Bridging the IT Business Gap – The Role of an Enterprise Architect

Today’s enterprises understand the value that Information Technology (IT) can bring to their business. IT supports day-to-day business operations to optimize operational cost, but more importantly, it can bring competitive advantage to the business by aligning IT strategy with business strategy. The common obstacle in achieving the strategic business advantage through IT is misalignment of IT and business groups.

This paper describes why and how the Enterprise Architect needs to work with the business and IT groups to bridge the gap and align IT functions effectively to business processes.

This paper aims to put forth that an Enterprise Architect can achieve business-IT alignment by adopting agility, big picture thinking, business focus, simplified IT governance and effective communication. It also describes TCS’s offerings in Enterprise Architecture space.
About the Author

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Introduction

An Enterprise Architect [1] can act as a bridge between Information Technology (IT) and business. An Enterprise Architect can streamline and optimize the IT framework and processes to enable them to quickly respond to the changes requested by the business.

The IT group and the business group often do not appreciate the compulsions and challenges faced by each other. This leads to conflict between the two, limiting the benefits that IT could bring to the business.

An Enterprise Architect can play the role of a catalyst by working towards constant alignment of IT and business. He/she understands the challenges and the needs of the business, and responds through an enterprise-level IT landscape and strategy.

An Enterprise Architect and the Enterprise Architecture discipline can bring in their expertise and understanding of the big picture to ensure that the IT functions support the business functions appropriately.

This paper proposes five key principles – Agility, Big Picture Thinking, Business Focus, Simplified and Transparent IT Governance, and Effective Communication that an Enterprise Architect can practice and institutionalize within the IT organization. It elaborates how these principles can help the Enterprise Architect to bridge the IT Business gap, and in turn result in maximizing IT value to the organization.

This paper also touches upon TCS’s offerings in the Enterprise Architecture space.

Business-IT Alignment

Business-IT Relationship

IT operations in any enterprise typically begin with system and network administrators along with few developers supporting the internet websites. For past several decades, this basic operational need has grown to a large extent. Business today wants to use IT to ensure operational efficiency and smooth operations to instill customer confidence as well as to gain competitive edge.

Business IT alignment has been a subject of debate for decades, and there is an inherent disconnect between the two groups, as they tend to think differently about the same problem. Business focuses on how to get more profitability by using IT to solve a problem. IT group focuses on how to model and implement the business problem within existing information, data flows, and systems. Business is worried about cash flows, whereas IT wants to take care of data flows. This disconnect is central to the lack of a strong relationship between business and IT.

Let us take an example to understand how thinking and language of the two groups is different under the same circumstances. Let us say the business group approaches the IT group with a change requirement. The business thinks it is an urgent and important change in order to stay ahead of the competition.

In response to this change requirement, the IT group responds with the technical modeling diagrams and talks about technical complexity to change the existing system. The differences in objectives, way of working of the two groups and lack of knowledge about the other group’s functioning start creating a gap between the two groups.

This gap may result in expensive IT systems that do not provide adequate return on investment. Historical analysis suggests that less than 30% of IT projects are successful, often because most of those are not aligned with business needs and priorities.
Aligning Business and IT

There are sufficient opportunities in providing Cloud services in Strategic planning and Demand creation area. Complete organization planning and Demand creation can be executed in a cloud model.

Following sections brief on the various sub-areas within Strategic Planning, Demand Creation and the potential of adopting cloud services in the sub-areas.

Enterprises typically put a structure in place for IT organization, to bridge this gap. In most organizations, the CIO (Chief Information Officer) has the main responsibility of ensuring that the requirements of business get drizzled down to the IT group. The CIO drives the transformation and alignment of the IT group with business. The CIO delegates a lot of authority and responsibility of this alignment to the Enterprise Architecture discipline in the organization.

The Enterprise Architect has to keep IT teams focused on the goals and on the long journey of transformation. The role of the Enterprise Architect may vary from an extension of the IT department to the business side’s ambassador to IT. But, the Enterprise Architect will never be exclusively involved with one department or another. He/She is rather supposed to be the bridge between business and IT.
Enterprise Architect

What is an Enterprise Architect?
Enterprise architects are practitioners of enterprise architecture; an information technology discipline that operates within large enterprises. Enterprise architecture includes business architecture, application architecture, data architecture as well as technology architecture.

