



IT STRATEGY

Prof. Dr. Norbert Frick

COURSE OVERVIEW – SEMESTER OUTLINE

| Lecture Date | Lecture Schedule | Exercise Date (MS Teams Meetings) | Deliverables (due 23:59) |
|--------------|--|--------------------------------------|-----------------------------|
| 16.04.2025 | Introduction to the course (online, VoD) | Bonus exercise | 22.04. |
| 23.04.2025 | IT Strategy/ Strategic & Operational IT Management | 25.04. | 29.04. |
| 30.04.2025 | Architecture Management | 02.05. | 06.05. |
| 07.05.2025 | Business Architecture (online, VoD) | 09.05. | 13.05. |
| 14.05.2025 | IT Outsourcing (Guest lecture) | 16.05. | 20.05. |
| 21.05.2025 | Application Architecture | 23.05. | 27.05. |
| 28.05.2025 | Requirements Engineering 1/2 | 30.05. | 03.06. |
| 04.06.2025 | Requirements Engineering 2/2 | 06.06. | 17.06. |
| 11.06.2025 | NO LECTURE!!! | no exercise | --- |
| 18.06.2025 | IT Service Management (online, VoD) | 20.06. | 01.07. |
| 25.06.2025 | NO LECTURE!!! | no exercise | --- |
| 02.07.2025 | IT Security (Guest lecture) | 05.07. | 09.07. |
| 09.07.2025 | IT Project & Program Management | 11.07. | 15.07. |
| 16.07.2025 | Recap & Exam preparation | no exercise | --- |
| 13.08.2025 | EXAM (10:00-11:30, rooms tbd) | | |
| tbd | RETRY EXAM (?:00-?:00, room tbd) | | |

WHAT ARE YOUR EXPECTATIONS?

SELF-IMAGE OF IT 1/2

IT as Crafting Discipline



Focus

Technology

Capabilities

Programming, System Management

Integration

Isolated, internally and externally decoupled

Results

Sporadic automation and innovation, many problems occurring

IT Industrialization



Processes

IT Management, Service Management

Colleagues as customers, externally decoupled

Services and solutions, efficiency and effectiveness

Digitalization



Business Models

Digital Leadership

Colleagues as partners, strong integration with external customers

Digital business innovations, new forms of value creation

Source: Kobus et al. (2016)

SELF-IMAGE OF IT 2/2

| | |
|----------------------------|---|
| Competitive Orientation | <ul style="list-style-type: none">• IT promotes competitiveness through "alignment" and "enabling" |
| Process Orientation | <ul style="list-style-type: none">• IT does not support individual functions, but cross-divisional and cross-company business processes |
| Service Orientation | <ul style="list-style-type: none">• IT is a customer-oriented service provider for the business units |
| Data Privacy Orientation | <ul style="list-style-type: none">• IT actively pursues the protection of personal data and creates a corresponding awareness in the organization |
| Sustainability Orientation | <ul style="list-style-type: none">• Procurement, use and recycling of IT conserves resources and avoids environmental damage |
| Innovation Orientation | <ul style="list-style-type: none">• IT actively drives innovations and supports the business units in their use |

DETOUR: WHAT IS A STRATEGY?

Strategy is defined as the fundamental, long-term behavioral approach (combination of measures) of the company and relevant subdivisions towards their environment in order to achieve long-term goals.

(Source: <https://en.wikipedia.org/wiki/Strategy>, last access: 18.04.2024)

WHAT IS AN IT STRATEGY?

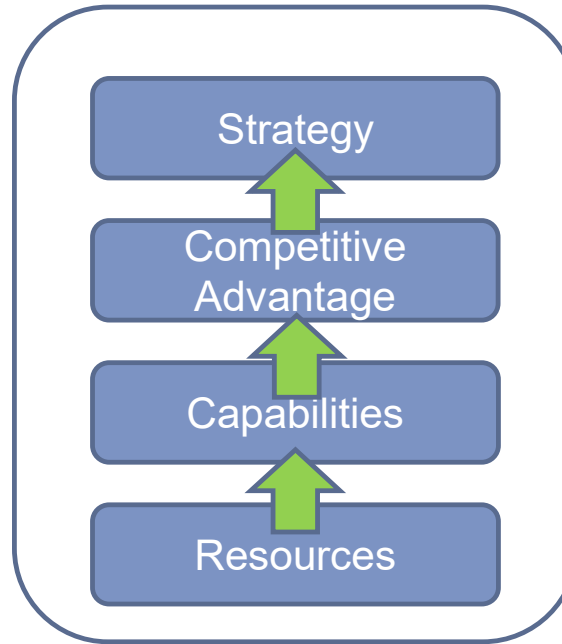
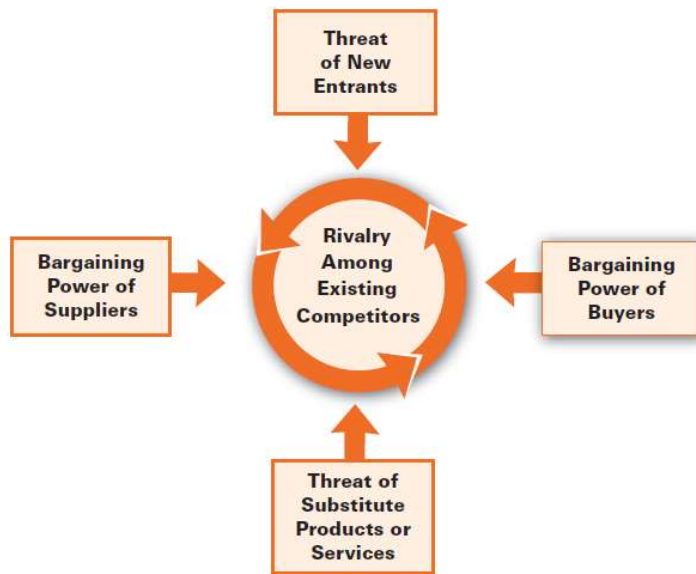
An IT strategy is a system of coordinated, long-term planned measures that serve to achieve the strategic goals of IT management. (Source: according to Tiemeyer (2011))

