How To Do Business-Driven Architecture

1 BDA Definition

IT/business alignment is the process of **aligning IT strategies and initiatives** with the **goals and objectives of the business** through clear **linkage** and **quantifiable measurements** established through business architecture activities. This involves **shifting** from a **technology-centric to a business-centric** approach and working collaboratively with business leaders to determine their needs and goals. To maintain alignment over time, **regular meetings** should be held, and the **future state of business architecture** should be defined at least once a year.

2 Influences

Governance	• **Managing** and **controlling architectures** at an enterprise-wide level, ensuring alignment with the business vision • Different isolated levels and practices of governance at different architectural levels & in different areas
Structured Approach	• Steers **consistency and alignment** of architecture with business objectives • **Unclear approach** within design phase and technical decisions leads to challenges in implementation and realization of BDA
Skill-Set	• Good **communication skills**, **business understanding**, **customer focus**, **holistic thinking** & **stakeholder management** are crucial • Mastering key competencies, DAs improve customer experience, optimize systems, and drive innovation
Collaboration & Team Setup	• Team should consist of all relevant individuals, including **governance team members**, **subject matter experts**, **architects** and **specialists** • Through collaboration of IT & business, organization achieve a more **comprehensive** and **aligned EA**
Guerilla Architecture	• Emphasizes **rapid iteration** and **agile decision-making** to address immediate business needs • Operates **outside formal EA frameworks**, providing a way to drive **innovation** and respond **rapidly** to business demands
EA Asset Maturity	• Early stages: EA assets may be **fragmented** and **unsystematic** which could hinder alignment with business objectives • As maturity progresses, EA assets become more **standardized**, **integrated**, and **recognized**
Roles & Responsibilities	• **Key Roles** within BDA range from the business architect, enterprise architect, domain architect to the solution architect • **Challenges**: potential for unclear understanding or the lack of defined roles within architectural context
Organization	• Suitable organizational features for implementing BDA such as **matrix organizations**, **agile organizations**, **product-oriented organizations** and **Centers of Excellence** (CoEs)
Culture	• **Understanding** and **considering** the company's culture can provide advantages to architects • Culture of an organization can **shape the practice of BDA** and EA should reflect and support the organization's overall culture and process

3 Methodology

Based on BDA **influences**, a system was developed to **elaborate necessary and suitable criteria for BDA**

A morphological box **breaks down complex situations** into their constituent parameters or dimensions

It provides a **framework for evaluating and comparing different alternatives** based on predefined criteria

The results in steps 1-3 provide a detailed guide on **how to apply BDA** that can be influenced by nine dimensions

4 Step 1

As-is and target state below

Consideration of the As-Is and Target State

• Morphological box as a basis to **understand** and **analyze** the **current architecture** of an organization, **existing structures**, **processes**, and **technologies**

• By gaining a **clear picture** of how the architecture should ideally be designed, specific **objectives** and **action plans** for BDA implementation can be developed

• This ensures that the implementation of BDA supports the **desired benefits** and **strategic goals** of the organization

5 Step 2

Scenarios on next page

Allocation to a Scenario

• Instructions for the implementation of BDA are **heavily dependent** on **organizations circumstances**

• We defined four scenarios which describe typical organizational structures based on the factors of **culture**, **organization type** and **approach**, which are difficult to influence

• The scenario which fits best, can be used as **orientation** for the **further BDA implementation**

4 Morphological Box

	Influence-ability	Approach				
		Internal orientation			External orientation	
		Capability-Based approach	Process-Driven approach	Data-Driven approach	Customer-Driven Approach	Value-Driven Approach
Scenario		Scenario 3b	Scenario 2	Scenario 2	Scenario 1, Scenario 3a	Scenario 1, Scenario 3a
EA Understanding	Easy	Capability-focused	Business-focused / Process-focused	Data-focused	Business-focused	
EA Governance	Easy	Federal		Central	Decentral	
			Decentral			
EA Community	Easy	Role-based communities	Guiding centre of excellence / Specialist-based communities	Specialist-based communities	Guiding centre of excellence	Role-based communities
EA Role	Easy to neutral	Integrator			Integrator & Connector	
		Connector	Translator	Moderator		
Team Setup	Easy to neutral	Mix of Business and IT		Central unit only	Mix of Business and IT	
Business & EA Collaboration	Easy to neutral	Joint requirements gathering / Co-creation during development	Governance and decision-making	Governance and decision-making / Joint requirements gathering	Governance and decision-making	Joint requirements gathering
					Co-creation during design and development	
EA Roles & Responsibilities	Easy to neutral	Enterprise Architect / Business Architect	Domain Architect	Data Architect / Platform Architect	Project Manager/ Product Owner / Business Architect	Enterprise Architect
EA Skillset	Easy to neutral	Business-oriented thinking and understanding			(Agile) Project Management Knowledge	Business-Oriented thinking and understanding
		EA and DA knowledge				
Organization Type	Hard	Function oriented			Product-oriented	
		Product-oriented		Product-oriented	Agile-oriented	
Culture	Hard	Adhocracy culture	Clan culture	Hierarchy culture	Adhocracy culture	
					Market culture	

