Application Atlas

Charting Braskem's Enterprise Architecture Voyage from Trial to Treasure with SAP LeanIX

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Enterprise Architect

Braskem

A GLOBAL COMPANY
NETHERLANDS
1 1
UNITED STATES
2 2 5
GERMANY
1 2
MEXICO
1 1 4
JAPAN
1
INDIA AND SINGAPORE
2
BRAZIL
4 3 29 1
UNDER DEVELOPMENT
BraskemSiam
BIO-BASED POLYETHYLENE
SOUTH AMERICA
Argentina, Chile, Peru and Colombia
4
Industrial plants
Commercial office
Innovation center
Recycling facilities
Representative office
CAPACITY PRODUCTION
Ethylene | 4.802 kt/year
Bioethylene | 260 kt/year
PE | 3.201 kt/year
PP | 1.850 kt/year
PVC | 710 kt/year
Chlorine | 400 kt/year
Caustic soda | 460 kt/year
PCR | 39 kt/year
PP | 625 kt/year
PCR | 23 kt/year
PP | 2.021 kt/year
PE | 1.050 kt/year
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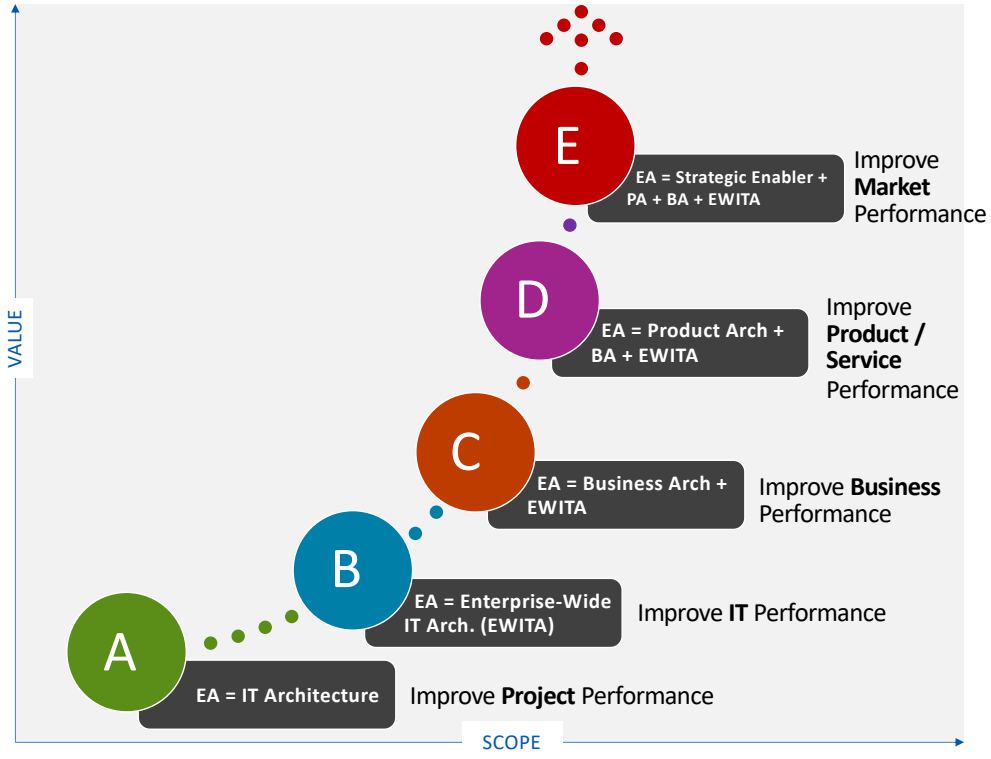
Braskem's EA Context



Entrepreneurial Culture

Braskem fosters an entrepreneurial culture that promotes problem solving and building solutions amid frequent changes.

Reactive Architecture Role

The architecture team was viewed as reactive, involved late to validate technical feasibility rather than strategy.

Limited Strategic Impact

Being consulted late limited the architecture team's influence on long-term planning and innovation at Braskem.

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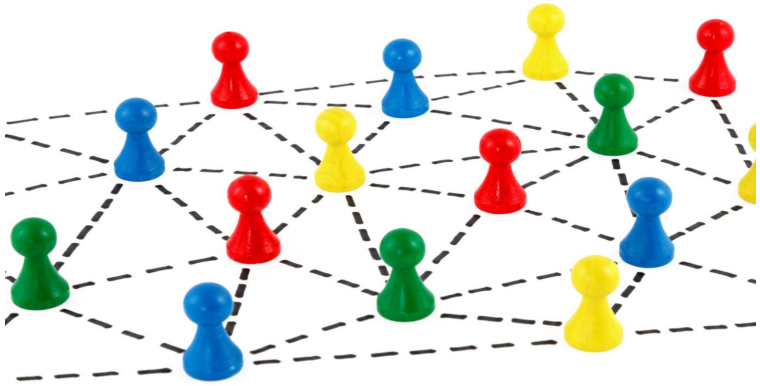
Source of Truth?



