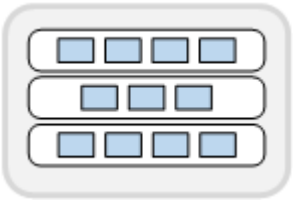
Capability Maps

Architecture Methods > **Capability Maps**



Links

- ITANA capability map (as an example)
- Teaching and Learning capability map (ITANA RATL working group)
- UW-M Advisor capability map
- Detailed Cutter article on the use of capability maps
- CEB Capability Modeling Whitepaper
- UM Med School "Education" capability map with investments linked
- TeachingLearningCapability-StudentPerspective (note a very detailed better for analysis than for communication)

...and these additional resources that are not available as of January 2024, but are being assessed and refreshed:

- Miami University of Ohio Capability Presentation by Dana Miller
- Miami University of Ohio Capability Map
- Miami University of Ohio Architectural Visualization Tool
- Umich map for School of Public Health (with technologies used)

Introduction

Description: A business capability, or simply a “capability,” defines what a business does. It does not communicate or expose where, why, or how something is done — only what is done. Specifically, the business capability is “a particular ability or capacity that a business may possess or exchange to achieve a specific purpose or outcome (Cutter)." This appears to be an industry definition.

A capability model should be distinguished from a business process model.

Business capability modeling captures the core functional model for an organization without the bias imposed by the organization's structure itself.

A model that shows your business capabilities and how they map to business value streams.

Capability maps provide a basis for mapping business processes and IT services to a business domain.

Capabilities can be decomposed, typically higher levels for purposes of planning and lower levels for purposes of detailed business/IT mapping. The tiers /levels allow us to communicate the capabilities to people in different levels of the organization . For example, the way that you would communicate a capability to a dean is different than how you would communicate it to a developer or program manager.

There should be no overlap between capabilities.

Goals:

1. Capabilities provide stakeholders with a common language.
2. Capabilities provide a way in which stakeholders can gain a common understanding of the essential enablers in their business.
3. Capability maps helps clarify for a business area understand what it is supposed to achieve and keep that understanding independent of the methods processes, etc in which people are engaged.
4. A capability map can reflect sets of related capabilities. It encourages the categorizing of the what into things like “core” and “supporting.”

   Here is an example of a Teaching and Learning Enterprise Capability Map: https://spaces.at.internet2.edu/display/itana/Teaching+and+Learning+Capability+Map
5. By speaking in terms of business capabilities, IT can synchronize with the business and demonstrate the linkage between business outcomes and the value that IT provides.

Context:

1. Helps to rationalize services in support of capabilities. Basis for analysis. Can highlight redundancies, weaknesses. (lends itself to heat map).
2. Identify areas of repetition and where effort can be combined / centralized. It helps to communicate areas of weaknesses.
3. Helps to separate capabilities from individual responsibilities/organization structure, especially when trying to determine technology value or preferred organization structure.

Scope:

The scope might be a business domain such as research, the registrar’s office, financial aid (a business area). You can take a business domain, highlight where it’s done and how it’s done.

The scope can be top-down (define strategic capabilities, and then decompose into sub-maps). The scope can be targeted (especially if the effort of doing top-level strategic capabilities is too large /daunting).

Focus opportunistically, iteratively, on a single business domain, not entire landscape.

Scenarios

The campus desires to coordinate all advising activities and a capability map can be used to understand the business.

A client engagement effort is underway and capability mapping can be used to validate the business activities.

Method

Roles:

1. Business Analyst
2. Subject Matter Experts
3. Business Architect
4. Mid-level decision makers. (these aren't technically required, but having them in the conversation is going to be useful, both from a shared-understanding and from a consensus /ability to share-out perspective).

Steps:

1. Identify domain (should be well enough scoped for the needs of the audience).
2. Identify goals for doing this
3. Get enough subject matter experts.
4. Define highest level capabilities. (note capabilities are the whats)
5. Decompose into more discrete levels as needed. As needed, tie capabilities to enabling capabilities
6. As needed, identify information consumed and produced by capability
7. Optionally, tie technology solutions or data classes to capabilities, to value, gaps, and redundancies.

Terms:

1. capability
2. enablers

Communication

The standard visualization is via a Capability Map (see examples linked below). There isn't really a standard format that can be followed and each tends to be somewhat unique.

Examples

ITANA capabilities map

The University of Michigan Medical School has mapped it's business capabilities for Medical Student Education, Research and Faculty Affairs. We use these to communicate our IT investments in terms of their business. This specific version is for the "Education" portfolio. It also contains all investments in the Education portfolio mapped to the business capability that the investment supports.

UM Medical School Business Capabilities and Investment Mapping.pdf

Related Methods

(to be completed)

Contributors

Want to help with this page? Please see the Method Contributor Guide.

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