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Preliminary Communication

EAFP: Enterprise Architecture Fusion Process

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Abstract

Enterprise Architecture (EA) is well-researched and well-developed concept, and even a two decades ago there were a plenty of frameworks in this field. However, the functional integration of EA at operational and tactical levels in organisations is identified as one of the biggest challenges faced by many Enterprise Architects today. To overcome this challenge, a comprehensive literature review on EA is conducted, which resulted with the identification of the knowledge gap. To overcome this gap, Enterprise Architecture Fusion Process (EAFP), a novel practical approach that demonstrates the capability of integrating EA activities into operational and tactical activities in respective organisation is developed, validated, and presented in this paper.
Keywords: enterprise architecture, architecture fusion, demand management process

1. Introduction

Enterprise Architecture (EA) is the well-established concept, which is covered by a plenty of publications and frameworks trying to define, organize, and standardize this field. However, as identified in Chapter 2., one of the biggest challenges faced by many Enterprise Architects today is the functional integration of EA at operational and tactical levels in organisations. Despite the fact that the most of the frameworks analysed in this paper, which are as well identified as the most used and most accepted by industry professionals and academia, do the job they are intended to, none of them covers the aspects on how to functionally integrate and fuse EA activities with existing processes of the respective organisation. This, and the fact that he faced the same challenges during his work as Domain and Enterprise Architect, motivated the author of this paper to develop appropriate approach that fills the identified knowledge gap and extends existing practical knowledge in the field of EA.

This paper introduces Enterprise Architecture Fusion Process (EAFP), a novel practical approach that demonstrates the capability of integrating EA aspects into existing operational and tactical activities in respective organisations. The aim of EAFP itself, however, is not to be yet another EA framework, but rather practical extension to the existing EA frameworks. It is intended to serve as a guide and as an

example for organisations that want to incorporate appropriate EA activities into their existing processes, meaning, EAFP is rather descriptive than prescriptive.

The overall structure of the paper is as follows. This chapter introduces the paper and aims of the paper. The second chapter describes Enterprise Architecture and the most common concepts and frameworks in this field, identifies the knowledge gap, and provides motivation for the development of Enterprise Architecture Fusion Process, covering the challenges that need to be addressed. Third chapter describes the process of EAFP development, explaining the activities and methods used in the scope of research approach that was used to develop EAFP. The same chapter provides information about evaluation method and primary mean used to assess the success of EAFP. The proposed final version of EAFP is described in chapter number four, where every process and subprocess is explained in detail, covering various aspects for each of them, such as inputs, outputs, people, and tools or equipment. Chapter number five provides conclusion and information about potential future work.

2. Related work

The first thoughts about the concept we today refer as Enterprise Architecture date back to the 60s [1], [2]. In the same time, there is a multitude of publications that define and describe this concept from various perspectives [3], [4], [5], [6], [7], [8], [9]. However, there is still no single definition of the Enterprise Architecture concept that could be considered as the overall consensus [10]. The aim of this paper is not to provide a comprehensive explanation or a new, updated definition of EA; however, for the better understanding of this paper, Enterprise Architecture is defined as a discipline that: i) defines, organises, standardizes, and documents the whole infrastructure and all important elements of the respective organisation, covering relevant domains such as business, digital, physical, or organisational; and ii) the relations and interactions between elements that belong to those domains, such as processes, functions, applications, events, data, or technologies.

Enterprise Architecture is well researched and well-developed concept, and even a two decades ago there were a plenty of frameworks in this field [11]. Today, there are even more frameworks, however, only few of them, such as The Open Group Architectural Framework (TOGAF) [3] and The Zachman Framework [7], got massive and markable attention from the industry and academia. Other frameworks such as Department of Defense Architecture Framework (DoDAF) [12] and Federal Enterprise Architecture Framework (FEAF) [13] found their home within the organisations and the industries they are intended for, however, without any evidence of being applied massively by other industries or fields. According to the several sources TOGAF is the most common EA Framework used by the organisations today [4], [14], [15].

Despite the fact that the most of analysed frameworks do the job they are intended to, and even some of them, such as TOGAF and its Architecture Development Method (ADM) go deep enough in providing coherent instructions how to develop and how to live Enterprise Architecture, none of mentioned frameworks provides solution or specific instructions on how to functionally integrate and fuse EA activities with

existing processes of the respective organisation, such as with existing demand processes for example. For example, TOGAF ADM describes a method and relevant activities for developing and managing the lifecycle of an enterprise architecture [3], however, it does not provide any reference what practical steps need to be taken to incorporate and fuse such activities into existing operational and tactical activities. The phrase "existing operational and tactical activities" refers to the activities that are performed in the scope of existing and already established processes in the respective organisation.

Establishing the Enterprise Architecture at operational and tactical levels in respective organisations is identified as one of the biggest challenges by many Enterprise Architects today [16]. One of the main reasons is the complexity of such activity, as it requires consideration of and fusion with all relevant domains and elements of the enterprise. For example, identifying and defining relevant elements, such as processes or events in the scope of business domain of specific organisation, for the sake of including appropriate enterprise architecture activities there, could be very challenging, complex and time-consuming activity [9]. Especially in the larger organisations that have complex organisational and functional structure, and in the same time legacy-based digital infrastructure. During his work as Domain and Enterprise Architect in two large companies in Austria, the author of this paper faced the same challenges as well. After analysing relevant set of literature concerned with the concept of EA and its establishment [3], [7], [9], [12], [13], [17], [18], [19], [20] and despite the fact that some provide a great overview of EA use scenarios [9], it was identified that none of them delivers applicable approach or suitable methodology to support integration of tactical and operational EA activities in respective organisation. This motivated the author of the paper to develop EAFP, a new, fully applicable, and comprehensive approach for integrating EA aspects into operational and tactical activities of the respective organisation.

3. Research Approach

A pragmatic approach to research, based on well-established design science research (DSR) approach [21], was used to develop Enterprise Architecture Fusion Process (EAFP), meaning, a combination of different procedures, techniques, and methods was used to define, develop, and evaluate the concept.