Fragmented IT Environment

The IT environment was fragmented with no unified inventory of technology partners or applications across units.

Scattered Data

Data was scattered and not centralized, highlighting the need for a single source of truth.

Need for Solid Foundation

Recognizing the 'as-is' environment is essential for building sustainable future architectures and innovation.

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More ≠ Better

Industry Downturn Impact

The industry decline forced a strategic shift focusing on cost-efficiency and simplification to adapt to new market realities.

Application Rationalization Challenge

Leadership identified an excess of workflow management tools, highlighting inefficiencies and complexity in operations.

Enterprise Architecture Strategy

A defined enterprise architecture strategy was necessary to rationalize applications and align technology with business goals.

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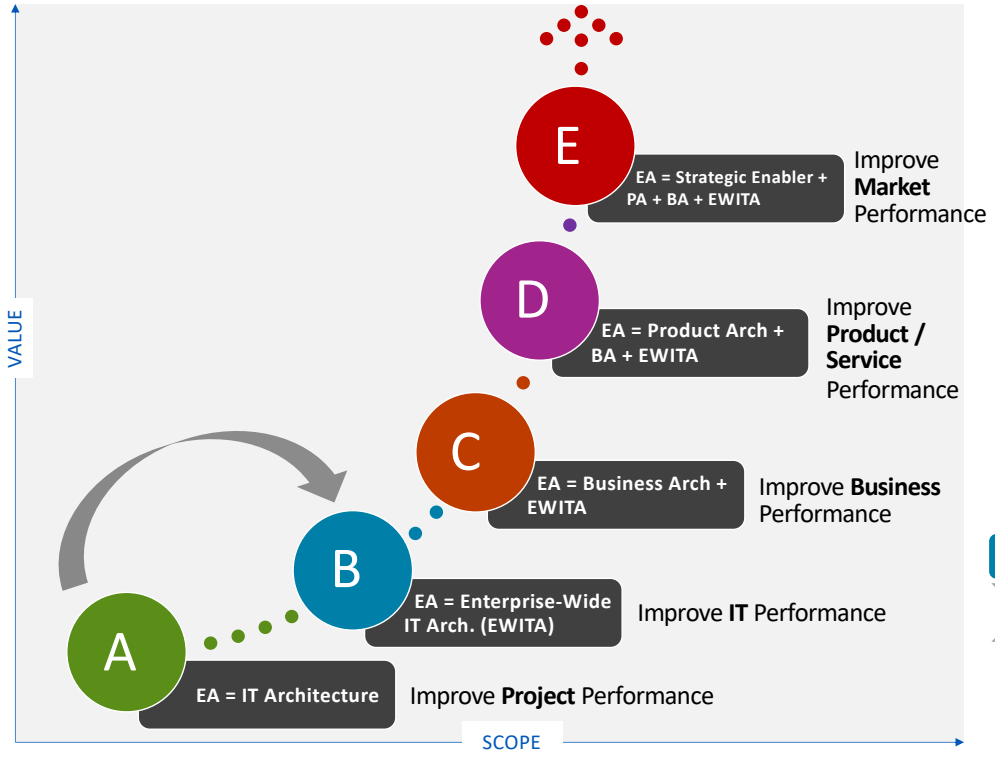
Noisy ⟶ Useful



Synergy and Rationalization

Optimize IT Resources and technical solutions; Identify opportunities of synergy between delivery teams

Support Delivery Teams

Give visibility to our entire landscape; Clearly understand our solution portfolio to help build our technology roadmap

Efficient and Strategic

Develop architecture standards; Define solution guidelines; Adopt governing principles; Increase demand time to value

