OrbusINFINITY

Total Economic Impact of an EA Tool

OrbusSoftware

Contents

00

Introduction

One of the most complex aspects of Enterprise Architecture is how to justify the return on investment (ROI) of investing in an Enterprise Architecture tool, and what would the total economic impact of such an investment be.

Many Enterprise Architecture teams have been faced with a bad reputation over the years due to slow response times, which in turn has resulted in many cases to a loss of trust in the credibility of the insights provided, as well as the architects themselves.

This poor perception is however wrongly placed at the door of EA practitioners when accountability and responsibility for the integrity of organizational artifacts is often spurned by senior management, and when coupled to ambiguous strategy formulation the picture becomes clear as to why there is a scarcity of available information to respond to the requests in ever shortening timeframes.

Populating an EA tool requires organizational collaboration across silos and a multi-disciplinary team to discern between fact and fiction. Domain architects and business subject matter experts will be required to generate a cohesive representation of the organization and annotate the financial cost of support structures to each business capability. The creation of the current “as-is” organizational views and existing cost structures will need to be referenced to financial accounting as a factual source to ensure that all costs have been addressed during the exercise. The results of this exercise will be embellished with the decisions made during strategy and planning which addressed the strategic foundation, ambition, strategy, and programme / project execution envisaged by the executive team to formulate a desired future state.

Most organizations have between 19-25 capabilities, but only 3-4 may be targeted for change as a result of the change in strategy.

00

The next step of the analysis is to identify the changes required to organizational capabilities in order to meet the strategic intent of the organization, a thorough analysis of the motivational model will provide invaluable information as to the direction the organization is planning to take, and the objectives of such a change. Most organizations have between 19-25 capabilities, but only 3-4 may be targeted for change as a result of the change in strategy.

The first part of addressing the impacted capabilities is to assess the maturity of these capabilities, and record SME insights as to areas of required improvement in the context of the goals and objectives of the organization. This exercise will provide the organization with the required insights as to the viability of the strategy and planning exercise, and the in-depth detail of total economic impact of such a strategy. The SME insights should be clustered into the following architecture domains:

STRATEGY

PRODUCTS AND SERVICES

ORGANIZATION

PROCESS

RISK

DATA & INFORMATION

TECHNOLOGY

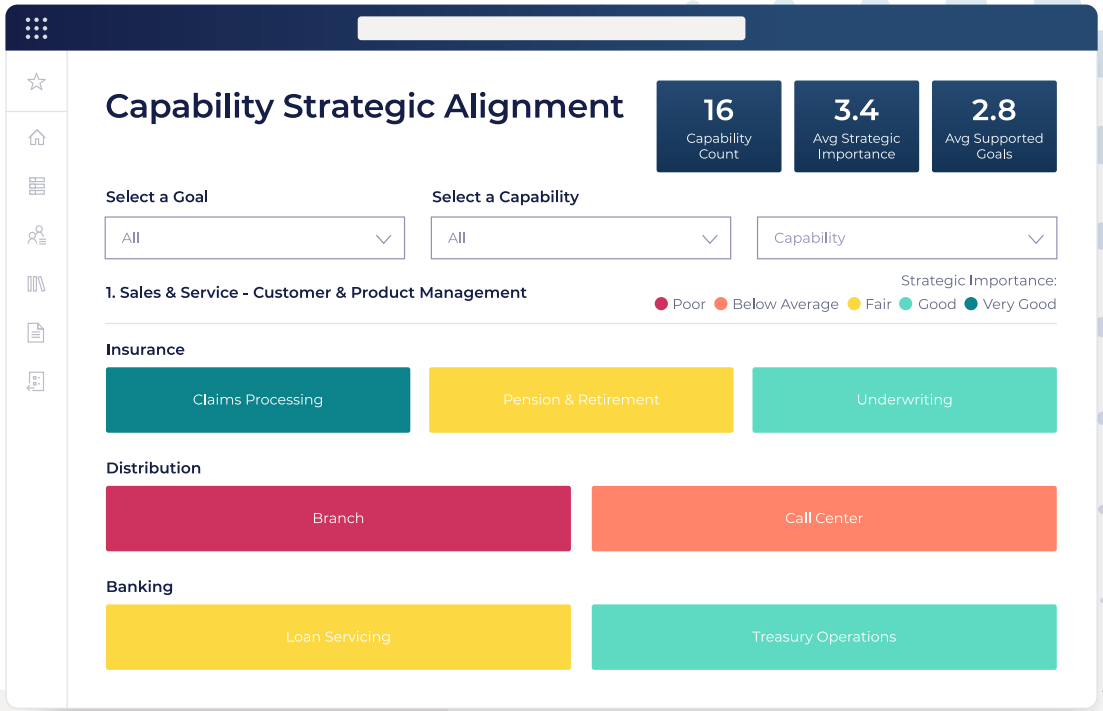
01

Strategy

One of the indicators that investors use when assessing company viability is the “cost-to-income ratio” of the target company. In accounting, the cost-to-income ratio measures the cost of running a business compared to its operating income.

The lower the cost-to-income ratio the more profitable the company becomes. It is a useful metric for gauging the efficiency of the organization’s operations.

So how do we calculate “cost-to income ratio”?



$$\frac{\text{Operating Expenses}}{\text{Operating Income}} = \text{Cost-to-income ratio}$$

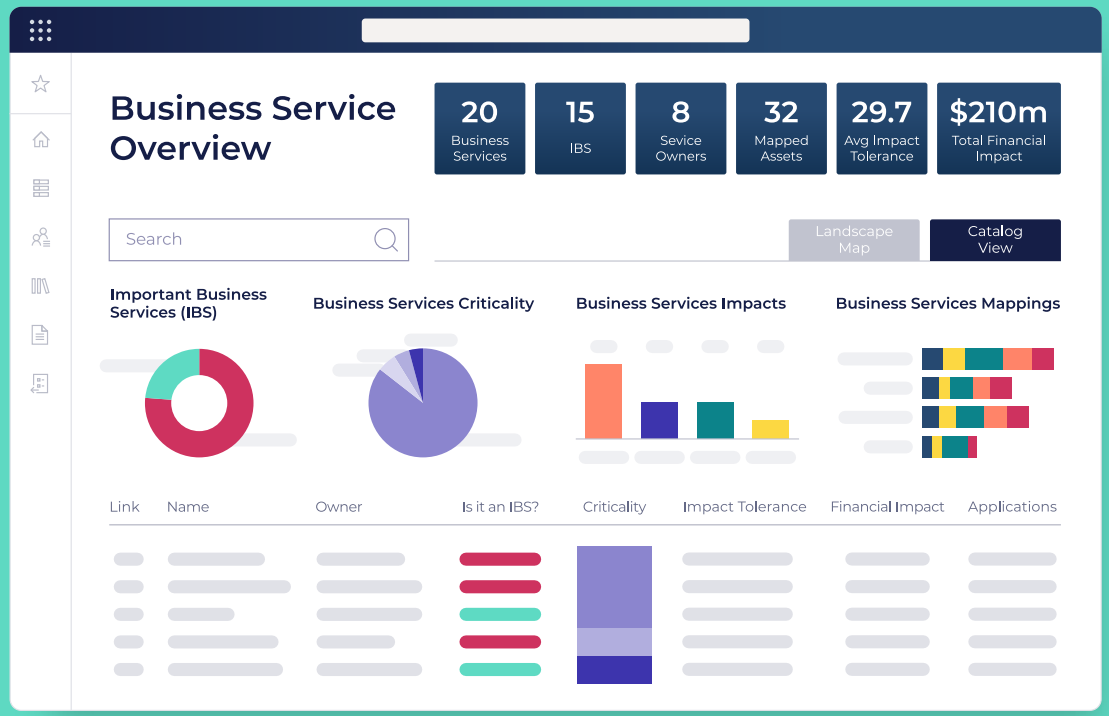
It is therefore imperative that all aspects of the organization are assessed, and appropriate costing information made available for review. Controlled investments in technology and infrastructure must be governed in a suitable manner so as to ensure that client offerings support remains beneficial to sales objectives in a given market. Excessive investment in technology may price your market offerings out of any given marketplace and hamper revenue generation.

