



Enterprise Architecture in the Digital Age Webinar

Mahmoud Aboelhassan

Introduction



- Organizations may need to realize the value of the Enterprise Architecture and its role in the digital transformation.
- To demonstrate the value of the Enterprise Architecture to your organization you will need to answer some questions that focus on the business benefits behind launching the Enterprise Architecture program inside your organization, and determine the drivers of the Enterprise Architecture.

Objectives



- Enterprise Architecture Drivers
- Enterprise Architecture Values
- How to start the?!
- Enterprise Architecture Frameworks
- Enterprise Architecture tools
- Enterprise Architecture answer these questions

Learning Outcomes



- ✓ Be able to demonstrate the of Enterprise Architecture value for your organization
- ✓ Know what are the different Frameworks of Enterprise Architecture
- ✓ Determine what is the Enterprise Architecture tools
- ✓ Be able to answer common questions using the Enterprise Architecture

Who should attend?



- Business Analysts
- Architects (Business, Applications, technology)
- CIOs or head of IT departments
- IT professionals

About the Speaker



- Mahmoud is an expert in IT field with 20+ years of Experience focusing mainly on Digital Transformation, Data Center, Information Security, IT Projects and Operations Management.
- His experience diversified in several Business areas like Digital Transformation, [Enterprise Architecture](#), Data Center services, Cloud and Virtual Hosting, ISO 27001, 20000, 9001, 22301, E-Commerce, IT Strategy and Business Transformation, Budgeting and Enterprise Planning.
- Delivered many courses for many candidates from several countries (Ex. Iraq, Oman, Jordan, Palestine and Egypt).
- Speaker at many conferences (Ex. ISACA, ITU, Arab Security Conference, ..etc.)
- He held several positions like Applications and E-commerce Manager, Data Center Operations Senior Manager, Head of PMO in Raya “one of the largest technology companies in Egypt”, recently he is Senior Manager (IT) in E-Finance.
- Mahmoud one of the main players in the successful transformation like one of the most famous e-commerce websites in Egypt rayashop.com, actively involved in launching Raya Nigeria and Raya Algeria. In addition to Data Center business from the startup to be one of the Key Data Center Providers and one of the key players in the Egyptian Data Center Market, differentiated by its ISO certificates and skilled people, Participated in creating 5 years strategic plan with extensive engagement with the Business.
- Mahmoud holds B.Sc. from Cairo University, M.Sc. from Middlesex UK in Computer Science, Doctoral of Business Administration Candidate at "The International Business School of Scandinavia- IBSS", Data Center Expert from Capitoline, and Advancement Management Program from RITTI.



