



BizDevOps Reference Architecture

24 nov 2024 17:23:12

Purpose

The "BizDevOps Reference Architecture" aims to provide a comprehensive and structured guide for integrating BizDevOps practices within an organization. This architecture facilitates the alignment of IT initiatives with strategic business objectives, ensuring agile and efficient delivery of software products that provide significant value.

Key views such as the "BizDevOps Alignment View", "BizDevOps People View", "BizDevOps Principles View", and "BizDevOps Process View" contain essential architectural building blocks that outline business capabilities, business processes, critical roles, and fundamental principles guiding the implementation of BizDevOps. These views ensure that all activities in the software development lifecycle are aligned with business objectives and promote agility and continuous collaboration.

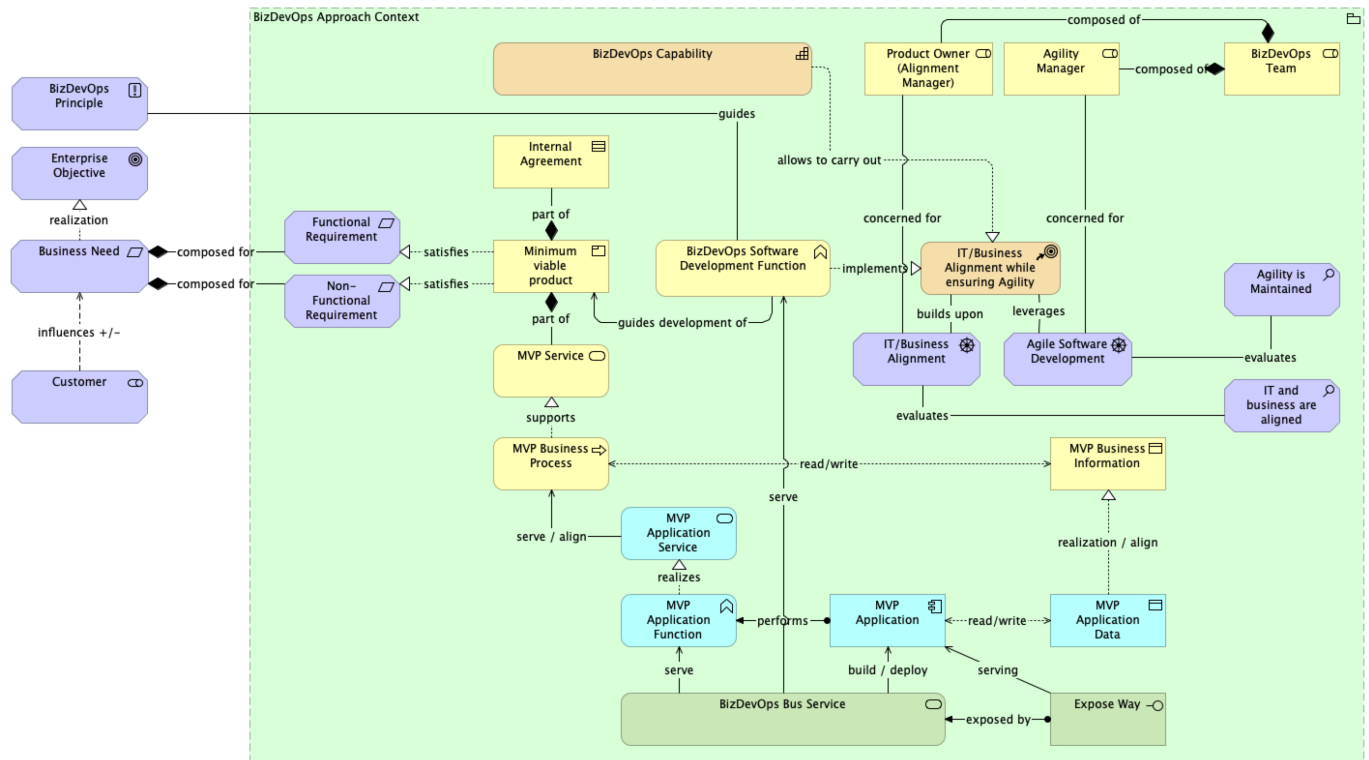
Additionally, the proposed viewpoints, "Viewpoint: DevOps Ecosystem" and "Viewpoint: Managing BizDevOps Projects", enhance the understanding and management of the DevOps ecosystem and facilitate decision-making within project teams. The "Viewpoint: DevOps Ecosystem" provides a holistic view of the DevOps environment, while the "Viewpoint: Managing BizDevOps Projects" focuses on improving communication and coordination among teams to ensure continuous alignment with business goals.

Together, this reference architecture is an artifact that could be useful for adopting BizDevOps practices, enabling organizations to achieve efficient integration of business, development, and operations functions. This results in greater operational efficiency, better team collaboration, and improved responsiveness to changing market need.

Views

BizDevOps Alignment View

No viewpoint



Documentation

Narrative:

The [Business Need] are composed of [Functional Requirement] and [Non-Functional Requirement], which are fulfilled by a [Minimum Viable Product (MVP)]. This MVP is designed, built, and delivered to its users considering the [BizDevOps Software Development Process]. This software development process complies with the course of action [IT/Business Alignment while ensuring Agility], which represents how the organization has decided to build the software and is also supported by the [Business Capability]. This course of action is influenced by the drivers [IT/Business Alignment] and [Agile Software Development], which are assessed by [IT and Business are Aligned] and [Agility is Maintained], respectively.

The [Minimum Viable Product (MVP)] is represented with a service orientation. This product is composed of contracts called [Internal Agreement] and business services [MVP Service]. Considering the service orientation, the business service is executed by business processes [MVP Business Process], which can access [Business Information]. The [MVP Business Process] is served by [Application Service], which exposes the services offered by [Application Function]. The [Application] can access [Application Data] and provides everything necessary for the [Application Function] to offer its functions. The [Application] and [Application Function] uses [DevOps Infrastructure Service] to enable Continuous Integration, Continuous Delivery, and others tasks, as well as to provide the necessary infrastructure to support the use of [Application]. This service orientation allows us to align the business ([MVP Business Process]) with information technologies [Application Service]. Additionally, it enables the alignment of information and data.

The role [BizDevOps Team] includes roles such as [Product Owner] and [Agility Manager], who are associated with the drivers of [IT/Business Alignment] and [Agile Software Development], respectively. This ensures that the roles are aware of the tasks that will keep IT aligned with the business while developing software in an agile manner.

The [Business Need] fulfill the [Enterprise Objective], allowing organizations to achieve their goals using the BizDevOps approach. Furthermore, the [Business Need] are influenced by architectural principles, which consider the [BizDevOps Principle], such as [Alignment], [Agility], among others.

Properties

| | |
|-----------|--------------------------|
| dct:title | BizDevOps Alignment View |
|-----------|--------------------------|

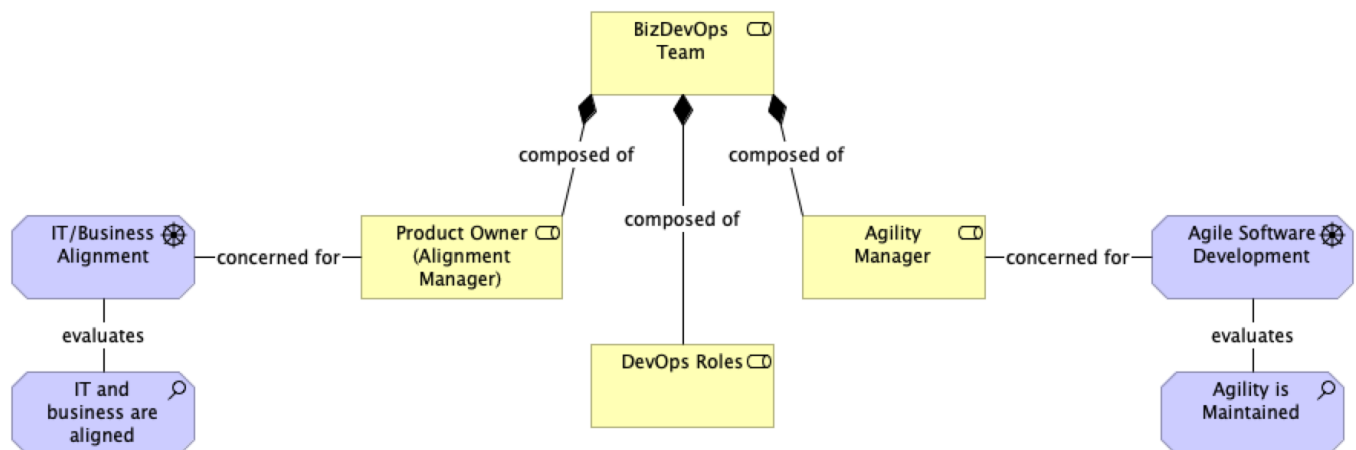
Elements

| Element | Type |
|----------------------------|--------------------|
| Agile Software Development | Driver |
| Agility is Maintained | Assessment |
| Agility Manager | Business Role |
| BizDevOps Approach Context | Grouping |
| BizDevOps Bus Service | Technology Service |

| Element | Type |
|--|-----------------------|
| BizDevOps Capability | Capability |
| BizDevOps Principle | Principle |
| BizDevOps Software Development Function | Business Function |
| BizDevOps Team | Business Role |
| Business Need | Requirement |
| Customer | Stakeholder |
| Enterprise Objective | Goal |
| Expose Way | Technology Interface |
| Functional Requirement | Requirement |
| Internal Agreement | Contract |
| IT and business are aligned | Assessment |
| IT/Business Alignment | Driver |
| IT/Business Alignment while ensuring Agility | Course of Action |
| Minimum viable product (MVP) | Product |
| MVP Application | Application Component |
| MVP Application Data | Data Object |
| MVP Application Function | Application Function |
| MVP Application Service | Application Service |
| MVP Business Information | Business Object |
| MVP Business Process | Business Process |
| MVP Service | Business Service |
| Non-Functional Requirement | Requirement |
| Product Owner (Alignment Manager) | Business Role |

BizDevOps People View

No viewpoint



Documentation

Narrative:

The [BizDevOps Team] includes roles such as [Product Owner] and [Agility Manager], who are essential for maintaining the alignment of IT with business objectives and fostering an agile environment. The [Product Owner] is responsible for defining the product vision and ensuring it meets the business needs and adds value. This role is critical in bridging the gap between business experts and the IT team, ensuring that the product delivers maximum value.

The [Agility Manager] ensures that the team remains agile across all phases of the approach. They create an environment for efficient and productive work, often filling the role of Scrum Master in Scrum and similar frameworks. The [Agility Manager] plays a key role in maintaining flexibility and responsiveness, helping the team adapt quickly to changing business needs and market conditions.

In addition to these roles, the [BizDevOps Team] includes [DevOps Roles], which encompass IT development and operations, DevOps Architect, and other roles defined within the organization. These roles focus on automating and streamlining the integration and deployment processes, ensuring continuous delivery and operational efficiency. The collaboration among these roles is vital for achieving seamless software development and delivery.

The [BizDevOps Team] operates under the influence of the drivers [IT/Business Alignment] and [Agile Software Development], ensuring that their efforts align with the broader business goals and agile practices. The effectiveness of these roles is assessed by the metrics [IT and Business are Aligned] and [Agility is Maintained], respectively, ensuring continuous improvement and alignment with business needs.

This structure enables the [BizDevOps Team] to effectively fulfill the [Business Need], ensuring that the organization achieves its [Enterprise Objective] through the BizDevOps approach. The principles of [Alignment] and [Agility] guide the roles and responsibilities within the team, fostering a collaborative environment that supports the strategic goals of the organization.