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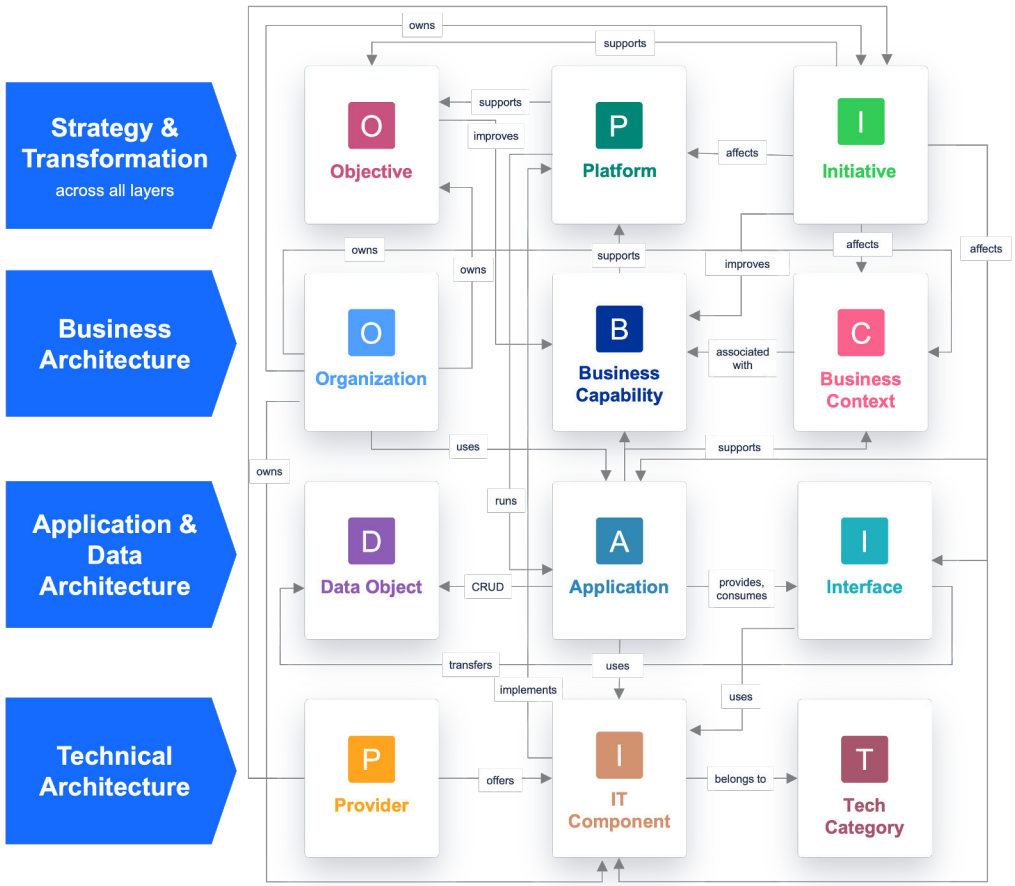
Useful → Trusted



Centralization of Application Data

Required a tool to centralize and connect diverse application data for effective management.

Alignment with Strategic Needs

SAP LeanIX's capabilities support strategic enterprise architecture practices and organizational goals.

Run Strategic Implementation

Developed a focused strategy to leverage the metamodel for successful implementation and lasting value.

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Enterprise Architecture
APPLICATION ATLAS

DEMOCRATIZATION OF DISCOVERY

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IT Leadership

Across All Layers

Enterprise Architect

Establishing the portfolio's technology vision, strategy, and roadmap. Translate strategy for whole landscape.

- EA Lead
- Enterprise Architect
- Enterprise Architect
- Enterprise Architect

Across Systems

Platform Architect

Defining and communicating a shared technical and architectural vision for technical and data architecture.

- Azure
- BTP
- Low-Code
- Integration
- Data
- SalesForce
- Others

Intentional Architecture & Guardrails

Emergent Design & Field feedback

Across Solutions

Solution Architect

Defining and communicating a shared technical and architectural vision for the business and application architecture.

- Industrial
- Investment to Shutdown
- Logistics
- Order to Cash
- Forecast To Stock
- Requisition to Pay
- Record to Report
- Hire to Leave
- Idea to Product Launch
- Supportive Processes

Digital Technologies (DT)

Business Owners

Braskem

SUPPORT NEEDED FROM DELIVERY TEAMS

Key Personnel

At least one solution architect with knowledge of systems and business connections

Active Meeting Participation

Engage in essential work meetings for collaboration and information sharing

Mapping & Updating

Commit to mapping applications and maintaining SAP LeanIX updates

LeanIX Reference

Solution Architect to be a reference for SAP LeanIX expertise and use in the delivery team

Full Engagement

Ensure entire delivery team is actively involved at critical times for alignment reasons