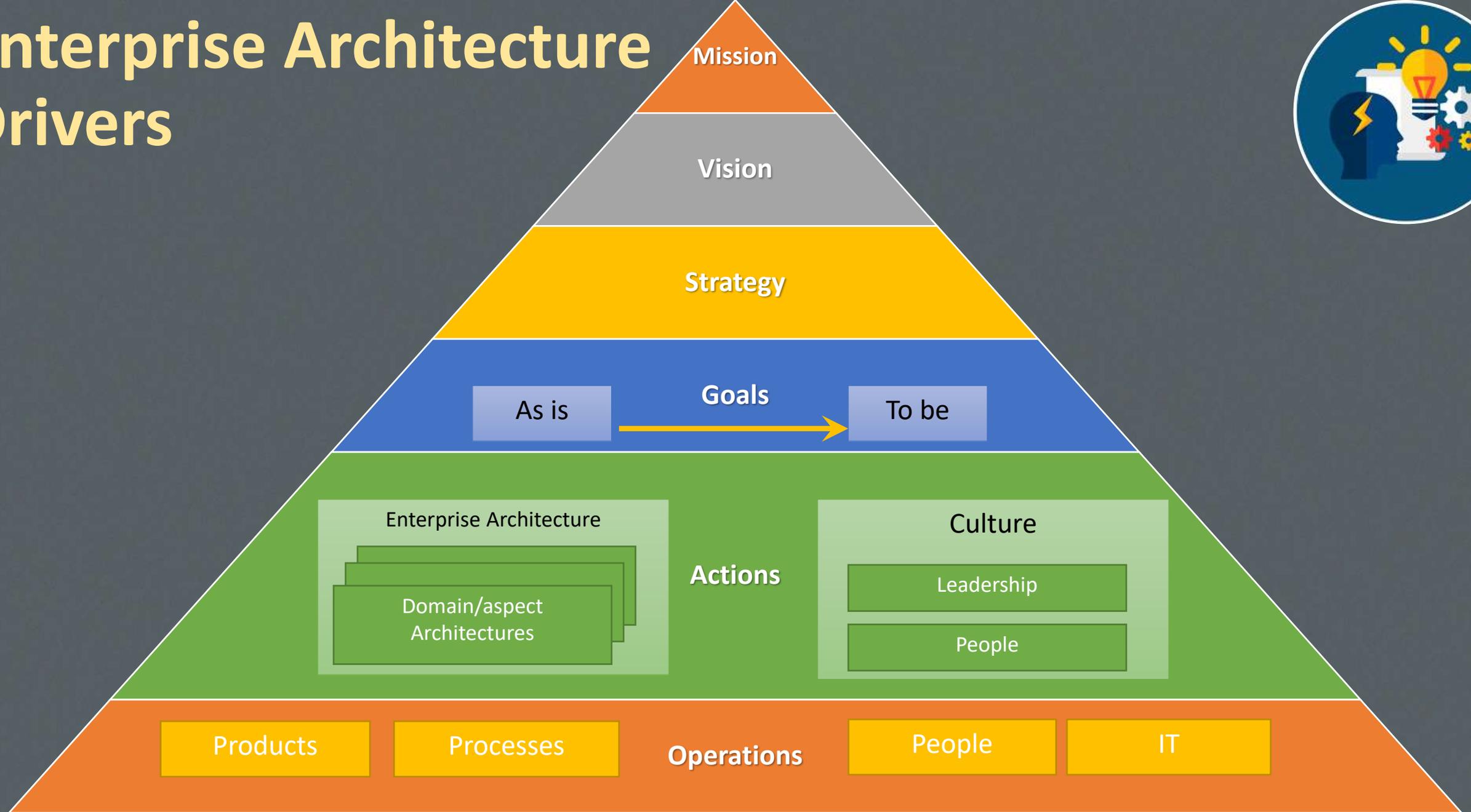
Enterprise Architecture Drivers

Enterprise Architecture Drivers



- Business Goals
 - The mission of the enterprise: why does it exist?
 - The vision states its ‘image of the future’ and the values the enterprise holds.
 - Its strategy, which states the route the enterprise will take in achieving this mission and vision.
 - This is translated into concrete goals that give direction and provide the milestones in executing the strategy.
 - Translating those goals into concrete changes to the daily operations of the company is where Enterprise Architecture comes into play.
 - It offers a holistic perspective of the current and future operations, and on the actions that should be taken to achieve the company’s goals and we call it the “**hard**” part of the enterprise
 - Next to its architecture, is the culture, is formed by its people and leadership, and we call it the “**soft**” part which is very critical in achieving its goals.

Enterprise Architecture Drivers



Enterprise architecture as a management instrument.

Enterprise Architecture Drivers



- New approaches in software developments within the context of the existing processes, IT systems, and other assets of an organization.
- The necessity and priority of any change from a business perspective.
- Maximize the ROI from technological and business innovations.
- Innovate and change with more stability and flexibility.

Enterprise Architecture Drivers



- 4th Digital Revolution
- The need to change the ‘operating model’ to be digital operating model with high level of integration and standardization of business processes across the enterprise
 - An **operating model** is both an abstract and visual representation (model) of how an organization delivers value to its customers or beneficiaries as well as how an organization actually runs itself.
- Organize the logic for business processes and IT infrastructure, which must reflect the integration and standardization requirements of the operating model.
- Describes the ‘engagement model’, i.e., the governance needed to ensure that business and IT projects meet local and corporate objectives and conform to the enterprise architecture.

Enterprise Architecture Drivers



- External pressures that push organizations towards adopting enterprise architecture practice.
- Compliance with new and existing regulations
- For Example:
 - In the USA, the Clinger–Cohen Act of 1996, also known as the Information Technology Management Reform Act, demands that every government agency must have an IT architecture, which is defined as: ‘an integrated framework for evolving or maintaining existing information technology and acquiring new information technology to achieve the agency's strategic goals and information resources management goals.’

Enterprise Architecture Drivers



- Examples:
 - The Agency Chief Information Officer (CIO) assigned the responsibility of ‘developing, maintaining, and facilitating the implementation of a sound and integrated information technology architecture.’ “Section 5125 (b) of the Act assigns”
 - IT must comply with this Act, including that in weapons and weapons system programs as required by The US Department of
 - The development of Enterprise Architecture as a discipline, not just in a government context, but in general is motivated approach by The Clinger–Cohen Act.

Enterprise Architecture Drivers



- Develop business capabilities
 - **Hyperawareness**
 - **Informed decision making**
 - **Fast execution**

What is the Hyperawareness?

The ability to detect and monitor changes in its business environment.

Capture insights internally from employees, or from the organization's internal operating environment, but they can also be obtained from external sources, such as customers, partners and competitors.

Enterprise Architecture Drivers



Develop digital capabilities required to create digital operating models:

- Sense and interpret disruption
- Ability to blur the lines between the physical and digital worlds
- Reskilled employees
- Develop and launch ideas faster
- Own and maintain your digital and analytics teams
- The ability to think beyond big data to consider different types of data and Organize data hackathons
- Understand, leverage, and monetize data

Enterprise Architecture Drivers



Create digital environment

- Create environments where humans and robots can work together successfully
- Evaluate the value of automation to your business.
- Invest in developing internal automation capabilities

Did you apply Robotic Process Automation “RPA” in your organization?

Enterprise Architecture Drivers



Create digital operating models.

Digital operating models Examples:

1- CUSTOMER-CENTRIC

- Focuses on making customers' lives easier and emphasizes front-office processes
- Ex.: Nespresso and the UK retailer Argos
- It works best with a culture that puts the client first and a decentralized structure that empowers frontline staff.
- Its success is best measured by a higher net promoter score (NPS).

What is net promoter score?

The Net Promoter Score is an index ranging from -100 to 100 that measures the willingness of customers to recommend a company's products or services to others

Enterprise Architecture Drivers



Create digital operating models.

Digital operating models Examples:

2- Extra-frugal

- Thrives on a culture of 'less is more' and a standardized organizational structure.
- By optimizing manufacturing, supply and support processes, it can provide a high-quality service at a low cost.
- A prime example of this model is tire manufacturer Michelin.

Enterprise Architecture Drivers



Create digital operating models.

Digital operating models Examples:

3. Data-powered

- Built around prowess in analytics and software intelligence
- Ex.: Google and Netflix, data-powered companies have an agile culture focused on innovation through empirical experimentation
- Usually built around a hub-and-spoke structure
- This model measures success primarily through its return on investment

Enterprise Architecture Drivers



Create digital operating models.

Digital operating models Examples:

4- SKYNET

- Named after the conscious, artificial general intelligence of the Terminator films
- Makes intensive use of machines to increase productivity and flexibility in production
- Ex.: Amazon and Rio Tinto, Skynet organizations are characterized by an engineer-led culture dedicated to automation
- Suited to manufacturing processes
- A key performance indicator is the ratio of full-time employees to revenue

Enterprise Architecture Drivers



Create digital operating models.

Digital operating models Examples:

5- OPEN AND LIQUID.

