

Identification and Documentation of the State-of-the-Art Enterprise Architecture Management Foundations Using a Semantic Wiki

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Introduction

- Motivation
- eam-initiative.org – a wiki-based knowledge community for EAM

Initial Utility of the eam-initiative.org

- Research Objectives
- Goal Achievement

Evaluation

- User Survey
- Community Activity Metrics
- Further Feedback
- Evaluation Summary

Future Work

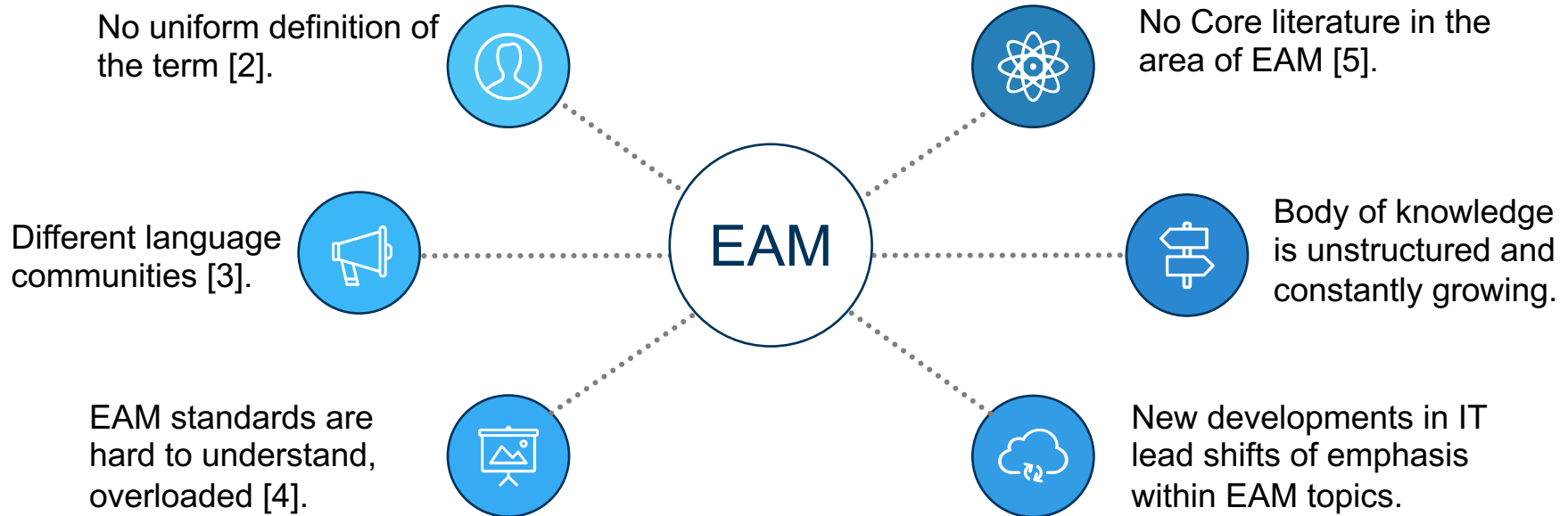
- Next Steps

“

[...] there seems to be a mystical mist surrounding the field of EA. This mist obscures the meaning and purpose of this field - not only for the naive observer but also for the mature architect.

”

- S. Bente, et al. [1]



- No definition of state-of-the-art EAM foundations relevant to practitioners
 - High entrance barriers young scholars and other prospects
 - Call for developing a common understanding / language



The goal of the eam-initiative.org is the advancement of the EAM domain.



The website structure is guided by a wiki-approach.



The community is based on participation.



EAM foundations are made available in the form of wiki articles.



A concept map is used as navigation tool



“Start small, think big” is a basic directive of the initiative.



In order for users to find value in their participation in a wiki-based online community, the wiki has to provide sufficient initial utility [6].