Preferred · Suitable alternative

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5 | Scenarios

	Scenario 1	Scenario 2	Scenario 3a	Scenario 3b
Culture	Market culture	Hierarchy culture	Adhocracy culture	Adhocracy culture
Organization Type	Product-oriented or agile organization	Functional-oriented organization	Product-oriented or agile organization	Functional-oriented organization
Approach	Customer-Driven or Value-Driven	Process-Driven or Data-Driven	Customer-Driven or Value-Driven	Capability-Driven
Implications for BDA	Focus on customer via products and services	Focus on data and processes	Focus on agile and customer-oriented structures	Focus on cross-functional integration of flexible, innovative processes

6 | Step 3

BDA Roadmap

- For each scenario, an **individual roadmap** and **action statements** for the implementation of BDA in the respective organizational environment were created
- The roadmap is based on the **dimensions** explained in **step 1** and reflects the **order** in which specific recommendations for action are suggested
- The approach under consideration and the **respective target states** are taken into account for each dimension

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Scenario 1

EA Community
Target State: Guiding Centre of Excellence
- Strengthen **business architecture role** by **defining** and **operationalizing** responsibilities + involvement

EA Skillset
Target State: Agile PM knowledge & business-oriented thinking and understanding
- **Collaborative** planning sessions, **incremental** architecture and solution development

Team Setup
Target State: Mix of business & IT
- Define **roles** and **responsibilities**
- **Joint committees** & **boards** and **business** & **architecture** trainings
- Definition of **common metrics**

EA Understanding
Target State: Business-focused
- Promote business understanding by developing **business knowledge**, participating in **strategy discussions** & fostering **communication**

EA Governance
Target State: Federal
- **Harmonize** governance structure by defining **joint guidelines**
- Extract **domain-specific** responsibilities & establish it close to appropriate value chain/domain

Business & EA Collaboration
Target State: Governance and decision-making & co-creation during design and development
- Definition of **common architect. standards** that consider **business** and **technical** requirements

Scenario 2

EA Community
Target State: Guiding Centre of Excellence
- **Community canvas**
- Gain **executive support** for the BDA CoE and identify **suitable architects**

EA Understanding
Target State: Data-focused
- **Enforce respective roles** in business and IT and **establish central** units to define standards

EA Governance
Target State: Federal
- Define **overarching EA topics** vs. **domain-specific topics** and define which need **centralized governance**

Business & EA Collaboration
Target State: Governance and decision-making
- Establishing **mechanisms** for **joint decision-making** (workshops, review meetings and joint coordination processes)

EA Role
Target State: Integrator
- Clearly communicate the **EA Integrator role**
- Establish **architecture vision** & **strategy** based on architecture principles

EA Skillset
Target State: Business-oriented thinking and understanding
- **Mixed teams**, **stages** & **training** for architects
- Internship, communities, job rotation, coaching

EA Roles & Responsibilities
Target State: Business & data architect
- Define **common goals** for all architects based on the **company's business objectives** and **strategic direction**

Scenario 3a

EA Understanding
Target State: Business-focused
- Create **common understanding** of **architecture** among all stakeholders
- Training with **focus** on **technical aspects** and deep understanding of **customer needs & values**
- Strengthening customer focus by **fostering mindset** with **customer needs**

EA Community
Target State: Guiding Centre of Excellence
- **Community canvas**
- Gain **executive support** for the BDA CoE
- Identify **suitable architects** and **experts** as members of the **CoE**
- Establish community with **focus on scaling**

Business & EA Collaboration
Target State: Governance and decision-making & co-creation during design and development
- **Interdisciplinary committees** made up of representatives which jointly make governance decisions
- **Create acceptance** in decentralized units for central management

Team Setup
Target State: Mix of business and IT
- **Define roles** & **responsibilities**
- **Joint committees** and **boards** incl. decision-making powers and structures within IT delivery processes
- **Joint business** and **architecture trainings** and cross-training programs

Scenario 3b

EA Understanding
Target State: Capability-focused
- **Capability-based training**: implement accessible training programs on capability-based architecture practices
- **Promote business understanding** and **communication** by developing business knowledge

EA Community
Target State: Role-based communities
- **Community canvas**
- Gain **executive support** for community
- Identify **suitable architects within communities**, considering technical knowledge and business capability expertise in **IT** and especially **architecture**

Business & EA Collaboration
Target State: Governance and decision-making & co-creation during design and development
- **Working groups** & **workshops**
- Use **interactive formats** e.g., design thinking workshops to create a collaborative environment
- **Collaborative tools** & **platforms** to promote collaboration and **visual tools**

Team Setup
Target State: Mix of business and IT
- **Define roles** & **responsibilities** of business and IT, incl. associated responsibilities and tasks
- **Diverse** mix of business experts and EA representatives in teams
- **Joint committees** and **boards** incl. corresponding roles, decision-making powers and structures

For more information, please refer to the BDA white papers on business-driven architecture by CBA Lab