1 Questions

Stakeholder	**1. State your stakeholder role. List the set of concerns you have that pertain to the architecture whose AD is being reviewed.**
EU Claim	Privacy of the users is guaranteed. Airline should handle situation appropriate. Transparancy is important, within the system, no airline should have more influence than another.
AirFrance-KLM	Be able to get in contact with the user. Have a reporting tool to see how the airline is doing. Enter flight information to combine with the rating. Other concerns are: costs and customer satisfaction.
Dutch Government	Representative of the Dutch government. Privacy and GreenIT are the concerns I have in this project.
Initiator	b. I am the initiator of this project. I want the project to be successful (become the nr1 site), profitable and online quickly. My main concern is the overall functionality of the system.

Stakeholder	**2. Find and record all places in the AD where your stakeholder role is listed as being covered.**
EU Claim	There is no list that the concerns are being covered.
AirFrance-KLM	There is no list that the concerns are being covered.
Dutch Government	Appendix A, p16, 1. Stakeholders, Stakeholder 3: Philipp Darkow.
Initiator	Appendix A, p16, 1. Stakeholders, Stakeholder 1: Peter Klijn.

Stakeholder	**3. Find and record all places in the AD where your concerns are listed as being addressed.**
EU Claim	Page 17: R1 Page 19: Q4, Q5
AirFrance-KLM	Page 16: F2 Page 18: M3 Functional Requirements: 5, 8, 9 Page 19: Q1, Q2, Q3
Dutch Government	Ch1, p6, GreenIT [R2] Appendix A, p17, R2
Initiator	Ch1, p6, Vendor lock-in [M2] Appendix A, p16, F1 Appendix A, p17, G1 Appendix A, p17/18, M1 Appendix A, p18, M2

Stakeholder	**6. Record all concerns you have that are not listed as being covered in either the AD or any framework being used or that are listed in an unclear fashion. For each, state the impact of this omission or misunderstanding on project success.**
EU Claim	Privacy/security concerns are clearly stated in the document. Transparency can be found at Q4. Privacy not entirely if the admin can see al the data (not clear what the admin can / cannot do).
AirFrance-KLM	Everything is stated in the document.
Dutch Government	Privacy: system breaking. If the user's privacy cant be guaranteed within the system, system development has to be halted till it does. In addition, by law user privacy has to be guaranteed unless the user agrees to sharing his information with people other than FlyWithUs.
Initiator	Nr 1 site: would be great to become the number one site but this does not impact the success of the project. Profit: the project has to be able to be profitable. If it is not, the project will fail. (do something competitors do not do?) Time till Deployment: the earlier the better but this does not prevent the project from succeeding.