Properties

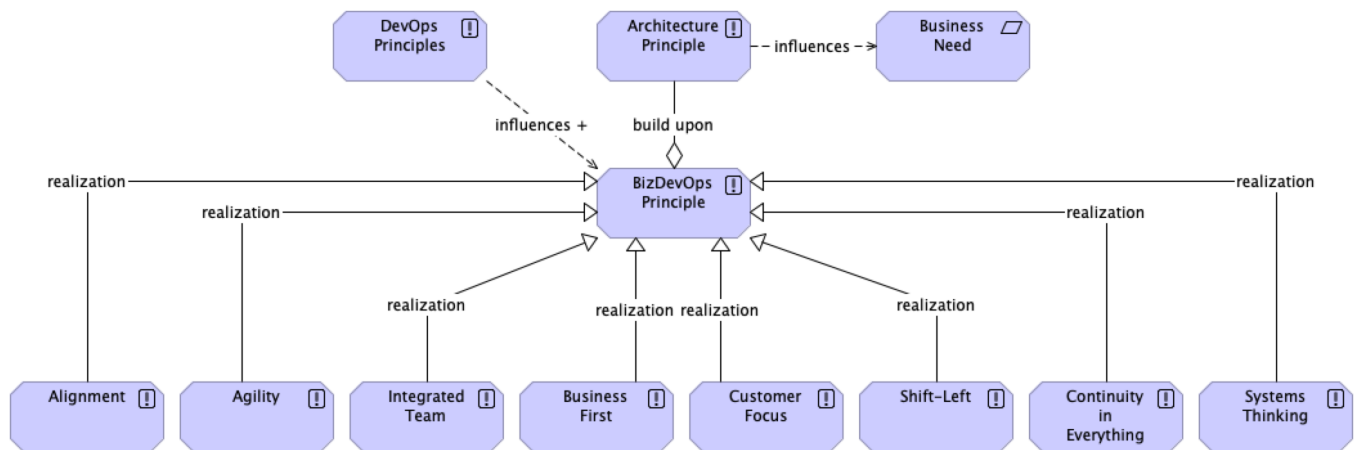
| | |
|------------------|-----------------------|
| dct:title | BizDevOps People View |
|------------------|-----------------------|

Elements

| Element | Type |
|-----------------------------------|---------------|
| Agile Software Development | Driver |
| Agility is Maintained | Assessment |
| Agility Manager | Business Role |
| BizDevOps Team | Business Role |
| DevOps Roles | Business Role |
| IT and business are aligned | Assessment |
| IT/Business Alignment | Driver |
| Product Owner (Alignment Manager) | Business Role |

BizDevOps Principles View

No viewpoint



Documentation

Narrative:

The [BizDevOps Principles] are fundamental guidelines that integrate business, development, and operations practices to enhance collaboration, accelerate delivery, and align IT efforts with business objectives. These principles are crucial for ensuring that all activities within the BizDevOps framework contribute to the overarching goals of the organization.

[Alignment]: This principle ensures continuous alignment of IT initiatives with business objectives. It emphasizes the importance of aligning IT services and capabilities with the strategic goals of the organization, thereby enhancing efficiency and creating value.

[Agility]: Incorporating agility throughout all operational cycles is essential. This principle promotes flexibility and responsiveness, enabling the organization to adapt quickly to changes in business needs and market conditions. It fosters an environment where iterative development and continuous improvement are standard practices.

[Integrated Team]: Rather than having separate teams, BizDevOps involves a unified team with roles spanning business, development, and operations to collaboratively meet software needs. This principle promotes a collaborative approach, breaking down silos and ensuring that all team members work towards common objectives.

[Business First]: This principle prioritizes organizational objectives over technical details. It ensures that all development and operational activities are driven by business goals, ensuring that the outcomes deliver maximum value to the organization.

[Customer Focus]: Adopting a customer-centered approach is key to delivering maximum value. This principle emphasizes prioritizing tasks based on customer needs and managing risks effectively, ensuring that the end product meets or exceeds customer expectations.

[Shift-Left]: Anticipating tasks typically performed at the later stages of development, such as quality and security testing, and addressing them earlier in the lifecycle is crucial. This principle ensures that potential issues are identified and resolved early, reducing risks and improving overall quality.

[Continuity in Everything]: Utilizing automated practices across business, development, and operations to maintain continuous process flow is essential. This principle supports continuous integration, continuous delivery, and other automated processes that enhance efficiency and reduce time-to-market.

[Systems Thinking]: Promoting a comprehensive understanding of the system from start to finish helps in resolving complex issues that may arise. This principle encourages considering the broader impact of decisions and actions, ensuring that all components work together harmoniously.

These principles collectively ensure that the BizDevOps framework is robust, flexible, and aligned with the strategic goals of the organization. By adhering to these principles, the organization can achieve better collaboration, faster delivery, and a stronger alignment of IT efforts with business objectives, ultimately leading to the successful fulfillment of the [Business Need] and achievement of the [Enterprise Objective].

Properties

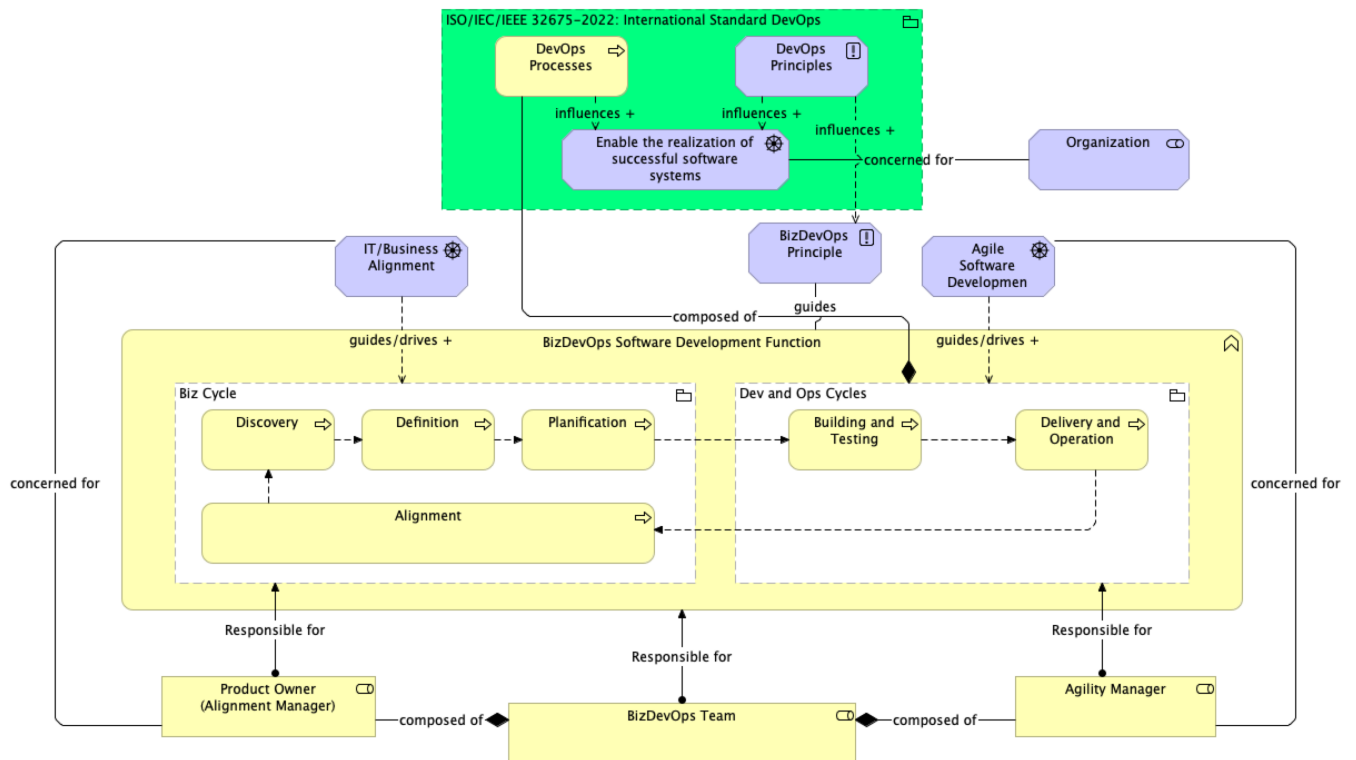
| | |
|------------------|---------------------------|
| dct:title | BizDevOps Principles View |
|------------------|---------------------------|

Elements

| Element | Type |
|--------------------------|-------------|
| Agility | Principle |
| Alignment | Principle |
| Architecture Principle | Principle |
| BizDevOps Principle | Principle |
| Business First | Principle |
| Business Need | Requirement |
| Continuity in Everything | Principle |
| Customer Focus | Principle |
| DevOps Principles | Principle |
| Integrated Team | Principle |
| Shift-Left | Principle |
| Systems Thinking | Principle |

BizDevOps Processes View

No viewpoint



Documentation

Narrative:

The [BizDevOps Process View] presents the processes that guide the development of a software product with BizDevOps. These processes ensure that the software development lifecycle is aligned with business objectives, promotes agility, and fosters continuous collaboration.

The first stage, [Discovery], involves identifying and understanding the business needs, requirements, and constraints. This process sets the foundation for aligning IT services with business goals, ensuring that the subsequent development efforts are focused on delivering value. Following discovery, the [Definition] stage involves detailed specifications of the product, including functional and non-functional requirements. This ensures that the development team has a clear understanding of what needs to be built, aligning with the [Business Need] and organizational objectives.

Planning is crucial in the [Planification] stage, where realistic timelines, resources, and milestones for the project are set. This process involves creating a roadmap that outlines the steps required to deliver the product, ensuring that all team members are aligned and prepared for execution. During the [Building and Testing] phase, the actual development of the product takes place, followed by rigorous testing to ensure quality. Adopting agile practices, this stage emphasizes iterative development, continuous integration, and automated testing to identify and fix issues early.

Once the product is built and tested, it moves into the [Delivery and Operation] phase. This process includes deployment, monitoring, and maintenance activities, ensuring that the product is delivered efficiently and operates smoothly, meeting the business requirements. An ongoing [Alignment] process ensures that the product and development efforts remain aligned with the changing business needs and market conditions. It involves regular reviews and adjustments to the project plan, ensuring continuous alignment of IT services with business goals.

The [DevOps Processes] integrate development and operations activities to enable continuous delivery and deployment. These processes include configuration management, infrastructure as code, continuous integration, and continuous deployment, ensuring that the product is delivered quickly and reliably.

Each of these processes is supported by the principles of BizDevOps, such as [Alignment], [Agility], and [Continuous Everything]. The processes are influenced by the drivers [IT/Business Alignment] and [Agile Software Development], ensuring that the development efforts are aligned with business objectives and agile practices.

By following these processes, the [BizDevOps Team] can effectively fulfill the [Business Need], delivering a [Minimum Viable Product (MVP)] that meets business objectives and adds value. The integration of these processes ensures that the development lifecycle is streamlined, efficient, and aligned with the strategic goals of the organization, ultimately leading to the successful achievement of the

[Enterprise Objective].

Properties

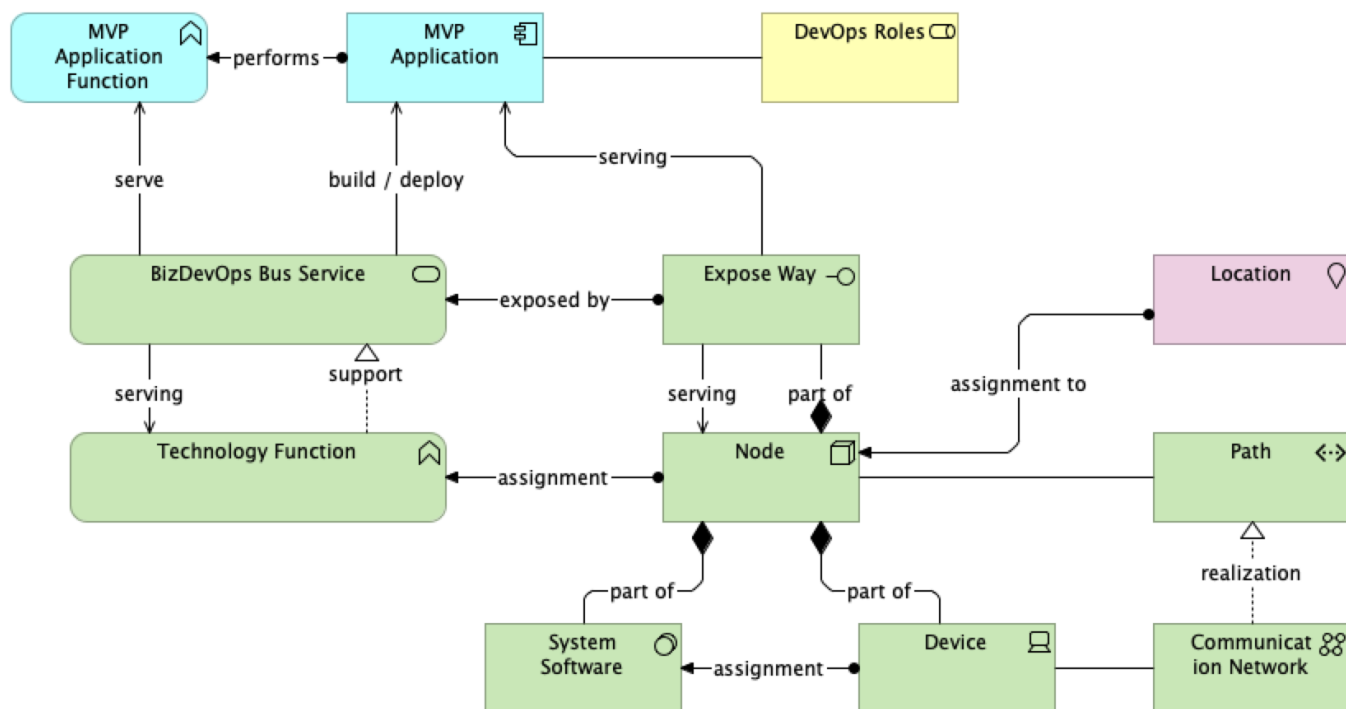
| | |
|------------------|------------------------|
| dct:title | BizDevOps Process View |
|------------------|------------------------|

Elements

| Element | Type |
|--|-------------------|
| Agile Software Development | Driver |
| Agility Manager | Business Role |
| Alignment | Business Process |
| Biz Cycle | Grouping |
| BizDevOps Principle | Principle |
| BizDevOps Software Development Function | Business Function |
| BizDevOps Team | Business Role |
| Building and Testing | Business Process |
| Definition | Business Process |
| Delivery and Operation | Business Process |
| Dev and Ops Cycles | Grouping |
| DevOps Principles | Principle |
| DevOps Processes | Business Process |
| Discovery | Business Process |
| Enable the realization of successful software systems | Driver |
| ISO/IEC/IEEE 32675-2022: International Standard DevOps | Grouping |
| IT/Business Alignment | Driver |
| Organization | Stakeholder |
| Planification | Business Process |
| Product Owner (Alignment Manager) | Business Role |

Viewpoint: DevOps Ecosystem

No viewpoint



Documentation

This viewpoint facilitates documentation, communication and decision making within the DevOps team.