- This model looks outward with a view to creating an ecosystem that can enrich the customer proposition.
- Built around a sharing customer, all processes in organizations of this kind are characterized by a constant flow of dialog with the outside world.
- Examples include Facebook and PayPal.
- A key measure of success is NPS.

What is your organization operating model?

Enterprise Architecture Drivers



Optimizing current business model:

- How digital is your organization? Build “THE DIGITAL MATURITY ASSESSMENT MODEL”.
- What business and financial benefits can we expect when we successfully attain our digitalization goals?
- A "balance point" describes the reasons why an enterprise shouldn't over digitalize

What is the Digital Transformation Maturity Model?

Effective tool to provide guidelines for a clear path throughout the transformation journey

Enterprise Architecture Drivers



Identify digital business KPIs that measure transformative growth:

- Diversified new digitalized revenue sources
- Financial and market share KPIs metrics
- KPIs that quantify the "quality" of revenue and complement it with revenue/market-size KPI of each new revenue source
- The market size range forecast
- The impact of digital business on revenue and margin
- Major areas of business must be digitalized
- The metric that will capture the benefits of digitalization
- The metric for degree of digitalization
- The metric that sets the balance point for digitalizing



Enterprise Architecture Value

Cost Reduction



- According to Gartner, companies with a strong Enterprise Architecture foundation have 25% lower IT costs. How?!
 - Application rationalization – 15% on run cost
 - License optimization – 30% on licensing cost
 - Vendor Consolidation – 22-28% on total cost of ownership (CTO)
 - Use collaboration tool – 20-25% Productivity increase
 - Searchable records – 35% of time searching for information

Rationalize your applications



- It is possible to reduce costs by 15% by:
 - Analyzing your applications by Business Capability and User Groups
 - Viewing applications functional fit
 - Eliminating redundant applications without affecting the quality and business value
 - This will also decrease costs for support and maintenance
 - Identifying the support gaps
 - Setting global standards across all organization and phase out non-standard applications

Rationalize your applications



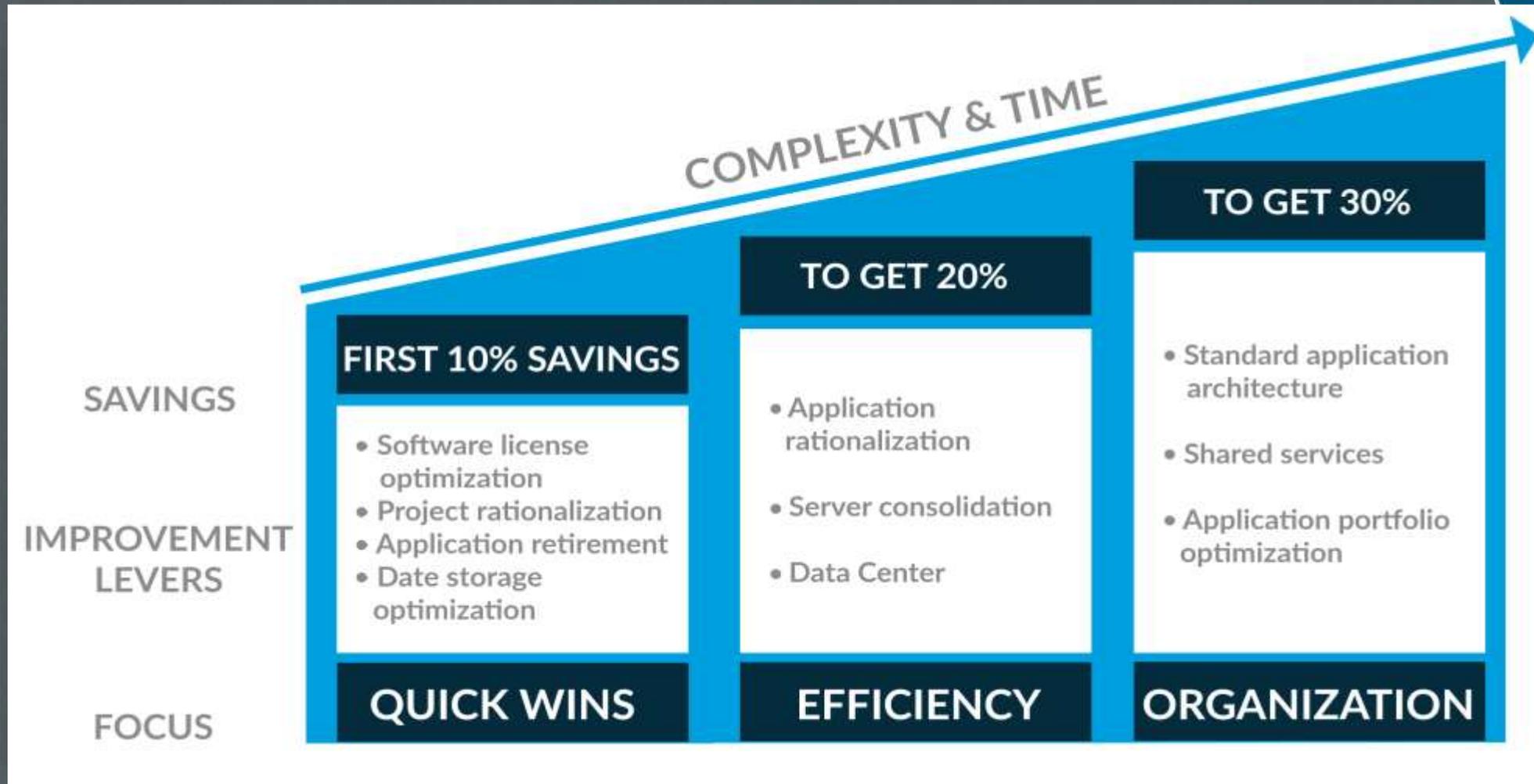
- Case Study
 - A retail bank was able to find more than:
 - 50 unused applications to decommission,
 - 150 redundant applications to consolidate,
 - 800 point-to-point 400 applications to connect with a data integration platform.
- (**McKinsey**)

Rationalize your applications



- Application rationalization minimize applications cost through:
 - Software license optimization,
 - Application retirement, or
 - Server consolidation with various levels of complexity and duration.