Business Liaison

Regular communication with business for vital information gathering

AGILE DELIVERY – SPRINTS

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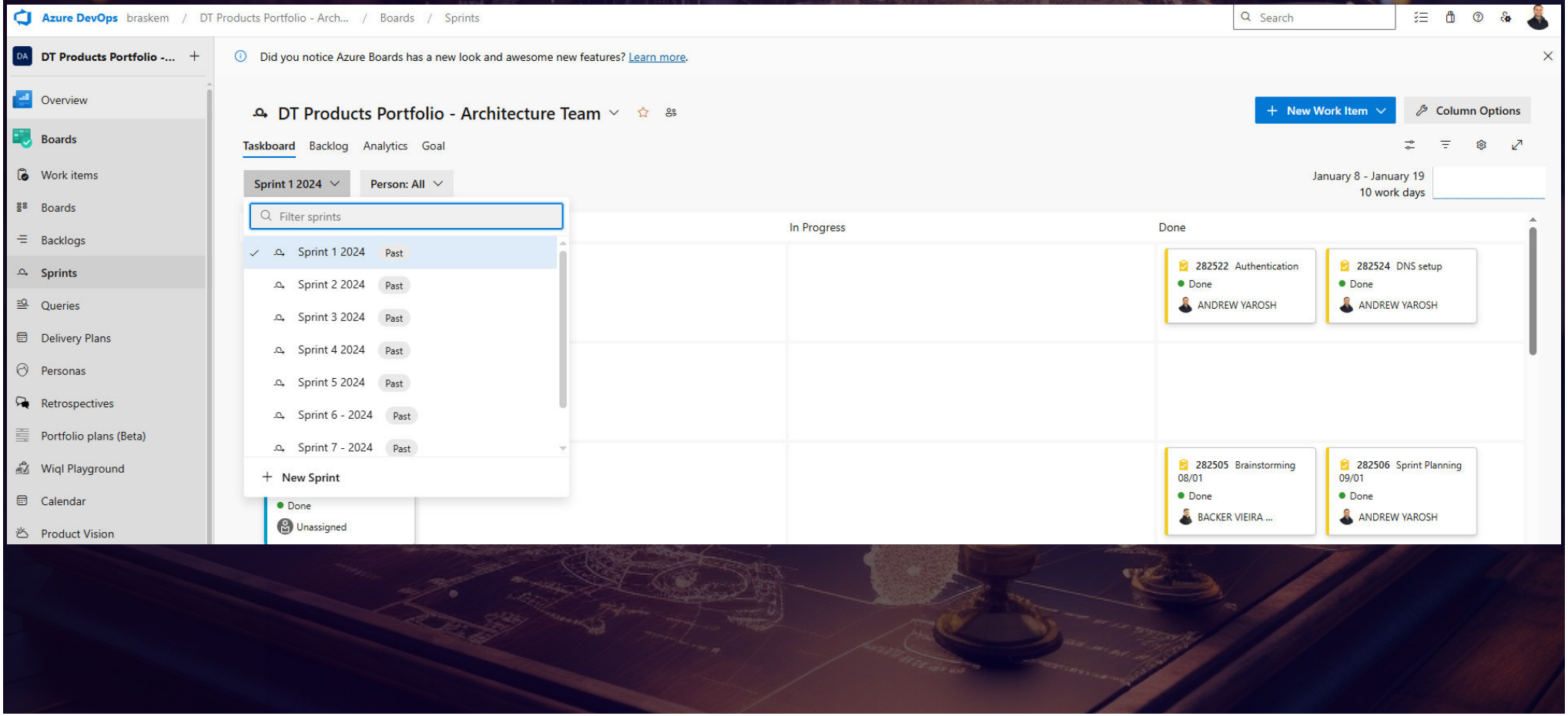

