

2 section two

Is Enterprise Architecture an Effective Strategy to Improving Enterprise Performance Effectiveness?



Enterprise architecture (EA) enables enterprise leaders and managers to understand current enterprise capabilities and constraints, desired future capabilities, and the strategies needed to improve enterprise performance effectiveness. EA is a maturing standard in the United States government organisations and is used in many private industry organisations to realise dramatic performance effectiveness outcomes. The author presents EA as an approach to improve enterprise performance capabilities, describes the benefits of an actionable EA, discusses performance outcomes government organisations realised from effective EA capabilities, and introduces the Transformational Leadership and Enterprise Management Integration Framework that prescribes the relationship between transformational leadership, governance, portfolio management, capital planning and investment control activities. Further, the author identifies EA adoption challenges in government organisations.

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1 Introduction

Many United States (U.S.) government departments and agencies (organisations) face the challenge to improve their performance effectiveness. Enterprise architecture (EA) is a management tool that enables government organisations to improve their performance effectiveness. An EA describes current enterprise capabilities and constraints, desired enterprise capabilities, and plans to transition from current to the desired capabilities. Many government organisations are using EAs to improve enterprise performance effectiveness.

2 Enterprise Architecture

An EA is a description of the organisation's current capabilities and constraints, a description of the organisation's desired capabilities, and a description of the plans to enable the organisation to transition from the current capabilities to the desired ones. The U.S. Office of Management and Budget (OMB) (2006) defined an EA as "A management practice for aligning resources to improve business performance and help agencies better execute their core missions. An EA describes the current and future state of the agency, and lays out a plan for transitioning from the current state to the desired future state" (p. A-1). Enterprises can be adequately described by answering six business interrogative questions and the actionable EA answers these questions. These questions involve the who, what, when, where, how, and why regarding the enterprise key business processes. In other words, organisational

leaders and senior managers can gain insight into enterprise capabilities by determining what the organisation's key business processes are and understanding who and what human, material, and technology resources are used to perform these processes, when the processes are performed, where the processes are performed, how the processes are performed, and why the processes are performed. By answering these questions organisational leaders and senior managers gain critical insight into enterprise capabilities and constraints. Highly effective organisations use EA to answer these questions and to develop strategies to improve enterprise performance effectiveness.

Actionable EAs provide enterprise leaders and senior managers critical insight into enterprise strategic capabilities and constraints. This insight represents the organisation's "As-Is" state. As a result of understanding the "As-Is" state these leaders and managers can determine if the current capabilities and supporting resources enable the organisation to meet enterprise performance goals and objectives. By identifying current enterprise performance effectiveness organisational leaders and senior manager can articulate desired enterprise capabilities. The desired capabilities represent the organisation's "To-Be" state. Understanding the "As-Is" and "To-Be" states enable organisational leaders and senior managers to plan for investments to realise desired performance effectiveness. There are few, if any, management approaches that provide this insight to organisational leaders and senior managers. Organisational leaders and senior managers that adopt and embrace an effective EA capability can dramatically improve enterprise performance effectiveness and efficiency.

3 EA Roots in United States Government Organisations

The U.S. government organisations historically focused their EA programmes, strategies, and actions on information technology (IT). The U.S. Senate Computer Chaos study (1994) found that billions of dollars were being wasted from antiquated and inefficient computer systems and found that government computer purchase planning efforts were not as effective. This report gained traction in the U.S. Congress and heavily influenced what is now known as the Clinger-Cohen Act of 1996 (1996) that required government organisations to develop an "information technology architecture". OMB refined this definition in 2002 by replacing the term IT architecture with the term "enterprise architecture". OMB's renaming of the term acknowledged that EA was a strategic management tool that can be used to describe enterprise capabilities and constraints rather than exclusively describing the IT capabilities that spanned the enterprise. However, many U.S. government organisational leaders and managers continue to view EA from an IT perspective and miss significant opportunities to develop and use EAs to improve enterprise performance effectiveness.