Rationalize your applications



IT saving potentials from Application Rationalization (Deloitte)

Vendors/Suppliers Consolidation



- Minimize applications' annual Total cost of ownership (TCO) from 22 to 28 % by reducing the number (A global study of the **Everest** Research Institute)
- Save up to 30% on software licensing costs (**Gartner**)
- **Enterprise Architecture** value in:
 - ✓ Using the processes and applications Inventory and analyze vendors' cost as well
 - ✓ Creating good opportunities to consolidate some vendors or negotiate better rates
 - ✓ Ensure an effective vendor selection along with procurement team taking into consideration the changes in support and training due to the change in vendors and/or products.
 - ✓ Analyzing the impact of any changes to the vendor landscape
 - ✓ Providing consolidation scenarios by swapping IT components and reconcile any interdependencies

Time saving



- Using **Enterprise Architecture** tool will:
 - Save documentation time, reports preparation and Information distribution
 - productivity of workers will raise from 20 to 25 % using social technologies (**McKinsey**)
 - Knowledge base can save about 35 % of the staff time they spend in searching for information.
 - Projects will start faster because of the information availability
 - Losing data or information is a cost and time waste
 - If there is no proper documentation, employees will leave and take all knowledge and information with them
 - 11B Euro are estimated to be lost every year due to knowledge drain.

Reduce Risks - Avoid IT security incidents



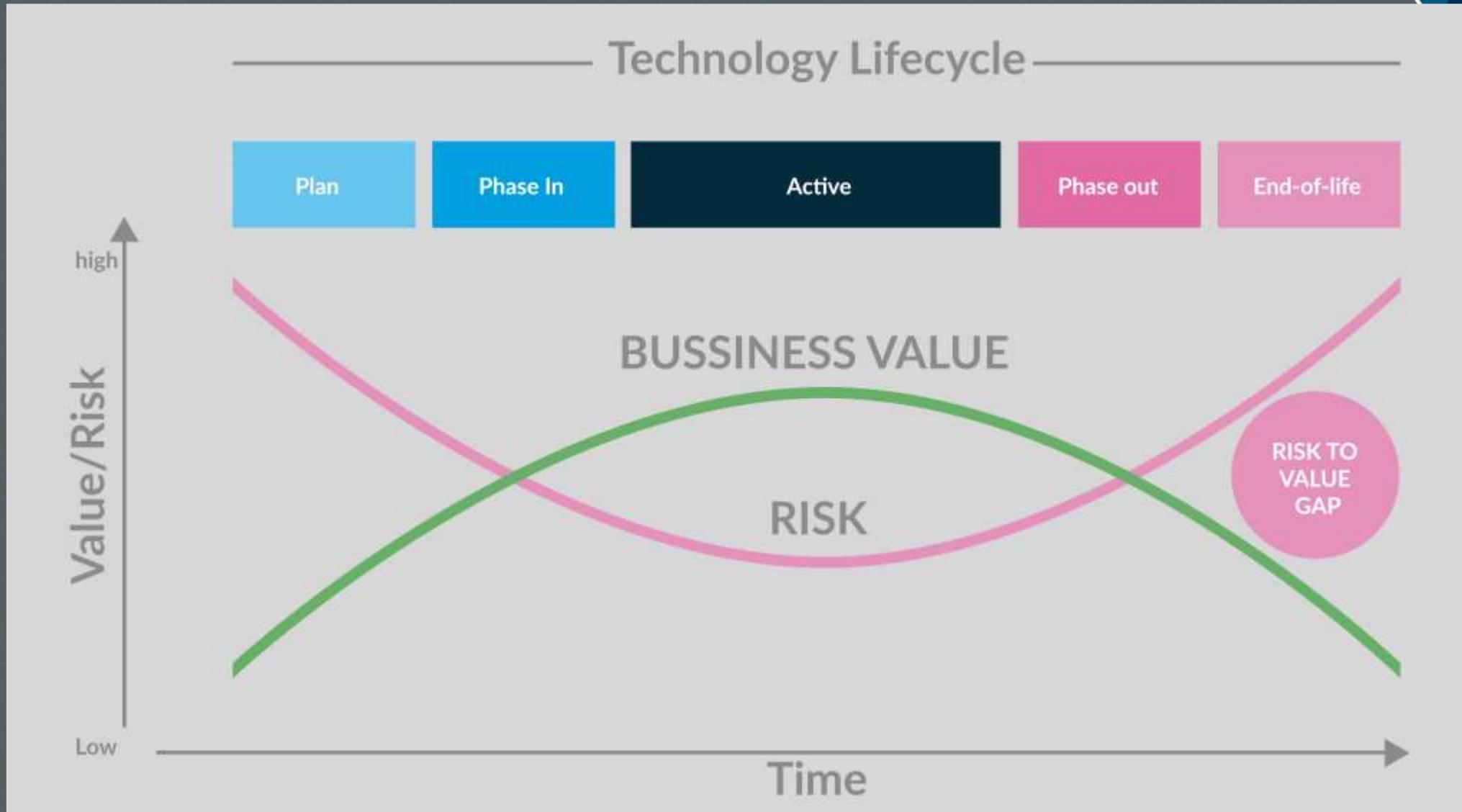
- Airline Comair Case Study (CIO.com 1st May 2005)
 - Airline Comair, a subsidiary of Delta Air Lines.
 - Comair's crew-scheduling system failed because it was only capable of handling a certain number of changes a month
 - It was catastrophic impact ; where 200,000 passengers left without help in the period before Christmas
 - The system collapsed as this time and cause 20M USD losses for the company
 - **Enterprise Architecture value:**
 - Provide an up-to-date inventory including all required information about all applications including the technologies they are based on.
 - Easy the assessment process of applications risks specially those depending on non supported IT components and will easy the tracking of your technology standards.
 - Make sure that the unsupported technology components will cause too much loses for organizations.