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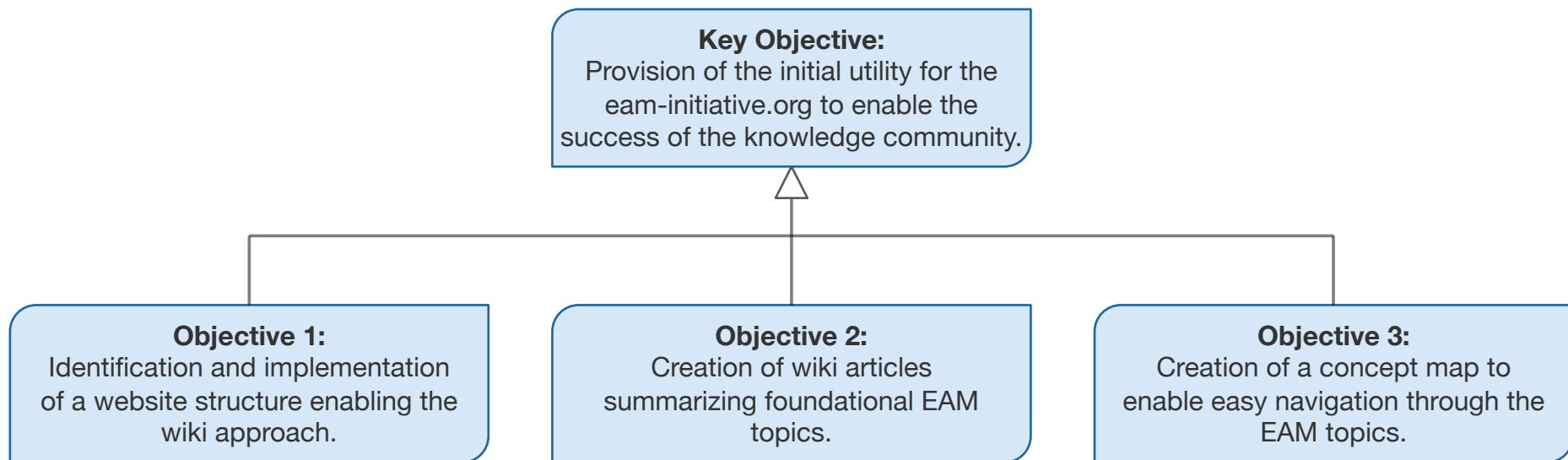
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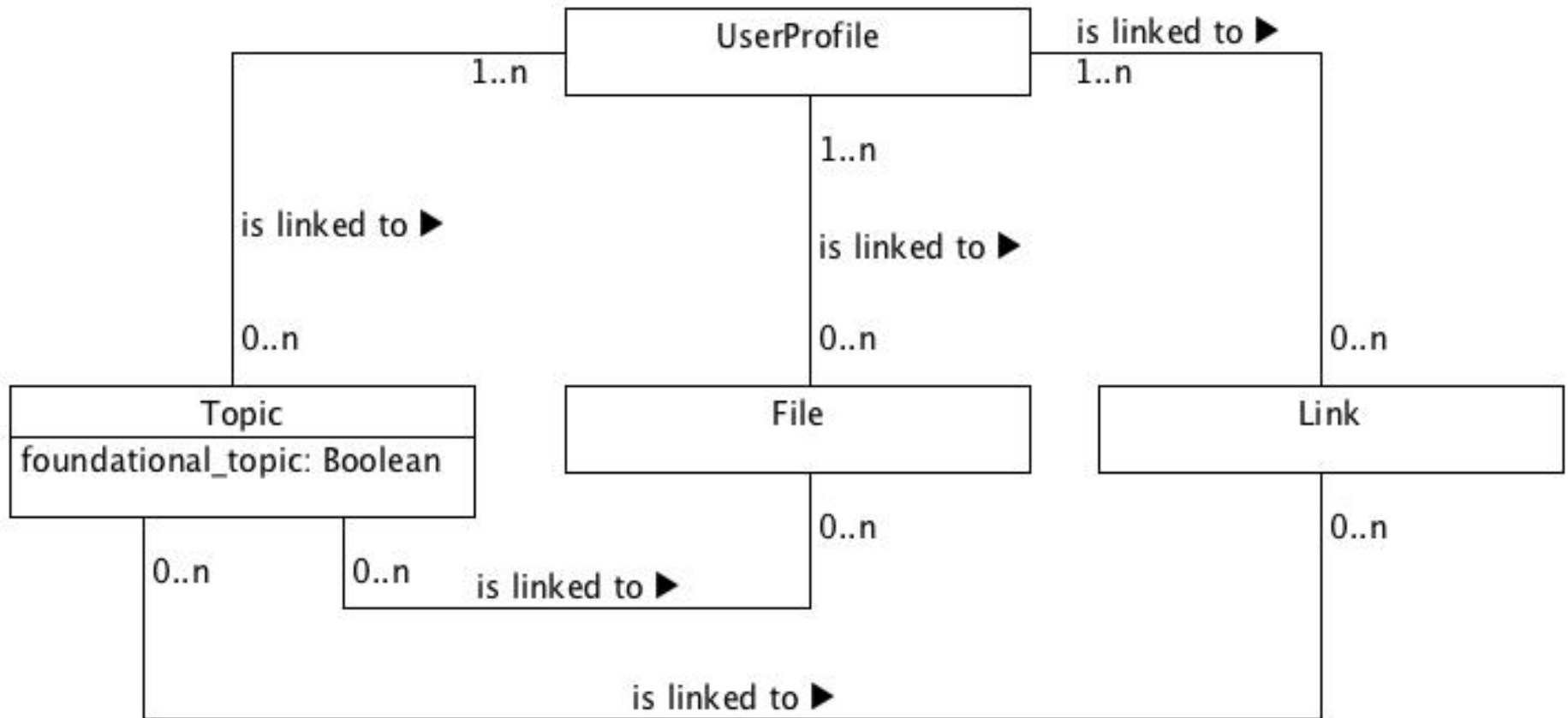
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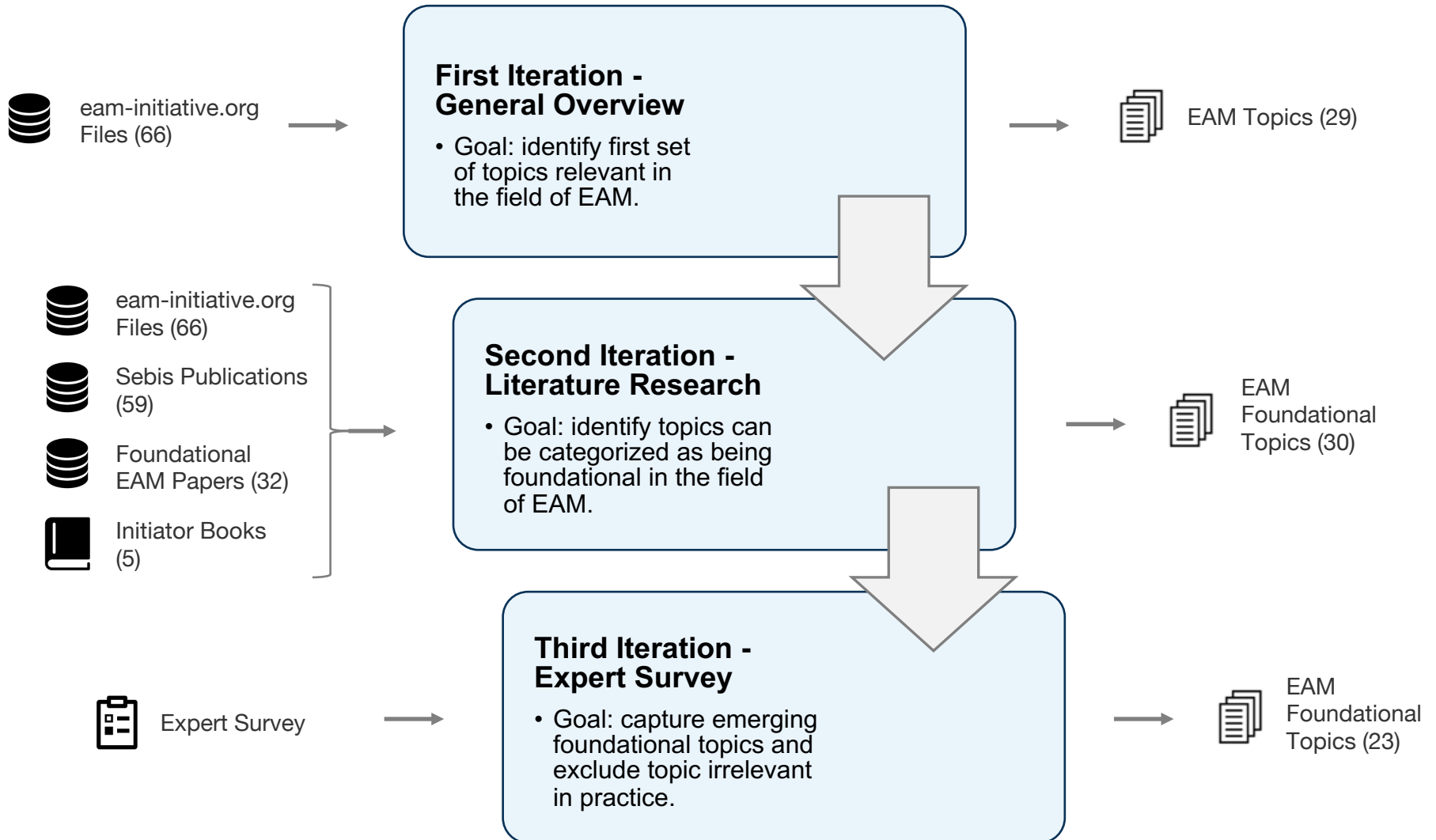