Business Strategy, Drivers, Goals, Governance, Principles

Enterprise Architecture

It takes inputs from business requirements, vision, drivers, and governance strategy & principles. Enterprise architecture consists of business scenarios, program and projects, architecture governance, architecture contracts, and people, process and technology.

Responsibilities of an Enterprise Architect
An Enterprise architect is responsible for devising and governing the enterprise architecture for the enterprise with the long term responsibility of IT systems. Comprehensive knowledge of the current IT landscape i.e. hardware, software, application, and systems engineering within the enterprise helps the Enterprise Architect to utilize the legacy applications to the best and extend to meet today’s challenges. An Enterprise Architect needs to promote shared infrastructure and applications to reduce cost and improve information flows. An Enterprise Architect is also responsible for influencing people, processes & technologies based on the business drivers.

Enterprise Architects need to establish a governance body to ensure consistency and big picture thinking within the IT group. Governance is also a critical factor in getting IT and Business into joint trade-offs and decision making.
Bridging the IT Business Gap
Enterprise Architects have a lot of potential to influence the IT group, as well as the business to ensure that they work well with each other. They also can also bring in their expertise to work on transformation of business processes as well as IT landscape to maximize the value of IT for business.

I would like to propose five key elements that an Enterprise Architect should concentrate on to achieve a strong IT-Business alignment. Those are Agility, Big picture thinking, Business Focus, Transparent and Simplified IT Governance, and Effective Communication. In this section, I would express my take on how these elements can help the Enterprise Architect to bridge the IT Business gap.

Figure 3: Bridging the Business IT Gap

Agility
Business today has adopted agility as a necessary attribute, as it wishes to be agile in the way it responds to changes in the market, the industry and demand. The Enterprise Architect needs to acknowledge the need for making the IT Group agile and flexible to respond to business.

The Enterprise Architect needs to welcome change in business as well as IT, work incrementally using simple modeling and focus on people more than techniques and technology to ensure agility.

Figure 4: Agility
**Welcome Change:** An Enterprise Architect should welcome change from the business. Business changes to keep itself in the race, and remain profitable. IT has to respond to these requested changes quickly. The Enterprise Architect should ensure that the IT landscape is not closed, but open for extension as well as modification. He/she should also be able to understand the impact of the change on various aspects of existing IT infrastructure, so that the changes are smooth.

Enterprise Architect should also welcome changes in the IT industry in terms of new technologies such as open source, new infrastructure models such as cloud computing, as-a-service and so on. That would help him/her to ensure an agile and competitive IT strategy.

**Simple Modeling:** Enterprise Architect is often involved in modeling of the enterprise-wide architecture, and then taking it to the IT Groups. To remain agile, the Enterprise Architect should keep the models simple.

Complex models detailing all the minutest components within the architecture may be near to perfect, but they rarely get used by the people on the ground i.e. people who architect, design and develop business applications. IT groups should adopt and use simple models willingly to gain a big picture understanding. The complex models also turn out to be very hard to change later and become obsolete very early.

**Work Iteratively and Incrementally:** Working towards the perfect model and perfect Enterprise Architecture as a big bang approach may not work. Any published diagram may turn obsolete as soon as it is published because of the rapid changes in everything.

Enterprise Architect should acknowledge the need of working iteratively and incrementally while working towards the architecture.

**Focus on People, not on Technology or Techniques:** An Enterprise Architect needs to create a buy-in for the enterprise architecture from the business as well as IT group. People would willingly implement the models, technology, techniques and processes in practice if they appreciate and understand those. Enterprise Architect needs to focus and groom people from the IT group to appreciate the need of thinking globally while they build locally.

Agility is the need of the hour for business, and an Enterprise Architect should appreciate the same for the IT strategy as well as the infrastructure. The Enterprise Architect needs to ensure that the applications or systems architecture, design and development happen in an agile manner. Agility can create a positive influence on the way business looks about IT, and would make a great difference in the value that IT brings to business.

