

Appendix B



Project: Implementing Enterprise Architecture,
Action Research at Air France Cargo – KLM Cargo
Student name: Andrew Go
Student number: 1047345
Version: 1.1

18-10-2006, Delft

Table of Contents

Appendix B.1: List of abbreviations	4
Appendix B.2: EA awareness presentation	5
Appendix B.3: Business principles from the literature	11
Appendix B.4: Group discussion reviews	12
Brainstorming session testing the methods and tools	12
Brainstorming session regarding the Customers domain	14
Brainstorming session regarding the Competitors and Partners & Suppliers domain.....	16
First reviewing session regarding principles for the Customers domain	18
Second reviewing session regarding principles for the Customers domain	19
Appendix B.5: Example of preparation material for a workshop	21
Appendix B.6: Workshop Tool Manual	23
Appendix B.7: Business Architecture principles	24
Appendix B.8: Project Proposal.....	25

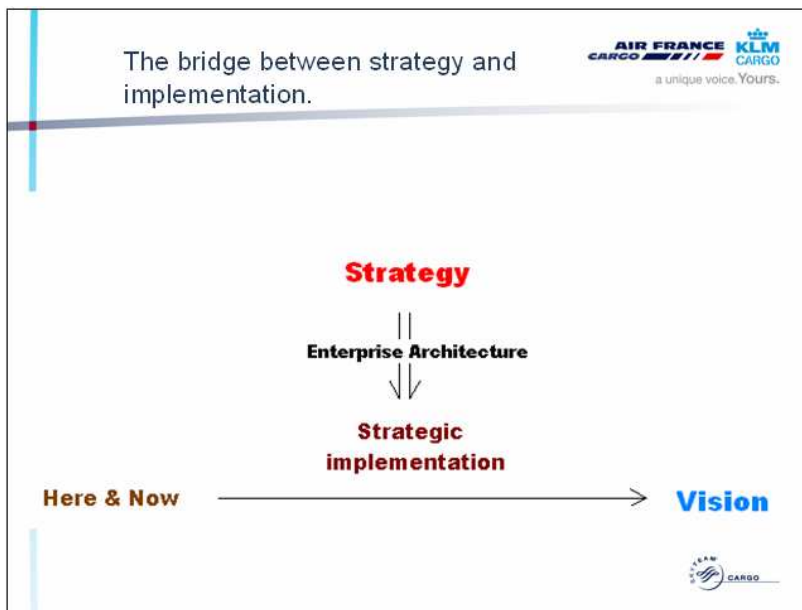
Appendix B.1: List of abbreviations

AF-KL	= Air France – KLM
AF-KL Cargo	= Air France Cargo – KLM Cargo
BDO	= Business Development Office
CIM	= Customer Information Management
EA	= Enterprise Architecture
EWTA	= Enterprise Wide Technical Architecture
GDT	= Group Decision Tool
GSS	= Group Support System
ICT	= Information and Communication Technology
IE	= Information Economics
IS	= Information Services
IT	= Information Technology
UVP	= Unique Voice Portal

Appendix B.2: EA awareness presentation

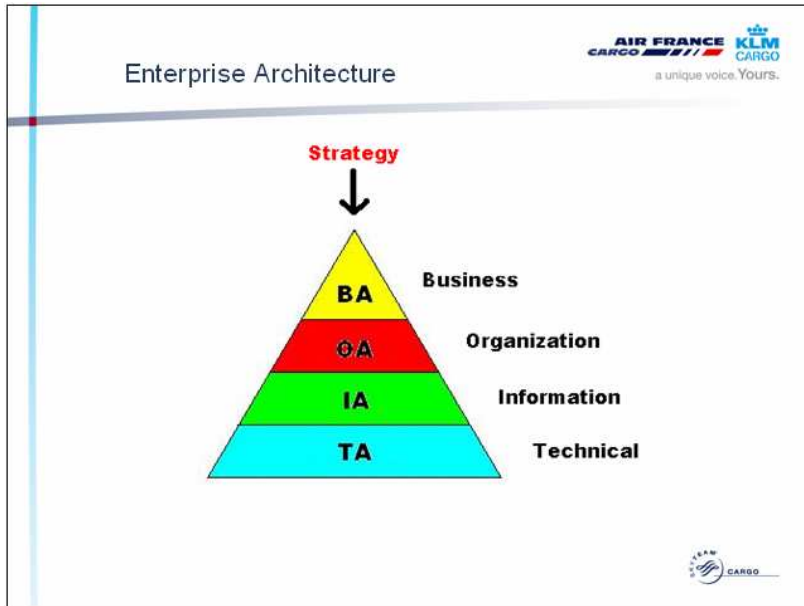


- One of the most important aspects of Enterprise Architecture is the fact that it is valuable for the strategy implementation.