Excessive investment in technology may price your market offerings out of any given marketplace and hamper revenue generation.

02

Products and Services

Products and Services are normally referred to by means of Family, Category, and Instruments in a particular market, and for larger organizations one can add Location to this categorization.



As a rule of thumb product transactional data and profitability can be added to each instrument as attributes, and facilitate multi-layered reporting in this domain.

Services on the other hand are not market-related and encompass business areas of expertise which often reflect ecosystem offerings for external parties. Items such as HR payroll, risk management, tax advisory form part of a value proposition in this area.

This domain is responsible for revenue enhancements, and should be a promoter of innovation and solutions which enhance the customer experience to drive growth in transactional and fee based services.

This domain is responsible for revenue enhancements, and should be a promoter of innovation and solutions.

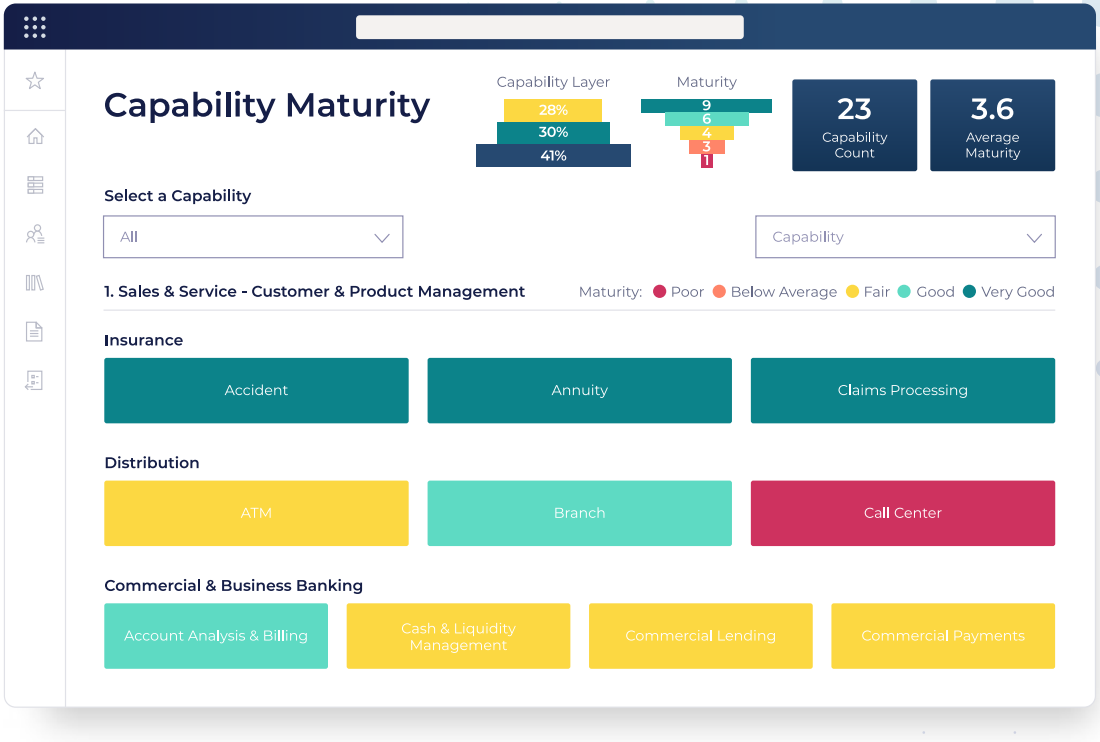
03

Organization

It does appear that much of the responsibility of BPAs can overlap with the responsibility of EAs. However, they both come at it from a different viewpoint with different skill sets.

The ability to annotate each capability with the maturity level will ensure that when executives make decisions in respect of centralization, decentralization or a hybrid organizational design, the relevant skills and resources are available to fulfil this mandate. This is not to say that all centralization will be housed at an organizational head office, but rather at a location with the highest capability maturity.