Goal Achievement Website Structure

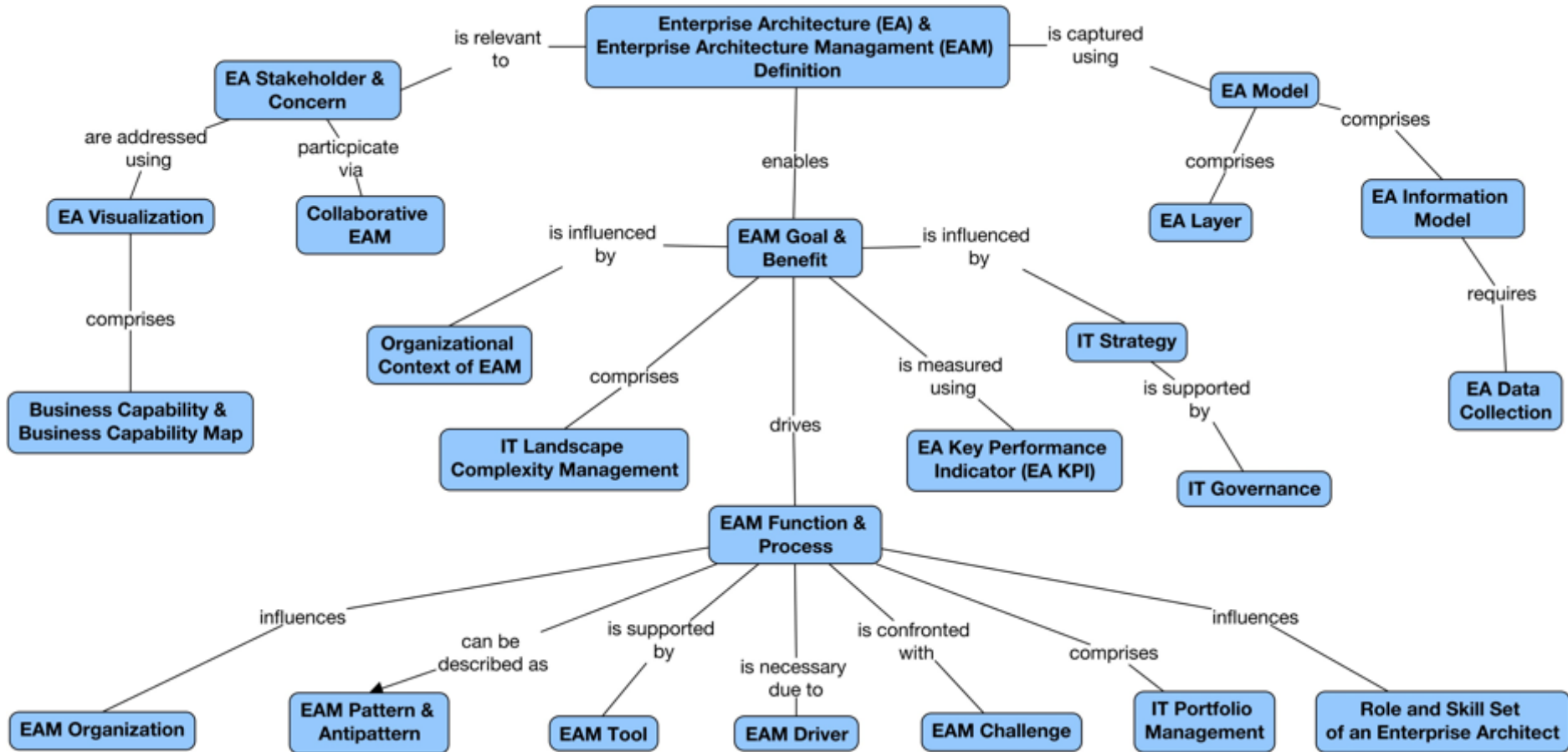


Goal Achievement

Foundational Wiki Articles



Goal Achievement Concept Map



eam-initiative.org

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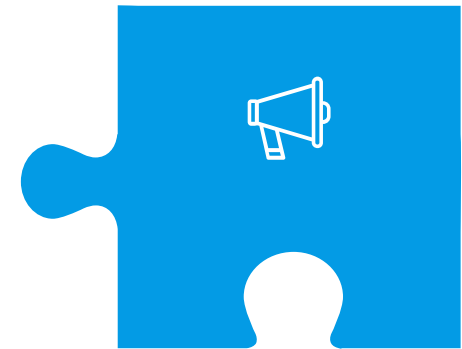
User Survey

- Descriptive Statistics
- Results



Community Activity Metrics

- Knowledge Posting Activities
- Viewing Activities Metrics



Further Feedback

- Feedback received via Email

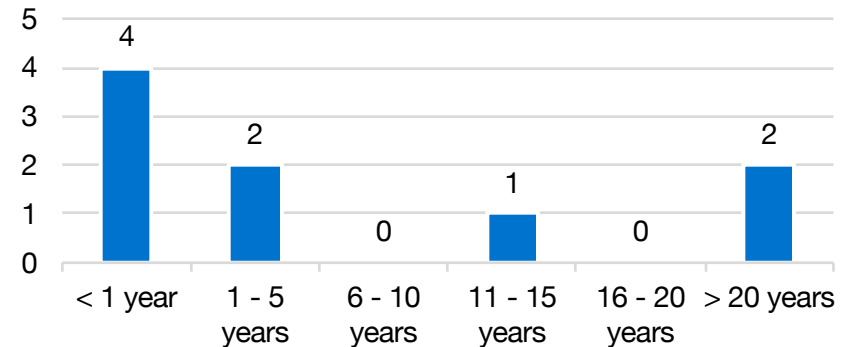
User Survey

Descriptive Statistics

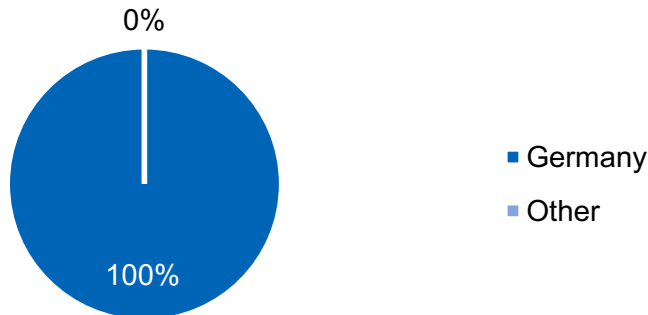
Roles of participants:

- Head of department business (1)
- Project manager (1)
- EAM consultant and interims IT manager (1)
- CIO (1)
- CEO (1)
- Chief architect completed the survey (1)
- Professor (1)
- Others (2)