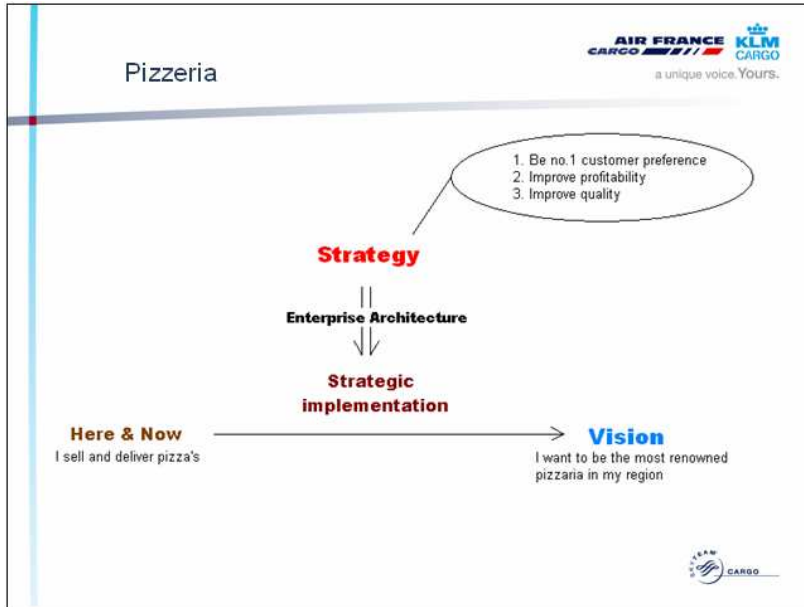


- In the strategy there are usually statements such as “increase profitability” and “realize growth”. Very generic and ambiguous.
- For instance, realize growth; one person might consider something different as growth than another person. If this isn’t made explicitly clear, both persons would think they’re talking about the same thing, which eventually could lead to problems.
- To avoid this from happening and to have everyone pointing their noses in the same direction, the strategy has to be more clear and more concrete. Enterprise Architecture (EA) can help us with this.

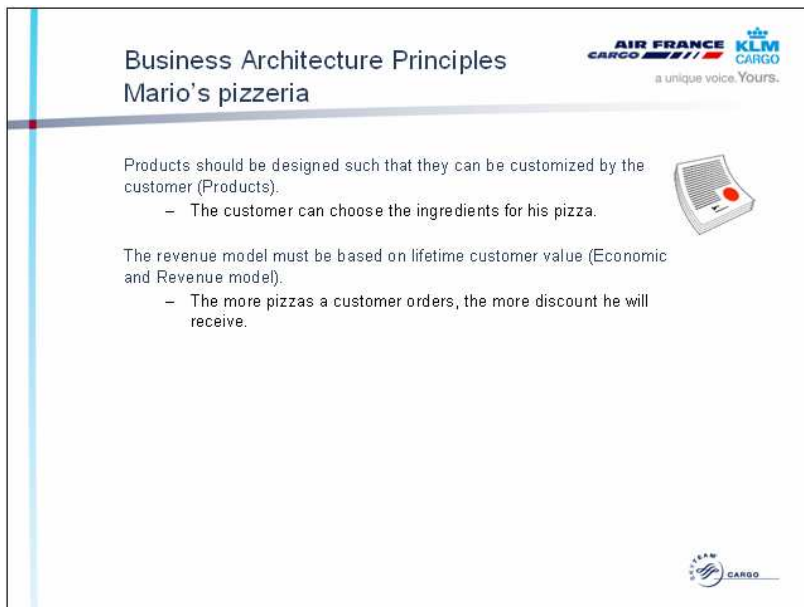
- EA can be seen as an elaboration of the chosen strategy. Put differently, it specifies the framework within which you can realize your vision.
- In practice, EA consist of principles and guidelines.
- Principles that are developed from the strategy and which have to be used to realize your business.
- This will ensure that, for instance, the applications you are building are aligned with your strategy and the business.
- The next question would be: what does an EA look like?



- EA consist of four domains.
- Every domain only consists of principles regarding that domain.
- The layered structure shows that from the strategy, business principles are devised, which in turn have consequences for the organizational principles, etc.
- While devising principles, it is important to keep in mind that all principles have to be consistent with all other principles.



- The example of a pizzeria presented on this and the following slides should give an idea of how an Enterprise Architecture could look like.
- As mentioned before, the strategy can be interpreted and realized in various ways. This can be illustrated by 2 different pizzeria's that have the same strategy, but work according to different principles.



- In the business domain, it's about how to approach your field of commercial endeavor. In short, what you want to do to realize your vision.
- Focus areas in this domain are for example, Products and Services, the Revenue Model and Customers.

Business Architecture Principles
Luigi's pizzeria



AIR FRANCE CARGO **KLM CARGO**
a unique voice Yours.

Products should be designed such that they can be produced as cheaply as possible (Products).

- We only offer a standard set of the most popular pizza's

The revenue model must be based on maximizing the sales quantity (Revenue model).

- Sell as much as possible by offering pizza's for the lowest price.



- As you can see, two totally different approaches are used in realizing the exact same strategy. Mario wants to achieve his goal by offering high quality products and services. Luigi wants to accomplish his goal by offering pizza's cheap.
- By explicitly stating their principles, the difference is made clear.
- In practice, both Mario and Luigi have organizational, informational and technical principles.
- For the example, only business principles of both pizzerias are presented.

Organization Architecture Principles

AIR FRANCE CARGO **KLM CARGO**
a unique voice Yours.

Management must enable employee self-management (Management).



- Delivery route and the order of delivery are determined by the deliverer.

One maximum delivery time must be stated for all the locations in the delivery area (Competence).

- In our delivery-zone, the delivery-time is 30 min. at max.

The traditional pizza preparation method should form the basis for all the culinary processes (Processes).

- Use fresh ingredients for the preparation of our pizzas



- In the organizational domain, it's about how the business should be organized.
- Focus areas in this domain are for example, Management, Competences and Processes.