Stakeholders: DevOps team, including IT Development and Operations; DevOps Architect; Other DevOps roles defined in the organization.

Concerns: Share the DevOps ecosystem between development and operations; understand all the how, with what, who, and why.

Purpose:

- Decide
- Inform
- Design

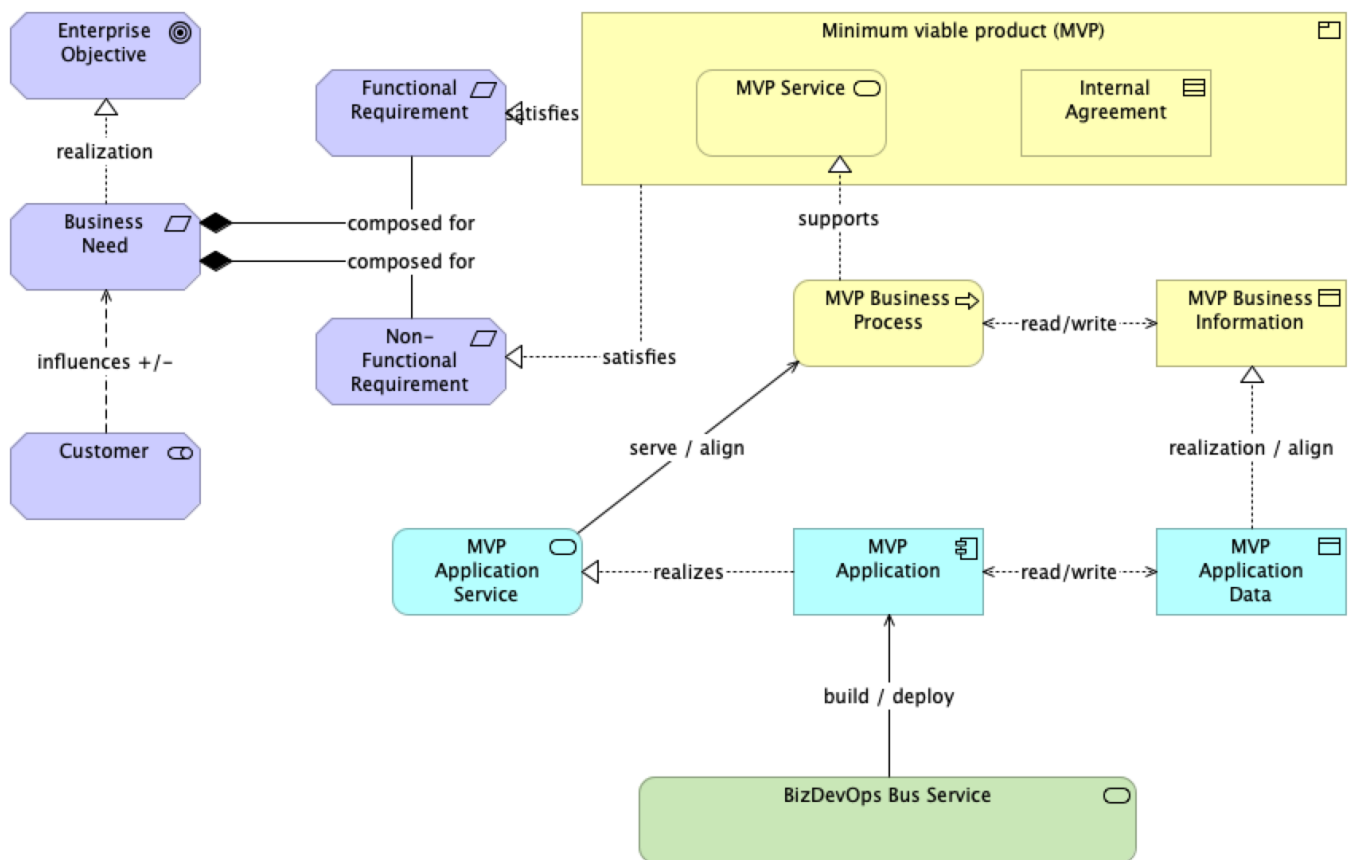
Narrative: An essential aspect in DevOps is the high importance of automation through a software toolchain (toolchain), for example, for code repository and versioning, testing, continuous deployment, or infrastructure as code. With DevOps-AV, all this type of software is managed and represented in two complementary ways: i) standard software acquired from suppliers (e.g. Jenkins) is considered IT infrastructure (expressed as instances of the 'system software' element); and ii) adaptations, extensions or integrations in which we incorporate our own business logic are considered systems of our DevOps ecosystem (expressed as instances of the 'application component' element). This difference is justified because in organizational terms, an essential aspect in EA, it is important to know if something is easy to replace (infrastructure) or not (information systems) because inside it has things made or added by us.

Elements

| Element | Type |
|--------------------------|-----------------------|
| BizDevOps Bus Service | Technology Service |
| Communication Network | Communication Network |
| Device | Device |
| DevOps Roles | Business Role |
| Expose Way | Technology Interface |
| Location | Location |
| MVP Application | Application Component |
| MVP Application Function | Application Function |
| Node | Node |
| Path | Path |
| System Software | System Software |
| Technology Function | Technology Function |

Viewpoint: Managing BizDevOps Projects

No viewpoint



Documentation

This viewpoint aims to improve communication and decision making within project teams, thereby effectively achieving designated objectives.

Stakeholders: The BizDevOps team, composed of the following roles: (i) Product Owner, (ii) Scrum Master (or 'Agility Responsible' if not following SCRUM), and Other DevOps roles.

Concerns: Managing a software project with BizDevOps while aligning IT/Business without sacrificing agility.

Porpurpose:

- Decide: Because it's in the interest of the BizDevOps team to make decisions regarding this perspective. This is considering that the perspective aims to facilitate alignment while maintaining agility and managing the project, and this could involve making decisions.

- Inform: Because it's in the interest of the BizDevOps team that the software project management with BizDevOps can be clearly communicated among all team members.

Elements

| Element | Type |
|-----------------------|--------------------|
| BizDevOps Bus Service | Technology Service |
| Business Need | Requirement |

| Element | Type |
|------------------------------|-----------------------|
| Customer | Stakeholder |
| Enterprise Objective | Goal |
| Functional Requirement | Requirement |
| Internal Agreement | Contract |
| Minimum viable product (MVP) | Product |
| MVP Application | Application Component |
| MVP Application Data | Data Object |
| MVP Application Service | Application Service |
| MVP Business Information | Business Object |
| MVP Business Process | Business Process |
| MVP Service | Business Service |
| Non-Functional Requirement | Requirement |

Strategy Layer

BizDevOps Capability

| | |
|------------------------|---|
| Type | Capability |
| dct:type | BDO:BizDevOpsCapability |
| dct:modified | 10/04/2024 |
| skos:definition | This Capability represent the organization's ability or capacity to develop software with BizDevOps. This capability ensures an agile alignment of IT with the business and preserves the benefits and characteristics of DevOps. |

Definition: this Capability represent the organization's ability or capacity to develop software with BizDevOps. This capability ensures an agile alignment of IT with the business and preserves the benefits and characteristics of DevOps.

ABB Name: BDO:BizDevOpsCapability

IT/Business Alignment while ensuring Agility

| | |
|------------------------|---|
| Type | Course of Action |
| dct:type | BDO:AgileITBusinessAlignment |
| dct:modified | 10/06/2024 |
| skos:definition | IT/Business Alignment while Ensuring Agility involves implementing strategies and practices that align IT services with business objectives, while maintaining flexibility and responsiveness. This approach includes adopting agile way of work, fostering continuous collaboration, and ensuring rapid adaptation to changing business needs and market conditions. |

Definition: IT/Business Alignment while Ensuring Agility involves implementing strategies and practices that align IT services with business objectives, while maintaining flexibility and responsiveness. This approach includes adopting agile way of work, fostering continuous collaboration, and ensuring rapid adaptation to changing business needs and market conditions.

ABB Name: BDO:AgileITBusinessAlignment

Business Layer

Agility Manager

| | |
|------------------------|---|
| Type | Business Role |
| dct:type | BDO:AgilityManager |
| dct:modified | 10/04/2024 |
| skos:definition | In BizDevOps, this role ensures the team remains agile across all phases of the approach. They create an environment for efficient and productive work. In Scrum and similar frameworks, this role is often filled by the Scrum Master. |

This view presents the ABBs that guide the development of a software product with BizDevOps.

ABB Name: BDO:AgilityManager

Alignment

| | |
|------------------------|--|
| Type | Business Process |
| dct:type | BDO:AlignmentProcess |
| dct:modified | 11/07/2024 |
| skos:definition | The Alignment Process in BizDevOps is fundamental to ensuring that software development activities are continuously synchronized with business objectives. This process addresses the challenge of integrating business and IT domains, ensuring that the strategies, goals, and practices of both are aligned to maximize the value delivered to end users and maintain business agility. |

Definition: The Alignment Process in BizDevOps is fundamental to ensuring that software development activities are continuously synchronized with business objectives. This process addresses the challenge of integrating business and IT domains, ensuring that the strategies, goals, and practices of both are aligned to maximize the value delivered to end users and maintain business agility.

Alignment in BizDevOps focuses on two essential components: people and processes. Regarding people, it involves ensuring that all actors involved, both from business and IT, work towards the same goals. This is achieved by forming cross-functional and autonomous BizDevOps teams, where each member possesses skills both in their specialty and in other areas of the team, promoting closer collaboration and a better understanding between different roles. Process alignment involves integrating agile and DevOps practices with business strategies, facilitating continuous and effective communication between business stakeholders and development teams.

A crucial aspect of the alignment process is the implementation of short and frequent feedback cycles, which allow the BizDevOps team to receive valuable insights from end users and make necessary adjustments to continuously improve the product. This iterative and data-driven approach ensures that software development not only meets technical requirements but also aligns with market expectations and needs. Additionally, the use of specific metrics and KPIs helps evaluate the performance of the team and the product, ensuring that decisions are made based on accurate and up-to-date information.

Finally, continuous alignment in BizDevOps not only focuses on delivering high-quality software but also on creating a collaborative and adaptable environment that can quickly respond to changes in business and market demands, always maintaining a user-centered vision.

ABB Name: BDO:AlignmentProcess

BizDevOps Software Development Function

| | |
|------------------------|---|
| Type | Business Function |
| dct:type | BDO:SwDevelopmentProcess |
| dct:modified | 10/07/2024 |
| skos:definition | The BizDevOps Software Development Process is a comprehensive building block that integrates business, development, and operations activities throughout the software lifecycle to ensure that delivered products effectively meet business and end-user needs. This process begins with the exploration and identification phase, where business stakeholders are engaged to define needs and requirements. This initial phase produces prototypes and a business backlog that guide subsequent development activities. Then, during the development and operation phase, product development is carried out using agile and DevOps practices, facilitating continuous delivery and the rapid integration of changes and improvements. This collaborative and iterative approach ensures that the software is developed in an agile manner, with a strong emphasis on constant collaboration between business, development, and operations teams, thus ensuring continuous alignment with business objectives and user expectations. |

Definition: The BizDevOps Software Development Process is a comprehensive building block that integrates business, development, and operations activities throughout the software lifecycle to ensure that delivered products effectively meet business and end-user needs. This process begins with the exploration and identification phase, where business stakeholders are engaged to define needs and requirements. This initial phase produces prototypes and a business backlog that guide subsequent development activities. Then, during the development and operation phase, product development is carried out using agile and DevOps practices, facilitating continuous delivery and the rapid integration of changes and improvements. This collaborative and iterative approach ensures that the software is developed in an agile manner, with a strong emphasis on constant collaboration between business, development, and operations teams, thus ensuring continuous alignment with business objectives and user expectations.