An IT strategy includes statements about planned measures in relation to all design areas of IT management: People, Tasks/Processes, ICT technologies

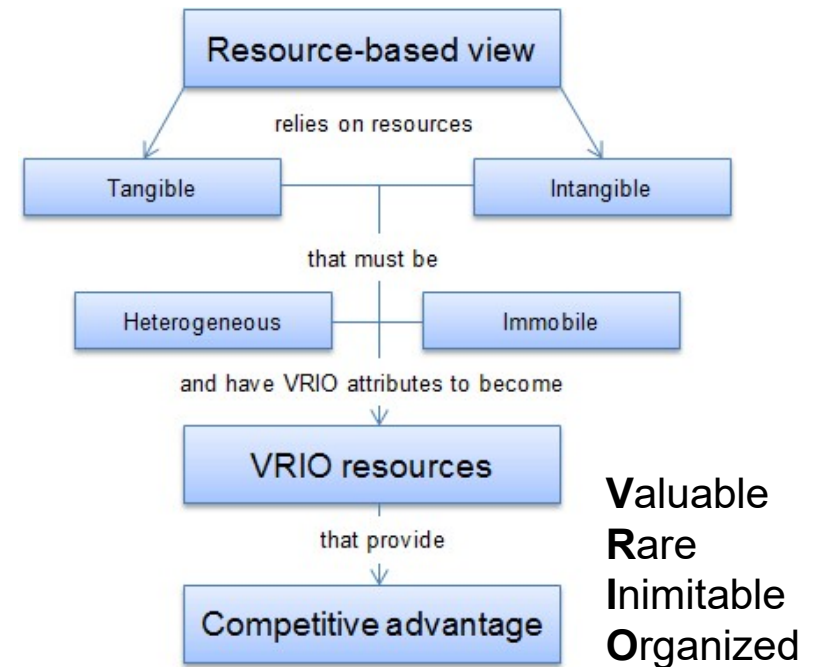


TWO APPROACHES

The Five Forces That Shape Industry Competition

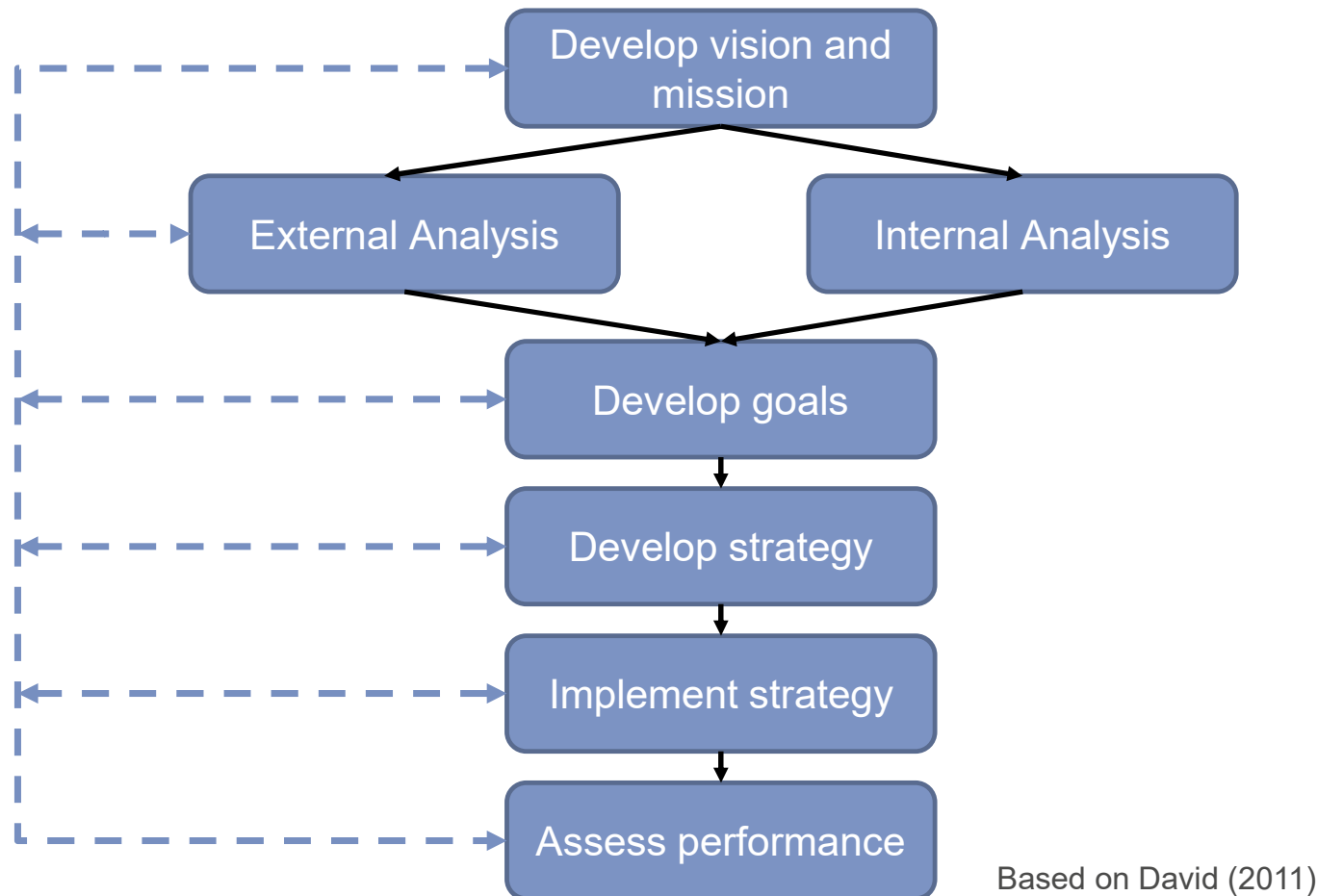