3.1. Problem Identification and Motivation for further Work

The first phase of DSR included **identification of the problem and motivation for the further work**. As soon as the challenged was faced in real-world environment, a literature review, as essential method to identify what has been already written on a subject and to determine the extent to which a specific subject has been researched [22] was used as a starting research methodology to address the initially identified challenge. In this case subject was Enterprise Architecture and practical fusion of its activities and methods with existing organisational processes. In that context, a background research was conducted on existing related work concerned with the

concept of EA and its establishment. It was identified that analysed literature describes and explains EA, its scope, development methods, lifecycle activities and stakeholders, and most of the other relevant aspects quite well. However, the functional references on how to integrate and fuse EA activities and processes with existing operational and tactical activities and processes were not identified. Thus, the literature review confirmed the previously identified knowledge gap that needed to be bridged.

3.2. Defining Objectives of the Artefact

Consequently, the problem could be clearly defined and next phase of DSR could be started – namely, **definition of the objectives of the artefact**. As the problem originated from the real-world challenge where a specific solution was needed, it was easy to define the objective to be achieved, which actually reflected requirements of the solution that was needed. Thus, the next phase of the DSR, **design and development of the artefact** could be conducted.

3.3. Design and Development of the EAFP

To bridge the identified gap and to develop needed artefact, the empirical process design and process development methods were used, settled into environment identified as appropriate.

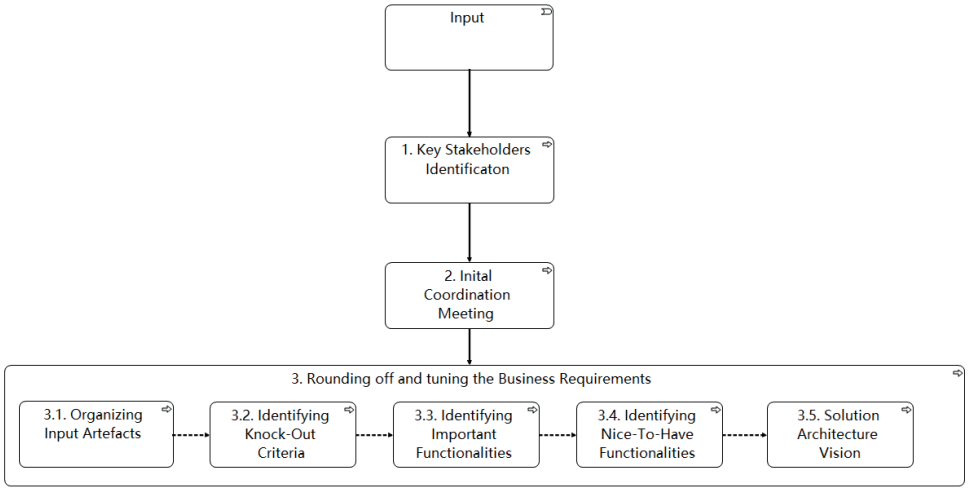

Figure 1. Initial draft of the first part of EAFP process

The first step was to identify appropriate organisational context or a discipline in which a respective fusion process would be developed and tested. Hanschke [9] identifies Demand Management (DM) as one of the appropriate fields to integrate Enterprise Architecture into. DM is a discipline that manages strategical themes and translates them into concretized tactical and operational artefacts. It is identified as

one of the most important techniques to maximize benefits for the utilities and clients, both internal and external [23]. It is a planning methodology that is used to manage, plan and forecast various types of enterprise elements, such as products and services from different types of domains, such as business or information technology [24]. In that context, Demand Management was identified as well-suitable candidate for EAFP to be demonstrated on.

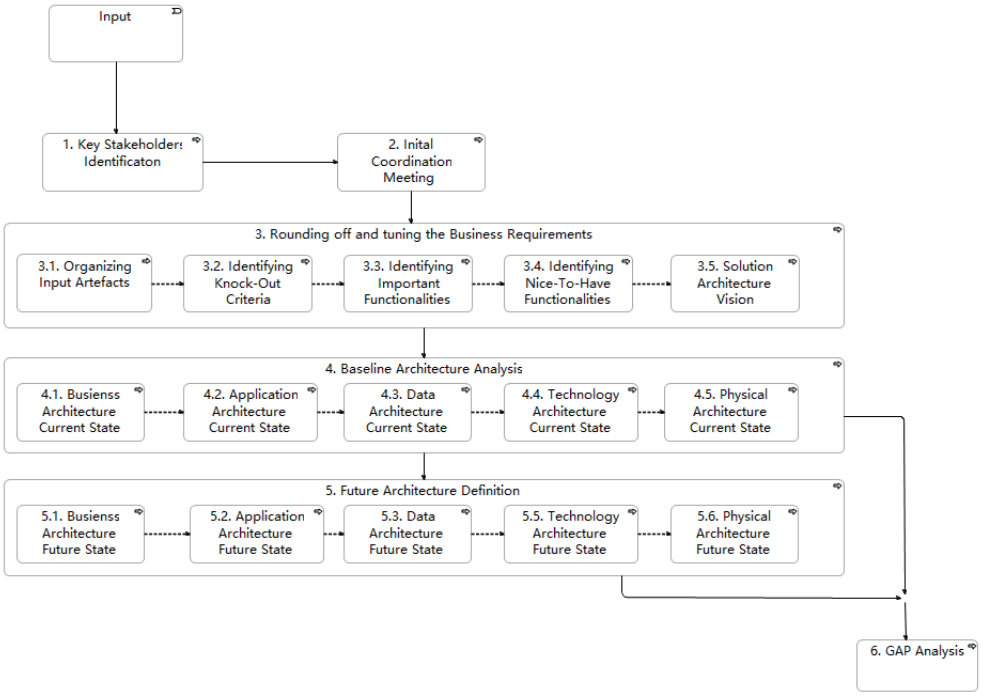

Figure 2. Extended version of the initial EAFP draft

The second step in design and development phase included identification of activities and aspects relevant in the scope of Demand Management Process (DMP) and their relation to the potential activities performed in the scope of EA. As ITIL is the most widely accepted approach to IT management and the most popular framework that exists today to deliver services [25], [26], its concept of DM, where DMP should be triggered through relevant *Input* was used as a starting point for the EAFP as well. This base is further extended with the practical aspects of IT Demand Management identified in three Austrian companies – two regional and one international. In this case, in addition to the *Input,* other activities relevant for *stakeholder collaboration to identify the requirements of wanted solution* are added to the initial draft of the first part of EAFP process (Figure 1).