Reduce Risks - Avoid IT security incidents



- Enterprise Architecture tools provide the segregation of duties, responsibilities and roles according to the IT security of your organization.
- It will also provide clear responsibilities for Applications, Processes and IT Components.
- Ensure the data availability in the right context in case of a security audit or incident.
- Classify the criticality of the data objects used by your company's applications.

Reduce Risks - Avoid IT outages due to obsolete technologies



More Agility



- More Agility means:
 - Get ahead of 75% companies by effective knowledge sharing
 - increase EBIT by 3-5 percentage point by systematic complexity management
- Enterprise Architecture value:
 - Encourage the innovation by simplifying and reducing the documentation, governance and reporting efforts so the organization can focus on driving change and making Cloud, Big Data and Digitization a success.
 - Modern development methods rely on access to information and reuse of services (Ex. DevOps)

More Agility- Developers Empowerment



- Low the barriers to efficiency by making data available and accessible
- All new services, their lifecycles and interfaces must be document in your IT inventory to achieve compliance with regulatory requirements.
- Zalando's offices Case Study:
 - It is online clothing retailer Zalando's offices
 - Developers work in over 100 small, autonomous teams in a microservices structure
 - There are independently working teams "Silos" have to work towards a common goal and need access to information about their IT to be efficient.
 - Enterprise Architectures team serve as a link between the different teams and different programming languages.
 - This team responsible for filling the gaps

More Agility- Easy Collaboration



- The collaboration features in the Enterprise Architecture tool engage staff inside and outside the IT organization.
- Avoid misunderstandings and pick up speed by developing common language with all stakeholders.
- About 80 % of the senior executives surveyed in a study said that effective coordination across product, functional, and geographic lines was crucial for growth. (McKinsey)
- About 25 % of the respondents described their organizations as “effective” at sharing knowledge across boundaries.

More Agility- Easy Collaboration



- Case Study:
 - Analysis of one of the company's high-performing groups showed that:
 - 35% of all collaboration handled by a small number of construction managers and engineers.
 - This group's ability to deliver expertise was dramatically enhanced.
 - The company's revenue raised from \$80 million to \$275 million in a one year Identifying and building proper communication and collaboration between specialists.

More Agility - Lower Complexity



- Enterprises consists of people, organizations, things, processes, goals, policies, rules, events, locations, and so on.
- For large enterprises, complexity is the 1st enemy of people productivity.
- Locking information on people's heads, then other people won't be able to innovate, add new product lines or to increase the capacity of systems.
- When the system is changed to meet a new requirement, errors will often occur in unexpected places as the full information had not been available before the change.



How to start?!

Data Collection



- Plan your future activities using reliable information about business and IT landscape
- Inspect existing data sources then format and clean it up
- Remove outdated or irrelevant data.
- Check data quality with content owners.
- Select your Enterprise Architecture tool
- Test data on the Enterprise Architecture tool after refining it.
- Complete the data migration after passing data quality test.
- Data migration to the Enterprise Architecture tool can be done using Excel spreadsheets templates, REST API or even manually.

Portfolio Analysis



- Portfolio analysis can be done by focusing on business criticality, functional and technical fit.
- For Example:
 - Business criticality can be rated from 1 less criticality to 4 mission-critical.
 - Functional fit can be described as “unreasonable,” “insufficient,” “appropriate,” or “perfect.”
 - Technical fit can be described as “inappropriate,” to “unreasonable,” to “adequate,” and “fully appropriate.” to focus on services, software or hardware concerning business requirements today and in the near future.
- Determine the business relevancy of an application and decide which applications should be invested in and which should be divested.

Measures Identification and Communication



- Keep track of planned measures using the [Enterprise Architecture](#) tool and use its collaboration features to involve all concerned parties.
- Perform high-level assessment of business criticality, functional fit and technical fit will deliver valuable communication for business and IT to focus on the improvement opportunities.
- Applications and technologies lifecycle information will help you to produce roadmaps of what will happen in your IT landscape.

Initiatives Implementation



- Ideas assessment by impact and ability for execution.
- Determine the high impact/high feasibility projects.
- First projects' value, risk, budgets, and status must be determined and tracked in the Enterprise Architecture tool.
- Projects should not last longer than three months.
- Rationalize applications, IT support gaps filling or application hosting consolidation.
- Redundant applications is your starting point using the portfolio analysis.
- Others you will want to invest in, as they are critical to the success of the business.

Outlook



- Focusing on Business Capabilities and data is the next step upon the availability of applications information.

Business Capability Maps



- Business Capabilities determine what a business is doing right now and what it will be doing to implement its strategy.
- Business Capabilities help in identifying redundancies, spot risks and develop solutions, which is why it is crucial for you to develop your Business Capability Map.
- Determine major capabilities that your business needs to operate.
- The critical ones should be on the first level, most companies have around 7-10 capabilities on the highest level.
- Then drill down one level from the first level.
- All capabilities should completely describe their parent capability and be without overlap on the deeper level, .
- 70% of organizations have capability models that have only one or two levels.
- Example:
 - LeanIX.com has some best practice Business Capability Maps for certain industries ready for you to download from their website.



Business Capability Maps



Example of a two-level business capability model of a multinational production company

Know your data and your interfaces



- Look at data and know how it drives the business.
- Identify major applications and the most urgent improvements.
- Focus on the key data objects that drive the business and the interfaces they use.
- Only from 10 to 20 data objects needed to get started.
- With such a basic set you can already answer questions about which applications have access to certain data and which do not; which information is classified and which can easily be moved into the cloud or who will be affected by an API change.
- Look at how the information flows across your application portfolio and whether there are any applications with an increased risk of failure due to their high number of interfaces.
- What happens further along the road depends on your use cases.
- Ask yourself what your questions are and what analyses you need to answer them.
- You can derive your necessary data from that.
- It's recommended to focus on one or two use cases at a time, implement them and then iterate again.