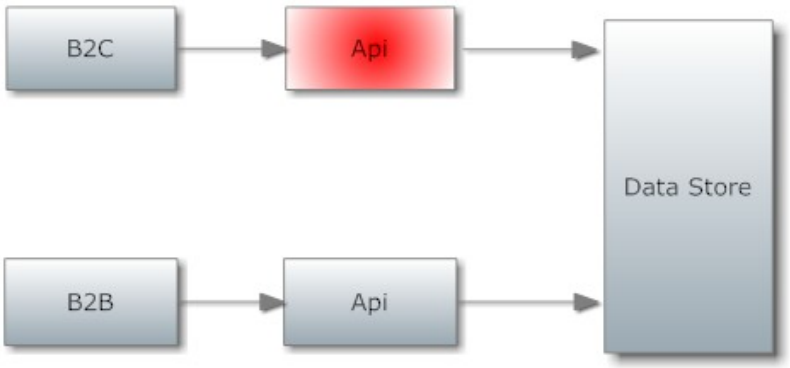
Stakeholder	**7. For each of your concerns as a stakeholder, find and record the places in the AD where that concern is addressed (not just listed). Explain why you do or do not believe that the concern will be satisfied by the architecture.**
EU Claim	Privacy: Adressed on page 10 at Airline Rating Service Database on page 25 at seperate users table. This concerns will probably be satisfied by the architecture. The user database will be protected and located under dutch law. Transparency: It is touched on page 15 at 'Filter and Store' and at 'Extract and Apply'. I am convinced it will be in the architecture but not in a very detailed way.
AirFrance-KLM	Usability: Page 6, "fast and easy to query" ; page 6: performance ; page 8 B2C application ; page 10: Airline Rating Service database ; Section 2.2; page 18; functional requirements; page 19: Quality attribute Q2. Since it is covered on a lot of difference places it will most probably be covered by the architecture. Customer contact: Mentioned on page 19 and in the requirements, not convinced it will be in the architecture because that's the only mention found. Cost: Page 4: vendor locking ; Page 6 Vendor locking ; It is not mentioned a lot, it probably isn't in the architecture but I'm not sure it should be. Cost more depends on what system/software you use instead of how the architecture looks (e.g. hadoop instead of storm). It could have been mentioned as a tradeoff for modifiability.
Dutch Government	GreenIT: Ch1, p6, GreenIT [R2] I do not believe this is properly addressed because it is describing what GreenIT is without describing how these aspects are covered in the system. In addition, it does not give any grounded argumentation or facts for the choice of using a non-relational database. It seems to mostly rely on guesswork and a gut-feeling.
Initiator	Vendor lock-in: Ch1, p6, Vendor lock-in [M2] While they say that by using an own implementation we prevent vendor lock-in, there is no word on how expensive this would be. Is this cheaper than using Hadoop? Is Hadoop really a vendor lock-in (ie. No alternatives or replacements possible once we use Hadoop?). What happened with the Other distributed and Undistributed options?

Stakeholder	**8. Find and record the place in the AD that prioritizes the concerns. Explain why you do or do not agree with it.**
All	There is no prioritization of the concerns. Some are mentioned in a way that they "must" or "should" be implemented, which may indicate a prioritization. The document in general lays a high focus on how the data is handled which gives a priority to performance and scalability. It is quite logical they lay a focus on this point because it is one of the biggest concerns overal and it may have a large effect on the architecture.

Stakeholder	**9. Record important stakeholders that you are aware of that are not listed and whose concerns are not represented in the AD.**
All	All the stakeholders are listed.

Stakeholder	**10. State how you know that the architecture satisfies the concerns of the missing stakeholders and where this information can be found in the AD.**
All	There are no missing stakeholders.

2 Scenarios

<table>
<tr><td>Scenario</td><td>B2B - B2C decoupling</td></tr>
<tr><td>Attribute</td><td>Availability</td></tr>
<tr><td>Environment</td><td>Normal Operations</td></tr>
<tr><td>Stimulus</td><td>B2B or B2C failure</td></tr>
<tr><td>Response</td><td>Failure of either one does not influence the other.</td></tr>
<tr><td></td><td>
<table>
<tr><th>Architectural Decision</th><th>Sensitivity</th><th>Tradeoff</th><th>Risk</th><th>Non-risk</th></tr>
<tr><td>Decoupling</td><td>S1</td><td>T1</td><td></td><td></td></tr>
<tr><td>Different API</td><td>S1</td><td>T2</td><td></td><td>N1</td></tr>
</table>
T1: performance B2B vs performance B2C.
T2: redundant code (modifiability/maintainability) vs availability.
N1: Keeping the API as one still creates one point of failure for both B2B and B2C.
S1: If they are in the same server and the server goes down, B2C and B2B will both go down.
</td></tr>
<tr><td>Reasoning</td><td>Decoupling ensures, together with the different API, that if one the B2B or B2C module goes down, the other won't.</td></tr>
<tr><td>Architecture Diagram</td><td>The red API crashes.