Additional parallel activity to the second step in design and development phase included identification of appropriate architectural domains that might be considered in the scope of initial EAFP. This is done by analysing four EA frameworks, which

are the most accepted today: TOGAF [3], The Zachman Framework [7], [18], DoDAF [12], and FEAF [13]. Five EA domains are identified as potentially appropriate for the purpose of initial EAFP: Business Architecture, Application Architecture, Data Architecture, Technology Architecture, and Physical Architecture. These domains are then placed into conventional gap analysis scenario. This scenario includes activities to capture existing and planned architectures with the purpose to identify artefacts needed to move from baseline to wanted architecture. Initial draft of the first part of EAFP is then extended with those activities resulting with the extended version of the initial draft (Figure 2).

Appropriate EAFP activities, which follow after the process of Gap Analysis from Figure 2, were identified on the basis on authors' industrial experience (Figure 3). Those activities included two events (*E1. New Solution* and *E2. Extending Existing Solution*), two main processes (*7. Finalizing Solution Concept* and *8. Solution Selection*), and four subprocesses (*8.1. Market Research, 8.2. Rough Selection, 8.3. Fine Selection,* and *8.4. Final Selection*). Despite the fact, it was defined as the last step in Figure 3, *Implementation* was not considered as a part of EAFP, but rather as external activity that followed after the EAFP process is executed.

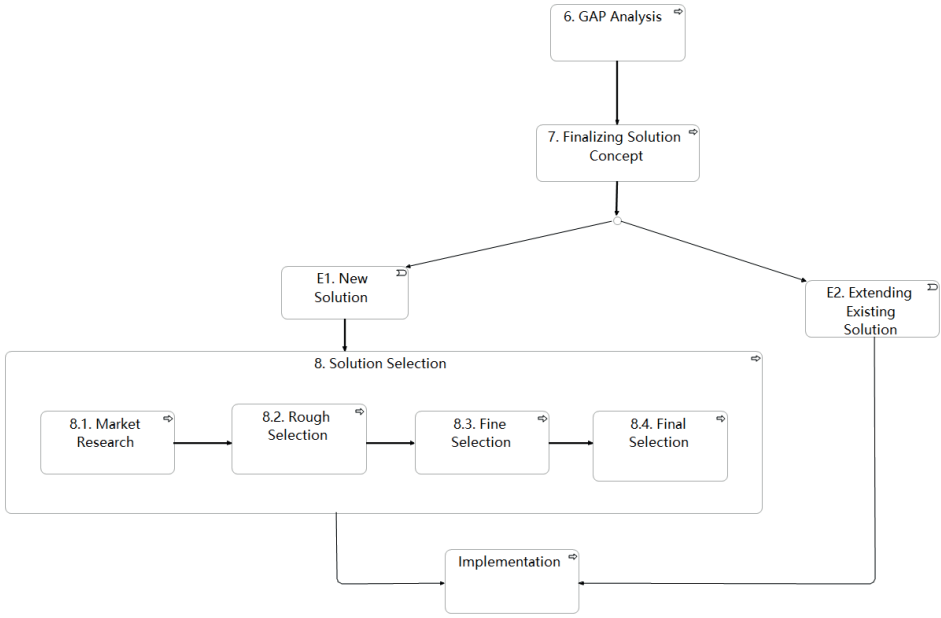

Figure 3. Activities that follow after Gap Analysis

For the purpose of evaluation, the first version of the complete EAFP, which was combination of Figure 2 and Figure 3, was then presented to the 23 IT experts (seven Domain Architects, 10 Solution Architects, and six Heads of IT Teams). A form of individual semi-structured interview was used, meaning the draft was presented and explained to the IT experts, followed by open-ended questions by interviewer that allowed unformalized discussions. EAFP is than modified according to the

suggestions and inputs from IT experts interviewed. The process that triggers EAFP is renamed from *Input* to *Solution Requirement Created* to better reflect DMP. All four solution selection subprocesses (Figure 3, processes *8.1. Market Research, 8.2. Rough Selection, 8.3. Fine Selection,* and *8.4. Final Selection*) are extended with additional subprocesses to reflect different activities that might be the part of those subprocesses (Figure 4). As seen from Figure 4 as well, a few additional events, identified as appropriate in regard to the new, extended version of the *Final Selection* subprocess, are also added to the first version of EAFP. This also led to the identification of one additional process – *9. Fulfilling Conditions*, which might be relevant in the case of the event *E4. Approved under Conditions*. The external process, names as *Implementation* in Figure 3, was renamed to more specific *Implementation Planning and Governance* process.