Enterprise Architecture Frameworks

Enterprise Architecture Frameworks



- The architecture method is a structured collection of techniques and process steps for creating and maintaining an enterprise architecture.
- Methods typically specify the various phases of an architecture's life cycle, what deliverables should be produced at each stage, and how they are verified or tested.
- Architecture development methods examples:
 - Rational Unified Process (RUP) (Jacobson et al. 1999), defines an iterative process, as opposed to the classical waterfall process, that realizes software by adding functionality to the architecture at each increment.
 - An extension towards enterprise IT architecture is given by McGovern et al. (2004) in the form of the Enterprise Unified Process.

Enterprise Architecture Frameworks



- The UN/CEFACT Modelling Methodology (UMM) is an incremental business process and information model construction methodology.
 - **The scope is intentionally restricted to business operations, omitting technology-specific aspects.**
 - **The Business Collaboration Framework (BCF), which is currently under development, will be a specialization of the UMM aimed at defining an enterprise's external information exchanges and their underlying business activities. See UN/CEFACT (2004).**
- The TOGAF Architecture Development Method (ADM), developed by The Open Group, provides a detailed and well described phasing for developing an IT architecture.
- The Federal Enterprise Architecture Framework (FEAF) created by “The Chief Information Officers Council” identified a practical and useful manual for developing enterprise architecture for governmental organizations (CIO Council 2004).
 - **Other initiatives of the US government include the Federal Enterprise Architecture (FEA) of the Federal Enterprise Architecture Program Management Office (FEAPMO 2004) and the Treasury Architecture Development Process by the Department of the Treasury (US Treasury 2004).**

Other architecture methods and frameworks developed by Various consulting. Examples include Sogeti's DYA, Capgemini's IAF, IBM's Enterprise Architecture method, and Microsoft's Motion.

We won't discuss them in this Webinar Because of the often-proprietary nature of these methods.

The IEEE 1471-2000 / ISO/IEC 42010 Standard



- In 2000, the IEEE Computer Society approved IEEE Standard 1471-2000 (IEEE Computer Society 2000), which builds a solid theoretical base for the definition, analysis, and description of system architectures.
- Adopted by the ISO in 2007 as ISO/IEC 42010, focuses mainly on software-intensive systems, such as information systems, embedded systems and composite systems in the context of computing.
- Provided key terms such as acquirer, architect, architecture description, architectural models, architecture, life cycle model, system, system stakeholder, concerns, mission, context, architectural view, architectural viewpoint.
- Explain how the key terms, relate to each other in a conceptual model for architecture description
- Explain the role of the stakeholders in the creation and use of an architecture description; To provide a number of scenarios for the architectural activities during the life cycle: architectures of single systems, iterative architecture for evolutionary systems, architecture for existing systems, and architectural evaluation.

The IEEE 1471-2000 / ISO/IEC 42010 Standard



The standard gives six architecture description practices:

- Architectural documentation referring to identification, version, and overview information.
- Identification of the system stakeholders and of their concerns, established to be relevant to the architecture.
- Selection of architectural viewpoints, containing the specification of each viewpoint that has been selected to organize the representation of the architecture and the reasons for which it was selected.
- Architectural views corresponding to the selected viewpoints.
- Consistency among architectural views.
- Architectural rationale for the selection of the current architecture from a number of considered alternatives.

The Zachman Framework



- In 1987, John Zachman introduced the first and best-known enterprise architecture framework (Zachman 1987), it was called ‘Framework for Information Systems Architecture’.
- Applies to enterprises and introduce logical structure for classifying and organizing the descriptive representations of an enterprise that are significant to the management of the enterprise as well as to the development of the enterprise’s systems.
- Advantages of the Zachman framework are that it is easy to understand, it addresses the enterprise as a whole, it is defined independently of tools or methodologies, and any issues can be mapped against it to understand where they fit.

The Open Group Architecture Framework (TOGAF)