ABB Name: BDO:SwDevelopmentProcess

BizDevOps Team

| | |
|------------------------|---|
| Type | Business Role |
| dct:type | BDO:BizDevOpsTeam |
| dct:modified | 08/07/2024 |
| skos:definition | The BizDevOps Team is a cross-functional unit that integrates roles from business, development, and operations to ensure continuous IT alignment with business objectives and agility. It includes positions such as Product Owner and Agility Manager, supported by DevOps roles, fostering collaboration to streamline software delivery and maximize value |

Definition: The BizDevOps Team is a cross-functional unit that integrates roles from business, development, and operations to ensure continuous IT alignment with business objectives and agility. It includes positions such as Product Owner and Agility Manager, supported by DevOps roles, fostering collaboration to streamline software delivery and maximize value

ABB Name: BDO:BizDevOpsTeam

Building and Testing

| | |
|------------------------|--|
| Type | Business Process |
| dct:type | BDO:BuildingAndTestingProcess |
| dct:modified | 11/07/2024 |
| skos:definition | The Building and Testing Process in BizDevOps is a crucial phase that focuses on the iterative development of the product and rigorous testing to ensure its quality. During this phase, the BizDevOps team employs continuous integration (CI) practices to develop, test, automatically integrate code, and validate product increments, enabling safe and satisfactory deployment into production. This incremental approach means that several iterations will take place, depending on the complexity of end-user needs. In the initial product increment rounds, the goal is often to turn the prototype into a working version of the software, known as the minimum viable product (MVP). The MVP contains the minimum necessary features to obtain user feedback and continue improving the software. |

Definition: The Building and Testing Process in BizDevOps is a crucial phase that focuses on the iterative development of the product and rigorous testing to ensure its quality. During this phase, the BizDevOps team employs continuous integration (CI) practices to develop, test, automatically integrate code, and validate product increments, enabling safe and satisfactory deployment into production. This incremental approach means that several iterations will take place, depending on the complexity of end-user needs. In the initial product increment rounds, the goal is often to turn the prototype into a working version of the software, known as the minimum viable product (MVP). The MVP contains the minimum necessary features to obtain user feedback and continue improving the software.

Once the code has been integrated into a build using continuous deployment, the software is moved into the testing environment where a series of automated and manual tests, such as unit testing, integration testing, system testing, and user acceptance testing (UAT), are conducted. An important phenomenon in testing is the concept of Shift-left testing, which emphasizes early testing in the process, test automation, test data management, and the removal of test constraints to resolve defects early and accelerate time-to-market. This approach ensures that issues are identified and resolved as early as possible, guaranteeing the final product's quality and its alignment with user expectations and business objectives.

ABB Name: BDO:BuildingAndTestingProcess

Definition

| | |
|-------------|------------------|
| Type | Business Process |
|-------------|------------------|

| | |
|------------------------|--|
| dct:type | BDO:DefinitionProcess |
| dct:modified | 11/07/2024 |
| skos:definition | The Definition Process in BizDevOps is a critical phase that focuses on the detailed specification of the product, encompassing both functional and non-functional requirements. This stage is essential to ensure that the development team has a clear and precise understanding of what needs to be built. During this phase, specific product goals are established and the necessary features and functionalities to meet these goals are precisely defined. The collaboration between business stakeholders and development teams is intense, allowing business requirements to be translated into detailed technical specifications. This process ensures that all members of the development team are aligned with the product's vision and objectives, minimizing the possibility of misunderstandings and errors during subsequent development and operation phases. Clarity and specificity in this phase are crucial for the efficiency and effectiveness of software development, ensuring that the final product meets business and end-user expectations. |

Definition: The Definition Process in BizDevOps is a critical phase that focuses on the detailed specification of the product, encompassing both functional and non-functional requirements. This stage is essential to ensure that the development team has a clear and precise understanding of what needs to be built. During this phase, specific product goals are established and the necessary features and functionalities to meet these goals are precisely defined. The collaboration between business stakeholders and development teams is intense, allowing business requirements to be translated into detailed technical specifications. This process ensures that all members of the development team are aligned with the product's vision and objectives, minimizing the possibility of misunderstandings and errors during subsequent development and operation phases. Clarity and specificity in this phase are crucial for the efficiency and effectiveness of software development, ensuring that the final product meets business and end-user expectations.

ABB Name: BDO:DefinitionProcess

Delivery and Operation

| | |
|------------------------|---|
| Type | Business Process |
| dct:type | BDO:DeliveryAndOperationProcess |
| dct:modified | 11/07/2024 |
| skos:definition | The Delivery and Operation Process in BizDevOps is a critical phase that focuses on the efficient deployment, monitoring, and maintenance of the product. During this stage, it is ensured that the developed product is delivered efficiently and operates smoothly, meeting business requirements and end-user expectations. This process includes several key activities such as continuous deployment, real-time monitoring, and product operation in the production environment. |

Definition: The Delivery and Operation Process in BizDevOps is a critical phase that focuses on the efficient deployment, monitoring, and maintenance of the product. During this stage, it is ensured that the developed product is delivered efficiently and operates smoothly, meeting business requirements and end-user expectations. This process includes several key activities such as continuous deployment, real-time monitoring, and product operation in the production environment.

Continuous deployment allows new software versions to be released frequently and

reliably, minimizing downtime and ensuring that improvements and fixes reach users quickly. Techniques like Blue-Green deployments and A/B testing are used to manage the release of new features, allowing experimentation and validation of changes with specific user groups before a full rollout.

Real-time monitoring is essential to maintain system stability and performance. Telemetry data, such as events, logs, and metrics, are collected to monitor the health and usage of the application as well as its business performance. This technical feedback enables the BizDevOps team to identify and resolve issues quickly, continuously optimizing the system to maximize the value delivered to the end user.

In the operation phase, the BizDevOps team is responsible for keeping the system running, making necessary adjustments, and ensuring that the product continues to meet business goals and user expectations. This user-centered and data-driven approach ensures that the product is not only technically sound but also provides tangible and meaningful value to users and the organization.

ABB Name: BDO:DeliveryAndOperationProcess

DevOps Processes

| | |
|-----------------|---|
| Type | Business Process |
| dct:modified | 11/07/2024 |
| skos:definition | <p>DevOps is sometimes viewed as being mostly focused on systems and applications deployment, and thus applicable mainly at the end of the life cycle. In practice, DevOps is a full life cycle endeavor which gives equal consideration to each stage. DevOps is a set of principles and practices which enable better communication and collaboration between relevant stakeholders for the purpose of specifying, developing, continuously improving, and operating software and systems products and services. It is not just a matter of technical practices affecting other life cycle processes.</p> <p>Teams using DevOps typically start a systems or applications effort by creating a continuous delivery pipeline (set of tools and procedures) that takes the code from the source code management system and automates the complete application build, package, deployment (including transitions to other environments), operations, and sustainment workflow. Contributors often start with a simple program, write the pipeline, and then iteratively (and rapidly) develop their code. In development, multiple teams often integrate code continuously, automatically deliver the code to a test automation framework, and on to subsequent workflow participants. Transitions to other contexts in the workflow can require special enhancements to the workflow (e.g., simulation-based training or shadow operations) so that quality and velocity are not compromised during and after any transition.</p> <p>DevOps is suitable for most life cycle process models, and particularly appropriate when teams adopt agile methodologies. DevOps can be just as valuable in an iterative waterfall approach.</p> |

DevOps is sometimes viewed as being mostly focused on systems and applications deployment, and thus applicable mainly at the end of the life cycle. In practice, DevOps is a full life cycle endeavor which gives equal consideration to each stage. DevOps is a set of principles and practices which enable better communication and collaboration between relevant stakeholders for the purpose of specifying,

developing, continuously improving, and operating software and systems products and services. It is not just a matter of technical practices affecting other life cycle processes.

Teams using DevOps typically start a systems or applications effort by creating a continuous delivery pipeline (set of tools and procedures) that takes the code from the source code management system and automates the complete application build, package, deployment (including transitions to other environments), operations, and sustainment workflow. Contributors often start with a simple program, write the pipeline, and then iteratively (and rapidly) develop their code. In development, multiple teams often integrate code continuously, automatically deliver the code to a test automation framework, and on to subsequent workflow participants. Transitions to other contexts in the workflow can require special enhancements to the workflow (e.g., simulation-based training or shadow operations) so that quality and velocity are not compromised during and after any transition.

DevOps is suitable for most life cycle process models, and particularly appropriate when teams adopt agile methodologies. DevOps can be just as valuable in an iterative waterfall approach.

Source: ISO/IEC/IEEE 32675-2022: International Standard DevOps

DevOps Roles

| | |
|-----------------|--|
| Type | Business Role |
| dct:type | BDO:DevOpsRoles |
| dct:modified | 08/09/2024 |
| skos:definition | DevOps roles, including IT Development and Operations; DevOps Architect; Other DevOps roles defined in the organization. |

Definition: DevOps roles, including IT Development and Operations; DevOps Architect; Other DevOps roles defined in the organization.

ABB Name: BDO:DevOpsRoles

Discovery

| | |
|------|------------------|
| Type | Business Process |
|------|------------------|

| | |
|------------------------|--|
| dct:type | BDO:DiscoveryProcess |
| dct:modified | 11/07/2024 |
| skos:definition | The Discovery Process in BizDevOps is a fundamental phase that focuses on identifying and understanding customer needs and problems, as well as exploring new market opportunities. This initial process is crucial for establishing alignment between business objectives and technical capabilities, ensuring that subsequent software development efforts are geared towards delivering maximum value to the end user. During this phase, the BizDevOps team gathers information from multiple sources, including insights from business experts, analysts, and key users, to form a detailed understanding of the underlying problem and market needs. Defining high-level business goals and creating a clear product vision are critical activities in this phase, allowing for the establishment of hypotheses that will guide further experimentation and validation with user feedback. This iterative and user-centered approach ensures that development efforts are continuously aligned with business and market expectations, minimizing risks and costs associated with unexpected changes and failures in later stages |

Definition: The Discovery Process in BizDevOps is a fundamental phase that focuses on identifying and understanding customer needs and problems, as well as exploring new market opportunities. This initial process is crucial for establishing alignment between business objectives and technical capabilities, ensuring that subsequent software development efforts are geared towards delivering maximum value to the end user. During this phase, the BizDevOps team gathers information from multiple sources, including insights from business experts, analysts, and key users, to form a detailed understanding of the underlying problem and market needs. Defining high-level business goals and creating a clear product vision are critical activities in this phase, allowing for the establishment of hypotheses that will guide further experimentation and validation with user feedback. This iterative and user-centered approach ensures that development efforts are continuously aligned with business and market expectations, minimizing risks and costs associated with unexpected changes and failures in later stages.

ABB Name: BDO:DiscoveryProcess

Internal Agreement

| | |
|------------------------|--|
| Type | Contract |
| dct:type | BDO:InternalAgreement |
| dct:modified | 10/06/2024 |
| skos:definition | Internal agreements are understandings and commitments among team roles to ensure efficient and effective collaboration. These agreements cover shared objectives, communication protocols, roles and responsibilities, CI/CD practices, incident management, quality standards, documentation, and team culture. They align expectations and responsibilities across business, development, and operations teams to achieve seamless software development and delivery. |

Definition: Internal agreements are understandings and commitments among team roles to ensure efficient and effective collaboration. These agreements cover shared objectives, communication protocols, roles and responsibilities, CI/CD practices, incident management, quality standards, documentation, and team culture. They align expectations and responsibilities across business, development, and operations teams to achieve seamless software development and delivery.

ABB Name: BDO:InternalAgreement

Minimum viable product (MVP)

| | |
|------------------------|---|
| Type | Product |
| dct:type | BDO:MVP |
| dct:modified | 10/06/2024 |
| skos:definition | MVP (Minimum Viable Product) refers to the initial version of a product that includes the minimum set of features necessary to meet the core business needs and allow for early user feedback. This approach aims to quickly deliver a functional product to the market, validate assumptions, and gather data to inform further development and enhancements. The MVP aligns development and operational efforts with business goals, ensuring rapid iteration and continuous improvement based on real user experiences and feedback. |

Definition: MVP (Minimum Viable Product) refers to the initial version of a product that includes the minimum set of features necessary to meet the core business needs and allow for early user feedback. This approach aims to quickly deliver a functional product to the market, validate assumptions, and gather data to inform further development and enhancements. The MVP aligns development and operational efforts with business goals, ensuring rapid iteration and continuous improvement based on real user experiences and feedback.