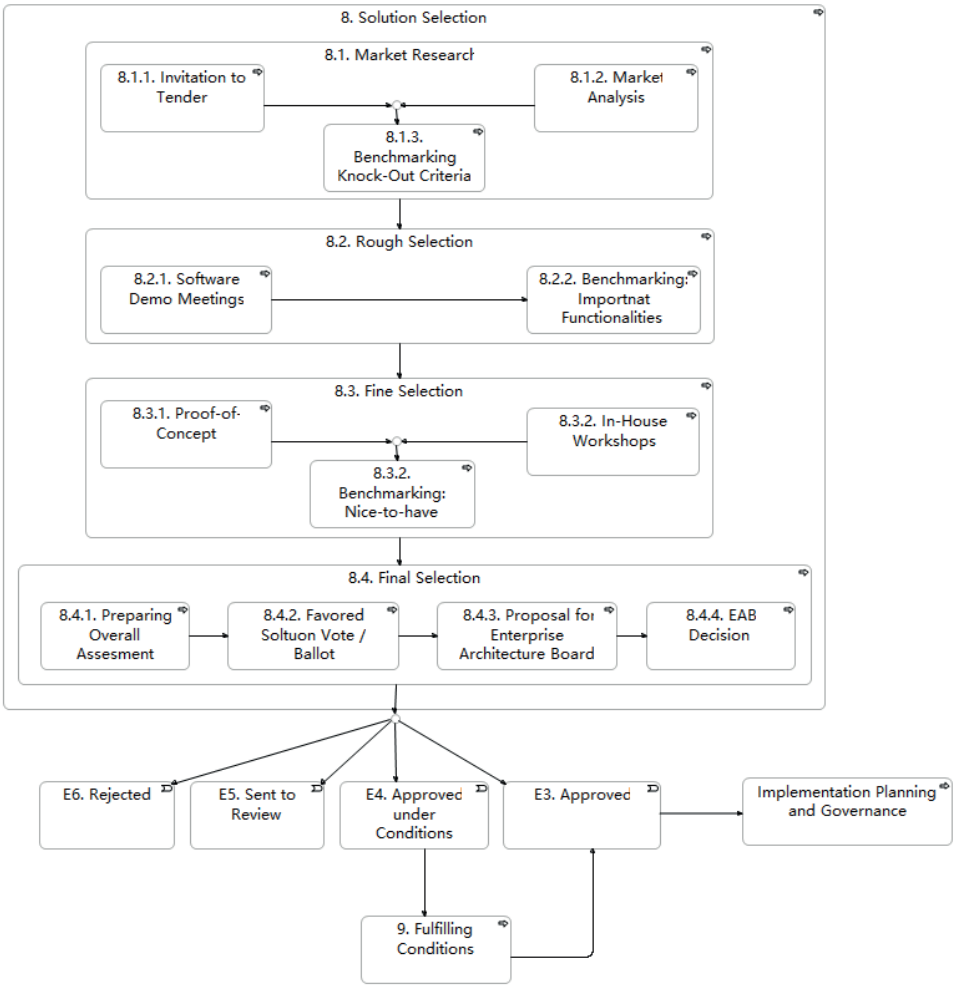

Figure 4. Extended version of the Solution Selection Process including new events

The last step covering design of complete and final version of EAFP included separation of the internal and external EAFP processes, which resulted with the final version of EAFP described in the next chapter and presented in the Figure 5.

The fourth phase of DSR included demonstration of the artefact. A hypothesis of functional concept was tested by applying previously created situation in the real-world environment, to check its efficiency. Meaning, the final version of the approach was demonstrated and validated through the real-world implementation in one Austrian regional company, where the full version of the EAFP was integrated into existing IT demand process of the respective organisation.

Fifth phase of DSR covered the **evaluation of the artefact**, where end user satisfaction, conventionally recognized as critical measure of success of Information Systems (IS) concepts [27], was used a as primary mean for assessment. A simple concept to measure the affective attitude of the end users, which were different stakeholders relevant for EA activities in the scope DM (12 Business Key Users and six Solution Designers/Architects) is used. The stakeholders that experienced EAFP during the demonstration period and which also had experience with previous IT DM environment that did not include EAFP, had a possibility to decide which of those two environment is more preferable for them. 15 stakeholders (10 Business Key User and 5 Solution Designers/Architects) stated that the IT DM process that includes EAFP is more preferable for them, as it's more transparent. Two stakeholders (both Business Key Users) had no preferences, while one stakeholder belonging to the category of Solution Designers/Architects stated that the environment without EAFP is preferred, as the EAFP itself requires additional human resources to be executed.

The presentation of the evaluation results to the six decision-making stakeholders during the fifth DSR phase, actually reflected the requirements of the last DSR phase - namely **communication of the results**.

As the all (six) decision-making stakeholders, to which the results of the evaluation were communicated in the scope of the last DSR phase, proposed to continue using EAFP in the scope of IT Demand Management in real-world environment, it can be concluded that EAFP demonstrated added value and usefulness for the respective organisation.

The next chapter presents EAFP and describes its components.

4. Enterprise Architecture Fusion Process

Enterprise Architecture Fusion Process (Figure 5) is a novel practical approach to integrate Enterprise Architecture aspects into operational and tactical activities in respective organisation; however, this paper focuses on EAFP in the scope of Demand Management Process.

Despite the fact that this paper focuses on EAFP which is demonstrated in the scope of DMP, it can be used as a basis framework for any other similar processes triggered through some kind of a input requirement, such as Innovation Management, Business Capability Management, Change Management, Project Development, Release Management, or Business Transformation. It could be also scaled and used

only in the scope of specific architecture domain, such as Data Architecture, Technology Architecture, or Business Architecture.