Information Architecture Principles



AIR FRANCE CARGO KLM CARGO
a unique voice. Yours.

Information type and purpose must be consistently linked to presentation styles (Presentation).

- Vegetarian products on the menu card must be accompanied with a green broccoli symbol.

Information about lifetime customer value must be available at all customer contact points (Exploration).

- After providing a customer's name, the information system has to present all information regarding that customer.



- The information domain concerns how information has to be managed.
- Focus areas are e.g. the presentation of information, information quality and exploration of information.

Technical Architecture Principles



AIR FRANCE CARGO KLM CARGO
a unique voice. Yours.

Pizza's must be baked in a brick-kiln.

- We use the Millennium 2000 Brick Pizza Oven to bake our pizza's.

Heat retaining pizza boxes must be used for delivery.

- We use Pizza Carton Elevation containers to deliver our pizza's.



- In the technical domain its about how technology should be used to support the chosen strategy.
- CIO/IS is already using such an architecture to prescribe how IT should be used.
- Focus areas are e.g. Data warehouse, information security, etc.
- There is little IT in our pizzeria example. Nevertheless, technology goes beyond IT, such as ovens, tables, buildings etc.
- The principles in the architectural domains ensure that the enterprise is designed as a whole according to your strategy.

Conclusion



The principles in the Enterprise Architecture cover all aspects of an enterprise (Business, Organization, Information and Technology).


As shown in the pizzeria example, these principles guide *how* these aspects of the enterprise should be realized.

The consistency among all principles ensures that all aspects are aligned with each other.

This enables a holistic approach when developing certain aspects of an enterprise (e.g. business redesign, process redesign, IT development, etc.)



Conclusion (2)




In other words:

The complexity of strategic implementation will decrease, because by taking the principles into consideration:

1. The focus is on *how* changes must be realized in stead of *what* changes must be realized.
2. All aspects of the enterprise are taken into account (e.g. IT development can only be successful if the processes are aligned with the IT).
3. All aspects of the enterprise will remain consistent with one another, even after having implemented the change.

Source: Hoogervorst, J.A.P., (2004), *Enterprise Engineering &- Architectuur: een antwoord op falende strategie-implementaties*, Holland Management Review



Appendix B.3: Business principles from the literature

For internal use only.

Appendix B.4: Group discussion reviews

Reviews of the following group discussions are presented below:

- Brainstorming session testing the methods and tools,
- Brainstorming session regarding the Customers domain
- Brainstorming session regarding the Competitors and Partners & Suppliers domain,
- Reviewing session regarding the Customers domain principles 1 and
- Reviewing session regarding the Customers domain principles 2.

Brainstorming session testing the methods and tools

Results

This workshop resulted in 34 generated principles, which were clustered into 15 distinct principles. All principles were accepted by all the participants as principles by which AF-KL Cargo must conduct their business. However, it is not clear whether or not these principles are actually correct, since none of the participants were actually involved in the domains for which the principles were generated.

Participants' involvement

Although the participants didn't quite know what they could expect from the workshop, with help from the preparation material and their experiences with other workshops, they were able to quickly adapt to the circumstances.

The fact that all except for two participants had a workstation available, presented each participant with the same opportunities for providing their input in the workshop. This would have been crucial if there were any political, social or hierarchical barriers between the participants. However, the atmosphere between the participants is always good, which makes facilitating the workshop much easier.

Because of the free-format method of formulating principles, it was simple for the participants to generate principles. However, it didn't go very smoothly, largely because the participants didn't really know what guiding principles there are in the domains.

The discussion of the principles went very good mainly because the atmosphere was good and open discussion was stimulated.

Organization

Although the structure was good and comprehensible, it was difficult to organize a 2 hour workshop in which prepared principles have to be discussed and new principles have to be generated and discussed. The focus was put on generating principles, which didn't left much room for discussion of the principles.

In stead of the standard Post-Its, this workshop used a website on which the participants were able to post their generated principles. The website presented the participants principles generated by all participants in order for them to "tag on" to others' ideas. This worked very well as the results shows principles that are clearly based on other principles.

Generation of principles was carried out in three phases:

- During the first phase, the flip-over presented a page with a list of questions for which principles had to be generated. These were the same questions that were provided in the preparation material.
- After about 7-8 minutes, the flip-over showed a page with five domains for which principles had to be generated and a list of areas of concern, which could serve as a source of inspiration.
- After the break, the participants were asked to generate principles again, but this time they had to provide answers to the reverse questions.

The areas of concern didn't have much effect on the principles the participants were generating. Perhaps it wasn't made clear what the intention was of these areas of concern. The reversal method influenced the participants more. Viewing the issue from the reverse perspective clearly provided additional principles.

Clustering of the generated principles into distinct principles was done plenary. This wasn't necessary, because this could have been done easily and quickly during a break with the assistance of a few participants.

Discussion of the principles didn't work out very well with the website; the discussion page on the website didn't show a clear list of attached principles. Another page was used to discuss the principles. However, because the principles were displayed very small on this page, discussion of the principles was very difficult.

Effort

The most challenging aspect of having this workshop was to make sure all participants were available at the same time and location. About half of the invitees actually participated in the workshop. In order for future workshops to succeed, it is absolutely necessary to ensure that everyone who is invited is present. Principles generated during the workshop wouldn't be valid and perhaps even accepted when a part of the group wasn't there.