ABB Name: BDO:MVP

MVP Business Information

| | |
|------------------------|---|
| Type | Business Object |
| dct:type | BDO:MVPBizInformation |
| dct:modified | 10/06/2024 |
| skos:definition | Business information associated with an MVP includes key data and insights gathered from the MVP's performance, user interactions, and feedback. This information helps validate the MVP's assumptions, guide further development, and inform strategic decisions to improve the product and meet market needs effectively. |

Definition: Business information associated with an MVP includes key data and insights gathered from the MVP's performance, user interactions, and feedback. This information helps validate the MVP's assumptions, guide further development, and inform strategic decisions to improve the product and meet market needs effectively.

ABB Name: BDO:MVPBizInformation

MVP Business Process

| | |
|-------------|------------------|
| Type | Business Process |
|-------------|------------------|

| | |
|------------------------|--|
| dct:type | BDO:MVPBizProcess |
| dct:modified | 10/06/2024 |
| skos:definition | An MVP (Minimum Viable Product) business process is the simplest, most streamlined version of a business process that achieves its primary objectives. It includes only the essential steps and elements needed to validate the process's effectiveness, gather feedback, and make iterative improvements with minimal resources and risk. |

Definition: An MVP (Minimum Viable Product) business process is the simplest, most streamlined version of a business process that achieves its primary objectives. It includes only the essential steps and elements needed to validate the process's effectiveness, gather feedback, and make iterative improvements with minimal resources and risk.

ABB Name: BDO:MVPBizProcess

MVP Service

| | |
|------------------------|--|
| Type | Business Service |
| dct:type | BDO:MVPService |
| dct:modified | 10/06/2024 |
| skos:definition | An MVP (Minimum Viable Product) business service is the simplest version of a service that delivers core functionality to meet initial business goals and customer needs. It includes only essential features to validate the service concept, gather user feedback, and iterate on improvements with minimal investment and risk. |

Definition: An MVP (Minimum Viable Product) business service is the simplest version of a service that delivers core functionality to meet initial business goals and customer needs. It includes only essential features to validate the service concept, gather user feedback, and iterate on improvements with minimal investment and risk.

ABB Name: BDO:MVPBizService

Planification

| | |
|------------------------|--|
| Type | Business Process |
| dct:type | BDO:PlanificationProcess |
| dct:modified | 11/07/2024 |
| skos:definition | The Planification Process in BizDevOps is a crucial stage where realistic timelines, resources, and project milestones are set. This phase involves creating a detailed roadmap that outlines the necessary steps to deliver the product, ensuring that all team members are aligned and prepared for execution. During planning, the BizDevOps team estimates and plans the product increments to be developed in the upcoming period. Continuous planning practice is common in many organizations, and incremental planning events (PI) serve as essential alignment loops to create a unified vision of product features, planning, team dependencies, and other necessary components to add value to the end user. In this process, product backlog management is conducted continuously and incrementally, with constant updates at various levels of granularity, from high-level solutions to team-level user stories. The Product Owner is responsible for defining and prioritizing what will be built in the upcoming product increments. |

Definition: The Planification Process in BizDevOps is a crucial stage where realistic timelines, resources, and project milestones are set. This phase involves creating a detailed roadmap that outlines the necessary steps to deliver the product, ensuring that all team members are aligned and prepared for execution. During planning, the BizDevOps team estimates and plans the product increments to be developed in the upcoming period. Continuous planning practice is common in many organizations, and incremental planning events (PI) serve as essential alignment loops to create a unified vision of product features, planning, team dependencies, and other necessary components to add value to the end user. In this process, product backlog management is conducted continuously and incrementally, with constant updates at various levels of granularity, from high-level solutions to team-level user stories. The Product Owner is responsible for defining and prioritizing what will be built in the upcoming product increments.

ABB Name: BDO:PlanificationProcess

Product Owner (Alignment Manager)

| | |
|------------------------|---|
| Type | Business Role |
| dct:type | BDO:AlignmentManager |
| dct:modified | 10/10/2024 |
| skos:definition | In BizDevOps, this role is pivotal in ensuring that the product aligns with business needs and creates added value. The primary focus of the Product Owner shifts towards facilitating IT-business alignment, emphasizing their responsibility to align IT strategies closely with business objectives. This redefined focus expands their traditional role of bridging the gap between business stakeholders and the IT team, ensuring that the product delivers maximum value in line with business priorities. |

Definition: In BizDevOps, this role is pivotal in ensuring that the product aligns with business needs and creates added value. The primary focus of the Product Owner shifts towards facilitating IT-business alignment, emphasizing their responsibility to align IT strategies closely with business objectives. This redefined focus expands their traditional role of bridging the gap between business stakeholders and the IT team, ensuring that the product delivers maximum value in line with business priorities.

ABB Name: BDO:AlignmentManager

Application Layer

MVP Application

| | |
|------------------------|--|
| Type | Application Component |
| dct:type | BDO:MVPApplication |
| dct:modified | 10/06/2024 |
| skos:definition | The Application is a modular, self-contained unit of software that provides specific functionality required by the service. It is a building block that supports the execution of the MVP business process by delivering essential features and enabling efficient development and deployment. |

Definition: The Application is a modular, self-contained unit of software that provides specific functionality required by the service. It is a building block that supports the execution of the MVP business process by delivering essential features and enabling efficient development and deployment.

ABB Name: BDO:MVPApplication

MVP Application Data

| | |
|------------------------|---|
| Type | Data Object |
| dct:type | BDO:MVPApplicationData |
| dct:modified | 10/06/2024 |
| skos:definition | Application Data associated with an application component refers to the specific data that the component creates, processes, stores, and manages. This data supports the functionality provided by the application component and is crucial for the operation of the application service. |

Definition: Application Data associated with an application component refers to the specific data that the component creates, processes, stores, and manages. This data supports the functionality provided by the application component and is crucial for the operation of the application service.

ABB Name: BDO:MVPApplicationData

MVP Application Function

| | |
|------------------------|--|
| Type | Application Function |
| dct:type | BDO:MVPApplicationFunction |
| dct:modified | 08/08/2024 |
| skos:definition | The Application Function is a unit of behavior performed by an application component that provides specific functionality necessary for the realization of an Application Service. It represents the internal processing, actions, or tasks that the application executes to deliver its defined services, aligning with business requirements and technical capabilities. |

Definition: The Application Function is a unit of behavior performed by an application component that provides specific functionality necessary for the realization of an Application Service. It represents the internal processing, actions, or tasks that the application executes to deliver its defined services, aligning with business requirements and technical capabilities.

ABB Name: BDO:MVPApplicationFunction

MVP Application Service

| | |
|------------------------|--|
| Type | Application Service |
| dct:type | BDO:MVPApplicationService |
| dct:modified | 10/06/2024 |
| skos:definition | An application service associated with an MVP business process exposes the services offered by an application, which are necessary to support the initial and optimized version of a business process. |

Definition: An application service associated with an MVP business process exposes the services offered by an application, which are necessary to support the initial and optimized version of a business process.

ABB Name: BDO:MVPApplicationService

Technology & Physical Layer

BizDevOps Bus Service

| | |
|------------------------|---|
| Type | Technology Service |
| dct:type | BDO:BizDevOpsBusTechService |
| dct:modified | 10/06/2024 |
| skos:definition | A Infrastructure Service is a foundational technology service that provides the necessary computing, storage, networking, and automation resources. It supports the continuous integration, delivery, and deployment of application components, ensuring efficient and reliable operation of the MVP Product and BizDevOps Software Development Function. |

Definition: A Infrastructure Service is a foundational technology service that provides the necessary computing, storage, networking, and automation resources. It supports the continuous integration, delivery, and deployment of application components, ensuring efficient and reliable operation of the MVP Product and BizDevOps Software Development Function.

ABB Name: BDO:BizDevOpsBusTechService

Communication Network

| | |
|------------------------|---|
| Type | Communication Network |
| dct:type | BDO:CommunicationNetwork |
| dct:modified | 08/09/2024 |
| skos:definition | A Communication Network representing the infrastructure that enables the exchange of information between devices and systems within the BizDevOps approach, ensuring connectivity and data flow required for collaboration, integration, and continuous delivery processes. |

Definition: A Communication Network representing the infrastructure that enables the exchange of information between devices and systems within the BizDevOps approach, ensuring connectivity and data flow required for collaboration, integration, and continuous delivery processes.

ABB Name: BDO:CommunicationNetwork

Device

| | |
|------------------------|--|
| Type | Device |
| dct:type | BDO:Device |
| dct:modified | 08/09/2024 |
| skos:definition | A Device representing a physical hardware resource within the BizDevOps approach, such as servers, workstations, or network equipment, that provides the foundational infrastructure necessary to support the execution of software components and delivery of services. |

Definition: A Device representing a physical hardware resource within the BizDevOps approach, such as servers, workstations, or network equipment, that provides the foundational infrastructure necessary to support the execution of software components and delivery of services.

ABB Name: BDO:Device

Expose Way

| | |
|------------------------|--|
| Type | Technology Interface |
| dct:type | BDO:ExposeWay |
| dct:modified | 08/09/2024 |
| skos:definition | A Technology Interface representing the means by which technology services or functions are exposed and made accessible within the BizDevOps approach, enabling integration, communication, and interaction between different components or systems. |

Definition: A Technology Interface representing the means by which technology services or functions are exposed and made accessible within the BizDevOps approach, enabling integration, communication, and interaction between different components or systems.

ABB Name: BDO:ExposeWay

Node

| | |
|------------------------|--|
| Type | Node |
| dct:type | BDO:Node |
| dct:modified | 08/09/2024 |
| skos:definition | A Node representing a physical or virtual computational resource within the BizDevOps approach, responsible for hosting, executing, and supporting application components and infrastructure services critical to enabling continuous integration, delivery, and deployment processes. |

Definition: A Node representing a physical or virtual computational resource within the BizDevOps approach, responsible for hosting, executing, and supporting application components and infrastructure services critical to enabling continuous integration, delivery, and deployment processes.

ABB Name: BDO:Node

Path

| | |
|------------------------|------------|
| Type | Path |
| dct:type | BDO:Path |
| dct:modified | 08/09/2024 |
| skos:definition | |

Definition: A Path representing the logical or physical link within the BizDevOps approach that facilitates the flow of data between nodes, devices, or systems, enabling seamless communication and integration across the technological landscape.

ABB Name: BDO:Path

System Software

| | |
|-------------|-----------------|
| Type | System Software |
|-------------|-----------------|

| | |
|------------------------|--|
| dct:type | BDO:SystemSoftware |
| dct:modified | 08/09/2024 |
| skos:definition | A System Software element representing the foundational software components that provide core functionalities, such as operating systems or middleware, enabling and supporting the execution of processes and services within the BizDevOps approach. |

Definition: A System Software element representing the foundational software components that provide core functionalities, such as operating systems or middleware, enabling and supporting the execution of processes and services within the BizDevOps approach.

ABB Name: BDO:SystemSoftware

Technology Function

| | |
|------------------------|---|
| Type | Technology Function |
| dct:type | BDO:TechFunction |
| dct:modified | 08/09/2024 |
| skos:definition | A Technology Function representing the internal technical capabilities required to support and enable specific services or processes within the BizDevOps approach, focusing on automation, integration, and continuous delivery practices. |

Definition: A Technology Function representing the internal technical capabilities required to support and enable specific services or processes within the BizDevOps approach, focusing on automation, integration, and continuous delivery practices.

ABB Name: BDO:TechFunction

Motivation

Agile Software Development

| | |
|-----------------|--|
| Type | Driver |
| dct:type | BDOAgileSwDevelopmentDriver |
| dct:modified | 10/06/2024 |
| skos:definition | An Agile Software Development Driver is a motivating factor that promotes the adoption of agile methodologies to enhance flexibility, speed, and collaboration in software development. It aims to deliver high-quality software incrementally, respond quickly to changes, and meet customer needs effectively through iterative development and continuous feedback. |

Definition: An Agile Software Development Driver is a motivating factor that promotes the adoption of agile methodologies to enhance flexibility, speed, and collaboration in software development. It aims to deliver high-quality software incrementally, respond quickly to changes, and meet customer needs effectively through iterative development and continuous feedback.

ABB Name: BDOAgileSwDevelopmentDriver

Agility

| | |
|-----------------|---|
| Type | Principle |
| dct:type | BDO:AgilityPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Incorporates agility throughout all operational cycles. |

Definition: Incorporates agility throughout all operational cycles.