TIMELINE

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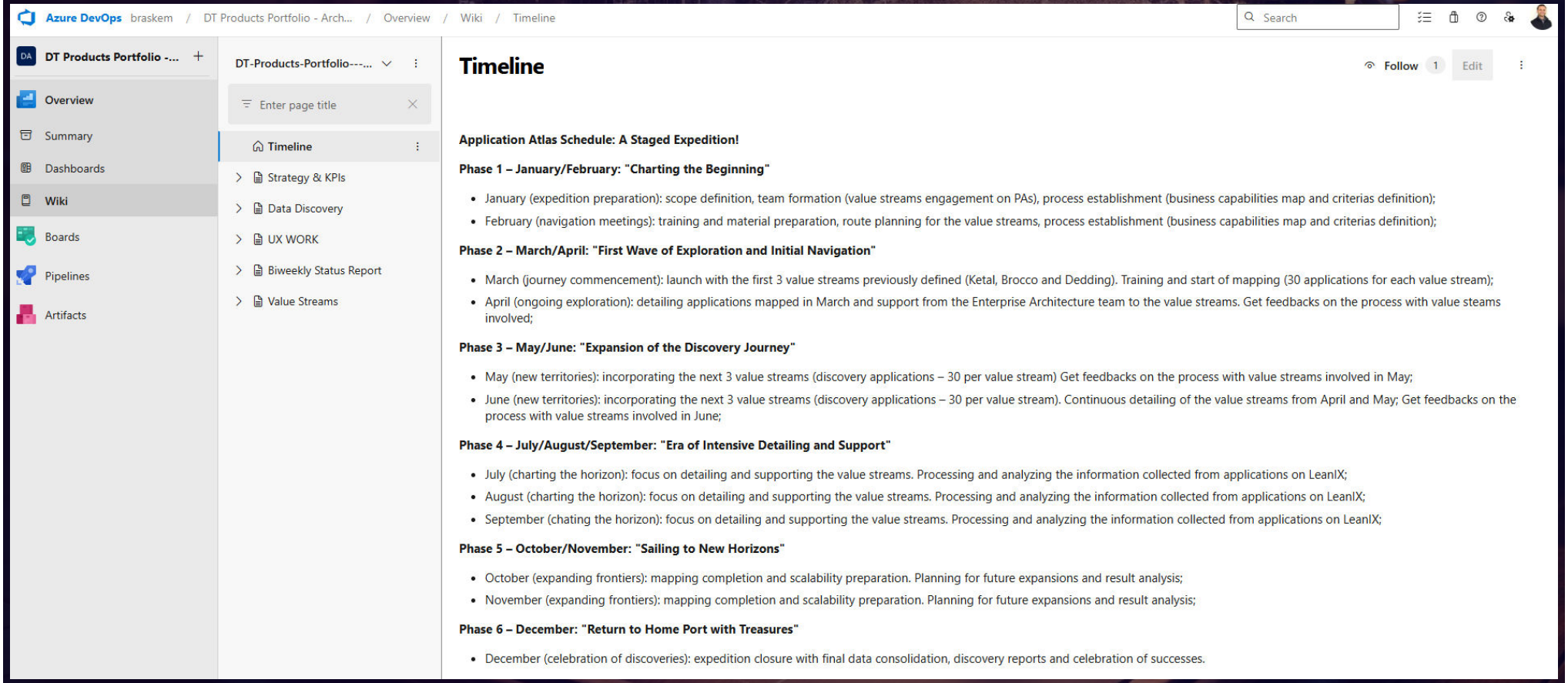
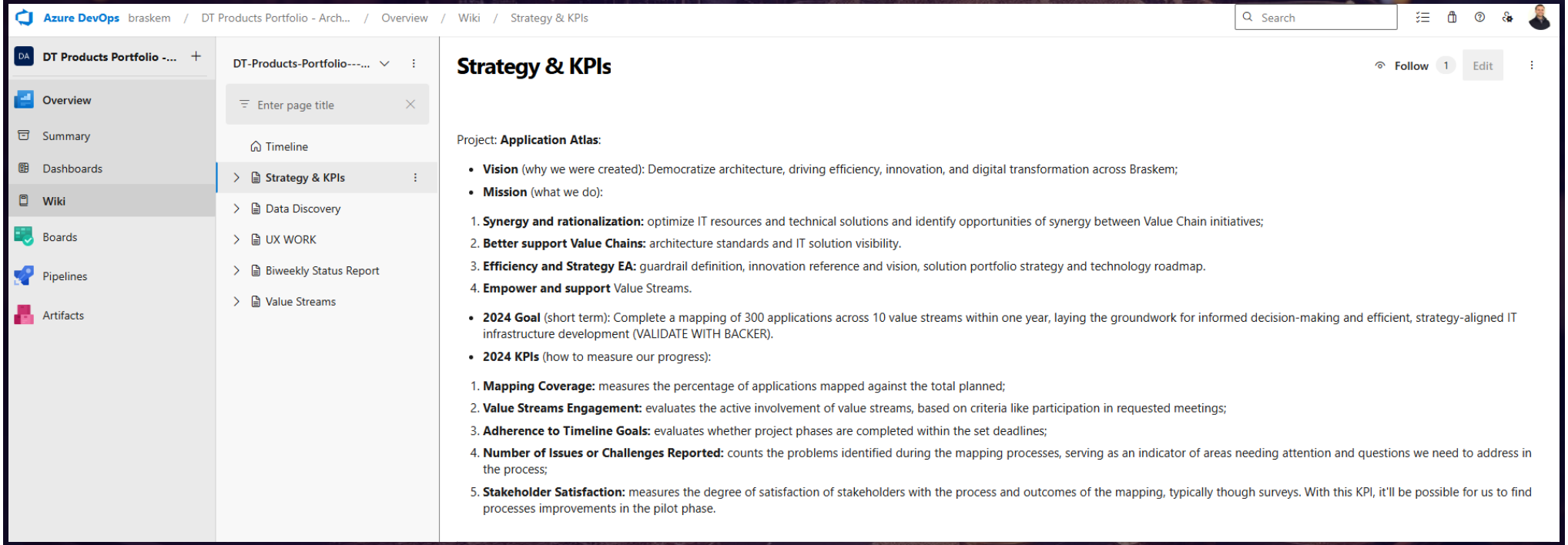


STRATEGY & KPIs



COLLABORATE TO SUSTAIN

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IT Leadership

Across All Layers

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Digital Technologies (DT)

Business Owners

COLLABORATE TO SUSTAIN

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Application Atlas Guideline

How to fill informations on LeanIX about Braskem's applications.

1. Application Information

Please always use the **SaaS Catalog** functionality to include new applications and IT Components. SaaS catalog provides auto-population of applications fields like description, product category, SSO, and hosting information. Once we use the SaaS Catalog, LeanIX will ensure continuous updates for these applications and IT Components. Please use the **name** field to include the original product name (commercial name) and the **alias** field as Braskem's internal name.

2. Lifecycle

If it wasn't possible to use the SaaS catalog functionality, then this information should be added **manually**. The text below helps provide additional clarity on how to interpret the Lifecycle Fields:

- **Plan:** The component has been announced by the provider.
- **Phase in:** The component is in beta or early access.
- **Active:** The component is generally available (it is **mandatory** to fill this field).
- **Phase out:** Date when the provider announces that a version will be going to be outdated.
- **End of life:** The component is end of life and no longer supported by the provider.