4 EA Benefits

An actionable EA is an EA from which organisational leaders and senior managers can take strategic actions. Among the many benefits related to an effective EA capability are enterprise planning, decision-making, and optimisation of key enterprise business processes. Implementing an effective EA capability enabled the U.S. Food and Drug Administration (FDA) to improve its performance effectiveness and efficiency through improved enterprise planning. The FDA (2005) used EA to align its business activities and capital planning and investment control processes and eliminate unnecessary duplication of resource investments and efforts. According to the FDA, "EA continues to be a part of FDA's strategic solution to standardise its business processes and consolidate its IT infrastructure" (p. 4).

Informed organisational decision-making is a hallmark of an actionable EA capability. The EA provides organisational leaders and senior managers information sufficient to make informed and defensible enterprise decisions. The U.S. Department of Labor (DOL) implemented an actionable EA in 2003. Improving its ability to make enterprise decisions based on an effective EA contributed significantly to DOL earning Green ratings on each of the President's Management Agenda (PMA) scorecard five evaluative categories from March 2005 - March 2007.

Optimising key business processes is an EA-enabled organisational benefit. As a result of analysing its current and desired capabilities, The U.S. Navy and Marine Corps improved their warfighting mission effectiveness capability by optimise key enterprise IT acquisition service business processes. The Navy and Marine Corps implemented the Navy and Marine Corps Intranet (NMCI) initiative and standardised its IT application platform, eliminated unnecessary duplication of IT applications, and tracked enterprise IT application investments. Although these are only a few examples of EA-enabled outcomes, many other government organisations are using EA to improve their performance effectiveness and efficiency. The Transformational Leadership and Enterprise Management Integration Framework situates EA within the context of enterprise management.

5 Transformational Leadership and Enterprise Management Integration Framework

The Transformational Leadership and Enterprise Management Integration Framework situates enterprise architecture within the context of enterprise management activities and demonstrates the critical importance of EA in enabling enterprise leaders and senior managers to plan, make decisions and optimise key enterprise business processes. Figure 1, Transformational Leadership and Enterprise Management Integration Framework, graphically prescribes the relationship that exists between transformational leadership and enterprise management activities.