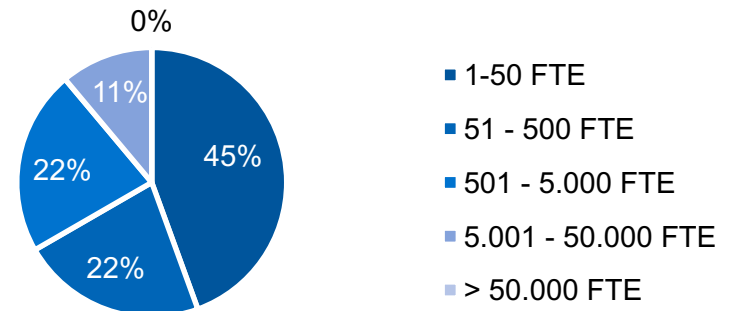
Professional EAM Experience



Organization Headquarter

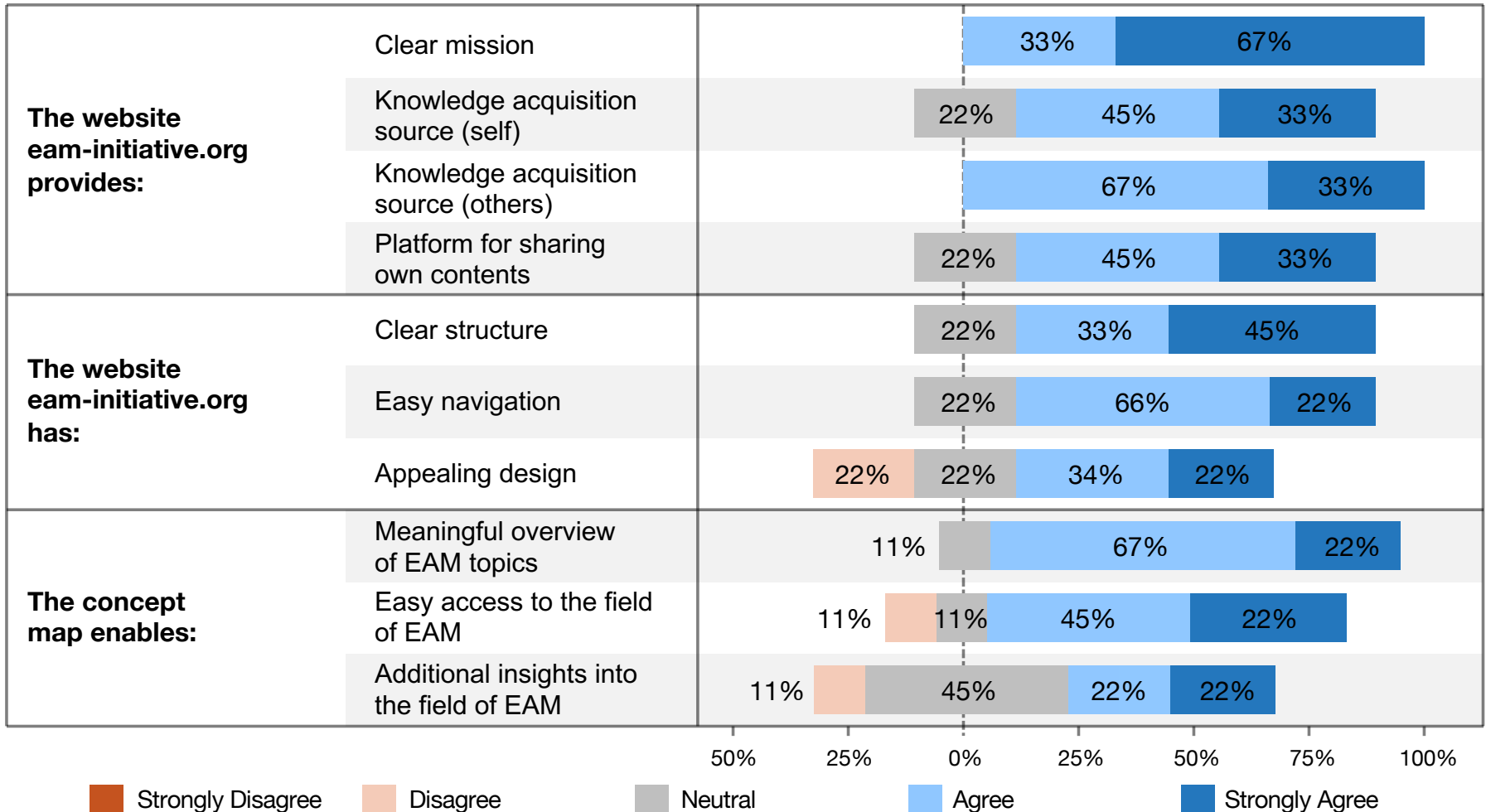


Organization Size



- **Pros:** Majority of practice-oriented participants with different levels of EAM experience
- **Cons:** Limited geographic distribution and overrepresentation of small organizations.

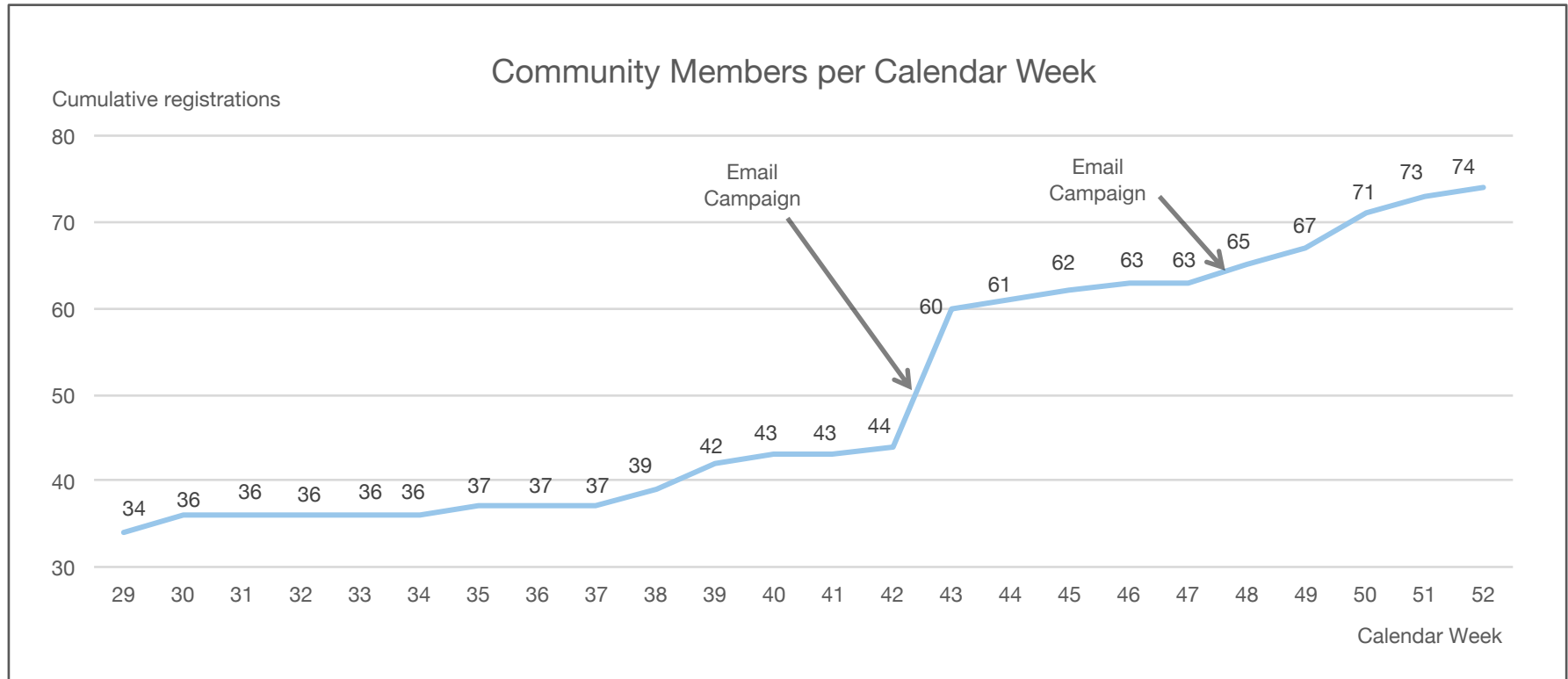
User Survey Results



- **Pros:** Positive feedback regarding the mission and the structure of the website.
- **Cons:** The website design could be improved.

