

Enterprise Coherence in the Dutch Ministry of Social Affairs and Employment*

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Abstract. This paper is concerned with a real world case study in Business/IT alignment at the strategic level. The case study is situated in the Dutch public sector, involving the Ministry of Social Affairs and Employment (SAE). In this case study, the GEA (Generic Enterprise Architecting) method was used. This paper will therefore take the GEA method as a given. Nevertheless, to better understand and appreciate the case study, we will also briefly review the GEA method and its background. Even more, we will also provide an evaluation on the GEA method, which was/is developed using a design science approach.

Key words: business-IT alignment, enterprise coherence, enterprise architecture

1 Introduction

This paper is concerned with a real world case in Business/IT alignment at the strategic level. The case is situated in the Dutch public sector, involving the Ministry of Social Affairs and Employment (SAE). It concerns the introduction of a new system for the creation of a digital document/dossier flow. The introduction of this system was a direct consequence of a government decision to automate these document processes by 2015. It was decided by the Ministry to re-use the system that was already designed, and built, to support similar processes at another Ministry (the Ministry Internal Affairs and Kingdom Relationships). Therefore, the focus of the case is not so much on the creation of a new solution, but rather on the impact on the existing organization when using an existing solution. The specific business issues addressed in the case are: (1) *What are the necessary change initiatives needed for the introduction of this new system?* (2) *What are the best choices in terms of solution direction and approach?*

In the case study, the GEA (Generic Enterprise Architecting) method was used. Given the focus of this paper on the actual case study, we take the GEA method as a given. Nevertheless, to better understand and appreciate the case study, we will also briefly review the GEA method and its background.

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The remainder of this paper is structured as follows. In Section 2, we provide more background to the GEA method. Section 3, then continues by summarizing that part of the GEA method that is most relevant to understanding the case study: the Enterprise Coherence Framework (ECF), which enables enterprise to set up their own *coherence dashboard* in terms of which the enterprise coherence can be governed/improved during enterprise transformations. The SAE specific configuration of this *dashboard* is discussed in Section 4. This is followed in Section 5, by a discussion on how this dashboard was used in a workshop to tackle the business issue at hand. Before concluding, Section 6 then briefly discusses an evaluation by the participants of the case.

2 Background to the GEA method

The development of the GEA (General Enterprise Architecting) method was initiated in 2006 by the consultancy firm Ordina (www.ordina.nl). The decision by Ordina to initiate the development of the GEA method originated from the observation that large scale enterprise transformations fail more often than not, while, in their experience, existing methods and frameworks for enterprise architecture failed to contribute to the success of enterprise transformation efforts [6, 5]. A survey held at the start of the GEA programme, showed that this experience was not limited to Ordina only, but was shared among a broad range of client organizations participating in the programme². The underlying issues were also considered grave enough for the participating client organizations to indeed co-invest, in terms of time and money, in the GEA programme. In the (still ongoing) development of GEA, the design science method [3] is used as the overarching “rhythm”, combined with case study research [7] to evaluate the application of the different iterations of the GEA method.

In its current form, the GEA method comprises three core ingredients [5]. Next to the Enterprise Coherence Assessment (ECA) that allows organizations to assess their ability to govern coherence during enterprise transformation, it contains an Enterprise Coherence Framework (ECF) and a (situational) Enterprise Coherence Governance (ECG) approach. The latter includes the identification of specific deliverables to produced/results, processes needed to produce these deliverables/results, as well as an articulation of the responsibilities and competences of the people involved. The ECF, which will be summarized in the next section, enables enterprise to set up their own *coherence dashboard* in terms of the enterprise coherence can be governed/improved during enterprise transformations. This, enterprise specific, dashboard enables senior management to govern the coherence between key aspects of an enterprise during a transformations.

² During different stages of the GEA research programme, the following client organizations were involved: ABN AMRO; ANWB; Achmea; Belastingdienst - Centrum voor ICT; ICTU; ING; Kappa Holding; Ministerie van Binnenlandse Zaken en Koninkrijksrelaties; Ministerie van Defensie; Ministerie van Justitie - Dienst Justitiële Inrichtingen; Ministerie van LNV - Dienst Regelingen; Ministerie van Landbouw, Natuur en Voedselkwaliteit; Nederlandse Spoorwegen; PGGM; Politie Nederland; Prorail; Provincie Flevoland; Rabobank; Rijkswaterstaat; UWV; Wehkamp (see also www.groeiplatformgea.nl).