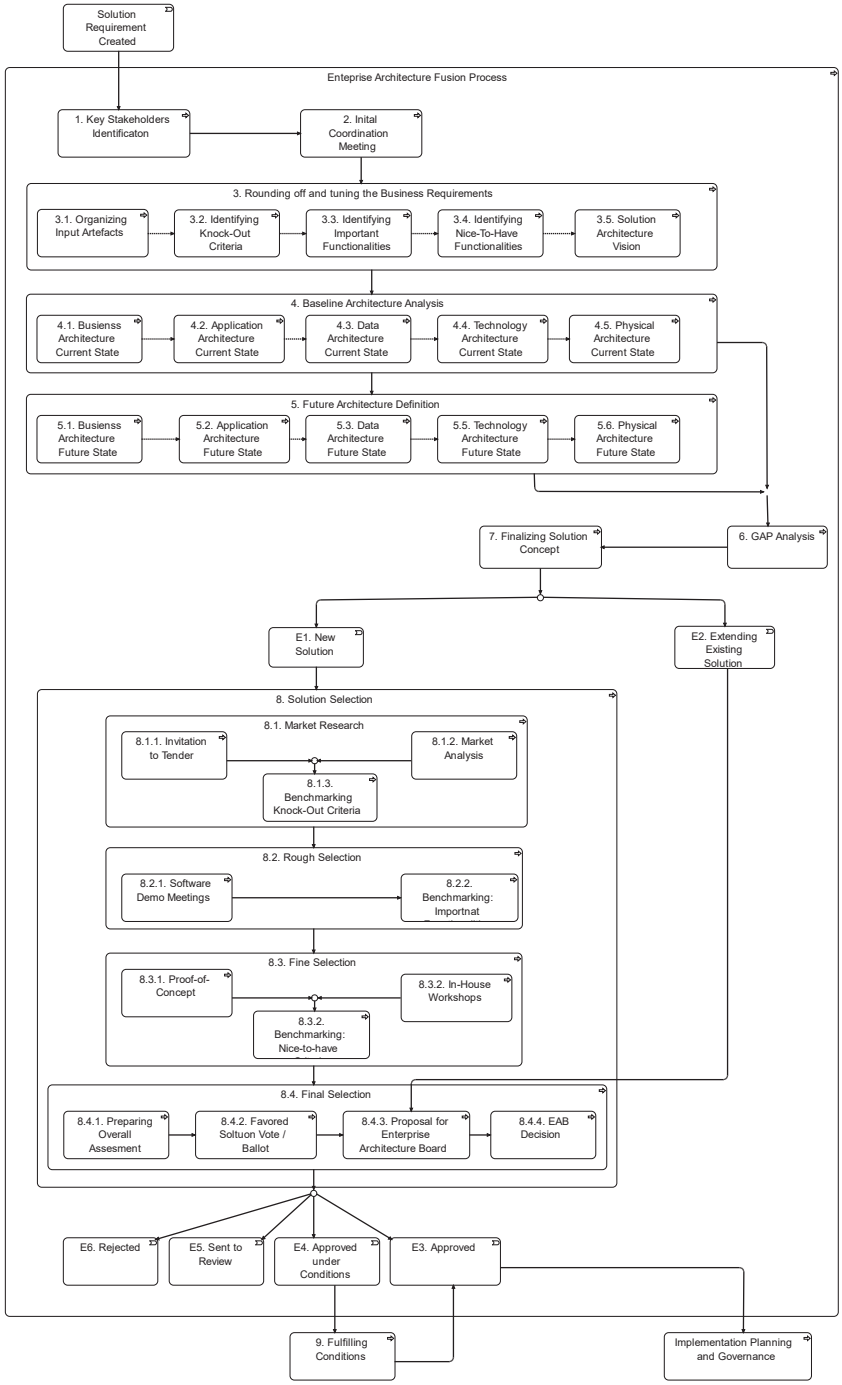

Figure 5. EAFP: Enterprise Architecture Fusion Process

As seen in the final version of EAFP, the process is triggered by creating a new solution requirement - in demonstrated case in the scope of Demand Management Process. It has total of ten lead processes, such as *1. Key Stakeholder Identification* or *8. Solution Selection Process* - meaning they have subprocesses by themselves, or they have significant differences in regard to other lead processes, or both. Some of the lead processes are composed of several subprocesses, referred as second-level processes in this paper, such as *4.1. Business Architecture Current State* or *8.1. Market Research*. Additionally, some of the second-level processes are as well composed of several other subprocesses, referred as third-level processes in this paper, such as *8.1.2. Market Analysis* or *8.3.1. Proof-of-Concept*. In addition to the processes, EAFP is composed of six potential events as well, such as *E1. New Solution* or *E3. Approved*.

EAFP is the off-the-shelf framework for architecture fusion processes. For example, Enterprise Architects could identify existing organisational processes where EAFP should be included and select the processes of EAFP they find useful and practical to be integrated there – building their own version of the EAFP. This especially relates to the second-level processes that composite the lead processes numbered three, four, five and eight. For comprehensive architecture fusion process, EAFP recommends to use as much processes as possible from those presented here; however, it does not impose the required minimum of the processes that must be used. Depending on the path of the EAFP cycle determined in the lead process number seven, the maximum of processes which could be executed in the scope of one EAFP cycle is 30 - with addition of three events.

4.1. Identification of Key Stakeholders

As seen in the Figure 5, the lead process *1. Key Stakeholders Identification* is the very first step done in the scope of EAFP. This step should be conducted as soon as there is a formal requirement for a new solution. Freeman [28] defines the stakeholders as any group or individual who can affect or is affected by the respective concept. However, in the context of EAFP we are concerned with identification of Key Stakeholders only, which are individuals often acting as Business Relationship Managers (BRMs) or department Key Users (KUs). Similar to the definition of Primary Stakeholders from Sandhu & Weistroffer [29], KUs can be defined as individuals, which in the scope of concerned requirement, have authority & power to speak in the name of organisational unit they represent, and responsibility to clarify and interpret business vision of required solution.

There are many ways, methodologies and techniques to identify appropriate stakeholders. Trentim [30] defines this process as part science and part art - meaning we are allowed to be very creative for the sake of identifying most appropriate and most relevant persons. However, the care must be taken, as the outcome of such process has serious relevance for the overall acceptance of the new solution - and consequently for the successful execution of the whole EAFP as well.

It is a common for larger organisations to have a lists of identified KUs or BRMs for every department, which could or should be contacted in the case of implementing

or enabling something that has relevance for their organisational units. If however, a specific organisation has no such list, the initiative should be started to create one. Such list could be used to identify appropriate and relevant stakeholders when starting a new EAFP cycle. A simple email to all persons from the list would be sufficient, explaining the new requirement and asking to whom, i.e. to which department it might be relevant. Persons that answer as interested or relevant should be included into the next step of EAFP – namely "*2. Initial Coordination Meeting*".