Disregarding the development of the website, preparing the website for the workshop isn't any effort at all. All tables in the database are truncated and filled with principles described in the preparation material and were off to go.

Evaluating the principles using the website isn't a problem either. Principles are extracted from the database and formatted appropriately in order to be copied from the browser and pasted in a Word-document. All principles generated during the workshop were preserved for future reference.

The participants were actually those providing the most effort for the workshop. The facilitator only ensures the right atmosphere and environment for the participants to generate and discuss the principles.

Feedback

Jan-Willem:	<ul style="list-style-type: none">• Plan workshop more in advance (for instance presenting a introduction or demo during a BA-session).
Karel:	<ul style="list-style-type: none">• It's relaxing.• Free-format makes it easy.• Website is useful.
Bram B:	<ul style="list-style-type: none">• Free format principle formulation works good.• Website is a useful tool.
Ralph:	<ul style="list-style-type: none">• The purpose of the workshop is good.

	<ul style="list-style-type: none">• Prefers Post-Its (more interaction, more dynamic and stimulates discussion).
Tom:	<ul style="list-style-type: none">• Free-format principle formulation works good.• Little time to discuss principles.• Split workshop into two separate workshops or increase the duration of the workshop.
Bram O:	<ul style="list-style-type: none">• Little time for discussion.• Website is a useful tool.
Hans:	<ul style="list-style-type: none">• Explicitly appoint a time-keeper during introduction.• Clustering can be done privately with the assistance of few participants.

Website issues:

- make exceptions more explicit, improve cluster principles
- Attached principles should be displayed when reformulating principles

General:

- For the business maybe good to confront them with already devised principles and ask them to evaluate them.
- End discussion when you think it is leading you nowhere.

Although the workshop was very structured, the free-format approach of generating principles and the open discussions that followed still provided enough sense of freedom.

Brainstorming session regarding the Customers domain

The workshop was held in order to discover the principles with which AF-KL Cargo develop their relationships with the customers. The plan for the workshop was to let the participants generate a number of principles. These principles were then clustered to eliminate duplicate principles. These clustered principles will then be discussed to correct, clarify and validate the principles.

Results

The participants were able to generate a total amount of 112 principles, of which 56 principles were the “Do” principles and 56 principles can be considered to be the “Don’t” principles. The generated principles could eventually be clustered into 10 main principles that should be discussed further in a second workshop. During the workshop only the “Do” principles are discussed and clustered into the 10 main principles. The “Don’t” principles should be discussed in a second workshop. However after reviewing these principles, it seems that although they are able to put the main principles in another perspective, they don’t provide additional main principles.

A number of participants are involved in the development of the customer relationship. This enables the group to verify and validate the discussed principles.

It is important to note that it is not possible to prove that each of the main principles and the set of main principles for the Customers domain are all complete. These principles have been devised to deal with the main issues brought forward by the participants themselves and the areas of concern provided by the facilitator during the workshop.

Participants’ involvement

Almost all participants had brought a laptop with them. This enables almost all participants to generate principles simultaneously.

Besides generating principles for the Business Architecture, they were also devising topics for the discussion during the workshop. This is the main reason why the participants are very involved during the discussion. The participants were able to follow the progress of clustering and the refinement of the principles with their laptop, which improved the discussion as well.

Organization

There are a number of differences between this workshop and the workshop held for the Business Analysts. First of all, I have introduced the notion of Enterprise Architecture shortly to the majority of the participants. The other participants also at least have heard of this notion of Enterprise Architecture. This helped them to understand the goal of the workshop. Nevertheless a brief explanation was given regarding Enterprise Architecture and also examples of design principles were discussed. These examples are based on a previous example given to the participants concerning Enterprise Architecture in general.

In stead of discussing principles for the Customers domain that have been prepared in advance, the workshop started with discussing examples of principles for the Customers domain that doesn't have anything to do with AF-KL Cargo. As mentioned above, the examples are based on the Pizzeria example, which can be considered as a clear context in which Enterprise Architecture can be explained. Such a context allows the facilitator to convey the message behind developing principles for the Customers domain.

Generating the 112 principles took about half an hour. The first 15 minutes were focused on devising the "Do" principles. For the other 15 minutes, the participants were asked to devise principles that are not part of how AF-KL Cargo should develop the relationship with their customers. The difference between the "Do" and the "Don't" principles was difficult to explain. Bearing in mind the small added value of the "Don't" principles, it should be taken into consideration to exclude this part of generating the principles in the next workshop.

Clustering the principles with the participants was done nicely. The group successfully pinpointed the main issues, which could be transformed into the main principles. The participants clearly understood the fact that the principles should be considered as choices that have been made regarding a certain issue.

Although the main principles were identified, there wasn't enough time to discuss all aspects of these principles. Especially the implications were mainly left out of the discussion in order for the group to be able to discuss all principles.

Effort

Preparation of the workshop has taken a lot of time. I had to introduce myself and the notion of Enterprise Architecture to each of the participants individually first before a meeting could be planned. Employees of the BDO are already familiar with the notion of Enterprise Architecture. Given the number of people that is necessary for such a workshop to succeed (about 8) and the fact that a large group is part of the BDO, the number of participants that are from the business is small.

The experience gained from the pilot workshop with the Business Analysts proved to be very helpful in preparing this workshop. Still it was difficult to focus on the discussion and asking the right questions to steer the discussion to the right direction.