3 The Enterprise Coherence Framework

The Enterprise Coherence Framework (ECF, see [5]) defines a series of cohesive elements and cohesive relationships, which together define the playing field for an enterprise's coherence. By making the definition of these elements explicit in a specific enterprise, a *coherence dashboard* results in terms of which one can gain insight in the 'state of coherence' while also being able to assess the impact of potential/ongoing transformations. This then enables a deliberate governance of enterprise coherence during/driving transformations.

The ECF is defined in terms of two connected levels of cohesive elements: the level of *purpose* and the level of *design*. At the level of purpose, the cohesive elements that have been identified, correspond to the commonly known concepts from strategy formulation [4, 1]: *Mission, Vision, Core Values, Goals* and *Strategy*. The cohesive elements at the design level are:

- Perspective** – an angle from which one wishes to govern/steer/influence enterprise transformations. The set of perspectives used in a specific enterprise depend very much on its formal and informal power structures. Both internally, and externally. Typical examples are culture, customer, products/services, business processes, information provision, finance, value chain, corporate governance, etc.
- Core concept** – a concept, within a perspective, that plays a key role in governing the organization from that perspective. Examples of core concepts within the perspective Finance are, for instance, “Financing” and “Budgeting”.
- Guiding statement** – an internally agreed and published statement, which directs desirable behaviour. They only have to express a desire and/or give direction. Guiding statements may therefore cover policy statements, (normative) principles [2] and objectives.
- Core model** – a high level view of a perspective, based on, and in line with, the guiding statements of the corresponding perspective.
- Relevant relationship** – a description of the connection between two guiding statements of different perspectives.

The presence of a well documented enterprise mission, vision, core values, goals and strategy are preconditions to be able to determine the content of the core factors on the design level of the organization.

4 The coherence dashboard for the Ministry of SAE

Since this was the first time for the Ministry of SAE to apply/use the GEA method, it was necessary to first develop an organization specific coherence dashboard. To this end, the case at the Ministry of SAE started in August 2010 with an intensive desk research activity, conducted by a small team of architects. This team studied relevant policy documents from the Ministry of SAE, resulting in the first version of the coherence dashboard for the Ministry, in terms of a list of the cohesive elements and their definitions, covering both the purpose and the design level. Starting point for creating

this list were the strategic documents of the organization such as the mission statement, vision notes, policy plans, business strategy, business plan, etc.

In a validation workshop, conducted in September 2010, this draft coherence dashboard was then validated with the major stakeholders and approved after some modifications. This validation workshop involved the executives of the Ministry, complemented with a number of (internal) opinion leaders and key stakeholders.

Perspective	Definition
Information provisioning	All processes, activities, people and resources for obtaining, processing and delivery of relevant information for SAE.
Collaboration	Collaboration needed to contribute to a common result on the team, entity or organization levels.
Processes	A coherent set of activities needed to deliver results of SAE.
Governance	The influencing of the SAE organization so that a desired goal is attained.
Employees	All persons who execute tasks or activities within the SAE organization.
Stakeholders	Legal entities or persons for whom the activities of SAE are important.
Culture	Explicit and implicit norms, values and behaviour within the SAE organization.
Services	All services that SAE within legal frameworks, or through agreed appointments with statutory authorities, establishes and delivers to customers.
Finance	The planning, acquisition, management and accountability of funds SAE.
Customers	Customers of a service of SAE
Law & regulations	All legal frameworks that form the basis for the task performance of SAE.
Communication	An active process in which information is exchanged between two or more parties or persons, regardless of how that is achieved.

Table 1. Definitions of perspectives for the Ministry of SAE

In Table 1, the perspectives that were selected by the Ministry of SAE are shown, while the core concepts of four of the perspectives are listed in Table 2. This set of perspectives also illustrates the need to align more aspects of an enterprise rather than just business and IT. Several of the perspectives may put *requirements* towards IT support, *information provisioning* followed by *communication* being the dominant ones in this sense. However, the chosen set of perspectives shows that when it comes to *alignment*, the stakeholders do not think in terms of Business/IT alignment, but rather in a more refined web of aspects that need alignment.

During the desk research phase 219 guiding statements were derived from the aforementioned policy documents. Needless to say that presenting all 219 guiding statements goes beyond the purpose of this paper. Therefore, Table 3 only shows those guiding statements that turned out to be relevant to the *processes* perspective.