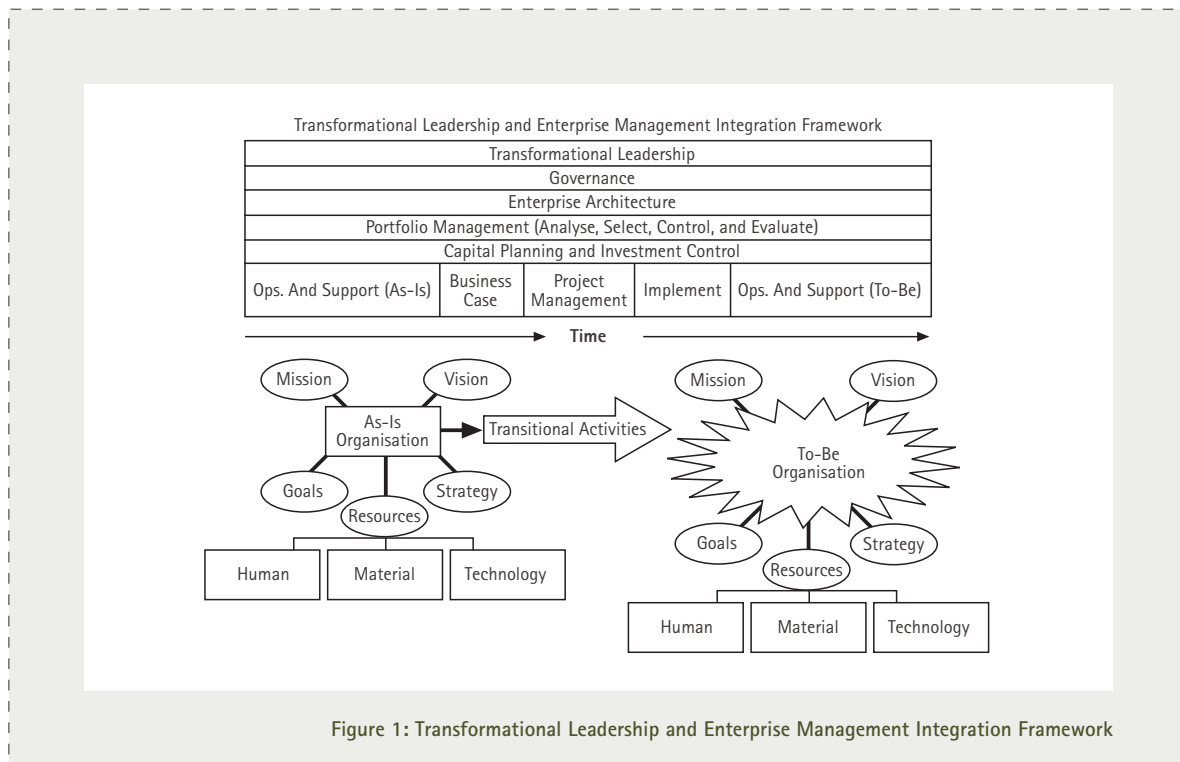


Figure 1: Transformational Leadership and Enterprise Management Integration Framework

Transformational leadership enables organisations to realise their long-term performance effectiveness goals and objectives. The transformational leader provides vision, integrity, communication, inspiration, and empowerment to enable enterprise members to achieve the enterprise vision, goals, and objectives. Each enterprise has a mission or business objective along with its vision, goals, and objectives. Although many enterprises might explicitly or tacitly state their vision, goals, and strategy, each enterprise has and acts on these elements.

The transformational leader establishes a clear, compelling, and consistent enterprise vision and uses every available means to communicate this to enterprise members and stakeholders through one-on-one meetings, small group meetings, town hall meetings, staff meetings, web site portals with frequently asked question areas, and any other creative, innovative, and effective means. Critical to the transformational leader's effectiveness is ensuring their actions are consistent with the organisation's vision, goals, and objectives. In other words, transformational leaders walk the talk. These leaders inspire organisational members to action to realise the organisation's vision, goals, and objectives. They provide financial, infrastructure, human resource, and moral support to empower enterprise members to accomplish the vision.

The presence of transformational leadership enables the organisation to successfully implement the remaining enterprise management framework components and ultimately to progress toward meeting the organisation's long-term performance effectiveness expectations. The absence of transformational leadership constrains many government organisations from effective enterprise management and, by extension, from realising long-term enterprise performance effectiveness goals and objectives.

Key enterprise management functions include governance, enterprise architecture, portfolio management, and capital planning and investment control (CPIC). Governance involves establishing the rules, roles, and responsibilities for enterprise decision-making. The framework depicts enterprise governance as the institutional process by which the enterprise makes decisions. As transformational leadership enables governance, governance enables the organisation to develop, implement, use, and manage an actionable EA capability. As discussed earlier, EA describes the enterprise "As-Is" and "To-Be" states and the transition plan. The EA serves as a revealing information base that enables the enterprise portfolio management process.

Portfolio management involves making decisions regarding enterprise resource investments. Portfolio management is an enterprise decision-making function and is informed by the governance process. Enterprise portfolio management then informs the enterprise CPIC process. The CPIC process is the process by which the organisation makes enterprise investments determined by the portfolio management process. Organisations develop business cases to substantiate enterprise investments, manage investments as projects and implement new enterprise capabilities to improve overall performance effectiveness. The framework prescribes transformational leadership as critical to enabling government organisations to meet their current business goals and objectives and successfully transition to the desired capabilities. The U.S. Department of Labor incorporated transformational leadership, governance, and EA to dramatically improve its performance effectiveness.