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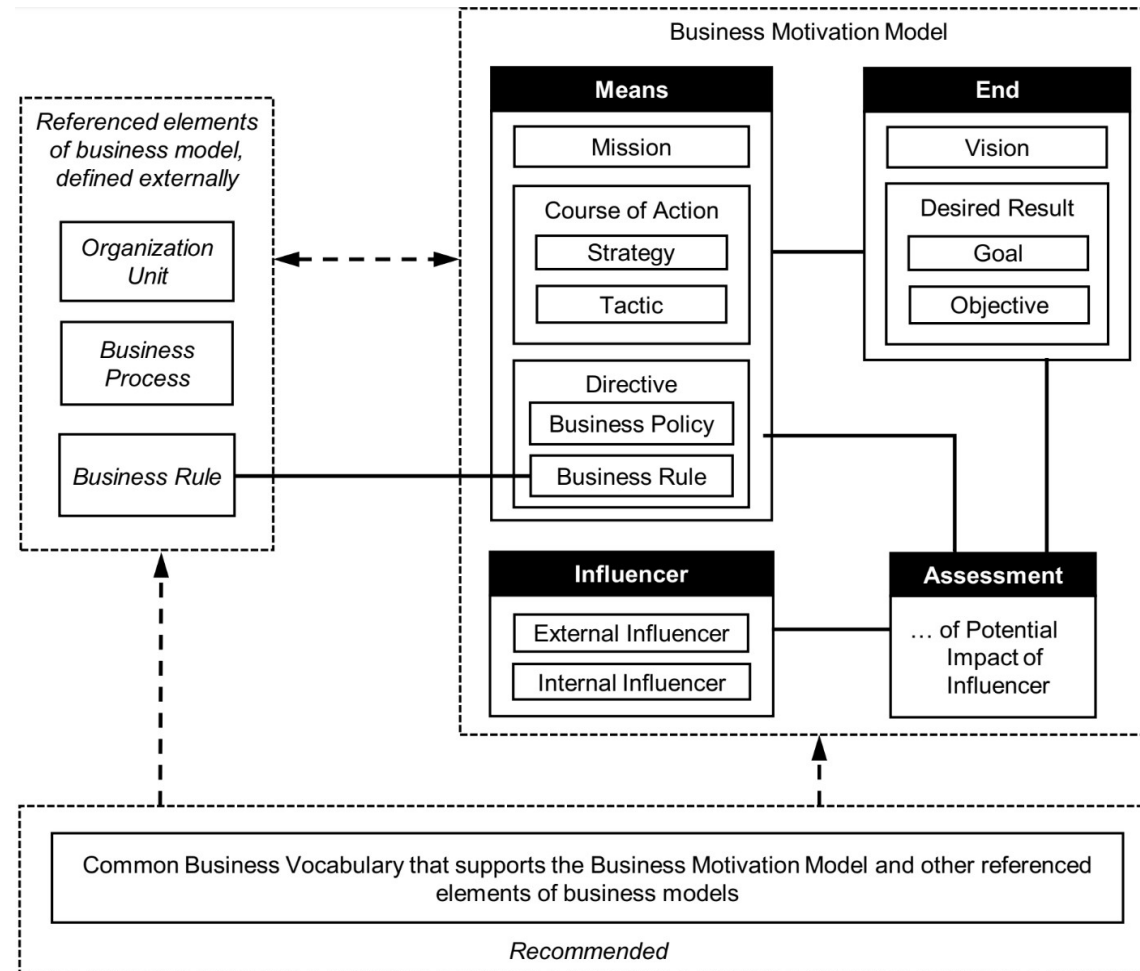
(Source: <https://strategicmanagementinsight.com/tools/resource-based-view/>, last access: 18.04.2024)

STRATEGIC MANAGEMENT PROCESS



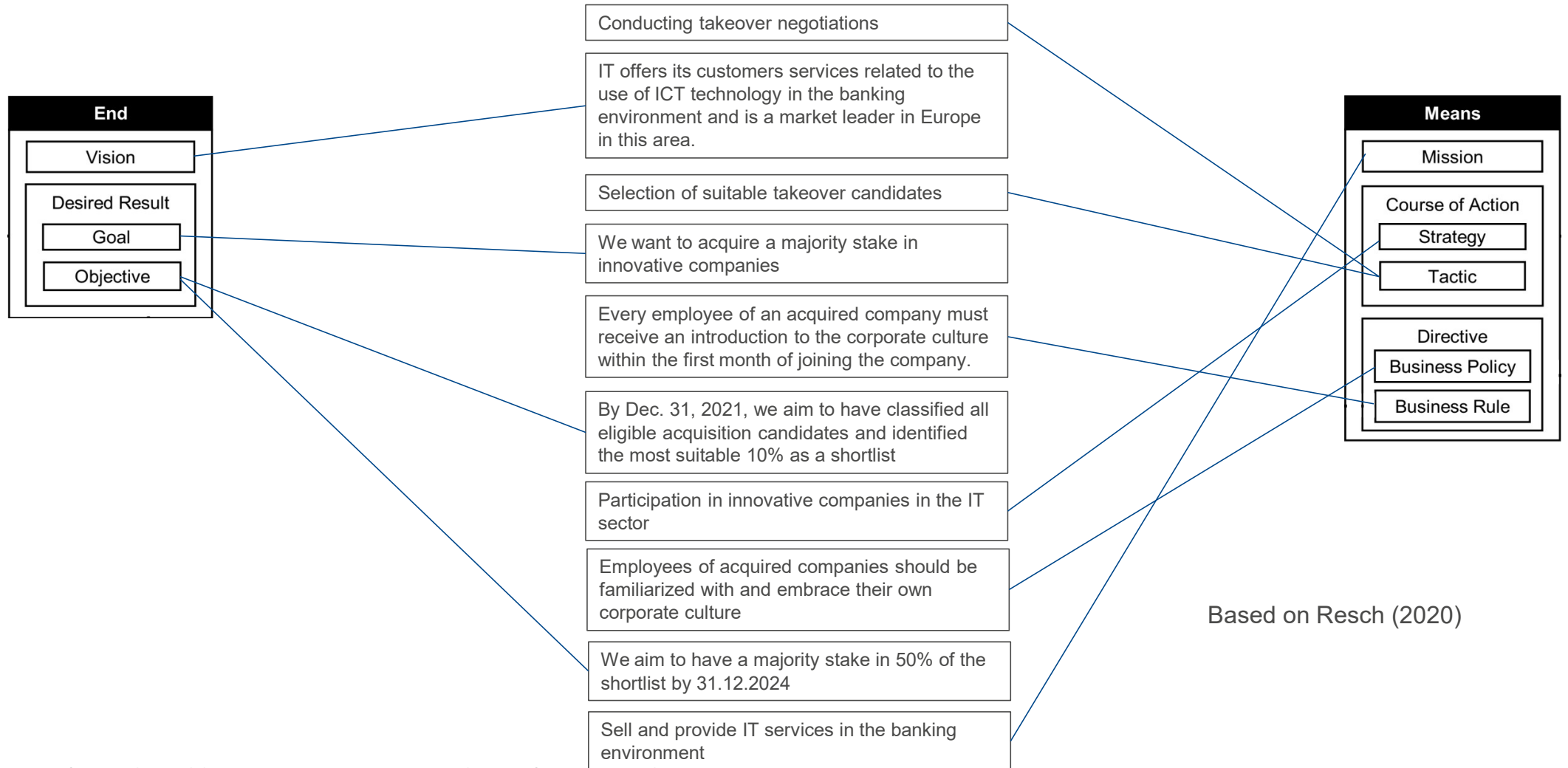
Based on David (2011)