**Big Picture Thinking**

Enterprise Architect can bring a “big picture thinking” to the IT operations group. Enterprise architects are similar to city planners, providing the roadmaps and regulations that a city uses to manage its growth and provide services to its citizens.

Technical architects and development teams often concentrate on building solutions for the problems at hand with best possible technical solution. Operations team wants to minimize overheads and ensure smooth working of existing systems and networks. These teams focus on their individual goals. They need to figure out what best suits the problem at hand, and what is the most efficient and stable way of doing things.

Enterprise Architect needs to emphasize the holistic view of the scenario to them to enable them to design and execute parts that fit seamlessly into the whole IT landscape.
The Enterprise models are a great tool that an Enterprise Architect can use to spread this big picture thinking into the IT group. He/she can create models and guidelines that the IT group can use so that the IT solutions are in line with the enterprise IT strategy. Enterprise models would consist of business processes, services, applications, and data. This helps reducing data and functionality duplication. It also simplifies the enterprise architecture for the business to understand.

In practice, enterprise models fail when they become obsolete over time as business needs and technology change, and the models are not revisited. This leads to IT group losing focus on the enterprise needs. Adopting agile principles of incremental and iterative development, the Enterprise Architect can work to overcome this problem.

**Business Focus**

An Enterprise Architect should compliment the big picture thinking with a strong sense and focus of business. He/She needs to ensure that the IT strategy, decisions and solutions are in line with the business vision and strategy.

An Enterprise Architect needs to take a deep dive into the business drivers, needs and challenges to come up with models for business architecture. When an Enterprise Architect validates the business architecture with the business leaders, it instills confidence in IT from business side.

An Enterprise Architect needs to constantly be in touch with the organization’s business mission, strategy, processes, and information. This would enable the Enterprise Architect to carve IT strategy that compliments the business needs. The Enterprise Architect needs to carry this IT strategy to the IT group and emphasize importance of the same.

With his business focus, and comprehensive knowledge of IT, the Enterprise Architect is the best person to bring about a business process transformation to be more efficient, as well as IT transformation to support business strategy.

Enterprise Architect should ensure IT visibility of the business strategy, the long term business plan and objectives. This would help IT to add value proactively rather than reactively. It would also groom the IT function to deliver systems not only for tactical reasons, but also in line with a broader strategic vision.

**Simplified and Transparent IT Governance**

To achieve Business-IT Alignment, organizations must make better decisions that take into account both business and IT disciplines. The term ‘Governance’ means establishing processes for decision-making and control; so Business/IT alignment is closely related to Information technology governance.

IT governance deals with the processes and systems by which the IT organization operates. IT Governance body plays a major part in ensuring that the IT decisions taken are not in isolation, but are in line with the big picture. An Enterprise Architect participates in the applications, technology and integration through the governance body. The main objective of IT Governance is to ensure that:

- IT group understands objectives and rationale behind the project it executes
- Governance guidelines are aligned with business and IT strategy
- Execution is smooth (through periodic meetings, setting a process to conduct governance reviews, risk management)
Governance as only rigid controls and never-ending meetings often fails to fulfill its purpose of ensuring consistency, and business alignment with big picture. I would like to propose two things that the Enterprise Architect can practice to maximize the value of IT Governance, Simplification, and Transparency.

**Simplifying Governance**

As the philosophy of the IT world moves to adopt agile principles, people believe in doing the simplest possible thing that works. An Enterprise Architect should extend the same principles into governance, and work towards establishing a process that is easy to adopt through well-established components, frameworks, and services. Making the right thing really simple to do is the key here. If an Enterprise Architect is able to lower the entry barrier to the right things, more people from IT and business groups would be willing to buy in, resulting in better quality IT for business.

IT group would then appreciate and easily adopt the best practices suggested by the governance body. The sheer resistance of the IT groups tones down, to look for ways and options to adoption of recommendations by the governance body.

Governance reviews are also a great tool to impart business sense to the IT group. Enterprise Architect can use this tool effectively to ensure that the IT group appreciates the business compulsions, business vision and needs. The Enterprise Architect can also emphasize on the big picture thinking so as to internalize and institutionalize the same in the IT group during architecting, designing or developing a solution.