Centralised services can be a catalyst for addressing skills shortages, but highly skilled resources will required to fill these positions.



The ability to annotate each capability with the maturity level will ensure that when executives make decisions... the relevant skills and resources are available to fulfil this mandate.

04

Process

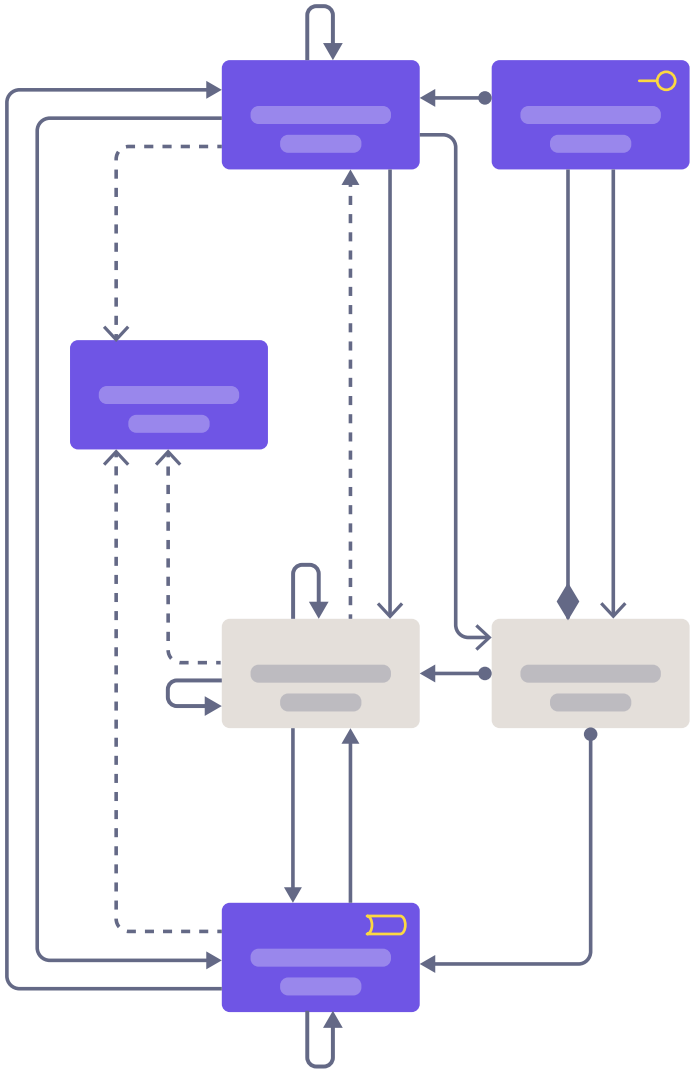
Processes are a critical component for automation activities across the organization, and as such are an integral part of digital transformation efforts in each organization.

Processes should be devolved to a task level, and linked to other content meta model domain elements. When a process is triggered it generates potential risk for the organization and changes to a process should be assessed for reputational, financial, compliance, technical, supplier or operational risk. Business Process Automation (BPA) should be considered to remove the human element from transactional processing and create the ability to expand processing capabilities exponentially.

A level 4 process representation can be utilised for resource on-boarding, employee training and procedural manuals and guidelines. The ability to produce in-house training materials will equate to huge saving on external courses and generate a common understanding of cross-divisional process artefact in an end-to-end process.

A lean approach to processes could free up process resources to undertake more meaningful organizational positions and fill any potential skills gaps. Hence, reducing the need to employ external resources for skills replenishment.

The ability to address the same task which is replicated in different silos by means of an organizational service will reduce a common usage of technology, scarce skills, and related infrastructure, with the accompanying cost savings.