ABB Name: BDO:AgilityPrinciple

Agility is Maintained

| | |
|-----------------|---|
| Type | Assessment |
| dct:type | BDO:AgilityMaintainedAssessment |
| dct:modified | 10/06/2024 |
| skos:definition | Agility is Maintained is an assessment indicating that the organization continues to operate with flexibility and responsiveness. It ensures that processes, teams, and technologies can quickly adapt to changes, meet evolving customer needs, and support continuous improvement and innovation. |

Definition: Agility is Maintained is an assessment indicating that the organization continues to operate with flexibility and responsiveness. It ensures that processes, teams, and technologies can quickly adapt to changes, meet evolving customer needs, and support continuous improvement and innovation.

ABB Name: BDO:AgilityMaintainedAssessment

Metrics Examples:

1. Team Velocity: Measures the amount of work a team can complete during a sprint, usually expressed in story points. This metric helps teams forecast the

amount of work they can take on in future sprints.

2. Burndown Chart: A chart that shows the amount of work remaining in the sprint versus time. It's useful for seeing if a team is on track to complete the sprint work on time.

3. Burnup Chart: Similar to the burndown chart, but it shows progress towards a larger goal, like a product release. This chart shows both the completed work and the total planned work, allowing for a clear view of how much remains to reach the final goal.

4. Cycle Time: Measures the time it takes to complete a task from when it starts until it finishes. This metric can help identify bottlenecks in the process.

5. Completion Rate: Calculates the percentage of tasks that are completed compared to the total tasks started. It's useful for evaluating the team's efficiency and delivery capability.

6. Lead Time: Measures the time it takes for the team to start working on a new task or request. A quick response can be indicative of good workflow and agility in the team.

7. Commitment vs. Achievement: This metric compares what the team committed to deliver at the start of a sprint with what they actually delivered at the end. It can help understand planning accuracy and the team's ability to deliver.

Alignment

| | |
|------------------------|--|
| Type | Principle |
| dct:type | BDO:AlignmentPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Ensures continuous alignment of IT initiatives with business objectives. |

Definition: Ensures continuous alignment of IT initiatives with business objectives.

ABB Name: BDO:AlignmentPrinciple

Architecture Principle

| | |
|------------------------|--|
| Type | Principle |
| dct:type | BDO:ArchitecturePrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Architecture principles are fundamental guidelines and rules that inform and shape the design, development, and evolution of an organization's systems and structures, ensuring alignment with business goals and effective decision-making. |

Definition: Architecture principles are fundamental guidelines and rules that inform and shape the design, development, and evolution of an organization's systems and structures, ensuring alignment with business goals and effective decision-making.

ABB Name: BDO:ArchitecturePrinciple

BizDevOps Principle

| | |
|-------------|-----------|
| Type | Principle |
|-------------|-----------|

| | |
|------------------------|--|
| dct:type | BDO:BizDevOpsPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | BizDevOps principles are fundamental guidelines that integrate business, development, and operations practices to enhance collaboration, accelerate delivery, and align IT efforts with business objectives. |

Definition: BizDevOps principles are fundamental guidelines that integrate business, development, and operations practices to enhance collaboration, accelerate delivery, and align IT efforts with business objectives.

ABB Name: BDO:BizDevOpsPrinciple

Business First

| | |
|------------------------|---|
| Type | Principle |
| dct:type | BDO:BusinessFirstPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Prioritizes organizational objectives over technical details. |

Definition: Prioritizes organizational objectives over technical details.

ABB Name: BDO:BusinessFirstPrinciple

Business Need

| | |
|------------------------|---|
| Type | Requirement |
| dct:type | BDO:BusinessNeed |
| dct:modified | 10/06/2024 |
| skos:definition | Business needs are the essential requirements and demands an organization must fulfill to achieve its strategic and operational goals, such as improving efficiency, increasing profitability, expanding market share, and enhancing customer satisfaction. |

Definition: Business needs are the essential requirements and demands an organization must fulfill to achieve its strategic and operational goals, such as improving efficiency, increasing profitability, expanding market share, and enhancing customer satisfaction.

ABB Name: BDO:BusinessNeed

Continuity in Everything

| | |
|------------------------|--|
| Type | Principle |
| dct:type | BDO:ContinuityInEverythingPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Utilizes automated practices across business, development, and operations to maintain continuous process flow. |

Definition: Utilizes automated practices across business, development, and operations to maintain continuous process flow.

ABB Name: BDO:ContinuityInEverythingPrinciple

Customer

| | |
|-----------------|--|
| Type | Stakeholder |
| dct:modified | 11/07/2024 |
| skos:definition | <p>The "Customer" stakeholder plays an essential role in the software development process. The customer is the primary stakeholder representing the market's needs, expectations, and demands. Their involvement is crucial to ensure that the products developed are not only technically sound but also provide tangible and meaningful value.</p> |
| | <p>The customer is involved in various stages of the software development lifecycle. During the discovery phase, customer feedback is vital for identifying and understanding user needs and market opportunities. This initial feedback helps form a clear product vision and define specific requirements that will guide development. In the definition phase, customers collaborate with BizDevOps teams to refine these requirements, ensuring that product specifications align with their expectations and needs.</p> |
| | <p>Throughout development and operation, the customer continues to provide critical feedback, allowing for iterative adjustments and continuous product improvements. This ongoing interaction ensures that software development remains aligned with changing market demands and end-user expectations. The implementation of short and frequent feedback cycles facilitates the incorporation of the customer's perspective at every stage of the development process, promoting greater agility and responsiveness.</p> <p>Additionally, customers use specific metrics and KPIs to evaluate the performance of the product and the team, ensuring that decisions are based on accurate and up-to-date information. This constant collaboration and user-centered focus ensure that the delivered products not only meet technical standards but also satisfy customer expectations and generate the desired value.</p> |

The "Customer" stakeholder plays an essential role in the software development process. The customer is the primary stakeholder representing the market's needs, expectations, and demands. Their involvement is crucial to ensure that the products developed are not only technically sound but also provide tangible and meaningful value.

The customer is involved in various stages of the software development lifecycle. During the discovery phase, customer feedback is vital for identifying and understanding user needs and market opportunities. This initial feedback helps form a clear product vision and define specific requirements that will guide development. In the definition phase, customers collaborate with BizDevOps teams to refine these requirements, ensuring that product specifications align with their expectations and needs.

Throughout development and operation, the customer continues to provide critical feedback, allowing for iterative adjustments and continuous product improvements. This ongoing interaction ensures that software development remains aligned with changing market demands and end-user expectations. The implementation of short and frequent feedback cycles facilitates the incorporation of the customer's perspective at every stage of the development process, promoting greater agility and responsiveness.

Additionally, customers use specific metrics and KPIs to evaluate the performance of the product and the team, ensuring that decisions are based on accurate and up-to-date information. This constant collaboration and user-centered focus ensure that the delivered products not only meet technical standards but also satisfy customer expectations and generate the desired value.

Customer Focus

| | |
|------------------------|--|
| Type | Principle |
| dct:type | BDO:CustomerFocusPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Adopts a customer-centered approach, prioritizing tasks to deliver maximum value and effectively managing risks. |

Definition: Adopts a customer-centered approach, prioritizing tasks to deliver maximum value and effectively managing risks.

ABB Name: BDO:CustomerFocusPrinciple

DevOps Principles

| | |
|-------------|-----------|
| Type | Principle |
|-------------|-----------|

| | |
|-----------------|---|
| dct:modified | 11/07/2024 |
| skos:definition | <p>Business or mission first: DevOps focuses on business and organizational goals ahead of procedural and technical considerations. DevOps utilizes information-rich feedback loops to understand progress and threats to attaining business and mission goals. Taking a business or mission first view helps to balance the concerns of risk and the activities which provide the most value to the customer. Continuously finding a dynamic balance between opportunities and risks and applying risk assessment and treatment at the organizational level enables the realization of DevOps without thrashing and wasted resources. Realizing the full promise of DevOps requires maintaining a strategic balance between honoring today's commitments while enabling the organization to survive risks and develop the capabilities to move forward.</p> <p>Customer focus: DevOps takes a customer-centric view, prioritizing and designing work to deliver value to the customer, as well as identifying and managing risk. In short, if it makes sense for the customer and meets a customer need, then it is likely to be the right approach from a DevOps perspective. For example, for both customers and suppliers, privacy is a customer focus: not only protection of individuals' data, but also protection of enterprise data. Privacy may include data categorization (e.g., health data, financial data) and classification-driven methods (e.g., confidential, restricted, internal use, public) as often required by regulatory and legal requirements.</p> <p>Left-shift and continuous everything: The normal DevOps practice is information-driven, risk-based, continuous everything. DevOps continuous everything means using the same practices in development as in operations and sustainment. DevOps practices are founded on automation for continuous integration, delivery and deployment, and operations and sustainment. The approach to DevOps in this document is to build systems to be secure and verifiable from the very beginning. Risk management, quality assurance (QA), and testing are the practices that make accelerated velocity and continuous delivery possible.</p> <p>Systems thinking: Systems thinking counters a myopic approach of utilizing specialists—such as networking professionals, database administrators, and systems administrators—who rarely communicate with either the development or operations teams and lack understanding of the system as a whole. In DevOps, taking a comprehensive view encourages technology professionals to fully understand the system from end to end. Systems thinking can enable resolution of complex and emergent problems that are not easily traceable to a single flaw. Systems thinking should apply to a consistent architecture for the enterprise tools used for DevOps as well as to the system under development.</p> |

Business or mission first: DevOps focuses on business and organizational goals ahead of procedural and technical considerations. DevOps utilizes information-rich feedback loops to understand progress and threats to attaining business and mission goals. Taking a business or mission first view helps to balance the concerns of risk and the activities which provide the most value to the customer. Continuously finding a dynamic balance between opportunities and risks and applying risk assessment and treatment at the organizational level enables the realization of DevOps without thrashing and wasted resources. Realizing the full promise of DevOps requires maintaining a strategic balance between honoring today's commitments while enabling the organization to survive risks and develop

the capabilities to move forward.

Customer focus: DevOps takes a customer-centric view, prioritizing and designing work to deliver value to the customer, as well as identifying and managing risk. In short, if it makes sense for the customer and meets a customer need, then it is likely to be the right approach from a DevOps perspective. For example, for both customers and suppliers, privacy is a customer focus: not only protection of individuals' data, but also protection of enterprise data. Privacy may include data categorization (e.g., health data, financial data) and classification- driven methods (e.g., confidential, restricted, internal use, public) as often required by regulatory and legal requirements.

Left-shift and continuous everything: The normal DevOps practice is information-driven, risk-based, continuous everything. DevOps continuous everything means using the same practices in development as in operations and sustainment. DevOps practices are founded on automation for continuous integration, delivery and deployment, and operations and sustainment. The approach to DevOps in this document is to build systems to be secure and verifiable from the very beginning. Risk management, quality assurance (QA), and testing are the practices that make accelerated velocity and continuous delivery possible.

Systems thinking: Systems thinking counters a myopic approach of utilizing specialists—such as networking professionals, database administrators, and systems administrators—who rarely communicate with either the development or operations teams and lack understanding of the system as a whole. In DevOps, taking a comprehensive view encourages technology professionals to fully understand the system from end to end. Systems thinking can enable resolution of complex and emergent problems that are not easily traceable to a single flaw. Systems thinking should apply to a consistent architecture for the enterprise tools used for DevOps as well as to the system under development.

Source: ISO/IEC/IEEE 32675-2022: International Standard DevOps

Enable the realization of successful software systems

| | |
|-----------------|--|
| Type | Driver |
| dct:modified | 11/07/2024 |
| skos:definition | Implementing effective information technology (IT) controls, embracing and managing risk, while enabling more rapid development (higher velocity). |

Implementing effective information technology (IT) controls, embracing and managing risk, while enabling more rapid development (higher velocity).

Source: ISO/IEC/IEEE 32675-2022

Enterprise Objective

| | |
|------|------|
| Type | Goal |
|------|------|

| | |
|------------------------|--|
| dct:type | BDO:EnterpriseObjective |
| dct:modified | 10/06/2024 |
| skos:definition | Enterprise objectives are the strategic goals and targets that an organization aims to achieve to ensure its long-term success and growth. |

Definition: Enterprise objectives are the strategic goals and targets that an organization aims to achieve to ensure its long-term success and growth.

ABB Name: BDO:EnterpriseObjective

Functional Requirement

| | |
|------------------------|--|
| Type | Requirement |
| dct:type | BDO:FunctionalRequirement |
| dct:modified | 10/06/2024 |
| skos:definition | Specifications of the functions a system or component must perform, including inputs, outputs, and behaviors under various conditions. |

Definition: Specifications of the functions a system or component must perform, including inputs, outputs, and behaviors under various conditions.