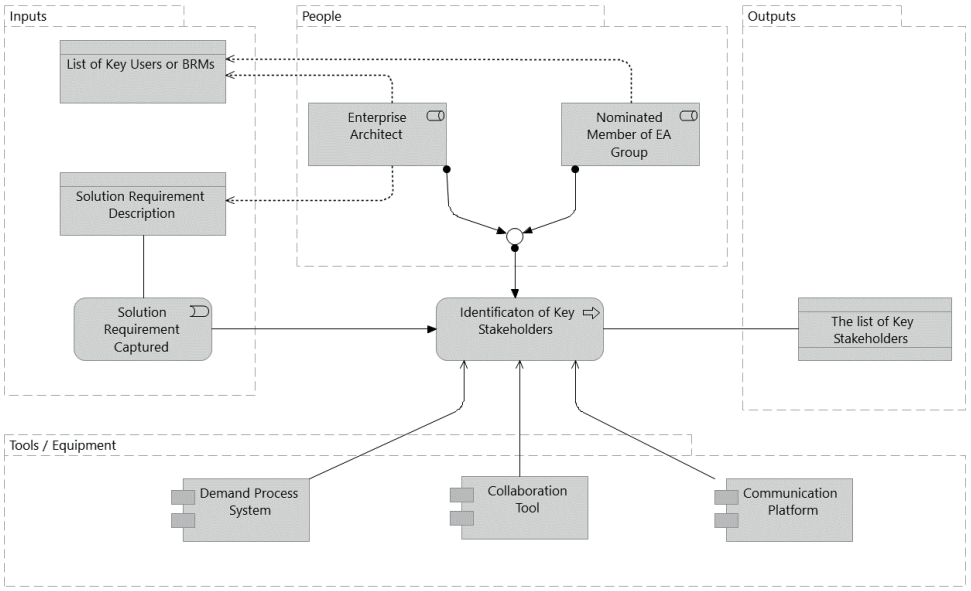

Figure 6. Inputs, Outputs, People, and Tools relevant for the Identification of Key Stakeholders

A leaner and slight-modified set of aspects from Process Audit Turtle Diagram, which is often used in ISO 9001 audits [31], such as Inputs, Outputs, People and Tools, could be used to provide a good overview of this lead process and to help to better understand it. Such set of aspects is visualised in Figure 6 using ArchiMate EA modelling language. In EAFP context, Inputs represents the artefacts that trigger or that are needed to start the process, and those are: an event when Solution Requirement is captured, a Solution Requirement Description itself, and a List of KUs or BRMs. However, depending on perspective, the artefacts Solution Requirement Description and a List of KUs or BRMs could be considered as the tools as well. Output would be the final list of relevant Key Stakeholders that would be actively involved in the whole architecture fusion process. Tools that could be used in this step of EAFP include, but are not limited to: A system that enables Demand Process, Documentation Management System providing a required lists, and a platform that enables communication, such as email. The person responsible for execution of this part of the EAFP should have the Enterprise Architect role, or be a nominated member that belongs to the EA group. As soon as Solution Requirement is formally captured, Enterprise Architect should use the other inputs as well to start and to conduct the

process of stakeholders identification. This should be done by using the appropriate tools, which serve the process. The output is the Agreed List of relevant key stakeholders.

4.2. Initial Coordination Meeting

The lead process *2. Initial Coordination Meeting* is the second step of EAFP. Enterprise Architect, or a nominated person should organise the meeting, define the agenda and act as moderator of the meeting. This meeting has the aim to connect the group together and to clearly specify the focus. The members of the group are Enterprise Architect and the relevant key stakeholders identified as such in the previous step of EAFP.

As we can see from Figure 7, there are two input artefacts that are relevant for this step. First of them is the list of relevant stakeholders that should take a part in Initial Coordination Meeting anyway. However, in this case we use the list as a basis to identify other potentially important key stakeholders, which might be omitted when considering only KUs or BRMs lists. Such stakeholders could be Business Architects, Domain Architects, Portfolio Managers, external experts, etc. The final list of relevant Stakeholders should be the outcome of a such activity. Solution Requirement Description is the other artefact that we use as an input. Its consideration, together with other additionally possible ad-hoc inputs, should be the basis for the output artefact – namely, a List of required information. Such information could be anything that might be relevant or helpful for further clarification and fine tuning of solution requirements.

The potential tools and equipment that could be needed in the scope of initial coordination meeting are physical or virtual meeting room, optical display technology, such as projector, and communication or collaboration platform, such as video conferencing system.

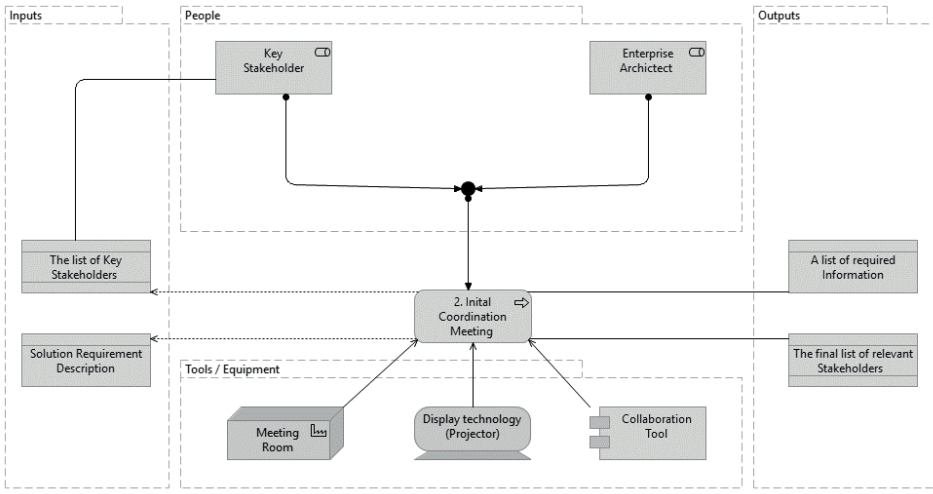

Figure 7. Initial Coordination Meeting lead process

It is important to stress that this meeting is not a collaboration or a kick-off meeting, and is not intended to arbitrate decisions, determine trade-offs, or solve any technical problems. The aim is to coordinate not to collaborate.