Community Activity Metrics

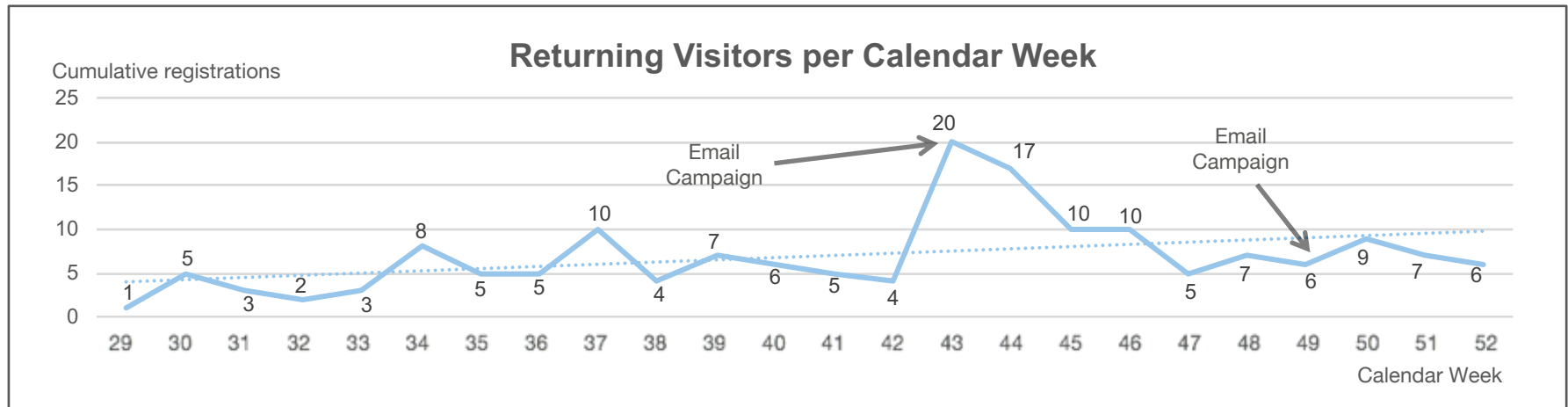
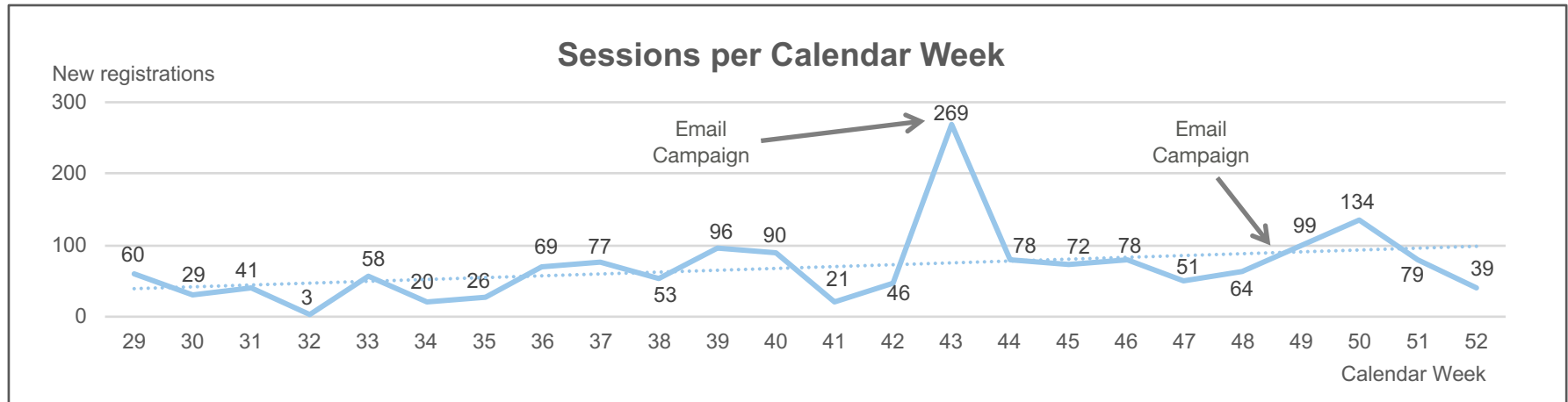
Knowledge Posting Metrics



- **Pros:** The amount of users increased from 34 to 74.
- **Cons:** No changes or creation of wiki articles, new contributions or comments.

Community Activity Metrics

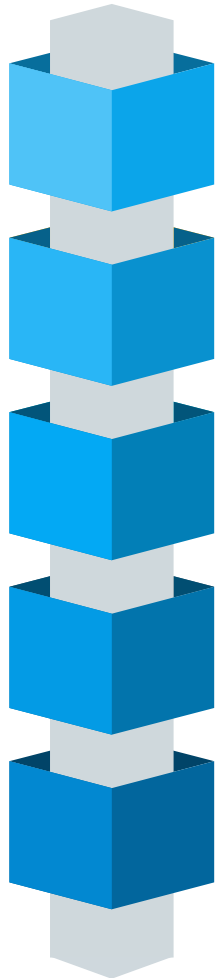
Viewing Activities Metrics



- **Pros:** Increase in session and returning visitors per calendar week.

Further Feedback

Feedback received via Email



Overall picture:

- Good implementation (3)

Community involvement:

- Community needs to be involved more (2)

Website Content:

- Should address the current issues and the self-image of EAM (1)
- Website should focus on the expectation of clients (1)

Topics:

- Topic structure is considered as fitting (2)
- Topics are too fine-grained (1)

Website navigation:

- Tree-like structure like the concept map is not fitting for EAM (1)
- Integrating of basic topics in the navigation bar could make the navigation easier (1)



- **Pros:** The general approach to of the website received positive feedback.
- **Cons:** Foster community involvement and enable the integration of current topics.

Positive Feedback

- Mission is understood and accepted
- Structure is good
- Concept map provides a good means for navigation
- Increasing number of registered users
- Increasing number of sessions and returning users

- Website design should be improved
- More involvement of community
- Should address the current issues and the self-image of EAM

Potential for Improvement



Now that the basic utility of the eam-initiative.org is provided, efforts should focus on fostering community building.