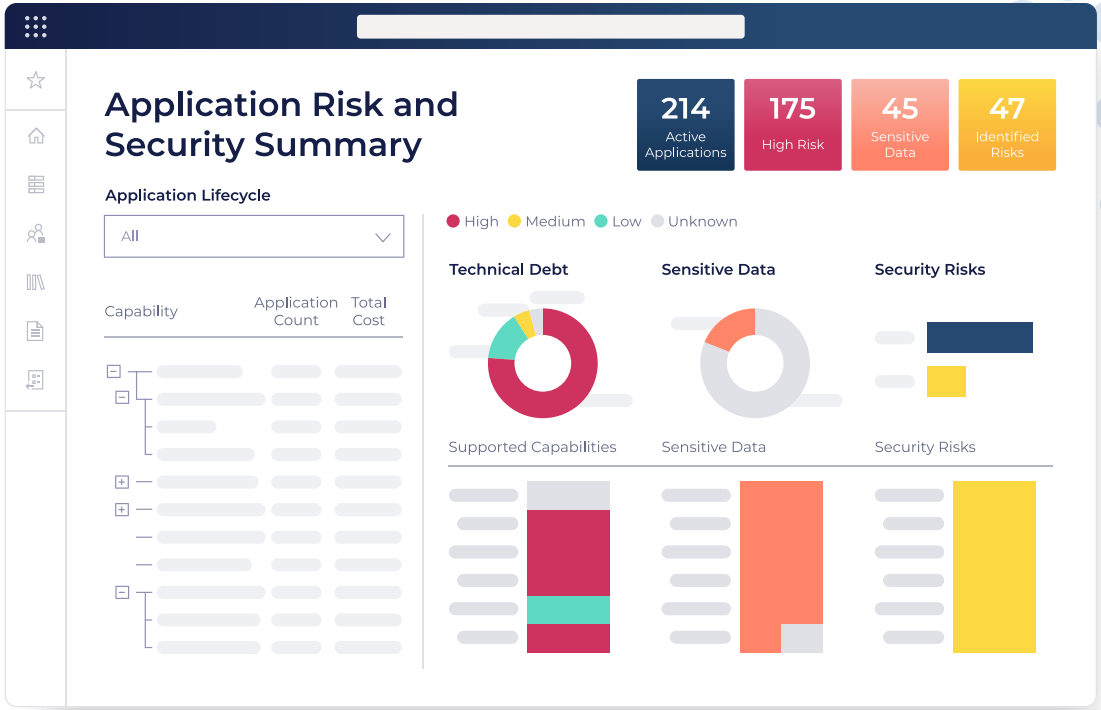


When a process is triggered it generates potential risk for the organization.

05

Risk

The ability to service a customer request in an agreed manner can generate reputational risk which in turn could result in financial implications for an organization, either customers will close accounts or if the inability to serve the client is deemed to be non-compliant with laid down laws or regulations could result in large fines being levied.



External supplier risk can impact an organizations ability to operate. If we look at the building tensions between China and Taiwan we may be faced with an inability to access computer chip manufacturers and this in turn will impact manufacturing of smartphones, artificial intelligence and high-performance computing. Over reliance on vendors in conflict areas across the globe could also result in an organization being unable to remain competitive in a digital market place with operations being unable to process large transactional volumes.

Outsourcing of functions can also expose the organization to cybersecurity risks, and pen-testing should become a pre-requisite for any new development, network or web application to identify vulnerabilities which a hacker could exploit. However that being said, competent outsourcing at a reduced price will contribute to a reduction in operating expenses.

Outsourcing of functions can expose the organization to cybersecurity risks.

06

Data and Information

Architects are responsible to enable the ability to create, read, update, and delete data in its raw state. Information on the other hand is organised data presented in the requestors context and format.

Data Architecture represents integration of value specifications for qualitative and quantitative variables and their alignment with business architecture and strategy.

Information Architecture is where usable data is constructed, designed or arranged in a fashion most useful or empirically holistic to the users of this data.

An example of these two aspects are seen at the task level of a given process, where controls are deployed to ensure the effective and efficient throughput of data from a business perspective. Data architecture would then document transaction volumes, processing time per transaction, data type, data storage location etc.

Information Architecture will consolidate data artefacts which are required to deliver a given report in a particular context to meet the requestors requirements. The categorization of data types will need to be agreed as part of strategy and planning to ensure the availability of such data objects.

Cloud computing is generally an option to reduce data costs and improve security based on 4 types of offerings.

