

# The New Rise of Enterprise Architecture within Insurance Companies

For a long time Enterprise Architecture was regarded as an IT function. However, in recent years many financial services companies, especially insurance companies, have rediscovered the power of having a strong architecture team that brings in an end-to-end view of the business, a structured operational framework, knowledge about market best practices and insights into IT trends and developments.

The article shows how insurers can create a systematic competitive advantage through the empowerment of Enterprise Architecture, which provides a holistic overview of their business and supports the implementation of business visions, whilst keeping IT trends and the operational setup in mind using a structured framework.

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The basic concept of Enterprise Architecture (EA) is not new. EA is a high-level, strategic management technique designed to help senior managers achieve business and organizational change. In fact, EA methods, models and principles such as TOGAF (The Open Group Architecture Framework) or Zachmann have been around for more than 15 years. Nonetheless, knowledge of EA concepts, frameworks and processes within many financial services organizations is still quite limited. Recently, however, there has been a marked tendency to establish stronger, less-IT-focused EA practices at leading international insurance companies.

In the aftermath of the late 2000s financial crisis, many companies have renewed their growth ambitions, especially in emerging markets. However, growth brings with it new challenges such as difficult system integrations (as a result of mergers and acquisitions), the development of additional application capabilities and the need for fresh operating models. These new challenges, in combination with having to manage complex and usually home-grown IT system landscapes and new IT trends such as «Big Data & Smart Analytics» have resulted in a strong need to have a structured strategic management technique in place, like the kind provided by Enterprise Architecture.

## Typical Enterprise Architecture setup in insurance companies

According to many surveys, the majority of organizations choose to create their own EA framework instead of relying on an existing one, although many are inspired by TOGAF. The reasons for creating a bespoke EA framework vary, from the need to support a service-oriented architecture to the desire to use terminology that is tailored to the language used within the organization. Irrespective of the approach a company may take, Enterprise Architecture views the organization as a holistic entity and should therefore be carried out at the enterprise level.

Enterprise Architecture provides an evolving, dynamic way of describing and aligning the functional aspects of an organization: its people, business processes, IT systems, information and technical IT infrastructure, so that they all work together more effectively to achieve the organization's business goals through intelligent design.

The principles of EA hold that by understanding the existing setup (the «as is» state) and by having a vision of the mid- and long-term «to be» states, one can successfully steer an ever-changing organization. Architects typically use artefacts such

as «Application Landscapes», «Process and Capability Maps», «Target Operating Models» and «Information Catalogues» to establish and share ideas throughout their organizations. Furthermore, architects identify and refine their stakeholders' requirements in order to develop their own visions. To further develop a vision or to get the necessary buy-in and approval from management, it is crucial that these artefacts are high-level, visual and follow the organization's value chain. Only then are they able to facilitate a focused discussion about the target state of the organization with IT, the front office and senior management. Such discussions naturally lead to the development of prioritised focus topics and a basic roadmap for implementation by project organizations and/or the line organization.

Most EA methods (including TOGAF) split EA into four areas:

- Business Architecture: Defines the business strategy, governance, organization and business processes
- Information (data) Architecture: Defines the structure of an organization's logical and physical data assets and data management system
- Application Architecture: Defines the architecture of the IT applications being deployed and their interactions and relationships to business processes

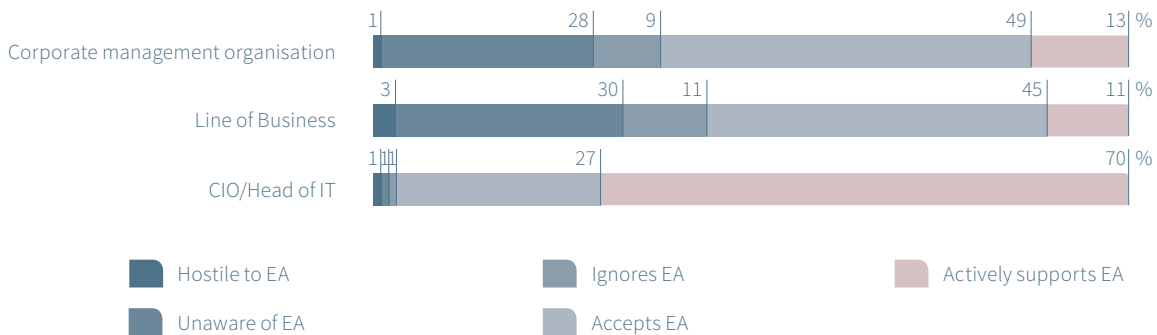
- Technology Architecture: Describes the software and hardware capabilities and includes networks, middle-ware, standards, etc.

Most of the focus at financial services companies in recent years has been on Business Architecture (especially on process optimisation), but now a shift towards Information Architecture is taking place, largely supported by the hype surrounding «Big Data». Another factor that has a major influence on where EA sets its priorities is to whom EA reports within the organization. When EA reports directly to the CEO or COO architects typically focus more on Business Architecture, while when they report to the CIO or other technology-focused executives the focus is more on the other three architectural areas.

### Communication of architecture across the enterprise

In order to effectively communicate across the organization, an Enterprise Architect must be able to explain the architecture to many different groups. As Lankhorst et al. (2005) note: «Most stakeholders of a system are probably not interested in its architecture, but only in the impact of this on their concerns. However, an architect needs to be aware of these concerns and thus be able to explain the architecture to all stakeholders involved, who will often have completely different backgrounds».