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Website Design

Improve website design
(student assistant,
design contest)



Initiator Meetings

Organize regular initiator
meetings



Promotion

Direct promotion (email,
phone, presentations at
expert gatherings)



Member feedback

Regularly seek feedback
(surveys, community
activity metrics)



Newsletter

Regular email
newsletters



Technology performance

Ensure availability of
features and adequate
performance



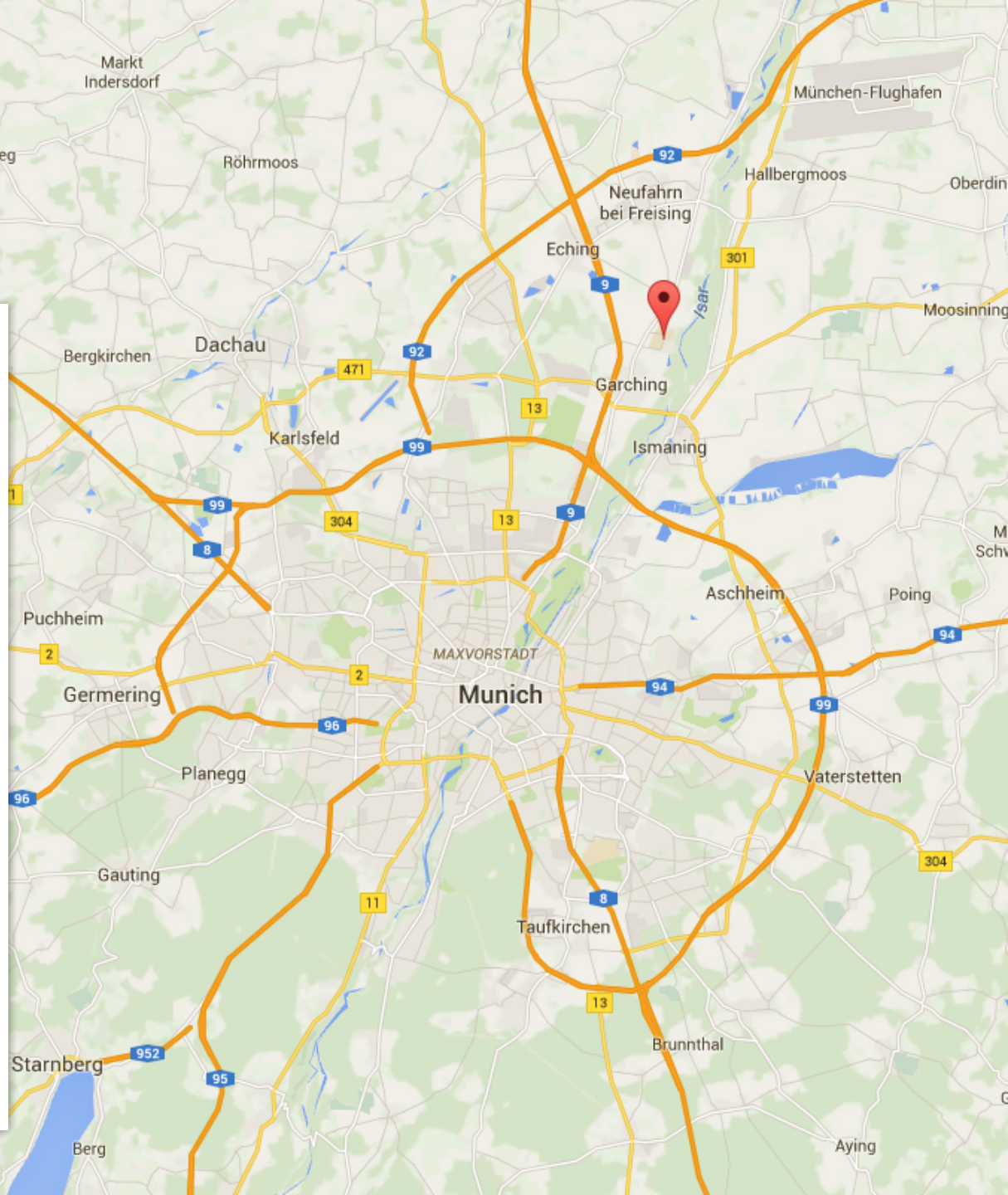
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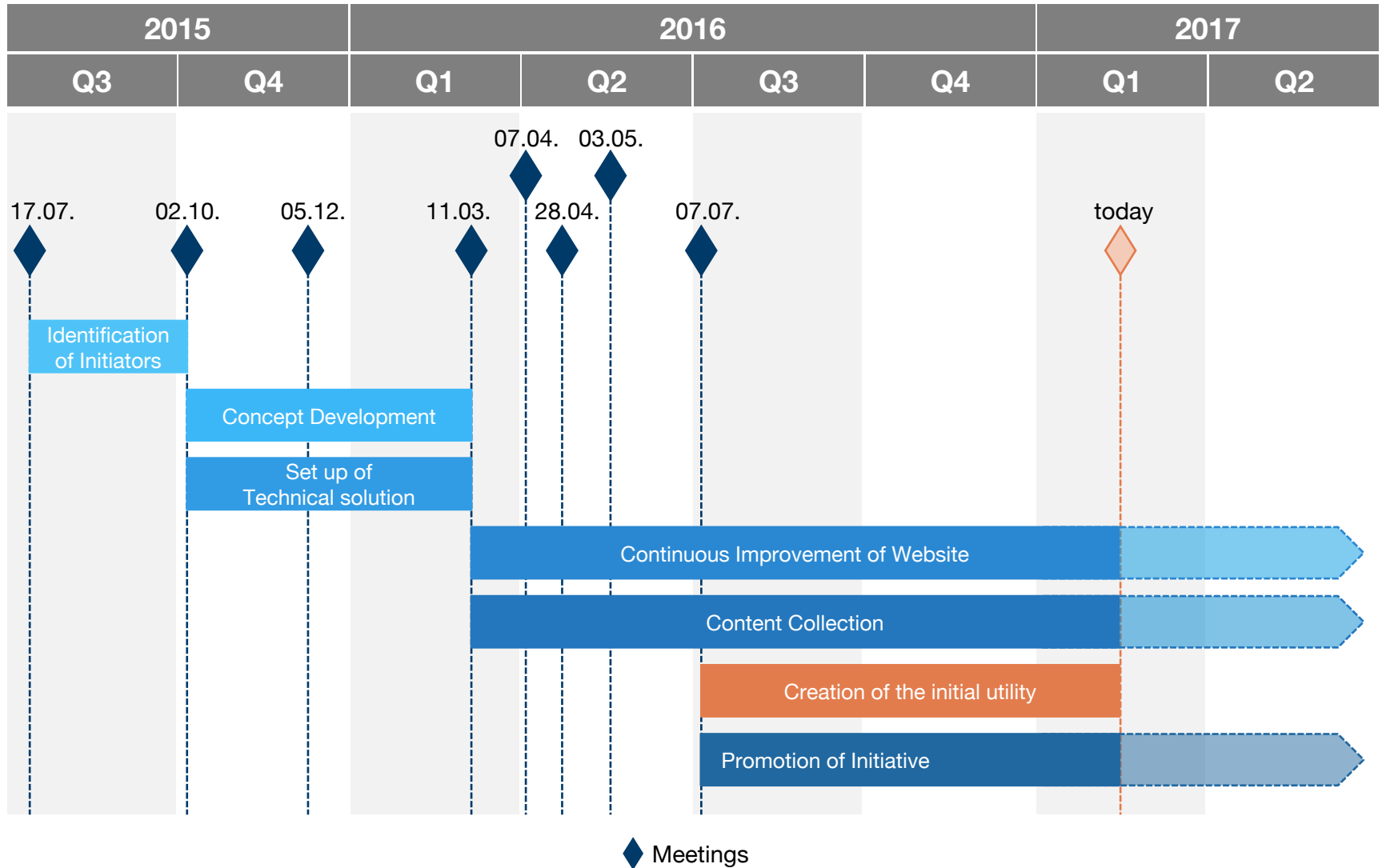
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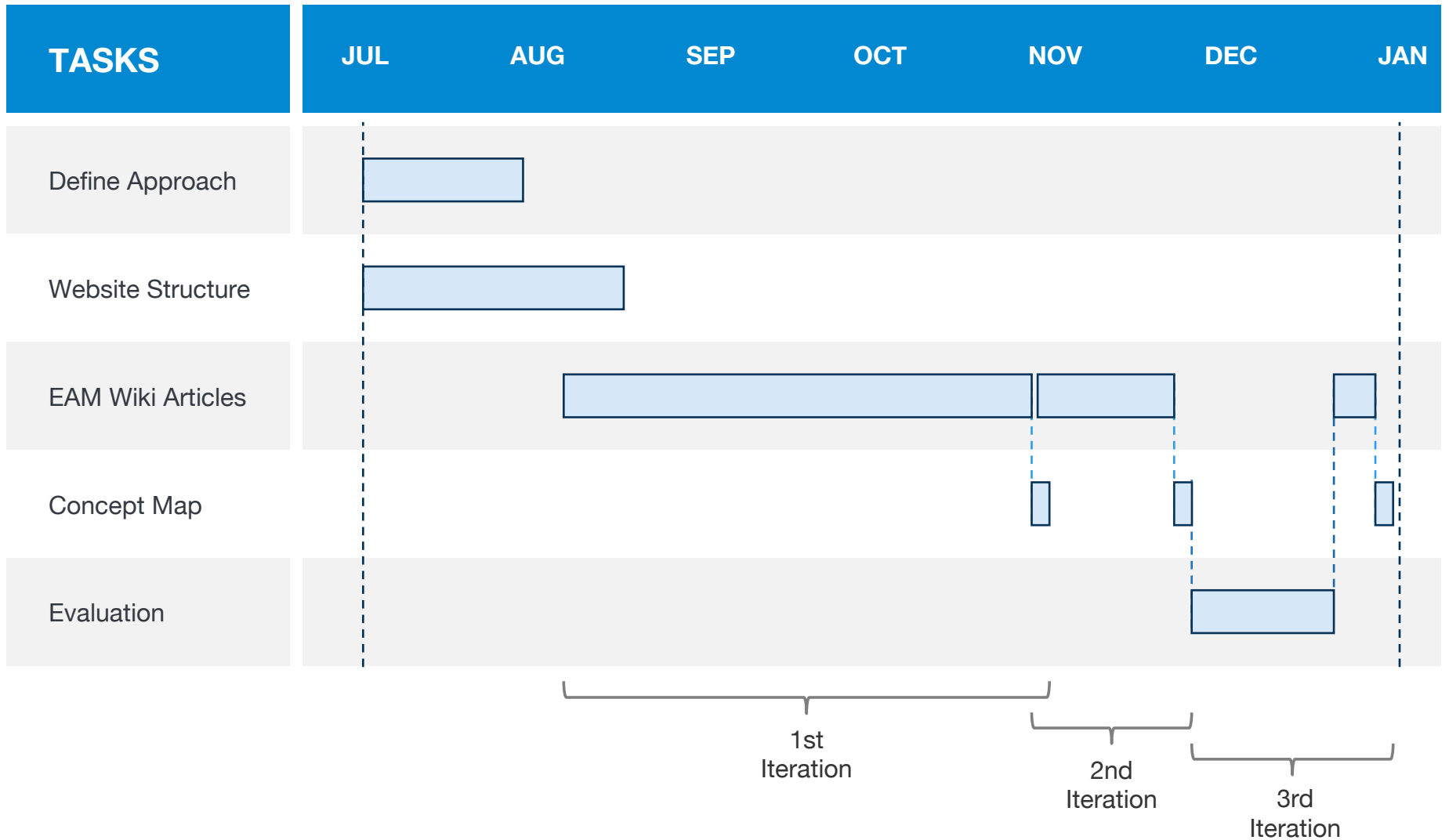
- [1] S. Bente, U. Bombosch, and S. Langade. *Collaborative Enterprise Architecture: Enriching EA with Lean, Agile, and Enterprise 2.0 Practices*. Elsevier, Inc., 2012.
- [2] Aier, C. Riege, and R. Winter. “Unternehmensarchitektur - Literaturüberblick und Stand der Praxis.” In: *Wirtschaftsinformatik* 50(4) (2008), pp. 292–304.