4.3. Rounding off and tuning the Business Requirements

Rounding off and fine tuning the Business Requirements through collaboration between key stakeholders, which should be moderated by Enterprise Architect or other nominated person from EA group, makes the third step of EAFP. As a third lead process, this process is a composition of several second-level processes (Figure 8), which outcomes have crucial implications on decision to be made in the further steps of the EAFP.

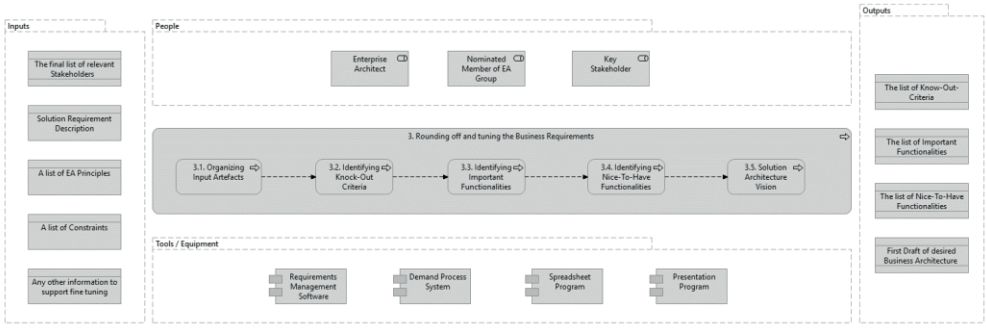

Figure 8. Rounding Off and tuning Business Requirements lead process

In contrast to the previous step, this step requires in-depth discussions to find common and clear definitions of business requirements to the solution, which fit well with existing enterprise architecture, and are in the same time acceptable by all involved stakeholders. According to Mascitelli [32], in collaborative meetings, trade-offs are made, decisions are arbitered, problems are solved; and this is exactly case with this step of EAFP - however only in the scope of business requirements.

The first step in this lead process is to *organise input artefacts* to be able to support identification of Knock-Out (KO) criteria for desired solution. Inputs to this step can be various – basically any information that is relevant for tuning business requirements, including but not limited to, Solution Requirement Description, list of EA Principles, list of Constraints, relevant Blueprints, and Mindmaps. The second step is to *identify the KO Criteria* of desired solution, meaning, defining capabilities or attributes that desired solution must have, fulfil, or comply with under any circumstances, such as business requirements, architecture principles, or legal constraints. Third step is the *identification of Important Functionalities* that desired solution should have, but are not eliminatory in their nature. The fourth step is the *identification of Nice-To-Have Functionalities* that are not eliminatory or important, but would be nice to have them within desired solution. All these requirements, identified in the previous three steps, should lead to creation of the Solution

Architecture Vision, represented through the first draft of desired business architecture.

4.4. Analysis of the Baseline Architecture and Definition of the Desired Architecture

Previous three sections (4.1, 4.2, and 4.3) cover each one lead process of EAFP, namely *1. Key Stakeholders Identification*, *2. Initial Coordination Meeting*, and *3. Rounding off and tuning the Business Requirements*; however, from practical reasons, this section (4.4) covers three lead processes together: *4. Baseline Architecture Analysis*, *5. Desired Architecture Definition*, and *6. Gap Analysis*.

To conduct the lead processes *4. Baseline Architecture Analysis* and *5. Desired Architecture Definition*, EAFP recommends the use of following phases from TOGAF Architecture Development Cycle (ADM): B. Business Architecture, C. Information Systems Architecture, and D. Technology Architecture. Phases B, C, and D could be used to record corresponding domains of Baseline Architectures, and to define corresponding domains of Desired Architectures. The same phases, B, C, or D, could be used to get an idea what could be needed to record Baseline or Desired Architectures of any additionally needed domain, such as in the EAFP example Physical Architecture.

The first draft of Desired Business Architecture is used as an input for both lead processes. Solution Architecture Vision serves as an orientation to identify and capture relevant existing artefacts of Baseline Architecture, and as a guide to define artefacts required by Future Architectures. Outputs of the both lead processes should be relevant architectures, which are to be used as the Inputs for the next subprocess, namely *6. Gap Analysis* (Figure 9).

The aim of the lead process number 6, namely *Gap Analysis,* is to identify differences between Baseline and Future Architectures and is very similar to the Phase E of TOGAF Architecture Development Cycle. Baseline and Future Architectures are consolidated, refined and compared to identify what artefacts already exists and what artefacts need to be implemented to deliver the Future Architecture. If required, the implementation chronology should be delivered as an output as well - in addition to the list of the artefacts that need to be implemented.

The identification of the artefacts, needed to deliver desired solution, supports a holistic view on the existing situation and provides the basis for decision-making; thus, enabling the execution of the next lead process - *7. Finalizing Solution Concept*". In this step, taking into account current situation and all artefacts that need to be implemented, a decision is to be made, if there is a need for a new solution or extending existing solution would be sufficient.

If decision is made to extend the existing solution (event E2 in Figure 5), a proposal should be prepared to be presented in the front of Enterprise Architecture Board (EAB). According to TOGAF, EAB should be representative of all the key stakeholders in the enterprise architecture, and will typically comprise a group of executives responsible for the review and maintenance of the overall architecture, having decision-making capabilities and global, regional, or business line scope.

If, however, decision is made that there is a need for a new solution, than the lead process number eight, namely "*Solution Selection*", should be started.

4.5. Solution Selection

Solution Selection is the lead process number 8, which is concerned with the selection of appropriate solution, that should fulfil the requirements of artefacts identified as needed to deliver Desired Business Solution. In my most cases, this process is executed to select a new software or a new digital technology that should fulfil the business requirements.

