

# DATA-DRIVEN ENTERPRISE ARCHITECTURE

STA Group's Enterprise Architects, with decades of experience, are Business-Technologists who understand the language of business and translate its strategic intent into enterprise architecture designs with a unique *Data-Driven* approach that leads to more effective business transformations and a competitive advantage.

## OVERVIEW

The practice of Enterprise Architecture (EA) began as an effective way to develop and execute successfully on an organizations business and information technology (IT) strategies. All too often, EA's effectiveness has been called into question, most notably when the realization of the enterprise architecture does not fully support the enablement of leadership's strategic goals and objectives. The absence of recognizing this critical lapse early on can be traced back to deficiencies in the **shared information strategy** between the business, IT and EA. A shared information strategy refers to an established approach for continuous collaboration and sharing of related strategic planning information for the purposes of aligning business and IT roadmaps. This situation generally occurs because the business and IT develop their respective strategies separately<sup>1</sup> and often not with the same working knowledge of the business's comprehensive goals, objectives and issues.

Addressing this issue requires a different approach, one of which brings the business, IT and EA together in a single and continuous collaboration of strategy development and execution. This approach delivers what STA Group calls '**Enterprise Strategy**.' Enterprise Strategy encompasses and intertwines business and IT strategy to help businesses comprehend and influence their decisions. The key to the enablement of STA Group's approach to Enterprise Strategy is the incorporation of analytics in the interpretation and gaining of insights into various decision made by business and IT.

## THE CURRENT APPROACH / TODAY'S CHALLENGE

*Shared information strategy* properly aligned to a common business and technology context is critical in the development, execution and realization of business and IT strategies. In today's organizations, large volumes of sharable information are being made available through various internal/external sources but aren't integrated with other business areas. This information is collected and/or stewarded by multiple business and IT areas, enabling its availability but not necessarily its integration with other business areas. This approach has an insidious impact on a company's operations and the perceived value of its business and IT architectures.

Often enterprise architects, their sponsors, and stakeholders make architecture related decisions based on "siloes" information which is created and/or collected throughout the organization. This critical lapse yields sub-optimal architecture decisions and a shortage of strategic clarity. This in turn produces subjective interpretations of business intent and technology needs that leads to costly rework and creates barriers to leveraging emerging technology. Taken collectively, these issues introduce the risk of the business losing out on opportunities in the market place.

**Figure-1** shows the typical approach an organization uses to develop their enterprise architecture.

C-Level executives provide the ultimate direction for their organization. Their decisions are documented and communicated to their senior leadership team, who in-turn define how their respective business areas need to change in order for the business strategy's goals and objectives are to be realized.

1. C-Level executives and senior leadership defines one or more business strategies based on the goals and desired outcomes for their business units
2. Senior IT leadership defines their strategy based on the perceived business and IT needs along with their technology evolution roadmap.
3. Decisions by senior IT leadership feed into the overall IT Strategy
4. Enterprise Architecture is responsible for understanding the business strategy and translating it into an IT strategy through the use of architectural principles, models, roadmaps, and investment decisions.

There are several shortfalls with this approach:

1. The interpretation of strategic information provided by C-level executives is not similarly understood by individual business units.
2. Individual business units will tend to translate the C-level strategy so that it best benefits the development of their unit-level business plans. On their own, these unit plans may represent an appropriate direction for the business units. But, when these business unit plans are aligned collectively, they rarely embody a consistent business or technology direction.
3. The decisions made by senior leadership are often consumed and acted upon by individual business areas. This is done before they can be aligned and designed into a holistic strategy with supporting business and IT architectures. Aside from being labor-intensive, this effort inherently leads to subjective interpretations of strategic direction and intent. This deteriorates the quality and accuracy of *shared information strategy* resulting in misaligned and consequently dysfunctional business and IT architectures.
4. The corresponding IT strategy can and often is defined separately from business. The scope of IT strategies can differ from the business strategy and may not include longer term technology roadmaps. When these roadmaps do not take advantage of longer term business or IT strategy, they constrain the business from taking advantage of opportunities involving new technology.

Despite these shortfalls, Enterprise Architecture's role remains to coalesce the gaps between C-level executives and their business/technology strategists to derive more competitive and unique decisions, goals and objectives. Given the exponential growth of data inside today's organizations EA's task of continuously mending these disconnects becomes increasingly more difficult. Today's fast-paced, technology-driven environments are already exposing these limits and creating a new set of challenges for business and IT.

**FIGURE 1**