ABB Name: BDO:FunctionalRequirement

Source: <https://www.iso.org/es/contents/data/standard/07/81/78176.html>

Integrated Team

| | |
|------------------------|--|
| Type | Principle |
| dct:type | BDO:IntegratedTeamPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Rather than having separate teams, BizDevOps involves a unified team with roles spanning business, development, and operations to collaboratively meet software needs. |

Definition: Rather than having separate teams, BizDevOps involves a unified team with roles spanning business, development, and operations to collaboratively meet software needs.

ABB Name: BDO:IntegratedTeamPrinciple

IT and business are aligned

| | |
|------------------------|---|
| Type | Assessment |
| dct:type | BDO:ITBusinessAlignmentAssessment |
| dct:modified | 10/06/2024 |
| skos:definition | IT and Business are Aligned is an assessment indicating that IT initiatives, resources, and strategies effectively support and enhance business goals. This alignment ensures cohesive operations, maximizes efficiency, and drives organizational success by ensuring that IT contributions are directly aligned with business needs and objectives. |

Definition: IT and Business are Aligned is an assessment indicating that IT initiatives, resources, and strategies effectively support and enhance business goals. This alignment ensures cohesive operations, maximizes efficiency, and drives

organizational success by ensuring that IT contributions are directly aligned with business needs and objectives.

ABB Name: BDO:ITBusinessAlignmentAssessment

Metrics Examples: (source: <https://ieeexplore.ieee.org/document/9263839>)

1. Number of applications by business process.
2. Number of business process by objective

IT/Business Alignment

| | |
|------------------------|---|
| Type | Driver |
| dct:type | BDO:ITBizAlignmentDriver |
| dct:modified | 10/06/2024 |
| skos:definition | An IT/Business Alignment Driver is a motivating factor that ensures IT strategies and services are integrated with and support business goals. This alignment enhances efficiency, drives competitive advantage, and creates value for the organization by ensuring that IT capabilities directly contribute to business success. |

Definition: An IT/Business Alignment Driver is a motivating factor that ensures IT strategies and services are integrated with and support business goals. This alignment enhances efficiency, drives competitive advantage, and creates value for the organization by ensuring that IT capabilities directly contribute to business success.

ABB Name: BDO:ITBizAlignmentDriver

Non-Functional Requirement

| | |
|------------------------|--|
| Type | Requirement |
| dct:type | BDO:NonFunctionalRequirement |
| dct:modified | 10/06/2024 |
| skos:definition | Criteria that define the quality attributes of a system, such as performance, usability, reliability, security, compatibility, maintainability, and portability. |

Definition: Criteria that define the quality attributes of a system, such as performance, usability, reliability, security, compatibility, maintainability, and portability.

ABB Name: BDO:NonFunctionalRequirement

Source: <https://www.iso.org/es/contents/data/standard/07/81/78176.html>

Organization

| | |
|-------------|-------------|
| Type | Stakeholder |
|-------------|-------------|

| | |
|------------------------|---|
| dct:modified | 11/07/2024 |
| skos:definition | <p>The stakeholder "Organization" refers to the overarching entity that includes all stakeholders, structures, and resources involved in delivering value through software development. The organization is responsible for providing the vision, strategy, and necessary resources for BizDevOps teams to function effectively. This stakeholder plays a crucial role in aligning business goals and objectives with IT development and operations practices.</p> <p>The organization establishes the policies and procedures that guide the work of BizDevOps teams, ensuring that software development projects are aligned with the company's strategic objectives. Additionally, the organization facilitates communication and collaboration among different teams and departments, promoting a culture of agile and collaborative work.</p> <p>A key role of the organization is to provide support and resources, including funding, tools, and training, to enable BizDevOps teams to implement continuous development and deployment practices. The organization is also responsible for overseeing and measuring the performance of the team and the product, using specific metrics and KPIs to ensure that software development initiatives are delivering the expected value to the business.</p> |

The stakeholder "Organization" refers to the overarching entity that includes all stakeholders, structures, and resources involved in delivering value through software development. The organization is responsible for providing the vision, strategy, and necessary resources for BizDevOps teams to function effectively. This stakeholder plays a crucial role in aligning business goals and objectives with IT development and operations practices.

The organization establishes the policies and procedures that guide the work of BizDevOps teams, ensuring that software development projects are aligned with the company's strategic objectives. Additionally, the organization facilitates communication and collaboration among different teams and departments, promoting a culture of agile and collaborative work.

A key role of the organization is to provide support and resources, including funding, tools, and training, to enable BizDevOps teams to implement continuous development and deployment practices. The organization is also responsible for overseeing and measuring the performance of the team and the product, using specific metrics and KPIs to ensure that software development initiatives are delivering the expected value to the business.

Shift-Left

| | |
|------------------------|---|
| Type | Principle |
| dct:type | BDO:ShiftLeftPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Anticipates tasks typically performed at the later stages of development, such as quality and security testing, to address them earlier in the lifecycle. |

Definition: Anticipates tasks typically performed at the later stages of development, such as quality and security testing, to address them earlier in the lifecycle.

ABB Name: BDO:ShiftLeftPrinciple

Systems Thinking

| | |
|------------------------|---|
| Type | Principle |
| dct:type | BDO:SystemsThinkingPrinciple |
| dct:modified | 10/06/2024 |
| skos:definition | Promotes a comprehensive understanding of the system from start to finish, aiding in the resolution of complex issues that may arise. |

Definition: Promotes a comprehensive understanding of the system from start to finish, aiding in the resolution of complex issues that may arise.

ABB Name: BDO:SystemsThinkingPrinciple

Other

Biz Cycle

| | |
|------|----------|
| Type | Grouping |
|------|----------|

This view presents the ABBs that guide the development of a software product with BizDevOps.

BizDevOps Approach Context

| | |
|------|----------|
| Type | Grouping |
|------|----------|

The BizDevOps Approach Context establishes the key ABBs for integrating business, development, and operations practices within an organization. These ABBs emphasize aligning IT capabilities with business objectives, fostering agility, and enabling continuous collaboration across teams. By bridging the gap between business goals and software development, this context ensures that all activities within the software development lifecycle contribute directly to delivering value for the organization. Through its principles and processes, the BizDevOps approach supports organizations in adapting to evolving business needs while maintaining coherence between technical and business perspectives.

Dev and Ops Cycles

| | |
|------|----------|
| Type | Grouping |
|------|----------|

This view presents the ABBs that guide the development of a software product with BizDevOps.

ISO/IEC/IEEE 32675-2022: International Standard DevOps

| | |
|-----------------|---|
| Type | Grouping |
| dct:modified | 08/07/2024 |
| skos:definition | Technical principles and processes to build, package, and deploy systems and applications in a reliable and secure way are specified. Establishing effective compliance and information technology (IT) controls is the focus. DevOps principles presented include mission first, customer focus, left-shift, continuous everything, and systems thinking. How stakeholders, including developers and operations staff, can collaborate and communicate effectively is described. The process outcomes and activities herein are aligned with the process model specified in ISO/IEC/IEEE 12207:2017 and ISO/IEC/IEEE 15288:2015. |

Technical principles and processes to build, package, and deploy systems and applications in a reliable and secure way are specified. Establishing effective compliance and information technology (IT) controls is the focus. DevOps principles presented include mission first, customer focus, left-shift, continuous everything, and systems thinking. How stakeholders, including developers and operations staff, can collaborate and communicate effectively is described. The process outcomes and activities herein are aligned with the process model specified in ISO/IEC/IEEE 12207:2017 and ISO/IEC/IEEE 15288:2015.

Location

| | |
|------|----------|
| Type | Location |
|------|----------|

| | |
|------------------------|--|
| dct:type | BDO:Location |
| dct:modified | 08/09/2024 |
| skos:definition | A Location representing a specific physical or logical place within the BizDevOps approach where organizational, technological, or operational resources are situated or interact, facilitating the alignment of business and IT activities. |

Definition: A Location representing a specific physical or logical place within the BizDevOps approach where organizational, technological, or operational resources are situated or interact, facilitating the alignment of business and IT activities.

ABB Name: BDO:Location

Relations

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | MVP Service |

Composition relation

| | |
|---------------|--|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | IT/Business Alignment while ensuring Agility |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | BizDevOps Bus Service |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | Agility Manager |

Composition relation

| | |
|---------------|---|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | BizDevOps Software Development Function |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | MVP Business Process |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | Internal Agreement |

Composition relation

| | |
|---------------|-----------------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | Product Owner (Alignment Manager) |

Composition relation

| | |
|-------------|----------------------|
| Type | Composition relation |
|-------------|----------------------|

| | |
|---------------|----------------------------|
| Source | BizDevOps Approach Context |
| Target | BizDevOps Capability |

Composition relation

| | |
|---------------|------------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | Minimum viable product (MVP) |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | MVP Application Service |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | MVP Application |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | MVP Business Information |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | MVP Application Data |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | BizDevOps Team |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | Agile Software Development |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | IT/Business Alignment |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | Agility is Maintained |

Composition relation

| | |
|---------------|-----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | IT and business are aligned |

Composition relation

| | |
|---------------|---|
| Type | Composition relation |
| Source | BizDevOps Software Development Function |
| Target | Biz Cycle |

Composition relation

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Biz Cycle |
| Target | Planification |

Composition relation

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Biz Cycle |
| Target | Definition |

Composition relation

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Biz Cycle |
| Target | Discovery |

Composition relation

| | |
|---------------|---|
| Type | Composition relation |
| Source | BizDevOps Software Development Function |
| Target | Dev and Ops Cycles |

Composition relation

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Dev and Ops Cycles |
| Target | Building and Testing |

Composition relation

| | |
|---------------|------------------------|
| Type | Composition relation |
| Source | Dev and Ops Cycles |
| Target | Delivery and Operation |

Flow relation

| | |
|---------------|---------------|
| Type | Flow relation |
| Source | Discovery |
| Target | Definition |

This view presents the ABBs that guide the development of a software product with BizDevOps.

Flow relation

| | |
|---------------|---------------|
| Type | Flow relation |
| Source | Definition |
| Target | Planification |

This view presents the ABBs that guide the development of a software product with BizDevOps.

Flow relation

| | |
|---------------|----------------------|
| Type | Flow relation |
| Source | Planification |
| Target | Building and Testing |

This view presents the ABBs that guide the development of a software product with BizDevOps.

Flow relation

| | |
|---------------|------------------------|
| Type | Flow relation |
| Source | Building and Testing |
| Target | Delivery and Operation |

This view presents the ABBs that guide the development of a software product with BizDevOps.

Composition relation

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Biz Cycle |
| Target | Alignment |

Flow relation

| | |
|---------------|---------------|
| Type | Flow relation |
| Source | Alignment |
| Target | Discovery |

This view presents the ABBs that guide the development of a software product with BizDevOps.