The website was improved since the last workshop and supported the workshop very well. The participants became familiar with the interface for generating principles very quickly. With the improvements on the website, it became possible to efficiently cluster principles.

The infrastructure necessary for the laptops to connect to the Internet is the same as the last workshop. Setting up this infrastructure was no problem at all.

Reviewing the principles and clusters using the website is not preferable. The export function in the website which provides a list of all principles and clusters enabled a quick review of the principles. Within a few days, the principles have been reviewed and the results were sent to the participants.

Feedback

Unfortunately, there was little time left for the participants to provide feedback regarding the workshop. One participant mentioned that the workshop is an effective way to carry out a discussion. It is also very productive as 112 possible topics of discussion were generated in just half an hour. What remains to be seen is what is done with the results of the workshop.

Suggestions for improvements

Although the workshop went very well, there is still room left for improvement. First, it was observed that while the participants eventually generated principles easily, the start was difficult. In order to improve this part of the workshop, the participants could be asked to devise principles for the Pizzeria example. This could warm them up a little bit before starting generating principles for AF-KL Cargo.

Secondly, the “Don’t” principles proved to be not as successful as I had hoped. It provided additional insight into the already devised principles, but it didn’t presented new principles. This is largely due to the fact that it wasn’t explained well what the point of the “Don’t” principles was.

In order to maintain momentum in the discussion, additional workshops should be planned during the workshop, in stead of after the workshop. This enables everybody to agree on a time and date together.

Finally, the website could also be improved in certain areas. A much needed additional function is the provision of principles attached to a cluster. This has already been implemented for the facilitator, but the participants should also have insight in the full cluster. Besides this function, an import and export function to XML can be very useful.

Brainstorming session regarding the Competitors and Partners & Suppliers domain

The workshop was held in order to discover the principles with which AF-KL Cargo develop their stance towards competitors and their relationship with partners and suppliers. The plan for the workshop was to let the participants generate a number of principles. These principles were then clustered to eliminate duplicate principles. These clustered principles will then be discussed to correct, clarify and validate the principles.

Results

Initially, the Key Resources and Assets domain would also be tackled in the workshop. However, because the group didn't include someone who is able to verify issues regarding resources and assets, this domain was dropped.

Although 18 principles were generated by three persons in a period of 15 minutes, the results would have been better if the group consisted of more persons. Eventually three principles for the Competitors domain remained, while the principles generated for the Principles & Suppliers domain weren't discussed.

Participants' involvement

The participants were enthusiastic about the set-up of the workshop. However, they indicated that a bigger group would make the principles and discussions more interesting. Having persons from senior management would also stimulate them to become more involved.

The participants were less prepared for the workshop. During the introduction meetings with the participants, little has been discussed about the concept of EA. This also had effect on the extent to which they were involved in the workshop.

Organization

The workshop followed the same basic process as previous workshops. First an introduction was given to explain the purpose of the workshop. Next examples of principles are presented, which is followed by the group generating principles themselves. After this, the group discussed the principles that were generated.

A main difference between this workshop and previous workshops is that while the group was generating principles, there was no big screen on which they could see all the principles that were generated. Only is they would submit a principle, the list of principles on their screen would be updated.

Because the group wasn't well informed about the concept of EA, this had to be explained more thoroughly in the introduction of the workshop.

The workshop was attended by three persons, which is actually too little for a brainstorming session using a GSS. Initially about 8 persons were invited. However, a short time before the workshop a lot of them cancelled due to other work. The small group allowed a more time for feedback on the methods and tools that were used.

Effort

Because the workshop followed the same process, the necessary elements were already known. The presentation for the workshop had to be changed to present examples of principles regarding the Competitors and Partners & Suppliers domain.

Again most of the effort was put in scheduling the workshop. Unfortunately, the workshop was held in a busy period at AF-KL Cargo. Inviting more than 5 people to attend the workshop is the most difficult part of the workshop.

Feedback

The participants require more explanation regarding EA. This would speed up the process of the workshop and gain involvement from the participants.

Obviously, also more people should attend the workshop. A bigger group would provide more interesting discussions.

The workshop as a method to create a shared view on what AF-KL Cargo does works good, because the focus is more on the process than on the actual results. The participants agreed that the discussions were the most valuable outcome from the workshop.

Finally the tool that has been used to generate and discuss the principles worked very good and was suggested to apply it to other kinds of workshops.

First reviewing session regarding principles for the Customers domain

The discussions held on august 28th were meant to discuss the principles from the first BA workshop for this domain. During this workshop, about 10 main principles were discovered and discussed. After the workshop, I took the liberty to refine the principles based on the discussions that were held during the workshop, theories regarding principle formulation and strategy documents.

Besides discussing the 10 refined principles, the goal of the discussion was to examine how the participants felt about the principles. This is necessary to determine the sense of urgency for these principles.

Results

The discussions during this meeting gave interesting insights in how AF-KL Cargo should treat customers. Although the meeting only lasted 1.5 hours, each principle was discussed and sharpened in order to improve its correctness and clarity.

However, only one of the participants is part of the department dealing with AF-KL Cargo customer relationships. Another participant belongs to the BDO, but is assigned to improve the CSO through the use of ICT. Having only one CSO member as a participant is not enough to have the corrected and clarified principles validated.

Participant involvement

Because the group is small, the involvement of each participant during the discussions is significant. The group only consists of members that know each other well, which contributes to an open atmosphere.