BUSINESS MOTIVATION MODEL



(Source: <https://www.omg.org/spec/BMM/About-BMM/>, last access: 18.04.2024)

BMM - MEANS TO AN END



Based on Resch (2020)

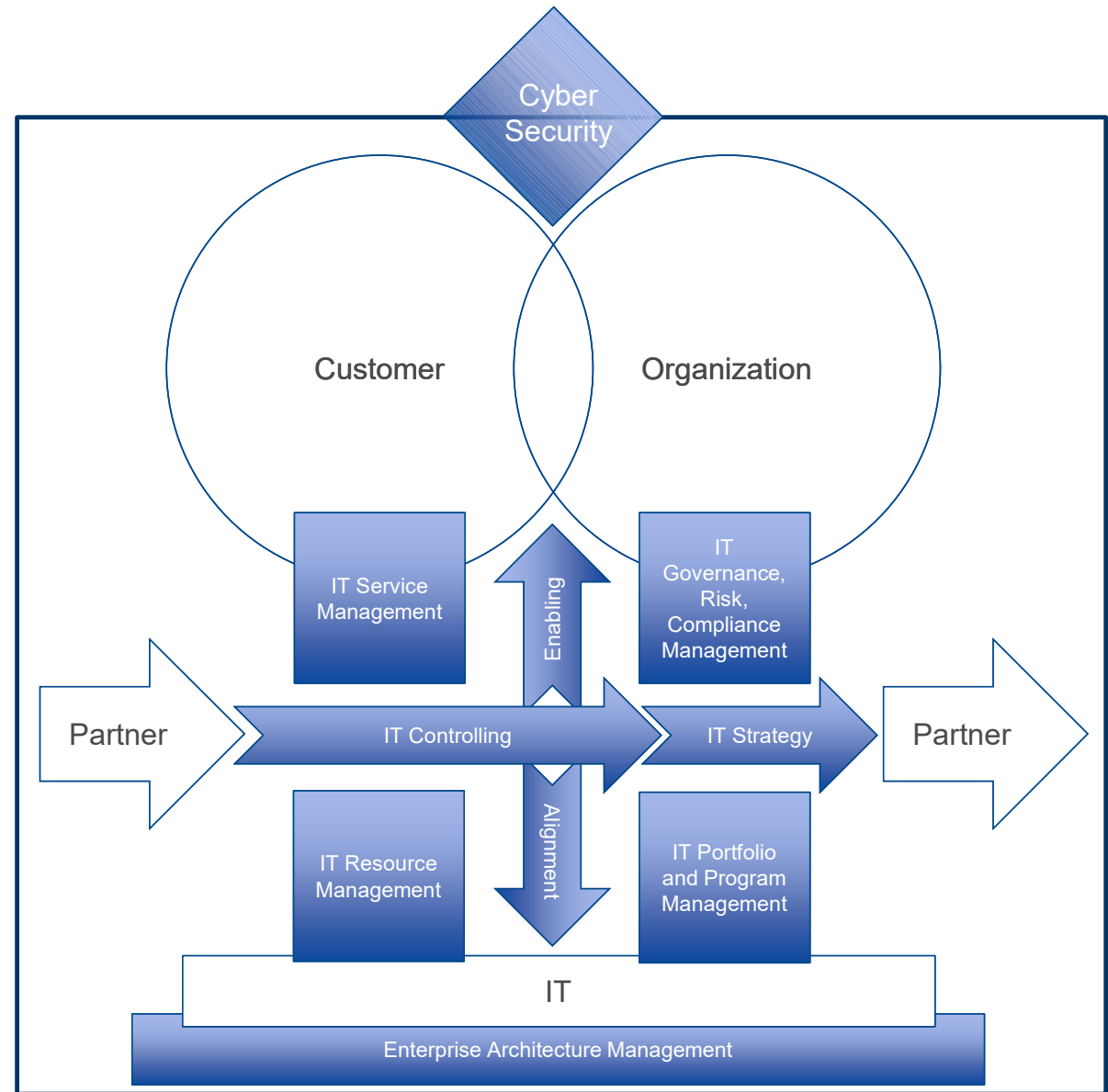
RECAP: IT MANAGEMENT TASKS

Strategic IT management (SITM) used to focus on the design, implementation, and operations of information technology and systems

Managing IT today is analogous to managing a company within a company

Mueller et al. (2009)