- [3] J. Schelp and R. Winter. “Language communities in enterprise architecture research.” In: *Proceedings of the 4th International Conference on Design Science Research in Information Systems and Technology*. ACM, 2009.
- [4] W. Keller. *TOGAF 9.1 Quick Start Guide for IT Enterprise Architects*. Tech. rep. Wolfgang W. Keller, 2011.
- [5] M. Mykhashchuk, S. Buckl, T. Dierl, and C. M. Schweda. “Charting the landscape of enterprise architecture management.” In: *10th International Conference on Wirtschaftsinformatik, 16th-18th February 2011, Zurich, Switzerland*. 2011.
- [6] A. Kittur, E. H. Chi, B. A. Pendleton, B. Suh, and T. Mytkowicz. “Power of the few vs. wisdom of the crowd: Wikipedia and the rise of the bourgeoisie.” In: *Alt.CHI at 25th Annual ACM Conference on Human Factors in Computing Systems (CHI 2007)*. San Jose, CA, 2007.
- [7] T. M. Corporation. *EABOK - built by the EA community*. <http://www.eabok.org/index.html>. Accessed: 02.01.2017.
- [8] T. A. of Enterprise Architects (AEA). *The Association of Enterprise Architects (AEA)*. <https://www.globalaea.org/>. Accessed: 02.01.2017.