The subject of discussion, the principles, is also known by the participants, because they have generated and discussed the principles during the workshop themselves. This familiarity with the subject further enhances the involvement of the participants.

The principles also have another effect on the participant involvement, which can be regarded as both positive and negative. The freedom enjoyed by the participants during the workshop is limited, because the principles consciously or unconsciously determine the boundaries of the discussion. This makes it difficult to discover additional principles/implications, but it also allows more focus on the existing principles, which could result in improved principles.

Organization

The group during the meeting was small, which enables focused discussions on specific subjects. The most important issue during the meeting was to discuss the principles. However, the workshop was held about a month earlier, so it is important to get all participants up to speed by first summarizing what we did during the workshop and what happened after the workshop. During the introduction, the goal of the workshop also has to be explained clearly to the participants.

Next, each principle is discussed by the participants. The participants were asked to think about the following issues regarding the principle:

- correctness,
- clarity,
- additional implications and
- additional principles.

The small group also allows an open discussion in which all participants were able to say everything anytime. This didn't jeopardize the progress and structure of the meeting.

Effort

In order to hold this meeting, the results of the workshop had to be processed first. This is a big task, because of the number of principles generated during the workshop next to the main principles, which were the result of clustering of the generated principles. These generated principles could contain valuable information for the main principles or perhaps even additional main principles.

After the results were processed, the refined principles should be discussed. The meeting was held, because the participants were not able to attend a workshop to discuss the principles. A total of 7 participants were requested for this meeting, of which two eventually couldn't attend. Finding a spot in the agenda for this meeting wasn't as difficult as it was for the workshop. However, it still presented problems, because the participants were in the middle of important projects, which demanded more time.

The discussion of each principle was carried very structured. This simplified the evaluation of the results of the meeting. The results were incorporated in the workshop to discuss the principles.

Feedback

The concept of developing principles for the business of AF-KL Cargo is good. However, people must act according to these principles, otherwise it has no value. This can be accomplished by having support from senior management.

Second reviewing session regarding principles for the Customers domain

This small group discussion was held in stead of a larger meeting, because most of persons that were invited weren't available on this day. The purpose of the discussion was to discuss the results from the first workshop that was held a month earlier.

Results

The outcome of the discussion with Bart and Hans is a more refined set of principles for the customers domain. As the person responsible for the development of CSO, Bart is a key actor in verifying the principles. With each verification and validation, the principles become more valuable. Therefore it is important to include more participants in the discussions.

The results from the previous meeting also played a role in this discussion. Suggestions from that meeting were thrown into the discussion. Although the principles were discussed with the results from the previous meeting, it would have been better if one meeting was held in stead of two. This would present the opportunity for the participants to challenge each other's suggestions.

Participant involvement

Although Bart wasn't able to attend the first workshop, he was kept up to date with the development of the principles. Also the fact that he was already introduced to the subject of Enterprise Architecture and the purpose of principles made it easy for him to discuss the principles.

The topics of discussion are in the interest of the participants and keep the participants involved during the discussion. Besides the discussion, the principles themselves kept the participants involved. Bart explained that having these principles could provide additional guidance for current CSO developments.

Organization

Although the big conference room was reserved for the meeting, a smaller setting seemed more appropriate for such a small group. The beamer wasn't needed as well as the participants were given the principles that had to be discussed on paper.

After reviewing the principles, Bart was asked to give his thoughts on how to continue with the principles. Bart suggested reviewing current developments within AF-KL Cargo based on the principles. This would show to what extent the developments match AF-KL Cargo's intent to develop their relationship with customers.

The downside of organizing such a small group discussion is that the facilitator too much involved in the discussion. Ideally the participants, who are the domain-experts, discuss with each other on the topics and the facilitator would observe the discussion and provide guidance by asking questions. The facilitator is not part of the business and therefore can't challenge the statements made by other participants.

Effort

Much of the effort for this meeting had been done for the small group discussion held earlier. The results from that discussion were not given to the participants to offer the participants the same topics of discussion. However, during the discussion, the suggestions from the previous discussion were carefully included in this discussion.

Appendix B.5: Example of preparation material for a workshop

Here below, an example of the preparation material for the participants of the brainstorming sessions is presented.

Workshop purpose

This workshop is intended to identify principles with which AF-KL Cargo should develop the relationship with its customers. These principles will become part of the business architecture that enables AF-KL Cargo to better determine how the strategy should be implemented.

Customers domain

The workshop will revolve around one domain in the Business Architecture, the customers. All aspects of the relationship between AF-KL Cargo and its customers are relevant for the workshop and can be taken into consideration when we attempt to find an answer to the following questions:

- How should the customers be selected?
- How should we approach our customers?
- How should we maintain our relationship with our customers?
- How should we interact/communicate with our customers?

Examples of principles

In order to provide more clarity in what kind of principles we are eventually looking for during the workshop, a number of examples will be provided. The example of Mario's Pizzeria in the Enterprise Architecture Explanation presentation¹ is used to present principles for the development of their customer relationships.

Example 1:

Customers must be able to communicate with Mario's Pizzeria in multiple ways.

Rationale:

- A backup communication method is necessary to maintain availability.
- Different customers have different communication preferences.

Example 2:

Customers must perceive Mario's Pizzeria as a classy pizzeria.

Rationale:

- We want to differentiate ourselves from the cheap pizzerias.

Example 3:

Customer approach method must be dependant on the customer target group.