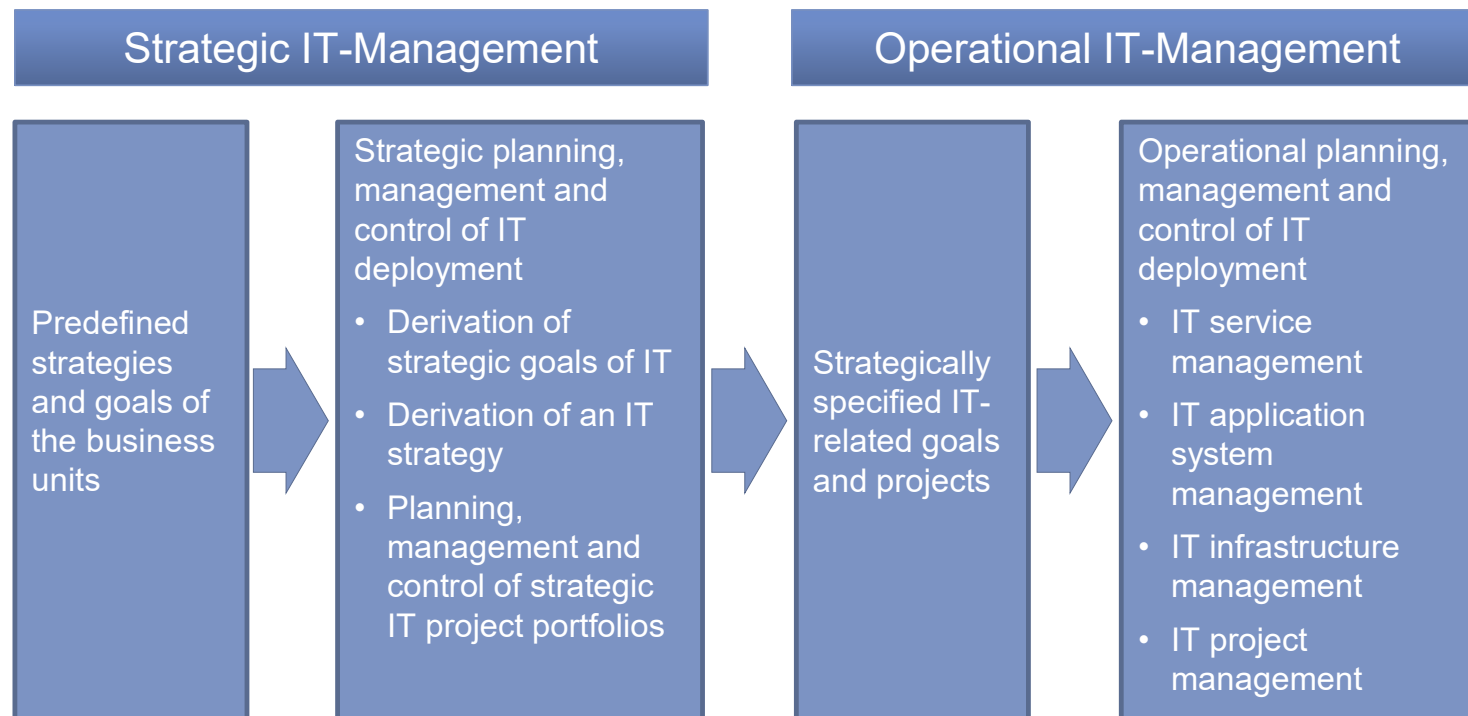
Resch (2020)



FEATURES IN STRATEGIC AND OPERATIONAL IT MANAGEMENT

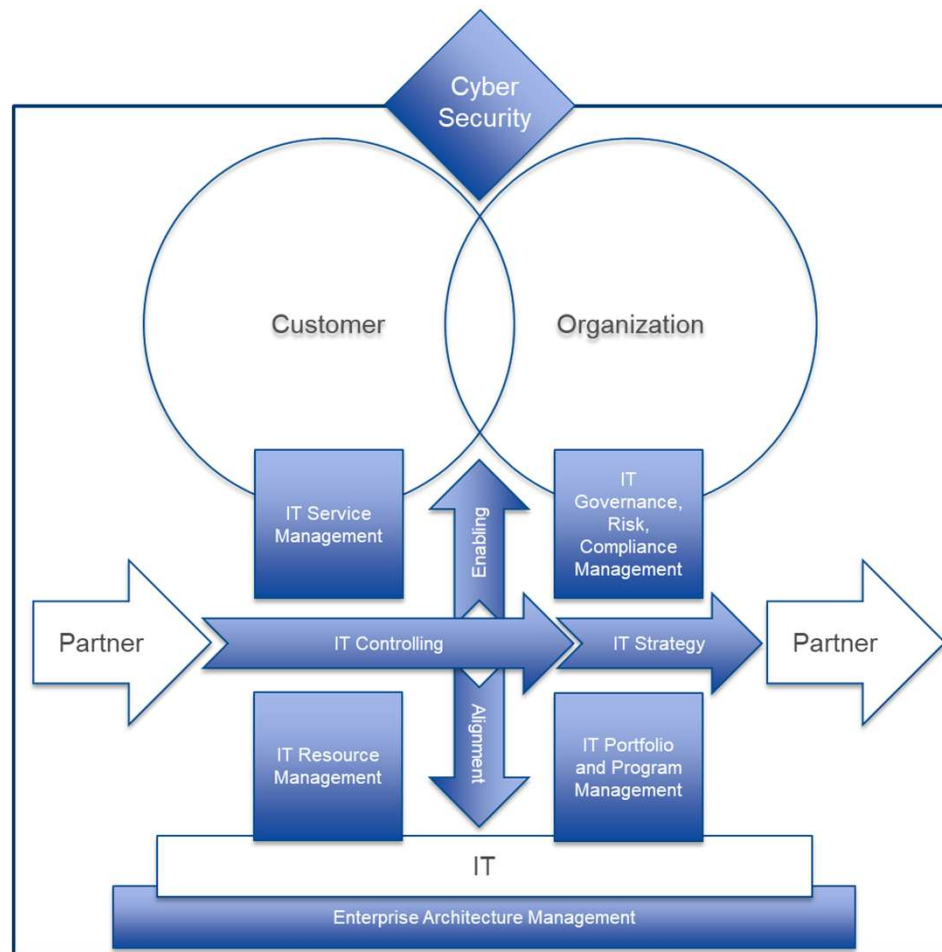
| Features | Strategic Tasks | Operational Tasks |
|-----------------------|--|--|
| Competition | Great importance for the competitive position | Competitive relevance is not an issue |
| Corporate Environment | Actively influencing the corporate environment | Consideration of the development of the corporate environment |
| Complexity | High complexity | Little complexity |
| Detail | Abstraction from details | Explicit consideration of details |
| Time | Rather long-term period | Tendency for short-term period |
| Degree of Freedom | Rough planning with large degrees of freedom | Detailed planning with lower degrees of freedom as well as management and control of IT projects |

STRATEGIC AND OPERATIONAL IT MANAGEMENT



According to Waidelich (1993)

OPERATIONAL IT MANAGEMENT: COMING BACK 😊



COBIT FRAMEWORK, LETS HAVE A LOOK...

