Case Study: Technology Investment Control by Enterprise Architecture (EA) for an Optimized Technology Strategy

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# **DOCUMENT CONTENT**





Interprise architecture and technology leaders can use this case study to learn how solutions by stc controls its enterprise technical investments to minimize investments' redundancy, complexity and information silos, in addition to associated business risks.

#### **OVERVIEW**

Since the establishment of the Enterprise Architecture & Data department at solutions by stc in 2020, the idea of controlling the technical and software investments existed with a high priority. With the support of the enterprise technology and innovation sector and its top management, all digital investments are controlled on an enterprise level with a high compliance and daily extensive governance oversight by the department. Solutions by stc's Enterprise Resource Planning (ERP) was selected to reach our intended value and be part of the existing procurement process.

### CHALLENGE

Before the beginning of the Enterprise & Data department in the company, there was no strategy and process to control technical investments. Business units were able to raise a request to procure a new application without assessing the availability of an internal technical capability within the company. The phrase "Reuse before Procure" was absent as there was an absence of a dedicated team to assess the investments on an enterprise level with an unbiased intention. Duplications of technical capabilities were there, in addition to security regulation breaches, as there were no Enterprise Architecture Principles to be complied with.



## **BUSINESS CONTEXT**

To eliminate any duplication of internal capabilities and waste of yearly spending, the Enterprise Architecture & Data department in Solutions by stc started to control the technological investments during early 2020 starting immediately from the enterprise level, to hit its optimum value.

This process describes the set of activities in which the investment request is going through in order to be assessed and governed by the Enterprise Architecture team:

- 1. The process starts by business units raising a technical investment request through ERP.
- 2. The Enterprise Architecture & Data department, represented by the Enterprise Architecture Governance unit, receives the request and starts analyzing it.
- 3. The Enterprise Architecture Governance unit will receive supporting documents to complete the analysis, such as:
  - Pervious and current Architecture Assessment Enterprise Landscapes.
  - Current initiative roadmaps and recommended action plans (an output of the Architecture Assessment exercises performed in the Enterprise Architecture & Data department).
  - Business and Technical Requirement Document (BRD).
  - Related business processes and workflows.
- 4. EA governance will align with the EA principles during the analysis process.
- 5. The EA Governance unit may return the request for additional information or requesting further supporting documents.
- 6. For duplicated capabilities, EA governance will reject the investment and communicate with the business requestor on the reasons.
- 7. For missing capabilities and need for new software, EA governance will direct the investment to the Business and Technology Architecture unit to perform a high-level assessment or a market research (based on the received business requirements).
- 8. Involvement of Enterprise Architecture ends when the request is approved or rejected by the team.

The following cases are addressed within the scope of Enterprise Architecture and Data control:

- Request part of a current architecture assessment initiative.
- Request part of a past architecture assessment initiative.
- New software or tool investment (e.g. investing in a knowledge management tool).
- Renewal of licenses and technical assets.

Key points to consider during assessment of the technical investment:

- Any request out of the scope of the above will be redirected to the relevant business units (e.g. learning and consultancy).
- Any request in relation to breaching cyber security regulations, or one that requires involvement of the internal cybersecurity or governance risk and compliance (GRC) units; it will be redirected to the relevant business unit.



The following diagram illustrates the process at a high level:



Note: In case of digital investments that show duplication of internal capabilities, Enterprise Architecture will reject the request though ERP (same workflow) and perform and assessment to customize an internal application to cover the requirements.

### **SOLUTIONS HIGHLIGHTS**

- Empower the Enterprise Architecture department to control investments on the enterprise level to reach the intended value and ensure an effective technology strategy and alignment with all initiatives between business units and the information technology unit.
- Link the Enterprise Architecture process with the existing procurement business process for a seamless enterprise workflow.
- Add the assessment of technical investments as one of the Enterprise Architecture yearly mandates.
- Control technological investments through an existing system, such as order management or portfolio management solutions which are fully operational. In solutions by stc's case, the Enterprise Resource Planning (ERP) platform has been used to centralize all requests and streamline the investment process with the procurement business process.
- Establishing or dedicating the control to the Enterprise Architecture Governance team or a lead within the department to make the decision, either approve or reject received requests, and holds the responsibility of aligning with all key stakeholders internally within the department, and with other departments within the organization.
- Enterprise Architecture controls certain investment use cases, which have a direct impact on the technology strategy to ensure optimum efficiency and timely response to all enterprise requests.

### RESULTS

- All enterprise investments are in compliance with standards and streamlined with a sole business process.
- All enterprise investments are in compliance with Enterprise Architecture standards and principles.
- Higher cybersecurity compliance for new software investments.
- Increased cost savings and higher Return on Investment (ROI).



### RECOMMENDATION

Enterprise architecture and technology innovation leaders interested in strategy driven investments, effective compliance with organization's standards and a higher Return of Investment (ROI) ought to empower their Enterprise Architecture units to control investments for a higher business impact. There are more complex approaches to control investments, but it is always best to start simple and improve along the way to optimum maturity and results.

There is a critical point to be considered during the practice of technical investments control – Enterprise Architects and teams should invest in yearly awareness activities before the establishment and during the practice of Enterprise Architecture.

### **ABOUT THIS RESEARCH**

This use case is based on a real situation practiced by the Enterprise Architecture and Data department within Solutions by stc.