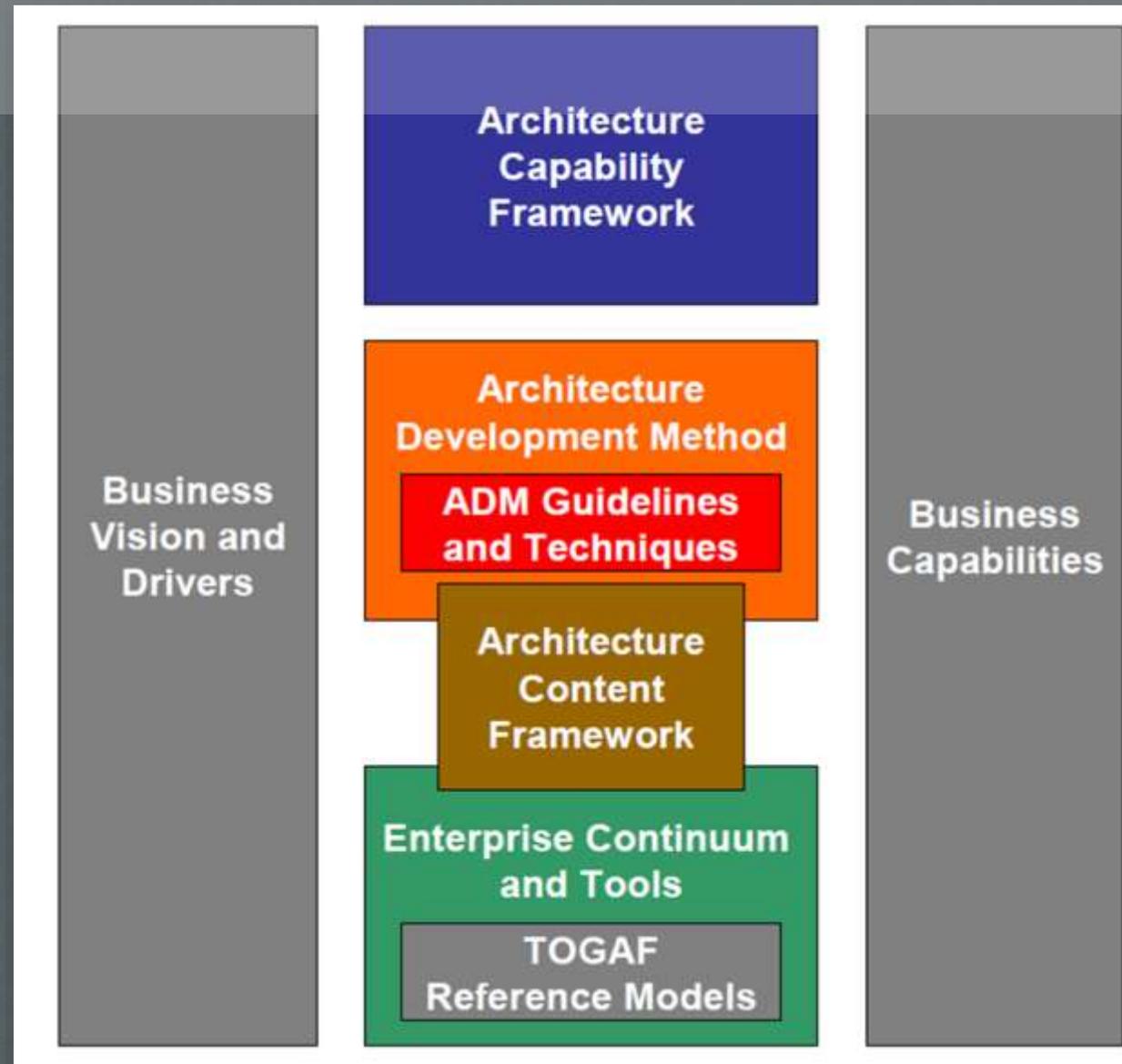
- The Open Group Architecture Framework (TOGAF) originated as a generic framework and methodology for development of technical architectures but evolved into an enterprise architecture framework and method.
- From version 8 onwards, TOGAF (The Open Group 2009a) is dedicated to enterprise architectures.

The Open Group Architecture Framework (TOGAF)



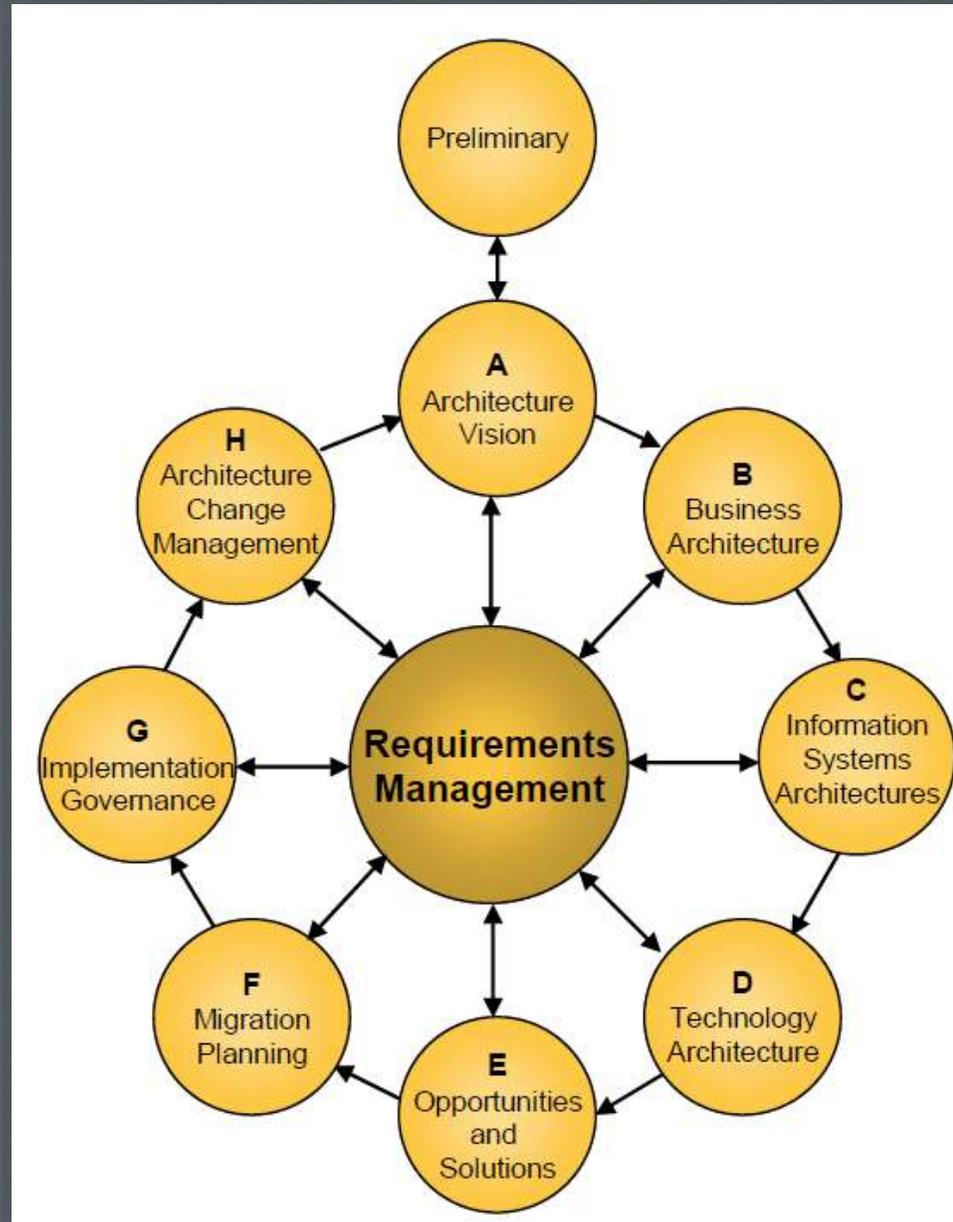
- TOGAF has the following main components:
 - The Architecture Capability Framework, it addresses:
 - **the organization, processes, skills, roles and responsibilities required to establish and operate an architecture function within an enterprise.**
 - The Architecture Development Method (ADM), which provides a ‘way of working’ for architects.
 - The ADM is considered to be the core of TOGAF.
 - The Architecture Content Framework, which considers an overall enterprise architecture as composed of four closely interrelated architectures:
 - **Business Architecture, Data Architecture, Application Architecture, and Technology (IT) Architecture.**
 - The Enterprise Continuum, which comprises various reference models, such as the Technical Reference Model, The Open Group's Standards Information Base (SIB), and The Building Blocks Information Base (BBIB).
 - The idea behind the Enterprise Continuum is to illustrate how architectures are developed across a continuum ranging from foundational architectures, through common systems architectures and industry-specific architectures, to an enterprise's own individual architecture

