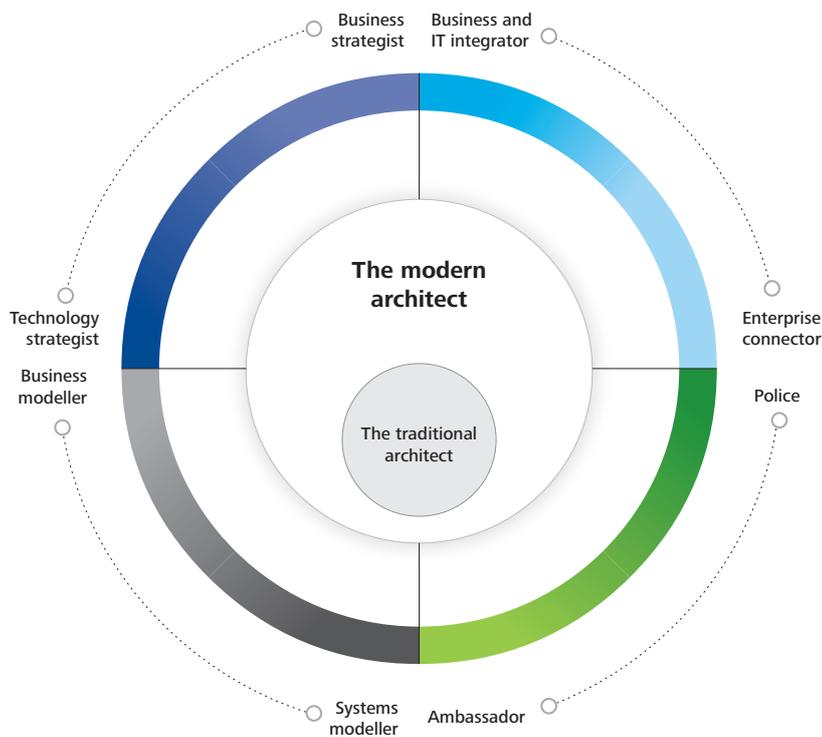
The expanding role of the modern architect

With opportunity however comes challenge. Linking the new technologies with the legacy backend applications is not easy. In fact, this presents significant technical and delivery management barriers, not to mention financial, political and change-related issues.

From our experience working with clients in transforming their digital capability, we have seen a radical change in the role of the modern day architect in response to these challenges.

This paper elaborates on some of these challenges and explores how the role of the modern day architect has evolved to become one which transcends these barriers.

Technology strategist and business strategist

Part of an architect's role is to bridge the space between technical strategy and business strategy. With the complexities brought forth by the new digital era, more organisations are facing uncertainty about their strategy, which presents a challenge for the modern architect.

To visualise the future state model of the organisation and its desired goals, the modern day architect must possess more than just technical expertise and knowledge of technology trends in the market. They must also have business acumen that comes from a breadth of industry experience. They must fully appreciate both the business resources and capabilities required to meet the company's goals and the complexity of the market in which it operates. They must be perceptive of the industry trends and issues, and be able to identify key factors that contribute to the organisation's success.

Through this lens, the modern day architect can guide organisations towards areas to exploit and explore, enabling the business to thrive under even uncertain conditions.

Systems and business modeller

Senior stakeholders increasingly need greater visibility of their enterprise capabilities and how these are enabled through technology. To achieve this, the modern day architect must extend their standard modelling techniques to not just explain the technical but also to show how this dovetails with the business's target operating model. This requires a broader level of architectural modelling to demonstrate:

- Alignment of aggregated business capabilities, the IT operating model and how these develop over time
- The status of the architecture relative to the target IT and business state
- The impact of IT investment decisions on the target state of both IT and the business.

Creating these models requires a combination of systems and business thinking. It involves application of an executive-level lens to transform complex business and IT processes into simple representations that can then be translated into detailed business operating models and processes, or detailed technical architecture definitions.

These models need to be translated into architectural models that people on the ground can use effectively. In many cases, the translation of these models to the next level of detail can be difficult to follow, given the tendency to use different terminology for different audiences. Increasingly, the modern day architect uses translation maps and integrated models to assist with this traceability.

Business, IT integrator and enterprise connector

Having become the central link between the business and IT throughout the solution delivery cycle, the modern day architect has to wear multiple hats, needing to engage with everyone from Business Analysts, Program and Project Managers, Vendors and IT Delivery Experts, right through to Operations.

Touch point for the business

When dealing with the business, there is an increasing need for the modern day architect to measure and demonstrate the impact of architecture on business performance and to be able link it to metrics that business stakeholders care about. This not only addresses the confusion the business has about the value of the architecture discipline, especially in an agile delivery environment, but also signs architecture up to specific delivery-related performance criteria.

Touch point for the program and project managers

Having defined solution requirements and their benefits, the architect gains unique visibility over technical and business interdependencies, commonalities and conflicts between projects. They are a vital conduit back to Program and Project Management to manage risks and issues and deliver projects successfully and efficiently.

Acting as a delivery subject matter expert in this way is a valuable addition to any project; however, it can also increase demand for the architect's time. It is essential that the modern day architect connects with the right people and communicates to them the critical project information and insights that they need to action.

Touch point for IT

Ideally, an architect helps ensure that IT is able to change with the business at the same pace and in the same direction, and that the business understands the cost and difficulty of implementing their requirements.

Touch point for Vendors

Architects must resist the urge for purism and strike the difficult balance between business need and technical over-engineering when assisting with vendor selection.

When selecting vendors and technology, the architect must therefore identify key criteria that are important to the organisation, against which they evaluate products.

Working with vendors, architects must be able to create and assess architecture and deployment options and identify the optimum solution not only in terms of functional fit and delivery risk, but also in terms of total cost of ownership.

Both of these skills require the modern day architect to be commercially astute and to understand budgeting, estimating and total cost of ownership.

Police and ambassador

An architect defines the end-state strategic architecture, guiding principles and policies. As IT and third party solution providers must adhere to these, the architect takes on a policing role. This requires continual validation and alignment of artefacts across architectural layers, identifying gaps and misalignment, and validating that the quality of solutions selected or built meets both business and technical requirements.

With the complexities of integrating new technologies with legacy systems, and often the unavailability of the right product, solution or resources, it is not enough for the modern day architect to just enforce principles and policies. They must also evaluate and negotiate exemptions for any deviation from the strategic architecture or principles. Where they approve such deviation, it must be in a manner that still delivers assurance to stakeholders.

This entails striking the right balance between quality and practicality – a skill which can only be acquired from strong delivery experience.

The modern day architect must demonstrate an awareness of the business's critical success factors and an ability to assess any architectural deviations which will affect their delivery. They will determine the appropriate remediation and communicate these to stakeholders for buy-in and implementation.

In summary
We have seen the role of the architect evolve in response to increasing pressures brought upon IT by faster and more competitive digital business environments.

The traditional role of the architect has moved on and the new, modern day architect must possess a range of skills acquired through first-hand experience.

The most exciting aspect of the architect's journey is the breadth of ability and strategic importance they have now acquired. Today's architect is a strategist and a deliverer, a policy 'enforcer' and an arbitrator – and ultimately a true change ambassador spanning a range of stakeholders.

The modern day architect is a well-rounded technology professional who can be engaged on a range of issues from business, technology and delivery to social and commercial issues. They connect people and guide the organisation to succeed in the competitive digital world.

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