Composition relation

| | |
|-------------|----------------------|
| Type | Composition relation |
|-------------|----------------------|

| | |
|---------------|----------------------------|
| Source | BizDevOps Approach Context |
| Target | Functional Requirement |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | Non-Functional Requirement |

Composition relation

| | |
|---------------|--|
| Type | Composition relation |
| Source | ISO/IEC/IEEE 32675-2022: International Standard DevOps |
| Target | DevOps Processes |

Composition relation

| | |
|---------------|--|
| Type | Composition relation |
| Source | ISO/IEC/IEEE 32675-2022: International Standard DevOps |
| Target | DevOps Principles |

Flow relation

| | |
|---------------|------------------------|
| Type | Flow relation |
| Source | Delivery and Operation |
| Target | Alignment |

Composition relation

| | |
|---------------|--|
| Type | Composition relation |
| Source | ISO/IEC/IEEE 32675-2022: International Standard DevOps |
| Target | Enable the realization of successful software systems |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | MVP Application Function |

Association relation

| | |
|---------------|----------------------|
| Type | Association relation |
| Source | DevOps Roles |
| Target | MVP Application |

Association relation

| | |
|---------------|-----------------------|
| Type | Association relation |
| Source | Communication Network |
| Target | Device |

Association relation

| | |
|---------------|----------------------|
| Type | Association relation |
| Source | Path |
| Target | Node |

Composition relation

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | BizDevOps Approach Context |
| Target | Expose Way |

allows to carry out

| | |
|---------------|--|
| Type | Realization relation |
| Source | BizDevOps Capability |
| Target | IT/Business Alignment while ensuring Agility |

[BizDevOps Capability] allows to carry out [IT/Business Alignment while ensuring Agility] by providing the organizational ability to integrate practices that align IT with business while maintaining agility.

assignment

| | |
|---------------|---------------------|
| Type | Assignment relation |
| Source | Node |
| Target | Technology Function |

[Node] hosts [Technology Function], providing the infrastructure required for its operation.

assignment

| | |
|---------------|---------------------|
| Type | Assignment relation |
| Source | Device |
| Target | System Software |

assignment to

| | |
|---------------|---------------------|
| Type | Assignment relation |
| Source | Location |
| Target | Node |

build / deploy

| | |
|---------------|-----------------------|
| Type | Serving relation |
| Source | BizDevOps Bus Service |
| Target | MVP Application |

[Application] is enabled by [DevOps Infrastructure Service], which provides the foundational infrastructure for its deployment and execution.

build upon

| | |
|-------------|----------------------|
| Type | Aggregation relation |
|-------------|----------------------|

| | |
|---------------|------------------------|
| Source | BizDevOps Principle |
| Target | Architecture Principle |

[BizDevOps Principles] build upon [Architecture Principle] by integrating these guidelines into the collaborative processes of business, development, and operations.

builds upon

| | |
|---------------|--|
| Type | Association relation |
| Source | IT/Business Alignment while ensuring Agility |
| Target | IT/Business Alignment |

[IT/Business Alignment while ensuring Agility] builds upon [IT/Business Alignment] by using its principles as a base and enhancing them with flexibility and responsiveness.

composed for

| | |
|---------------|------------------------|
| Type | Composition relation |
| Source | Business Need |
| Target | Functional Requirement |

[Business Need] composed for [Functional Requirement]

composed for

| | |
|---------------|----------------------------|
| Type | Composition relation |
| Source | Business Need |
| Target | Non-Functional Requirement |

[Business Need] composed for [Non-Functional Requirement]

composed of

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | BizDevOps Team |
| Target | Agility Manager |

[BizDevOps Team] compose of [Agility Manager]

composed of

| | |
|---------------|-----------------------------------|
| Type | Composition relation |
| Source | BizDevOps Team |
| Target | Product Owner (Alignment Manager) |

[BizDevOps Team] compose of [Product Owner]

composed of

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | BizDevOps Team |
| Target | DevOps Roles |

[BizDevOps Team] compose of [DevOps Roles]

composed of

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Dev and Ops Cycles |
| Target | DevOps Processes |

[Dev and Ops Cycles] composed of [DevOps Process]

[Dev and Ops Cycles] considers all processes specified by the ISO/IEC/IEEE 32675 DevOps standard.

concerned for

| | |
|---------------|----------------------------|
| Type | Association relation |
| Source | Agility Manager |
| Target | Agile Software Development |

[Agility Manager] concerned of [Agile Software Development]

concerned for

| | |
|---------------|-----------------------------------|
| Type | Association relation |
| Source | Product Owner (Alignment Manager) |
| Target | IT/Business Alignment |

[Product Owner] concerned of [IT/Business Alignment]

concerned for

| | |
|---------------|---|
| Type | Association relation |
| Source | Organization |
| Target | Enable the realization of successful software systems |

[Organization] concerned for [Enable the realization of successful software systems]

evaluates

| | |
|---------------|----------------------------|
| Type | Association relation |
| Source | Agile Software Development |
| Target | Agility is Maintained |

[Agility is Maintained] evaluates [Agile Software Development]

evaluates

| | |
|---------------|-----------------------------|
| Type | Association relation |
| Source | IT/Business Alignment |
| Target | IT and business are aligned |

[IT and business are aligned] evaluates [IT/Business Alignment]

exposed by

| | |
|---------------|-----------------------|
| Type | Assignment relation |
| Source | Expose Way |
| Target | BizDevOps Bus Service |

[MVP Infrastructure Service] exposed by [Expose Way].

guides

| | |
|---------------|---|
| Type | Association relation |
| Source | BizDevOps Software Development Function |
| Target | BizDevOps Principle |

[BizDevOps Principles] guides [BizDevOps Software Development Process]

guides development of

| | |
|---------------|---|
| Type | Serving relation |
| Source | BizDevOps Software Development Function |
| Target | Minimum viable product (MVP) |

[BizDevOps Software Development Process] guides development of [Minimum viable product (MVP)]

guides/drives

| | |
|---------------|-----------------------|
| Type | Influence relation |
| Source | IT/Business Alignment |
| Target | Biz Cycle |

guides/drives

| | |
|---------------|----------------------------|
| Type | Influence relation |
| Source | Agile Software Development |
| Target | Dev and Ops Cycles |

implements

| | |
|---------------|--|
| Type | Realization relation |
| Source | BizDevOps Software Development Function |
| Target | IT/Business Alignment while ensuring Agility |

[BizDevOps Software Development Process] implements [IT/Business Alignment while ensuring Agility] by turning strategic objectives into concrete actions through iterative and collaborative practices.

influences

| | |
|---------------|------------------------|
| Type | Influence relation |
| Source | Architecture Principle |
| Target | Business Need |

influences

| | |
|---------------|--------------------|
| Type | Influence relation |
| Source | Customer |
| Target | Business Need |

The [Customer] influences [Business Needs] both positively and negatively.

influences

| | |
|---------------|---|
| Type | Influence relation |
| Source | DevOps Processes |
| Target | Enable the realization of successful software systems |

[DevOps Processes] influences positively [Enable the realization of successful software systems]

A successful construction of software systems is influenced by a good application of the processes established by the ISO/IEC/IEEE 32675 DevOps standard.

influences

| | |
|---------------|---|
| Type | Influence relation |
| Source | DevOps Principles |
| Target | Enable the realization of successful software systems |

[DevOps Principles] influences positively [Enable the realization of successful software systems]

influences

| | |
|---------------|---------------------|
| Type | Influence relation |
| Source | DevOps Principles |
| Target | BizDevOps Principle |

[DevOps Principles] influences positively [BizDevOps Principle]

[BizDevOps Principles] are based on the [DevOps Principles]. They are considered part of their guidelines.

leverages

| | |
|---------------|--|
| Type | Association relation |
| Source | IT/Business Alignment while ensuring Agility |
| Target | Agile Software Development |

[IT/Business Alignment while ensuring Agility] leverages [Agile Software Development] to ensure that IT services remain aligned with business needs while maintaining agility.

part of

| | |
|---------------|------------------------------|
| Type | Composition relation |
| Source | Minimum viable product (MVP) |
| Target | MVP Service |

[MVP Service] part of [Minimum viable product (MVP)]

part of

| | |
|---------------|------------------------------|
| Type | Composition relation |
| Source | Minimum viable product (MVP) |
| Target | Internal Agreement |

[Internal Agreement] part of [Minimum viable product (MVP)]

part of

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Node |
| Target | Expose Way |

[Node] hosts [Expose Way], ensuring it has the required infrastructure for execution.

part of

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Node |
| Target | Device |

part of

| | |
|---------------|----------------------|
| Type | Composition relation |
| Source | Node |
| Target | System Software |

performs

| | |
|---------------|--------------------------|
| Type | Assignment relation |
| Source | MVP Application |
| Target | MVP Application Function |

[Application] performs [Application Function] by executing the tasks required to deliver specific functionality.

read/write

| | |
|---------------|----------------------|
| Type | Access relation |
| Source | MVP Application |
| Target | MVP Application Data |

read/write

| | |
|---------------|--------------------------|
| Type | Access relation |
| Source | MVP Business Process |
| Target | MVP Business Information |

realization

| | |
|---------------|----------------------|
| Type | Realization relation |
| Source | Business Need |
| Target | Enterprise Objective |

realization

| | |
|---------------|-------------------------|
| Type | Specialization relation |
| Source | Alignment |
| Target | BizDevOps Principle |

[Alignment] gives realization to [BizDevOps Principles]

realization

| | |
|---------------|-------------------------|
| Type | Specialization relation |
| Source | Agility |
| Target | BizDevOps Principle |

[Agility] gives realization to [BizDevOps Principles]

realization

| | |
|---------------|-------------------------|
| Type | Specialization relation |
| Source | Integrated Team |
| Target | BizDevOps Principle |

[Integrated Team] gives realization to [BizDevOps Principles]

realization

| | |
|---------------|-------------------------|
| Type | Specialization relation |
| Source | Business First |
| Target | BizDevOps Principle |

[Business First] gives realization to [BizDevOps Principles]

realization

| | |
|---------------|-------------------------|
| Type | Specialization relation |
| Source | Customer Focus |
| Target | BizDevOps Principle |

[Customer Focus] gives realization to [BizDevOps Principles]

realization

| | |
|---------------|-------------------------|
| Type | Specialization relation |
| Source | Shift-Left |
| Target | BizDevOps Principle |

[Shift-Left] gives realization to [BizDevOps Principles]

realization

| | |
|---------------|--------------------------|
| Type | Specialization relation |
| Source | Continuity in Everything |
| Target | BizDevOps Principle |

[Continuity in Everything] gives realization to [BizDevOps Principles]

realization

| | |
|---------------|-------------------------|
| Type | Specialization relation |
| Source | Systems Thinking |
| Target | BizDevOps Principle |

[Systems Thinking] gives realization to [BizDevOps Principles]

realization

| | |
|---------------|-----------------------|
| Type | Realization relation |
| Source | Communication Network |
| Target | Path |

realization / align

| | |
|---------------|--------------------------|
| Type | Realization relation |
| Source | MVP Application Data |
| Target | MVP Business Information |

realizes

| | |
|---------------|--------------------------|
| Type | Realization relation |
| Source | MVP Application Function |
| Target | MVP Application Service |

[Application Function] realizes [Application Service] by executing the operations that deliver the service.

realizes

| | |
|---------------|-------------------------|
| Type | Realization relation |
| Source | MVP Application |
| Target | MVP Application Service |

[Application] realizes [Application Service] by delivering the specific functionality needed to execute the service.

Responsible for

| | |
|---------------|---|
| Type | Assignment relation |
| Source | BizDevOps Team |
| Target | BizDevOps Software Development Function |

[BizDevOps Team] is responsible for [BizDevOps Software Development Process]

Responsible for

| | |
|---------------|-----------------------------------|
| Type | Assignment relation |
| Source | Product Owner (Alignment Manager) |
| Target | Biz Cycle |

[Product Owner] is responsible for [Biz Cycle]

Responsible for

| | |
|---------------|---------------------|
| Type | Assignment relation |
| Source | Agility Manager |
| Target | Dev and Ops Cycles |

[Agility Manager] is responsible for [Dev and Ops Cycles]

satisfies

| | |
|---------------|------------------------------|
| Type | Realization relation |
| Source | Minimum viable product (MVP) |
| Target | Functional Requirement |

[Minimum Viable Product (MVP)] satisfies [Functional Requirements] by addressing the essential business needs, ensuring that the initial product delivers tangible value to users.

satisfies

| | |
|---------------|------------------------------|
| Type | Realization relation |
| Source | Minimum viable product (MVP) |
| Target | Non-Functional Requirement |

[Minimum Viable Product (MVP)] satisfies [Non-Functional Requirements] by ensuring that essential quality attributes, such as performance and usability, are met in the initial product delivery.

serve

| | |
|---------------|--------------------------|
| Type | Serving relation |
| Source | BizDevOps Bus Service |
| Target | MVP Application Function |

[DevOps Infrastructure Service] serves [Application Function] by delivering the infrastructure resources necessary for its operational tasks.

serve

| | |
|---------------|---|
| Type | Serving relation |
| Source | BizDevOps Bus Service |
| Target | BizDevOps Software Development Function |

[BizDevOps Bus Technology Service] serve [BizDevOps Software Development Function]

serve / align

| | |
|---------------|-------------------------|
| Type | Serving relation |
| Source | MVP Application Service |
| Target | MVP Business Process |

[Application Service] serves [MVP Business Process] by delivering the core application functionalities needed to execute the process.

serving

| | |
|---------------|------------------|
| Type | Serving relation |
| Source | Expose Way |
| Target | Node |

serving

| | |
|---------------|-----------------------|
| Type | Serving relation |
| Source | BizDevOps Bus Service |
| Target | Technology Function |

[Technology Function] serves [DevOps Infrastructure Service] by providing the technical capabilities and operational support required for the infrastructure service to function.

serving

| | |
|---------------|------------------|
| Type | Serving relation |
| Source | Expose Way |
| Target | MVP Application |

support

| | |
|---------------|-----------------------|
| Type | Realization relation |
| Source | Technology Function |
| Target | BizDevOps Bus Service |

[Technology Function] supports [DevOps Infrastructure Service] by enabling its operations with core technical functionalities.

supports

| | |
|---------------|----------------------|
| Type | Realization relation |
| Source | MVP Business Process |
| Target | MVP Service |

[MVP Service] supports [MVP Business Process] by ensuring the efficient execution of its essential steps.