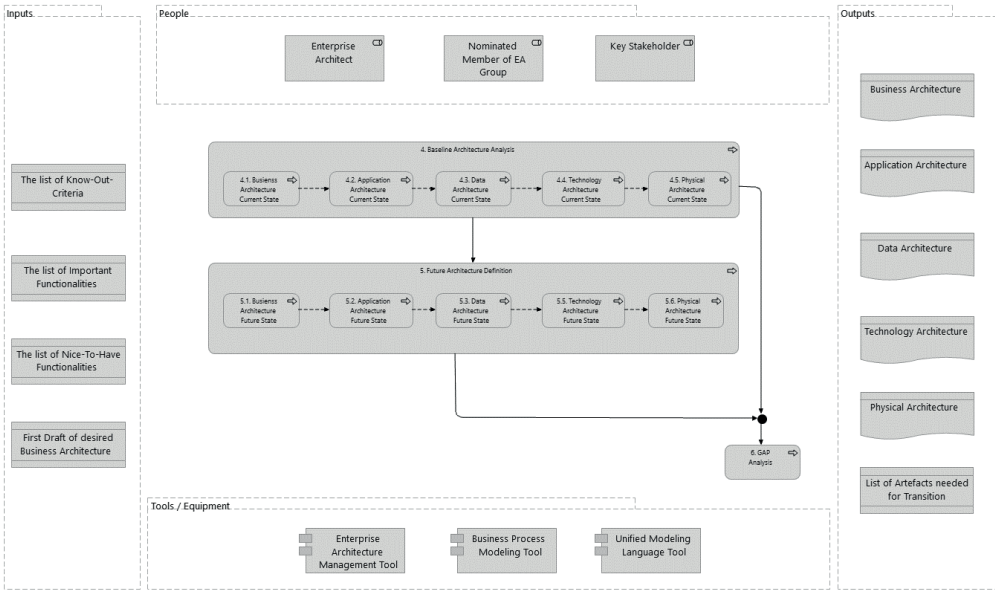

Figure 9. Baseline/Desired Architecture Analysis and Gap Analysis

Solution Selection process has three selection processes and one processes where final decision should be made. The first second-level process (stage 8.1. in Figure 5.), is concerned with the *Market Research*. At this stage, all relevant existing solutions identified through public invitation tender or market analysis, are considered and benchmarked against KO Criteria defined as relevant in the second-level process 3.2. Only those solutions that fulfil KO Criteria are considered in the following stage – namely, Rough Selection (stage 8.2. in Figure 5).

In *Rough Selection* phase, the companies that produce the solutions that fulfilled KO Criteria are invited to demonstrate their solutions, and to provide answers to the questions about Important Functionalities, identified as relevant in the second-level process 3.3. Two or three fittest solutions that fulfil the most of the Important Functionalities, should be selected for the Fine Selection phase – a stage number 8.3.

During the *Fine Selection* process, selected solutions should be verified through appropriate Proof-Of-Concept or in-house workshops, and benchmarked against

Nice-To-Have Functionalities, identified as relevant in the second-level process 3.4. As soon as this step is done, the next second-level process, namely "Final Selection" can be executed.

As seen in Figure 5, the first step of *Final Selection* is to prepare the Overall Assessment Report (third-level process 8.4.1.). This report is to be presented to the Key Stakeholders as the part of the third-level process 8.4.2., and is to be used as a basis for voting for preferred solution. After the vote, a proposal for EAB should be prepared in the scope of the third-level process 8.4.3., and presented to EAB in the scope of the third-level process 8.4.4.. EAB makes final decision to approve or to reject the acquisition of the proposed solution, and can seek for a specific review or fulfilment of additional conditions found as appropriate and relevant in respective situation. The EAB decisions *E3. Approved* or *E6. Rejected* represent in the same time the end of EAFP cycle, while decisions *E5. Sent to Review* or *E4. Approve under Conditions* could involve additional activities relevant for the architecture fusion, but not foreseen in the scope of EAFP.

Further activities, such as *Implementation Planning and Governance*, as seen in the Figure 5 are not considered as a part of EAFP cycle, as they don't define architecture, but only realize it.

5. Conclusion and Future Work

The first chapter described the paper and its intention. The second chapter described Enterprise Architecture, the most common concepts and frameworks in this field, identified knowledge gap, and provided motivation for the development of Enterprise Architecture Fusion Process, covering the challenges that need to be addressed. The chapter number three explained research approach, activities and methods used to develop EAFP. The chapter number four presented the final version of the EAFP, including its processes and subprocesses. As the last chapter in this paper, this section provides conclusion and the view on potential future work.

This paper presented EAFP, a new, practical approach to integrate Enterprise Architecture activities into existing operational and tactical processes in respective organisation with the focus of IT Demand Management; thus, filling in the existing knowledge gap identified through literature review. The final version of the approach was demonstrated and validated through real-world implementation in one Austrian company, where the full version was integrated into existing IT demand process of the respective organisation. EAFP demonstrated added value and usefulness for the respective organisation, as the relevant decision-making stakeholders, to which the results of the evaluation were communicated, proposed to continue using EAFP in real-world environment.

Despite the fact that the focus of the paper was Enterprise Architecture Fusion in the scope of IT DMP, it can be used in any other field or at any other level of the organisation, where Enterprise Architecture is needed. EAFP is presented as the off-the-shelf approach enabling the companies to pick what they need and to build their own version of the architecture fusion process. EAFP is not prescriptive, but rather descriptive.

The limitation of the EAFP is that it covers cases of acquiring new of-the-shelf solutions and extending existing inhouse solutions; thus, the potential future work includes extending EAFP with additional cases, such as building a new inhouse solution from the scratch. Also, application of EAFP through other organisational aspects, such as Business Transformation, Innovation Management, or Change Management offers a basis for further research as well. Additional fields for potential future work include validation and evaluation of EAFP in organisations applying agile concepts of work, such as Scaled Agile Framework (SAFe) for example [33].

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