3. Business Criticality

Business-critical applications are all applications that are essential to **everyday business operations**. Most often it includes applications related to sales, finance, customer service, business processes, and logistics. Use the criteria below to classify:

- **Mission-Critical:** Any failure or disruption is catastrophic. These applications must be available to run at any cost.
- **Business-critical:** Breaks in service are not catastrophic, but they are highly undesirable. This applications should be consistent and reliable.
- **Business operational:** When they are disrupted it can cause problems within the organization. However, they are out of the direct line of service to the customer.
- **Administrative applications:** When these applications fail it can cause some problems but it will not affect the customer and can be tolerated a bit more.

4. Functional Fit

This must be answered by the users of the application. Try to involve **at least 2 users** to ask the following questions: How well does the application align with your business needs? How well does the application support business capabilities and processes? Are there missing functionalities? Missing reports? Are users satisfied with the support of this application?
Use the following criteria to classify:

- **4 stars:** 90% or more fit.
- **3 stars:** 70% to 89% fit.
- **2 stars:** 50% to 69% fit.
- **1 star:** less than 50% fit.

5. Business Capabilities

Business Capabilities define the application in **business terms** and serve as a **common language** everyone in the organization understands and refers to. We provided a complete map and the idea is to have the support of the business to help fill this field. There are **3 levels**. You can pick the appropriate level. Example: you can pick a root level like "Finance" if you are not comfortable going deep in detail, or you can pick a child level such as "Finance / Accounting / External Reporting". If you think you need to add a level, **contact Enterprise Architecture team.**

6. Business Context

Business Context define the application in reflecting our **value stream structure map**. Same as Business Capabilities map, you can choose a root or a child to fill. If you think you need to add a level, **contact Enterprise Architecture team.**

7. Organizations

Organization is a map which reflects Braskem's regions represented by **geographical divisions**. Same as Business Capabilities map, you can choose a root or a child to fill. If you think you need to add a level, **contact Enterprise Architecture team.**

8. Time Classification (TC)

Gartner's TC is a methodology used in EA to assess an organization's application portfolio. It categorizes applications based on their **strategic value** and the **effort required to manage them effectively**. The TC is based on the Functional and Technical Fit assessment of the applications. Using those assessments, each application is categorized under one of four quadrants:

- Applications with a high Technical Fit but low Functional Fit will be **Tolerated.**
- Applications with a high Technical Fit and high Functional Fit will be **Invested.**
- Applications with a low Technical Fit and high Functional Fit will be **Migrated.**
- Applications with a low Technical Fit and low Functional Fit will be **Eliminated.**

9. 6R Classification

The 6R framework helps to classify applications for cloud migration based on six different strategies: Rehost, Replatform, Rearchitect, Repurchase, Retain, and Retire. 6Rs assess applications for cloud readiness.

- **Rehost:** Also known as "lift and shift." Rehosting is moving existing systems or applications to new infrastructure or cloud-based platforms. It can be automated using tools and is an easy way to optimize/re-architect applications already running in the cloud.
- **Replatform:** A way of identifying and modernizing parts of an application (IT components) to achieve some tangible benefits, such as improved resource utilization, improved security, etc., while the core architecture of the application remains the same.
- **Rearchitect:** This involves reimagining or restructuring an application architecture, usually using cloud-native technology and modern architectures (e.g., Microservice, Serverless). This is done when an organization wishes to add features, scale, or improve application performance. This approach offers the maximum benefits of the cloud, such as scalability, reliability, and cost efficiency, but it also requires significant effort.
- **Repurchase:** The application is fully replaced by a Software-as-a-Service (SaaS) product.
- **Retire:** Deciding which applications can be removed because they are no longer required for the business. Data archiving or data migration to a successor Application might be required.
- **Retain:** This is the 'do nothing' option. Applications that need no changes or should be revisited at another time.

10. Data Objects

Name Convention: Object: provider -> consumer. Example: SAP Contracts: SAP ECC -> Vendavo. Data Objects