[Right-Size Your Governance of Enterprise Information & Technology - YouTube](#)

COBIT FRAMEWORK, NOW WHAT?

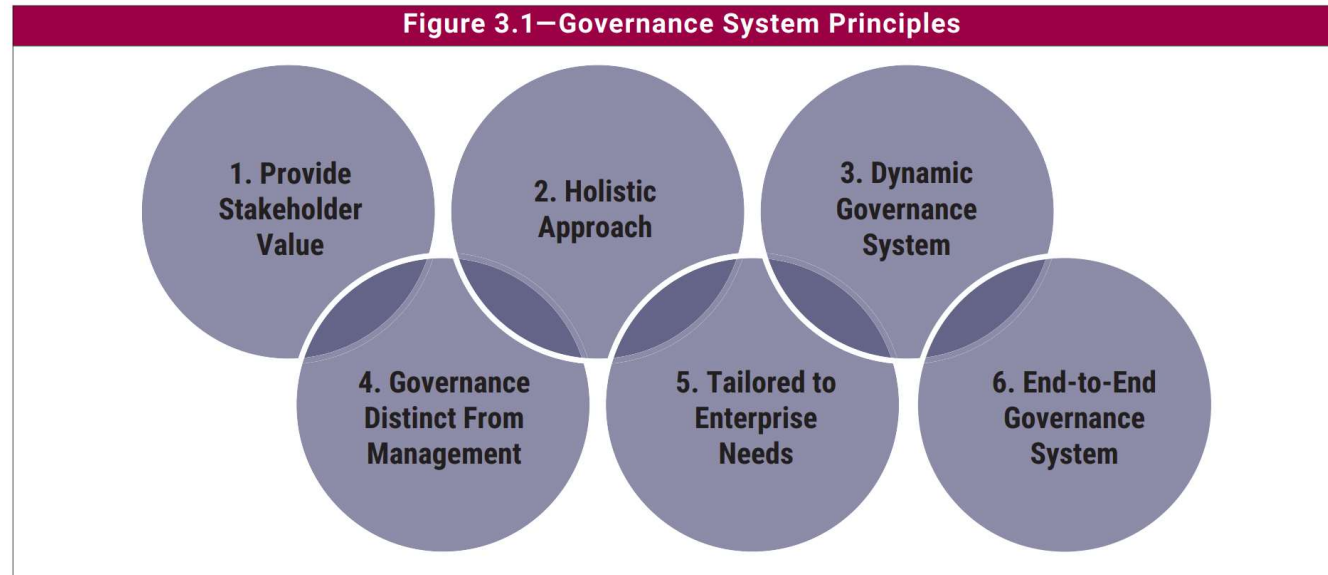
Figure 1.1—The Context of Enterprise Governance of Information and Technology



Source: De Haes, Steven; W. Van Grembergen; *Enterprise Governance of Information Technology: Achieving Alignment and Value, Featuring COBIT 5*, 2nd ed., Springer International Publishing, Switzerland, 2015, <https://www.springer.com/us/book/9783319145464>

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COBIT – SYSTEM PRINCIPLES

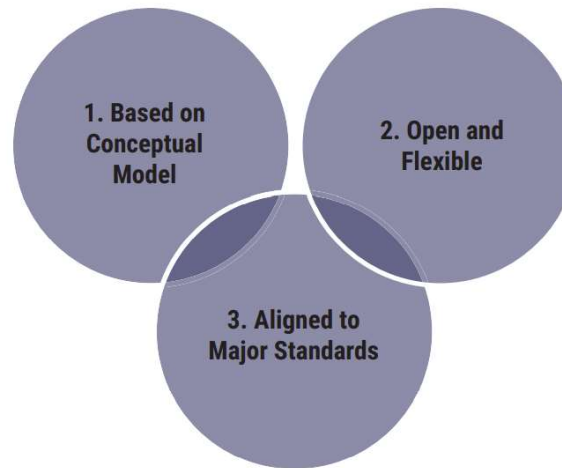


1. Each enterprise needs a governance system to satisfy stakeholder needs and to generate value from the use of I&T. Value reflects a balance among benefits, risk and resources, and enterprises need an actionable strategy and governance system to realize this value.
2. A governance system for enterprise I&T is built from a number of components that can be of different types and that work together in a holistic way.
3. A governance system should be dynamic. This means that each time one or more of the design factors are changed (e.g., a change in strategy or technology), the impact of these changes on the EGIT system must be considered. A dynamic view of EGIT will lead toward a viable and future-proof EGIT system.
4. A governance system should clearly distinguish between governance and management activities and structures.
5. A governance system should be tailored to the enterprise's needs, using a set of design factors as parameters to customize and prioritize the governance system components.
6. A governance system should cover the enterprise end to end, focusing not only on the IT function but on all technology and information processing the enterprise puts in place to achieve its goals, regardless where the processing is located in the enterprise

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COBIT – FRAMEWORK PRINCIPLES