Rationale:

- Approaching the customers is only effective if the right method is chosen.

¹ This presentation is included in the invitation for the workshop.

Practical note

During the workshop we will be using an online tool to generate these principles. If it is possible, please take your laptop with you for the workshop.

Appendix B.6: Workshop Tool Manual

Tool functions:

- Generating principles
- Viewing principles
- Viewing clustered principles

Generating principles

Principles can be generated on the “Generate Principles” page. In order to generate the 2 designated textareas have to be filled in. The tool doesn’t accept principles without a statement and/or a rationale. Leaving one or both textareas blank will result in an error. Pressing the button labeled “Submit” will store the principle.

While generating principles, all principles generated so far will be shown to all participants. The user is able to click on a principle, which results in the rationale of the clicked principle to be shown.

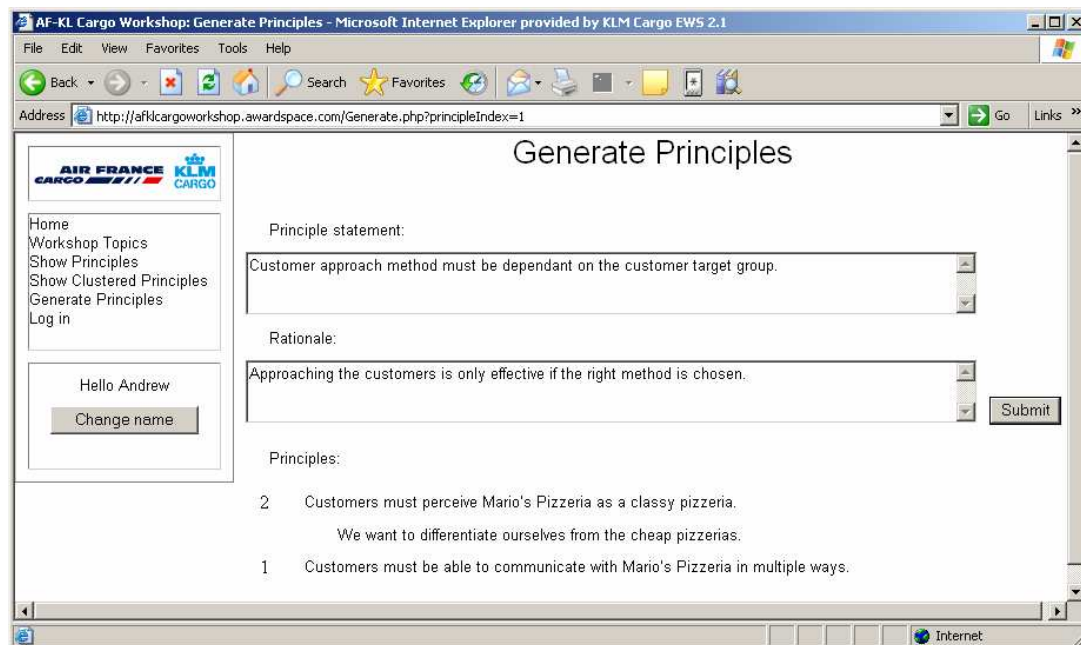


Figure 1: The “Generate Principles” page.

Viewing principles

The generated principles can be viewed by navigating to the “Show Principles” page. Clicking on a principle will show the rationale of the principle.

Viewing clustered principles

Once all generated principles are grouped together into clusters, these clusters can be viewed in the “Show Clustered Principles” page. Clicking on a cluster will show all elements of the cluster:

- Principle statement,
- Rationale and
- Implications.

Appendix B.7: Business Architecture principles

For internal use only.

Appendix B.8: Project Proposal

Project Name:	Final Thesis Project for MSc Information Architecture		
Start Date:	March 2006	End Date:	November 2006
Background:	<p>The concept of Enterprise Architecture isn't new for the people working at Air France-KLM Cargo. Based on the framework provided by the META Group, they have created an Enterprise Wide Technical Architecture, which is used to aid designers in developing technical systems. However, the Enterprise Business Architecture and Enterprise Information Architecture have yet to be made.</p> <p>For many years, these two architectures have received a lot of attention within Air France-KLM Cargo. The Enterprise Architecture Framework developed by Jan Hoogervorst shows how architecture should be used. Unlike most other companies, Air France-KLM Cargo strongly believes that architecture should be prescriptive. This can be accomplished by including principles and guidelines in the architecture. Any descriptive element, such as models, should be rejected from the architecture and considered as part of a design.</p> <p>Architecture plays a leading role in the design and should therefore be closely linked to the design. A strong delineation between the architecture (principles, guidelines, standards) and design (models, analyses) should be avoided.</p> <p>The need for an Enterprise Architecture that is complete has been growing in the last few years. The merger between Air France and KLM has also created an additional incentive to pick up the pace in developing such an Enterprise Architecture. In order to find out whether or not such an Enterprise Architecture would work for Air France-KLM Cargo, Martijn Cappel, a Master student from Delft University of Technology, has carried out his final thesis project at Air France-KLM Cargo on this topic. An Enterprise Business Architecture and Enterprise Information Architecture proofs of concept were two of the results from his project.</p>		
Problem thesis:	<i>How can the AF-KL Cargo strategy and best practices be captured correctly in an Enterprise Architecture?</i>		
Sub problems:	<ul style="list-style-type: none"> • How can the enterprise objectives be retrieved? • How are best practices extracted from the enterprise? • How should principles be formulated such that they are applicable for designers? • How should principles be organized? 		