The Open Group Architecture Framework (TOGAF)



TOGAF 9 (The Open Group 2009a).

The Open Group Architecture Framework (TOGAF)



TOGAF Architecture Development Method (The Open Group 2009).



Enterprise Architecture Tools

Enterprise Architecture tools



- Enterprise architecture (EA) tools help organizations to focus on business outcomes.
- Manage information related to EA and help in planning roadmaps for digital transformation.
- Provide collaboration, reports, testing, simulations and more to help organizations create and implement models for better business and IT processes, development and architecture.
- The following 13 enterprise architecture tools are among the most popular currently available on the market.
- These tools provide a mix of visualization, collaboration, and project management features in support of a wide range of enterprise architecture frameworks.

Top 13 enterprise architecture tools



1. Avolution Abacus
2. BiZZdesign Enterprise Studio
3. BOC Group Adoit
4. CrossCode Panoptics
5. Erwin
6. Innoslate
7. MEGA International Hopex

8. Orbus Software iServer
9. Planview
10. QualiWare X
11. Software AG Alfabet
12. Sparx systems enterprise architect
13. Unicom systems architect



Answer the common questions about Enterprise Architecture

What applications matter most to the business and how are they changing?



- You can answer the questions relating to the organization's application portfolio using Enterprise Architecture.
- It will provide the analysis of the current state direct the decision for which applications to invest in and which ones should retire based on reliable data to how well Business Capabilities are supported by technology.
- And you can play out different scenarios over time to make sure that your IT is aligned with business strategy.
- Benefits :
 - Cost reduction through application rationalization
 - Minimize risks through better understanding of the application landscape's functional and technical risk profile
 - More agility through better support of business demands

What are our critical technology dependencies and how can we optimize business data management?



- Transparent overview of all dependencies between applications and which data is used where in the business.
- From knowing where each data object is used to uncovering possible data manipulation conflicts and possible points of failure due to a large number of interfaces.
- Benefits:
 - Cost reduction through data and interface consolidation opportunities
 - Minimize risks through better data management, additional securing of highly interdependent applications
 - More agility through faster start of integration projects

What are our technology risks?



- Discover risks in organization's IT landscape and how to minimize them.
- Discover the redundant IT components and which applications are at risk due to this redundancy and how the application portfolio adheres to security standards.
- Benefits :
 - Cost reduction through standardization and reduction of redundancy
 - Minimize risks through an understanding of the impact and compliance to technology lifecycle management
 - More agility through supporting business capabilities quickly using defined standards and reusable patterns

Where is our data and how is it being used?



- Discover data is used in the business and whether sensitive data is adequately protected.
- The use of data objects and their business relevancy as well as ensure data consistency across the portfolio.
- Which user group uses which data to which data supports which business capability.
- Benefits:
 - Cost reduction by reducing redundant data maintenance
 - Minimize risks through improved understanding of data qualifications and its impact
 - More agility through information alignment and re-use according to business needs

Who are our vendors and how are they managed?



- Who the organization's vendors are and whether there is any potential to rationalize costs.
- Who the providers are and how much is spent with each of them, to the potential impact on users if one is changed:
- Benefits:
 - Cost reduction through supplier rationalization
 - Minimize risks by avoiding dependency on a single vendor
 - More agility by optimizing the service portfolio for better service levels

How much are we spending on IT?



- What the IT budget is spent on to ensure that the investments are in line with strategic priorities.
- The cost of a single application to costs by business capability, user group, provider, project or IT component.
- Benefits:
 - Cost reduction through improved investment decisions regarding suppliers, applications and IT components
 - Minimize risks by improved project and investment decisions
 - More agility by improved speed in investment and project planning and execution

Summary



- Architecture is the art and science of designing complex structures.
- Enterprise architecture, is a coherent whole of principles, methods, and models that are used in the design and realization of an enterprise's organizational structure, business processes, information systems, and infrastructure.
- Architecture models, views, presentations, and analyses all help to bridge the 'communication gap' between architects and stakeholders.
- Architecture is critical in managing the complexity of the enterprise and its processes and systems.
- Internal drivers for using an architectural approach, related to the strategy execution of an organization.
- Better alignment between business and IT leads to lower cost, higher quality, better time-to-market, and greater customer satisfaction.
- External drivers from regulatory authorities and other pressures necessitate companies to have a thorough insight into their structure and operations.
- All these drivers make a clear case for the use of enterprise architecture.



Thanks For Watching



+201001706312



maelhassan@gmail.com



Online



<https://www.linkedin.com/in/elhassan/>