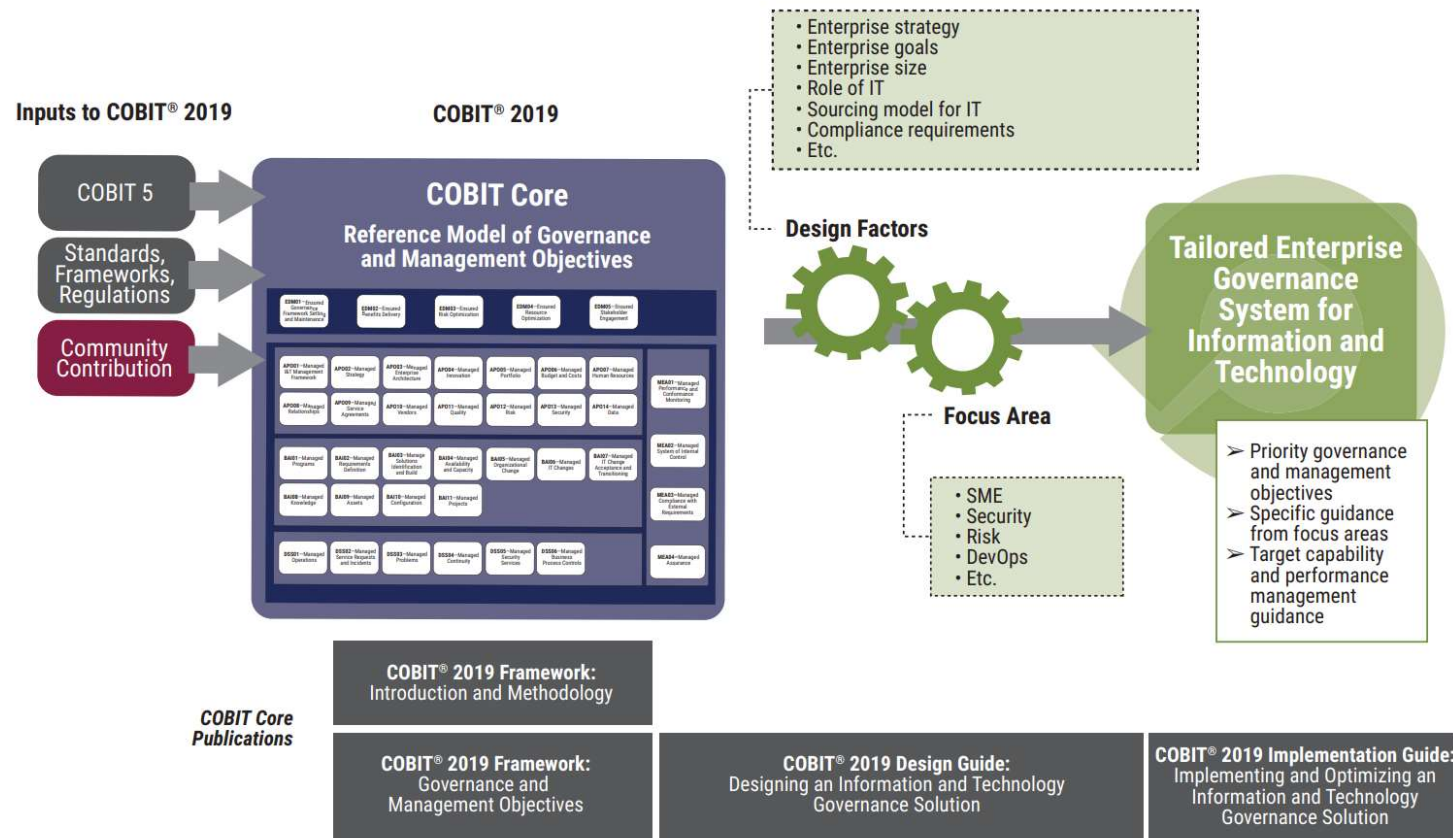
Figure 3.2—Governance Framework Principles



1. A governance framework should be based on a conceptual model, identifying the key components and relationships among components, to maximize consistency and allow automation.
2. A governance framework should be open and flexible. It should allow the addition of new content and the ability to address new issues in the most flexible way, while maintaining integrity and consistency.
3. A governance framework should align to relevant major related standards, frameworks and regulations.