5 The process followed in the case study

With the dashboard in place, the next step was to organize a workshop with the key stakeholders. In this workshop, the business issue at hand (*the introduction of a new system for the digitization of the flow of dossiers*) was positioned in relation to the coherence dashboard of the Ministry of SAE, and analysed in terms of the two questions: (1) *What are the necessary change initiatives needed for the introduction of this new system?* and (2) *What are the best choices in terms of solution direction and approach?*

Information provision	Processes	Governance	Stakeholders
Digitization	Time and place independent	Policy cores	Labor market
Integrity	Selection policy	Programs	Municipalities
Security	Efficiency	Scaling up	Labor force
Standardization	Actor	Collectivity	Employers Unions
Facilities	Effectiveness	Mission/vision assessment	Employee Unions
Information	Predictability	Employer ship	Funds
Maintenance	Planned	Themes and tasks	Other Ministries
Systems	Procedures	Functioning	Independent administrative bodies
Ownership		Organization	Society
Storage			Social and Economic Council
Architecture			Research agencies
			Social partners
			National Archive

Table 2. Core concepts for the Ministry of SAE

Processes
A dual situation in which paper and digital systems or more systems are used in parallel, should where possible be avoided.
SAE is based on the tenet that the entire work of staff and processflow of documents goes digital.
The concept of flexible working means customization (instead of one size fits all).
Existing paper-based processes of SAE are as much as possible adjusted to the features of the automated document management system.
Integral approach: It is important to think about sustainability already at the "front" of the information chain.
Selection policy must play a fully involved role at the beginning of the "information creation".
The coming years it is expected that firm pressure will be on the business operations and IT to operate cost-efficiently.
Working smarter with fewer people.
We aim to ensure the government can operate decisively, transparently and fast.
We involve at the front of the process the external actors in the issues and developments we are working on.
We must have more attention to the process.
In 2012, our work is supported by a modern work environment and we as professionals SAE are equipped to let this environment operate as optimal as possible for us.
We want better performing processes, more efficient and effective.
We want more predictability in our processes.
It must be clear how processes flow through the organization and who has which responsibilities.

Table 3. Guiding statements relevant to the *processes* perspective

During the workshop, each of the twelve perspectives of Table 1 was represented by one or two participants who had (delegated) ownership of that perspective. At the start of the workshop, the owner of the business issue gave a thorough introduction of the issue in terms of causes, degree of urgency, degree of interest, implications, risks, etc. See Table 4 (these lists were also handed out to the participants, before the workshop took place). This introduction gave the representatives of the perspectives a deeper insight into the associated aspects of this business issue, enabling them to make a translation of the issue to their own perspective. This enabled the representatives of the different perspectives jointly determine, which change initiatives were required to solve the business issue at hand. The business issue: "*impact of the implementation of a digitization solution*" was then addressed in terms of two tasks: (1) *Determine the necessary change initiatives based on the analysis of the business issue* and (2) *Determine the necessary*

change initiatives based on the solution space dictated by the guiding statements of the coherence dashboard of the Ministry (such as for example shown in Table 3).

Causes to adopt a digitization solution	
1	Government conducts restrictive policy for ICT investments.
2	Government wants rapidly resolve many issues in the field of archives, digital information and cultural heritage:
3	a No view on growth, size and cost of archiving.
	b Issues are already playing for three decades.
	c Government Decision: digital document management in the core departments by 2015.
4	Interdepartmental cooperation
5	In the field of archiving:
	a Many copies and versions.
	b Many documents are missing.
	c Rules and compliance are inadequate in the field of digitization.
	d Digitization is focused on storage and not to reuse.
6	In the field of processing (dossier flow)
	a Not timely delivery (including emergency notes, pieces of Ministers)
	b Many errors in submission, registration and also in the content.
	c Ambiguous differentiation of dossiers (Name, Address, City)
	d The author of a document is difficult to reach (especially with emergency items)
	e Errors far too late in the process discovered.
	f Lack of adequate information and proper use.
	g Lack of good management information (where, who, when, how long).
Implications of the digitization solution	
1	The employee gets a central position.
2	Incoming physical mail digitized and only processed digitally.
3	Office Documents in digitizing system created and to use by colleagues.
4	Other media (e-mail, sound, photographs, video) are stored.
5	Never (older) texts lost.
6	One organization-wide environment for the dossier flow.
7	All documents in dossiers accessible to everyone, unless ...
8	Managers will be active users by digitally agreeing.
9	The entire process is visible to everyone.
10	The initials line will be standardized within the own organizational unit.
11	There shall be no "co initials" anymore.
12	Employees will carry out all work with documents by using the digitization system (except Inspection and Legislation).
Risks by implementing the digitization solution	
1	Low acceptance of the user, because too much from the ICT is argued.
2	No conscious guidance on quantitative benefits, because the business case does not give this insight.
3	Subjective assessment of the results by no clear purpose.
4	Errors by improper use.
5	Errors due to complex procedures (due to many exception rules).
6	Not a good government of the dossier flow by confusion of responsibilities and no control.
7	Not learning from mistakes by taking over behavior.
8	Not learning from mistakes by failing want to be addressed.
9	Final results of the dossier flow are not achieved due to the gap between directors and senior staff.
10	Employees do not indicate errors to each other due to lack of management support. □
11	Suboptimal solution by limited (financial) resources.
12	Additional customization because specific management steps do not fit together.
13	No broad accessibility and standardization by different solutions for the same functionalities
14	Low commitment and support due to poor communication to stakeholders
15	Project failure due to lack of management attention.