**Transparency**

Transparency is one major characteristic that an Enterprise Architect should bring to IT Governance. When an Enterprise Architect is able to demonstrate transparent IT policies, decisions and guidelines to the business, it gets a better buy in. Clarifying the purpose of IT decisions and directions makes those more acceptable to both the business as well as the IT group.
Effective Communication and Networking
The Enterprise Architect often closely collaborates with a variety of people including analysts, architects, developers, operators, administrators along with project managers and business leads.

Each of these people has a different mindset, requirements and challenges. An Enterprise Architect needs to use his/her leadership skills along with effective communication and collaboration knowledge to ensure synergy among the group.

Along with the technology know-how, effective communication enhances the impact that an Enterprise Architect can have on the business as well as IT groups. The way Enterprise Architect conveys the policies, decisions and guidelines is as important as the matter itself to ensure to get a buy-in of people from varied background.

Enterprise Architects can also use their networking skills to connect people, and ensure that there is a good rapport. Creating a level of trust often results in good-will, and helps business and IT to come together to fulfill the objectives of the enterprise.

Enterprise Architect Offering @ TCS
TCS understands the value an Enterprise Architect can bring in to an organization in synergizing the IT and the business together. From aligning IT with business needs to an end-to-end strategy for transforming an enterprise, TCS has the world-class experience and expertise that an organization needs. TCS’s Global Consulting Practice (GCP) has a specialized part of IT consulting called IT Architecture Consulting, ITAC.

IT Architecture Consulting (ITAC)
This TCS practice helps create strategies that transform enterprises by aligning IT strategy and priorities to their business objectives. TCS delivers practical advice and fast-performing solutions in various related areas to addresses client's challenge of “Using IT strategically to sustain competitive edge, ensuring that IT priorities effectively support business strategy”
IT Architecture Consulting [2] helps customers through transformation by helping them assess, define, implement, govern and manage their enterprise and domain architectures. GCP IT Architecture Consulting (ITAC), guides business through definition, deployment and governance of their enterprise and domain architecture, while systematically analyzing the change drivers to connect the business requirement to adequate IT capabilities. GCP ITAC's holistic approach to IT Architecture encompasses multiple dimensions – Business, Information, Application, Technical, Implementation and Operating.

Summary
For a high performing IT organization within the Enterprise, an Enterprise Architect is an essential element. An Enterprise Architect acts as a bridge between the IT and the business. This paper highlights five tools that the Enterprise Architect can use to build this bridge i.e. Agility, Big Picture Thinking, Business Focus, Simplified and Transparent IT Governance and Effective Communication and Networking.

Enterprise Architects can maximize IT benefits for the business by bringing in the agile principles, transparency, and simplified governance structure within the IT organization. They can help IT to stay on track using their business focus and big picture thinking. Effective communication with both the business as well as IT groups helps filling in the gap.

Enterprise Architect can thus ensure that the IT investments are directly linked to strategic business objectives, and business drives the major IT initiatives. He/she can thus really make IT as an investment center rather than a cost center. Enterprise Architect has the potential to think more than alignment for Business IT, and take these towards convergence.

References
About HiTech Industry Solution Unit
TCS’ HiTech industry Solutions Unit provides optimal, customized, and comprehensive solutions across varied High Tech industry segments: Computer Platform and Services Companies, Software Firms, Electronics and Semiconductor Companies, and Professional Services Firms (Legal, HR, Tax & Accounting and Consulting & Advisory/Analyst firms).

Building on its vast experience in engineering, business process transformation, innovation and IT solutions, TCS offers a comprehensive portfolio of services that maximize growth, manage risk, and reduce costs. The TCS HiTech Industry Solution Unit partners with High Tech enterprises to provide end-to-end solutions which help realize operational excellence, innovation and greater profitability.

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A part of the Tata Group, India’s largest industrial conglomerate, TCS has over 174,000 of the world’s best trained IT consultants in 42 countries. The Company generated consolidated revenues of over US $6.3 billion for fiscal year ended 31 March 2010 and is listed on the National Stock Exchange and Bombay Stock Exchange in India. For more information, visit us at www.tcs.com

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