Backup

eam-initiative.org Timeline



Timeline



First Set of EAM Topics

ArchiMate

Architecture Description Language (ADL)

Business Capability & Business Capability Map

Complexity Management

EA and EAM Definition

EA Model

EA Visualization

EAM Activity

EAM Challenge

EAM Driver

EAM Framework

EAM Goal

EAM Information Model

EAM Key Performance Indicator (EAM KPI)

EAM Pattern & Antipattern

EAM Principle

EAM Process

EAM Reference Model & Reference Architecture

EAM Stakeholder & Concern

EAM Standard

EAM Tools

EAM View & Viewpoint

ISO/IEC/IEEE 42010:2011 Systems and software engineering - Architecture description

IT Governance

IT Portfolio Management

Managed Evolution

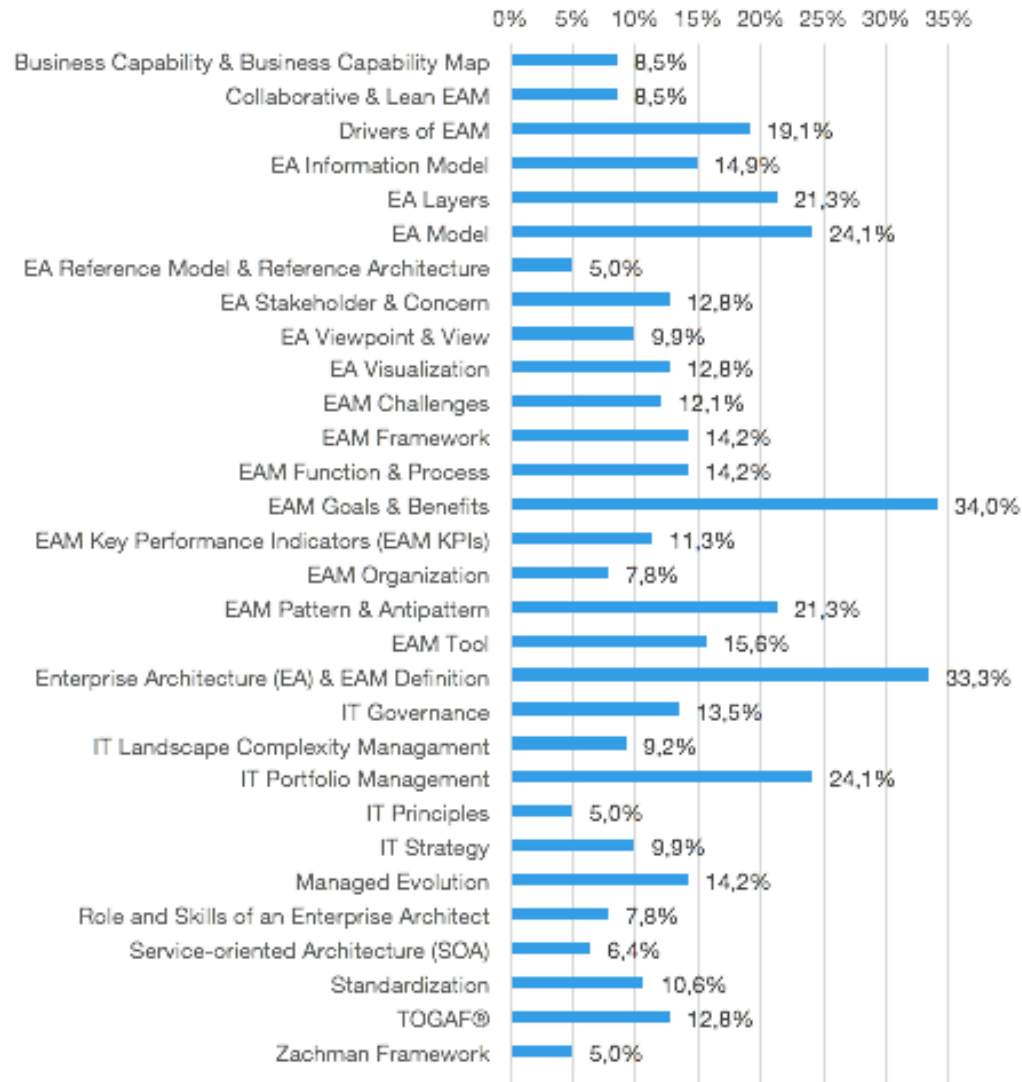
Organizational Context of EAM

TOGAF®

Zachman Framework

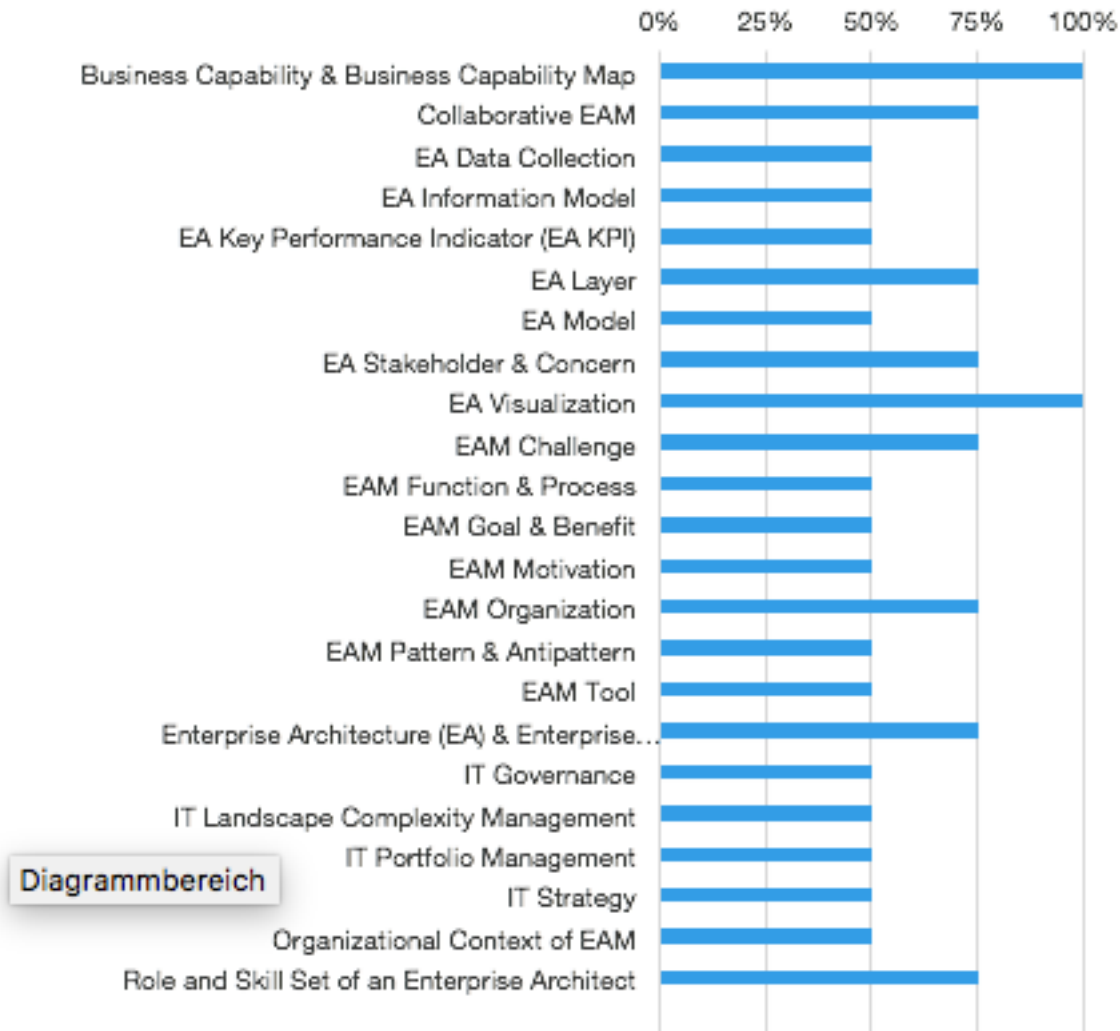
Set of Foundational Topics after the Literature Review

Literature Review Result



Final Set of Foundational EAM Topics

Expert Survey Results



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