EXPEDITION ROADMAP 2024

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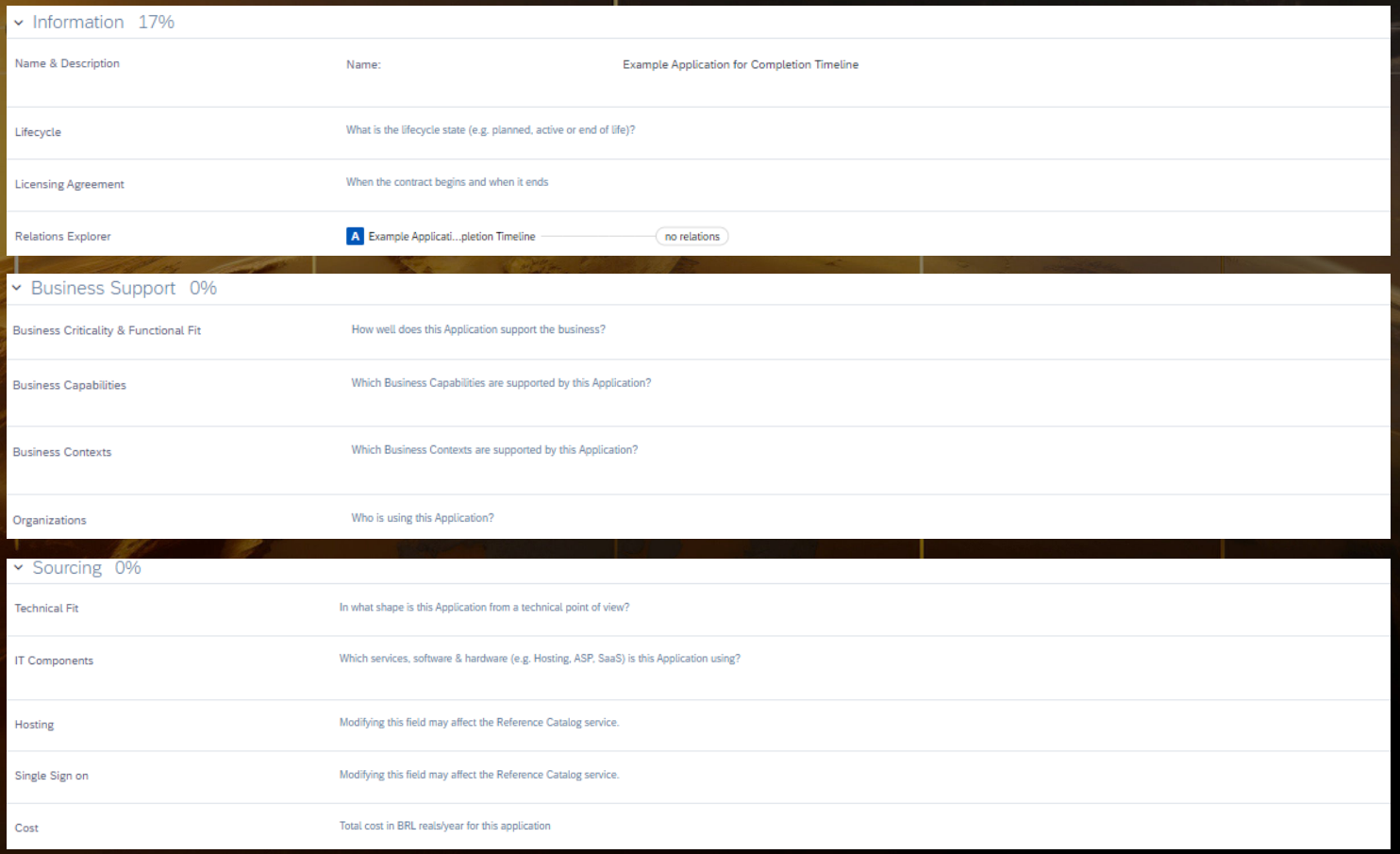
Product Portfolio Building