6 U.S. Government Organisation EA-Enabled Outcomes

The President's Management Agenda (PMA) is a key instrument through which government organisational performance effectiveness is measured. U.S. government departments and agencies (organisations) struggle to fully meet the government's performance effectiveness expectations. The U.S. Executive Office of the President established the President's Management Agenda [PMA] in 2001 as a strategic initiative for "improving the management of the Federal government. It focuses on five areas of management weakness across the government where improvements and the most progress can be made" (para. 1). The PMA desired outcome is to improve government organisation performance effectiveness as evaluated through enterprise Human Capital, Competitive Sourcing, Financial Performance, Expanded Electronic Government, and Budget and Performance Integration management. (Executive Office of the President, 2001).

OMB evaluates each government organisation quarterly to determine the organisation's management capability in each area. OMB evaluates the organisation's EA development, use, and applicable outcomes as a component of the PMA evaluation. OMB evaluates government organisations in the five areas and assigns a colour-coded score of Green, Yellow, or Red for each of the evaluative areas for each organisation. A score of Green represents success in meeting the criteria for the evaluative area, Yellow represents mixed results, and Red represents Unsatisfactory performance. OMB publishes the quarterly PMA scorecard results on its website.

The DOL earned Green ratings in each evaluative area in the June 2005 report and earned Green ratings in each evaluative area in each subsequent report through to the 31 March 2007 report. The DOL was the single government organisation to earn Green in all five PMA evaluative areas until the 31 December 2006 report, when the State Department earned Green ratings in all five evaluative areas.

In addition to the PMA scorecard evaluation outcomes, the DOL realised additional significant outcomes in recent years. The DOL earned six consecutive clean audit opinions through 2006, four U.S. President's Quality Awards through 2005, an unprecedented four consecutive years as the number one ranked government organisation on George Mason University's annual government performance report, and is one of only four government organisations to earn Stage 3 on the Government Accountability Office's (GAO) 2006 Enterprise Architecture Management Maturity Model assessment. The DOL stated that strong organisational leadership, governance, and EA were critical in enabling the department to realise these outcomes. If the DOL realised these outcomes by embracing transformational leadership, governance, and EA, what factors might be constraining other government organisations from realising similar performance effectiveness outcomes?

7 Factors Constraining Government Organisational EA Adoption

If the DOL leveraged transformational leadership, effective governance, and EA to realise significant performance effectiveness outcomes, can other government organisations leverage on these enablers to improve their overall performance effectiveness? The U.S. GAO (2006) identified organisational parochialism and cultural resistance, inadequate human capital and funding resources, and the lack of top management understanding as examples of factors constraining government organisations from realising the benefits from an actionable EA capability. Other factors identified by the U.S. National Defense University students include organisational complexity, ineffective organisational leadership, over-emphasis on short-term organisational performance effectiveness outcomes and the lack of organisational understanding regarding the EA value proposition.

8 Conclusion

EA is an effective strategy for improving enterprise performance effectiveness. An actionable EA enables enterprise leaders and managers to gain insight regarding enterprise capabilities and constraints, enables these leaders to craft clear and compelling visions regarding desired capabilities, and further enables these leaders to develop strategies to transition from current to desired enterprise capabilities. An effective EA capability enables organisations to make enterprise plans, make enterprise decisions, and to optimise enterprise business processes, where applicable. The Transformational Leadership and Enterprise Management Integration Framework emphasises transformational leadership to enabling government organisations to relate enterprise governance, EA, portfolio management, and capital planning and investment control functions. The U.S. DOL is leveraging transformational leadership, strong governance, and EA to produce dramatic performance effectiveness outcomes. Many government organisations are constrained from developing and using effective EA capabilities by factors such as organisation cultural resistance, inadequate human capital, funding resources and lack of top management understanding. Transformational leadership can enable government organisations to address these challenges.

9 References

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