Private Cloud

Private Exposure Only.

Public Cloud

Public Access Via the Web.

Hybrid Cloud

Combination of Private and Public Cloud, with the ability to privatize sensitive apps.

Multi-Cloud

Refers to more than a single public cloud provider along with a private cloud.

Cost savings are achieved by migrating from a server based storage to the cloud, and this new environment will scale up and down due to variations in required storage capacity. Prices will adjust based on storage requirements and usage, but cloud migration is seen as a cost effective alternative to server farms.

07

Technology

IT Portfolio Management (ITPM) has been around for approximately 50 years, and over time has evolved to become a management system that develops, maintains, monitors, and manages inspection, testing, and preventive maintenance activities.

Modern day IT constitutes the largest portion of organizational operating costs, and ITPM therefore can play an important role in ensuring that the portfolio of applications support business activities in a cost effective manner. By collaborating with the other domain architects it is now possible to produce a plethora of views to assist with managements understanding of the contribution of IT to the overall success of an organization.

Many organizations address **management of the IT portfolio** by means of platforms, examples of which are listed below:

1. Client and user interface platforms
2. Client service and product platforms
3. Product processing platforms
4. Business support services platforms
5. Corporate functions platforms
6. Infrastructure services platforms
7. Analytics and insights platforms

The annotation of various **application attributes** will enrich platform reporting to meet executive requirements for decision-making.

1. Vendor
2. Location
3. Vendor support location
4. Operating system
5. Country and divisional usage
6. Number of users
7. Process enablement

Modern day IT constitutes the largest portion of organizational operating costs.

07

Once this exercise has been completed we can utilise the harvested data to assess the level of risk associated with each application with the aim of improving resilience and sustainability of operational IT support, and to make informed ad-hoc changes dependant on changing market and customer dynamics. An example of the necessity of these views would play out in the current conflict in the Ukraine, if the application vendor or vendor support was based in Kyiv the availability of support would be understandably be impacted, but could prove catastrophic to organizations utilising the vendors application.

Cost savings within this domain, could also be forthcoming by the identification of multi-country, or muti-divisional usage of the same application. The generation of a centralised service which could be utilised by all users should be weighed up against individual applications per country or division. This would reduce the need for skilled technical support staff in each country or division and potential savings in maintenance costs for multiple applications.

08

Conclusion

So, in conclusion there is light at the end of the tunnel. It is however dependant on a high level of collaboration between business and architecture teams to ensure that the purchase of an EA tool delivers the value depicted in this article.

With global emphasis turning to resilience and sustainability organizations will be expected to produce increasing levels of ESG reporting as part of the organizations annual reporting and verifiable data confirmed by internal and external auditors and regulators.

If strategy and planning is undertaken with this in mind, and personnel are urged to collaborate with the organizational efforts to generate a trusted source of architectural artefacts then this level of reporting should not disrupt business as usual activities.

The total economic impact of the EA tool can then be equated in the following manner:

1. Controlled investment and cost savings across the IT portfolio.
2. Accelerated decision making during digital transformation.
3. Faster turnaround efficiencies for architecture requests.
4. Improved risk assessment.
5. Improved resilience and sustainability insights.
6. Improved programme / project funding and resourcing.
7. Improved regulatory reporting, and associated fine avoidance.

Orbus Software UK
LONDON

Orbus Software USA
NEW YORK

Orbus Software AUS
SYDNEY

Orbus Software EU
KATOWICE

About Orbus Software

Orbus Software is a leading provider of cloud solutions for enterprise transformation, with regional offices in Australia, Poland, the US, and the UK. Its enterprise platforms provide a comprehensive view of applications, systems, and data, allowing leaders to optimize cost, minimize risks, and maintain operational resilience in the face of constant disruption, while supporting them to make more informed and responsible business decisions that consider cost, impact, strategy, and sustainability. Customers are predominantly global blue-chip enterprises and government organizations, including AstraZeneca, CIMB Bank, Investec, Three, and Saab. To learn more, follow Orbus Software on LinkedIn and Twitter.

orbussoftware.com

WP0304/1123