<p>Scope:</p>	<p>The Enterprise Architecture should be based on the enterprise goals and strategy. Although in theory it might be possible that the development of the Enterprise Architecture has influence on the strategy, this role of Enterprise Architecture remains outside the scope of this project.</p> <p>The Enterprise Architecture should consist of the following four architectures:</p> <ul style="list-style-type: none"> • Enterprise Business Architecture (EBA) • Enterprise Organization Architecture (EOA) • Enterprise Information Architecture (EIA) • Enterprise Wide Technical Architecture (EWTA) <p>It is imperative to keep in mind the interdependencies between these four architectures. In this project, however, the focus will be on the EBA, EOA and EIA. The EWTA has already been developed and used in practice. This architecture is outside the scope of this project will therefore remain untouched. However, because of the interdependencies between the architectures, the EWTA will have to be taken into account during the development of the other two architectures.</p>
<p>Objectives:</p>	<ul style="list-style-type: none"> • Increased awareness for problems regarding design of the enterprise • Better understanding of the notion of Enterprise Architecture within AF-KL Cargo • An applicable Enterprise Architecture • Momentum to continue with the Enterprise Architecture
<p>Result:</p>	<ul style="list-style-type: none"> • Support from the people of AF-KL Cargo to work under architecture. • Enterprise Business Architecture • Enterprise Organization Architecture • Enterprise Information Architecture • Enterprise Architecture implementation process

Project approach:	<p>The activities to develop the Enterprise Architecture can be grouped into three phases:</p> <ol style="list-style-type: none">1. Analysis phase2. Development phase3. Evaluation phase <p>During the first phase information will be collected which are important for the next phases. Activities in this phase include:</p> <ul style="list-style-type: none">• Collect and analyze documents regarding enterprise strategy and goals.• Collect and analyze documents regarding key processes• Collect and analyze documents regarding the EWTA• Interview persons who are responsible for realizing the strategy (e.g. the Business Analyst)• Observe how strategy is being realized (e.g. observe how requirements are determined for a certain project)• Examine the proof of concept created by Martijn Cappel• Examine the Enterprise Architecture Framework created by Jan Hoogervorst, on which the Enterprise Architecture will be based on. <p>The second phase involves activities that are necessary for developing the EBA, the EOA and the EIA, such as:</p> <ul style="list-style-type: none">• Develop principles for the EBA from strategy• Develop principles for EBA from best practices• Develop principles for the EOA and the EIA (same method as developing the EBA)• Evaluate the principles by<ul style="list-style-type: none">○ Having interviews/discussions/workshops○ Comparing them with principles created by Man-Kit Lee (He is creating an EBA for the Aerospace department of Air France-KLM Cargo) <p>The final phase of the project should revolve around testing the principles that have been created earlier. Activities belonging to this phase are:</p> <ul style="list-style-type: none">• Develop and carry out process in order to evaluate projects using the Enterprise Architecture• Develop and carry out process in order to guide running/new projects• Develop and carry out process to govern the Enterprise Architecture
-------------------	--

Project Planning:	<p>The running time of the project is 8 months starting from the 1st of March.</p> <p>Because a principle-based Enterprise Architecture hasn't been made before, it is difficult to estimate how much time is needed to carry out the activities described earlier. Still, an attempt has been made to create a time plan:</p> <table border="1" data-bbox="777 409 1266 533"> <thead> <tr> <th>Month</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> </tr> </thead> <tbody> <tr> <td>Phase 1</td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Phase 2</td> <td></td> <td></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> <td></td> </tr> <tr> <td>Phase 3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="background-color: #cccccc;"></td> </tr> </tbody> </table>	Month	1	2	3	4	5	6	7	8	Phase 1									Phase 2									Phase 3								
Month	1	2	3	4	5	6	7	8																													
Phase 1																																					
Phase 2																																					
Phase 3																																					
Project Deliverables:	<ul style="list-style-type: none"> • Analysis report • Enterprise Business Architecture document • Enterprise Organization Architecture document • Enterprise Information Architecture document • Evaluation report 																																				
Project organization:	<ul style="list-style-type: none"> • Supervisor at TU Delft: Prof. J.L.G. Dietz • Supervisors at AF-KL Cargo: Hans Zwitzer • Project executor: Andrew Go 																																				

Other points of attention:	<ul style="list-style-type: none"> • In order to assure a certain level of quality the project should be reviewed regularly. These reviews should also ensure that the results of the project are of practical use. • The extensive amount of information that has been collected in the first phase might lead to a delay of the start of the second phase. • No previous attempts of developing such an Enterprise Architecture are available, which means that the principles created in the second phase don't have a reference with which they can be checked. This could lead to a delay of the start of the third phase. • Because of time constraints, it is not likely that all activities described in the final phase will be carried out. At least one activity should be done in order to provide feedback on the developed Enterprise Architecture. • In general the dependencies in this project can be divided into internal and external dependencies: <ul style="list-style-type: none"> • Internal <ul style="list-style-type: none"> ○ Availability of project supervisor Hans Zwitzer (Air France-KLM) ○ Availability of project supervisor professor Jan Dietz (Delft University of Technology) • External <ul style="list-style-type: none"> ○ Availability of persons at Air France-KLM Cargo for the necessary interviews ○ Accessability of relevant AF-KL Cargo documents
----------------------------	--