COBIT – OVERVIEW

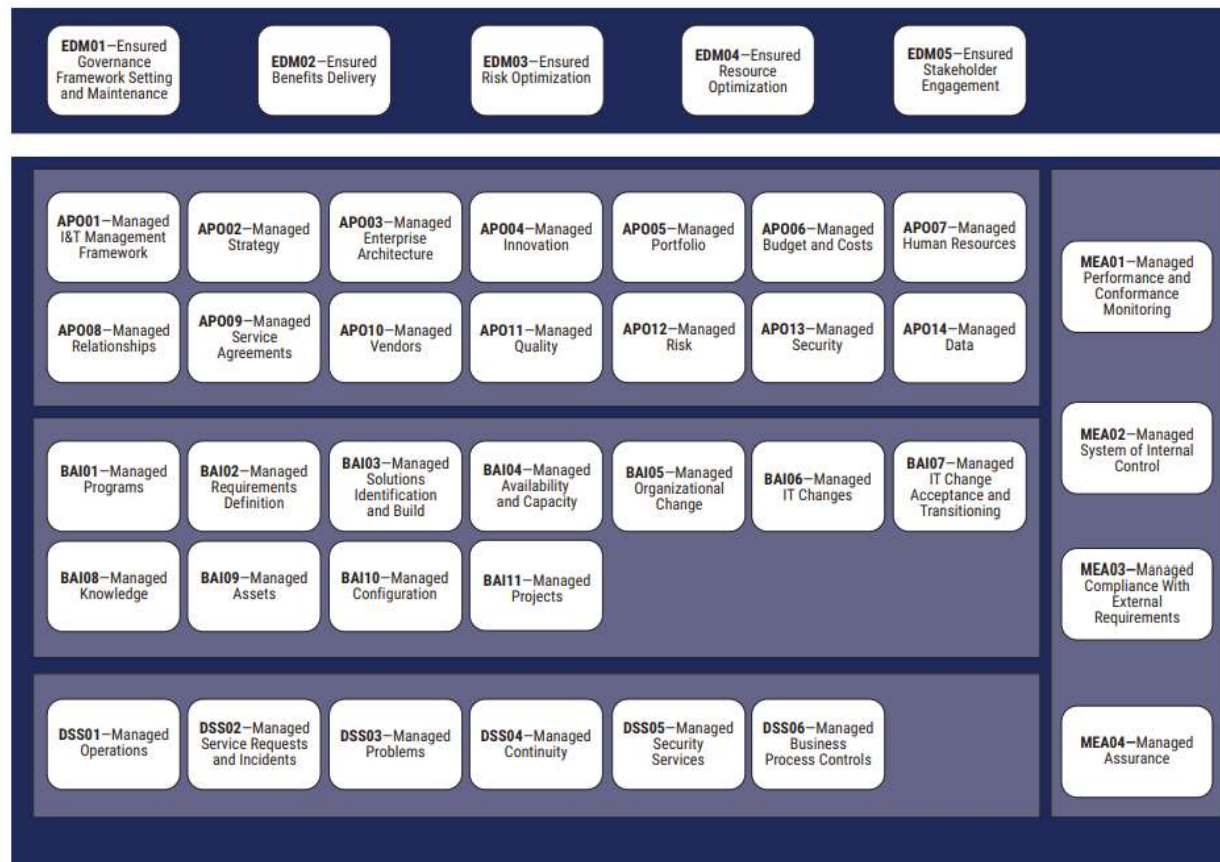
Figure 4.1—COBIT Overview



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COBIT – CORE MODEL

Figure 4.2–COBIT Core Model

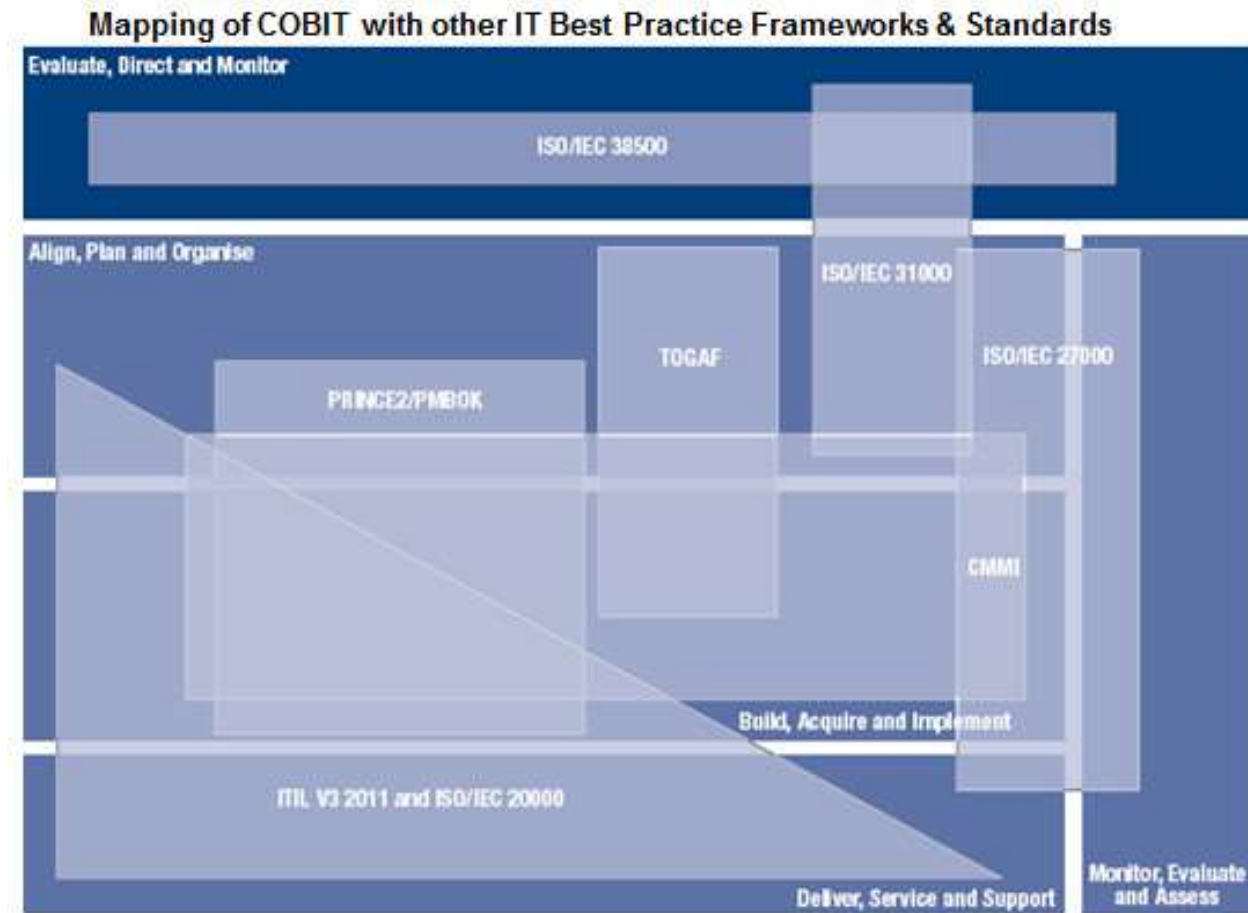


The governance and management objectives in COBIT are grouped into **five domains**. The domains have names with verbs that express the key purpose and areas of activity of the objective contained in them:

- **Governance objectives** are grouped in the **Evaluate, Direct and Monitor (EDM)** domain. In this domain, the governing body evaluates strategic options, directs senior management on the chosen strategic options and monitors the achievement of the strategy.
- **Management objectives** are grouped in four domains:
 - **Align, Plan and Organize (APO)** addresses the overall organization, strategy and supporting activities for I&T.
 - **Build, Acquire and Implement (BAI)** treats the definition, acquisition and implementation of I&T solutions and their integration in business processes.
 - **Deliver, Service and Support (DSS)** addresses the operational delivery and support of I&T services, including security.
 - **Monitor, Evaluate and Assess (MEA)** addresses performance monitoring and conformance of I&T with internal performance targets, internal control objectives and external requirements.

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COBIT AND OTHER IT BEST PRACTICE FRAMEWORKS



(Source: <https://www.linkedin.com/pulse/implement-institutionalize-gdpr-requirements-leveraging-rajiv-k-dua/>, last access: 18.04.23)

LITERATURE

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