Table 4. Part of the analysis of the business issue in terms of causes, implications and risks

Prior to this workshop, all 22 representatives of the perspectives received a copy of: an overview of all the perspectives and core concepts (see Table 2) and their definitions, an overview of the 219 guiding statements including the perspectives they are connected to, a list of guiding statements on each one perspective (see example Table 3), and a summary of the business issue at hand (see Table 4). In addition, two input forms were issued for the two of the tasks that would need to be performed during the workshop. After the introduction of the business issue by the problem owners, the group of 22

persons was split into four subgroups balanced in proportion to the number of guiding statements and the grouping of perspectives with a strong mutual relevant resemblance. The groups were located in different project rooms and asked to give a plenary wrap up by discussing their three major change initiatives after carrying out the three following tasks:

1. *Change initiatives based on the analysis of the business issue*
The group was asked to use the causes, implications and risks as identified in Table 4, to list the necessary change initiatives in their perspective.
2. *Change initiatives based on the guiding statements*
The group was asked to, based on the guiding statements, list those change initiatives that could be carried out to solve/mitigate aspects of the business issue.
3. *Prepare for plenary wrap-up*
After performing both tasks, each group was asked to identify the three major change initiatives, and prepare a presentation of these initiatives as input to the next plenary part of the workshop.

The workshop resulted in 98 change initiatives of which 15 were prioritized as most important ones. In the last plenary part of the workshop these major change initiatives were presented and all the attendees were offered the opportunity to comment on these. The workshop results were presented as an advisory report to the management of SAE, to decide on the proposed solution and approach.

6 Experiences and insights for improving GEA

At the end of the workshops, an evaluation session was organized with the participants of the workshops. This evaluation session resulted in the following shared observations:

1. The participants of the workshops already knew the key principles of this case, but especially the confrontation of these principles with the intended objective of the change program, and the discussions about this were regarded as useful. This provided support, management awareness as well as a more complete picture.
2. An acceleration of the decision-making process and the creation of support at the board level was achieved.
3. A much more holistic approach to the issue compared to the current IT-driven approach. This led to the recognition that much more needed to be changed in the organization than previously assumed.
4. A shorter lead time for obtaining the perspectives and core concepts as a result of the strategy used to first derive guiding statements from policy documents.
5. Saving a lot of processing time regarding the elaboration of the workshop results due to the use of digital forms. This was also experienced as a pleasant way of working by the representatives of the perspectives.
6. The turnaround time of developing the outline of a solution direction, and the choice of the approach to be taken, was reduced to one day using the coherence dashboard.
7. Only a limited number of SAE-employees, for a limited amount of time, (3 hours validation session and 6 hours workshop analyses) were needed in applying GEA.

8. The experience of having 22 representatives of the perspectives meet in a workshop requires timely planning and a convincing modus operandi from the project team, based on a clear problem solving vision and arguments based on added value.
9. The business issue at hand should be positioned at the right management and priority level. This may sound trivial, but especially in the case of business issues that initially ‘disguise’ themselves as IT-only issues, this is of the utmost importance.

These observations will serve as input for the further development/improvement of GEA, while also providing relevant starting points for more quantitative follow up research/evaluations.

7 Conclusion

In this paper, we discussed a real world case study in Business/IT alignment at the strategic level. The specific business issues addressed in the case were: (1) What are the necessary change initiatives of the introduction of this new system? (2) What are the best choices in terms of solution direction and approach? The *coherence dashboard* as configured for the Ministry of SAE, illustrated that Business/IT alignment is not only a matter of aligning “the business” and “the IT” aspects of an enterprise. The SAE case indicates that a more refined perspective is called for, in which multiple aspects need to be aligned with the goal of achieving more coherence.

As discussed in the introduction, in the case of the Dutch Ministry of SAE, the GEA method was a given. However, as also indicated, the GEA method is continuously developed further using a design science rhythm. The lessons learned as listed in the previous Section, have already lead to further improvements of the GEA method. In our further research we will, continue to conduct real life case studies, and based on the findings, further elaborate and improve GEA.

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