An Enterprise Architect therefore needs to be able to speak the languages of management, the front office and IT.



Source: Forrester Research, Global Annual State of Enterprise Architecture Online Survey (n=416), 2009

Degree of Enterprise Architecture (EA) support by different functions

### Adapting to new IT trends

Recent developments in IT have forced architects to spend more time learning about and staying prepared for potentially game-changing new trends such as «Big Data & Smart Analytics». By using Big Data many insurance companies are trying to translate internally and externally available material, both structured and unstructured, into business-enabling knowledge that will allow them to improve their risk assessment and risk selection abilities. With Big Data these companies may gain an important competitive advantage, whereas without it they could be putting their businesses at risk.

«Big Data & Smart Analytics» are expected to play a big role for insurance companies in the following areas:

- 🌀 Better fraud detection
- 🌀 Improved risk assessment
- 🌀 Enhanced customer retention
- 🌀 More customised product creation

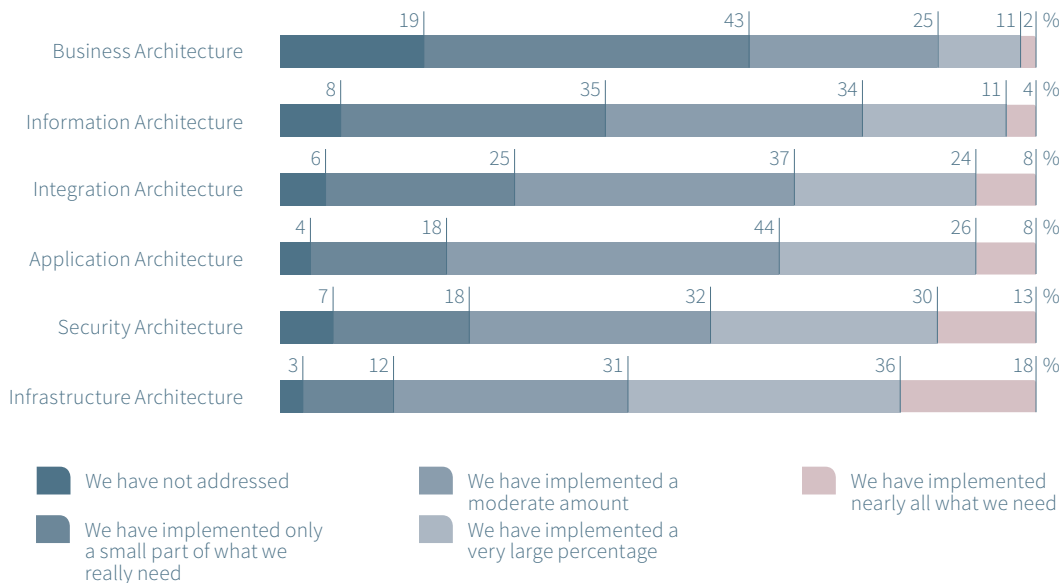
- 🌀 Increased cross-selling and improved marketing due to better knowledge of customers and markets

- 🌀 Insights and knowledge that can be shared with clients

All these areas have a major impact on applications, processes, information and organizations alike from Marketing/Sales to Underwriting/Costing, Claims Management and Reporting.

In addition to Big Data there are a few other IT trends which are leading to the rise of EA within insurance companies:

- 🌀 Third-party access to systems (e. g. self-service access for agents or insureds to access policy/claims-related information or to print out insurance certificates, etc.)
- 🌀 Cloud computing
- 🌀 Mobility (e. g. reporting for senior management, mobile devices for claims managers working in the field)
- 🌀 Service-oriented framework instead of building individual applications



Source: Forrester Research, Global Annual State of Enterprise Architecture Online Survey (n=416), 2009

📊 Business and Information Architecture Opportunities are Big

### What it means to be an architect

An Enterprise Architect's job is never truly complete due to constantly changing organizations, IT trends and management goals. An architect needs to have an overall vision and take reasonable steps towards its implementation, ensuring a certain stability without losing the flexibility needed to adapt in case of changing circumstances. In many cases, architects have limited direct decision-making power in their organizations and instead they focus on their role as a facilitator to bring about change. By providing a structured framework that can be used by IT and the front office, they enable discussions and, subsequently, informed management decisions, without needing to have responsibility in the line organization. Ultimately, they have to balance diverging views and take emotion out of the discussions.

In addition to being visionaries, Enterprise Architects must also be well-rounded and have an end-to-end view of their business. Otherwise, they would not be able to orchestrate change and optimise their company's architecture. They also need to constantly keep an eye on what their competitors are doing and what the market demands from their businesses.

Over the last years, Synpulse has supported multiple clients in more than ten EA initiatives, in part by contributing a solid understanding of advanced Enterprise Architecture techniques, insights about best insurance industry practices and an in-depth knowledge of IT trends. In addition to documenting architecture artifacts, Synpulse has organised and moderated various strategy workshops to help guide its clients along the party of defining and realising their target architecture.

With its extensive project management experience in this area, the knowledge of Synpulse of the Enterprise Architecture landscape can help close the gaps between EA and project teams.