May/June

July

August

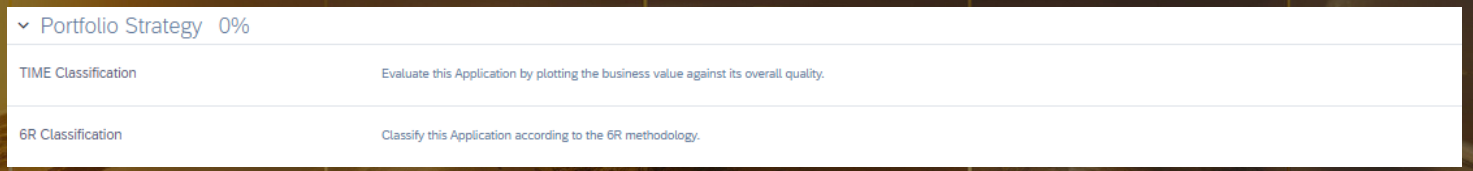


EXPEDITION ROADMAP 2024

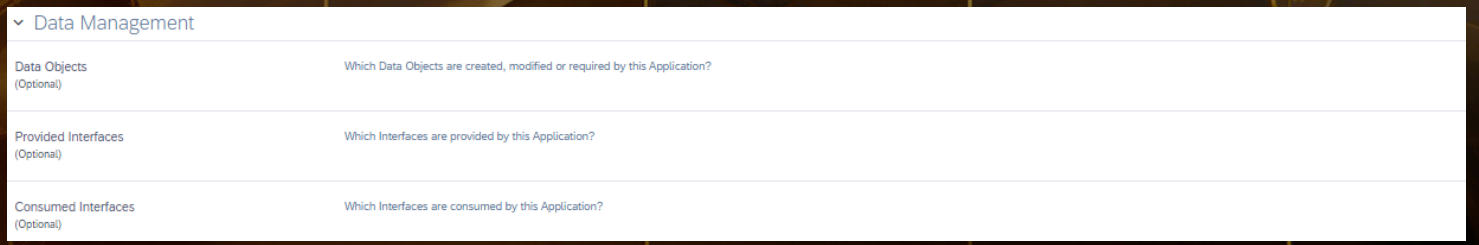
Braskem

Product Portfolio Building

September



October



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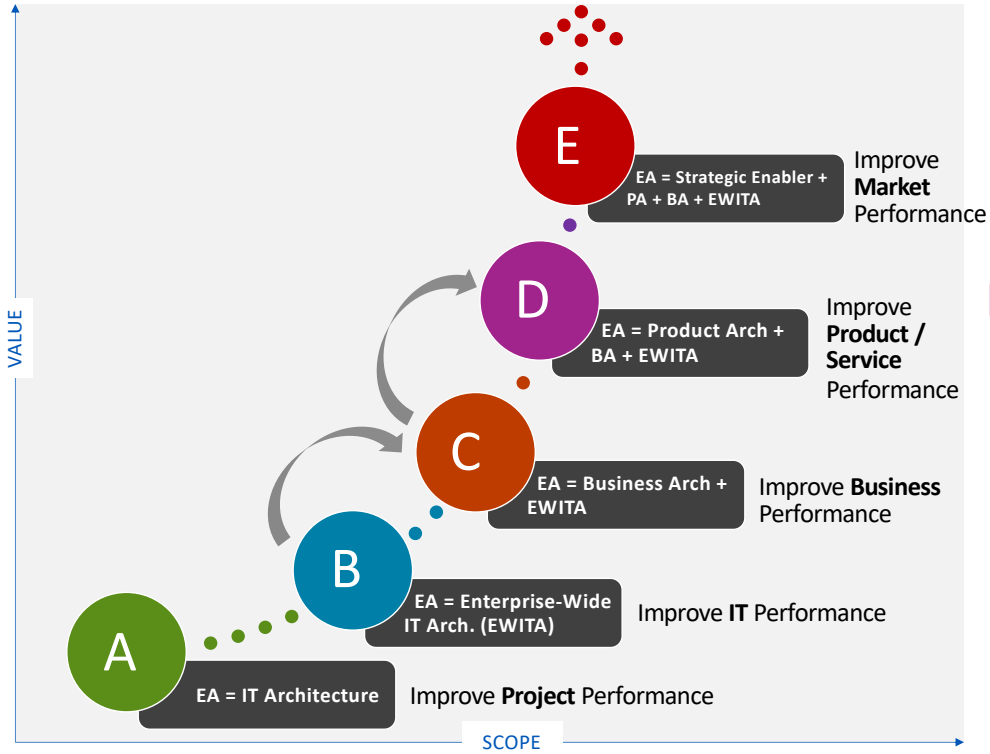
OUTCOMES!

Trusted ⟶ Influential



B -> D **Architecture as a Business Advocate**

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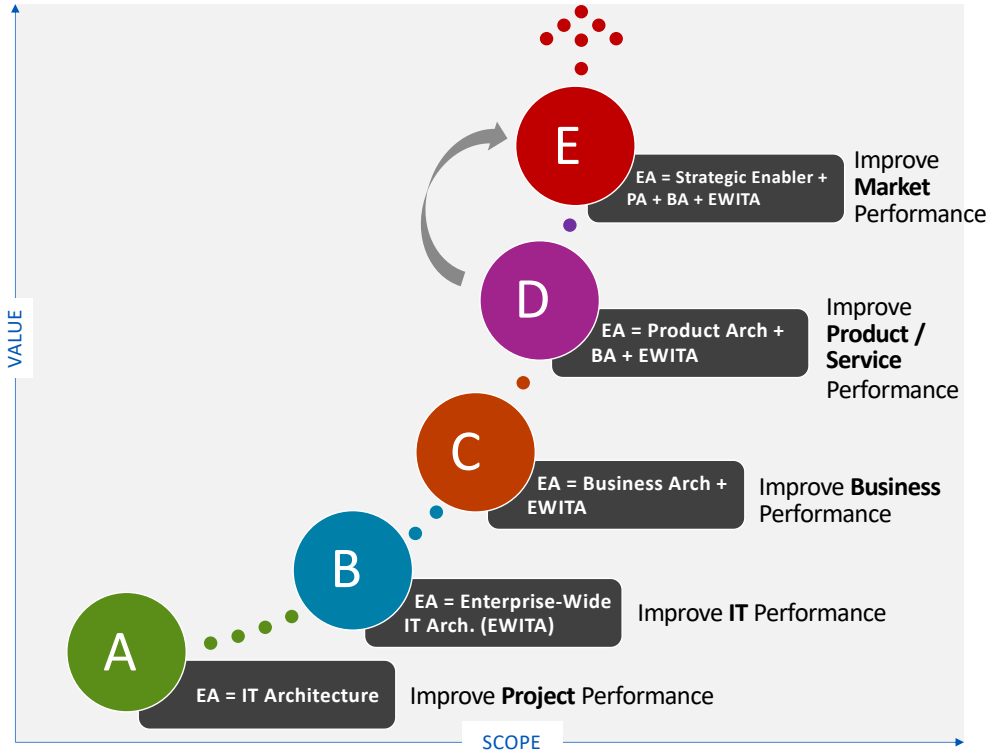
Influential → Strategic Advisor



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SUSTAINABILITY!

THANK YOU!

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