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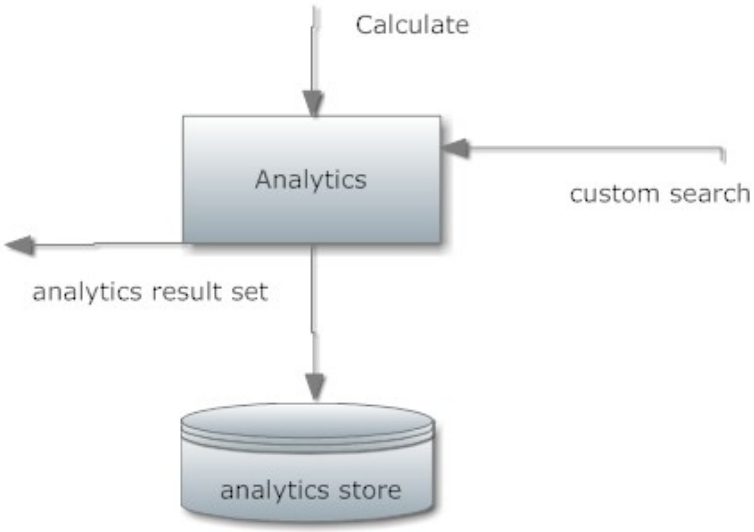
</table>

<table>
<tr><td>Scenario</td><td>Peak load on the analytics module</td></tr>
<tr><td>Attribute</td><td>Performance</td></tr>
<tr><td>Environment</td><td>Normal Operations</td></tr>
<tr><td>Stimulus</td><td>Recalculating ratings/reviews</td></tr>
<tr><td>Response</td><td>B2B latency ¡10 sec.</td></tr>
<tr><td></td><td>
<table>
<tr><th>Architectural Decision</th><th>Sensitivity</th><th>Tradeoff</th><th>Risk</th><th>Non-risk</th></tr>
<tr><td>Recalculate 1/2 times a day
(Implicit)</td><td></td><td></td><td>R1</td><td></td></tr>
<tr><td>B2B accesses analytics directly
(Implicit)</td><td></td><td>T1</td><td></td><td></td></tr>
</table>
R1: Creates peakload, leads to bad availability.
T1: Custom searches but there is a direct connect so if it fails of peak load, it is not available; Custom search vs peak load
</td></tr>
<tr><td>Reasoning</td><td>Recalculating creates a massive peakload which may therefore cause an overload which may lead to an undesirable response time. When the B2B performs a custom search, it will not receive an answer in time.</td></tr>
<tr><td>Architecture Diagram</td><td>Analytics module overloaded.


</td></tr>
</table>

<table>
<tr><td>Scenario</td><td>Review Privacy</td></tr>
<tr><td>Attribute</td><td>Privacy</td></tr>
<tr><td>Environment</td><td>Normal Operations</td></tr>
<tr><td>Stimulus</td><td>User writes a review</td></tr>
<tr><td>Response</td><td>Anonymous review</td></tr>
<tr><td></td><td>
<table>
<tr><th>Architectural Decision</th><th>Sensitivity</th><th>Tradeoff</th><th>Risk</th><th>Non-risk</th></tr>
<tr><td>Logged In</td><td></td><td></td><td>R1</td><td></td></tr>
</table>
R1: Review is not anonymous.
</td></tr>
<tr><td>Reasoning</td><td>No where in the document is stated that a review will be shown anonymous or how anonimity of reviews is guaranteed.</td></tr>
<tr><td>Architecture Diagram</td><td>Anyone can see review details.
 
</td></tr>
</table>

<table>
<tr><td>Scenario</td><td>Big Data</td></tr>
<tr><td>Attribute</td><td>Performance, Availability</td></tr>
<tr><td>Environment</td><td>Normal Operations</td></tr>
<tr><td>Stimulus</td><td>Big Data input</td></tr>
<tr><td>Response</td><td>Handle all input without any loss of data.</td></tr>
<tr><td></td><td>
<table>
<tr><th>Architectural Decision</th><th>Sensitivity</th><th>Tradeoff</th><th>Risk</th><th>Non-risk</th></tr>
<tr><td>ETL Adapters</td><td></td><td></td><td></td><td>N1</td></tr>
<tr><td>ETL Approaches</td><td>S1</td><td></td><td></td><td></td></tr>
<tr><td>Pipeline Structure</td><td></td><td></td><td>R1</td><td></td></tr>
</table>
S1: If it is Big data the system can not handle the input and a choke point will occur in the pipe model.
N1: Easily extendable, interdependent on eachother.
R1: Filter and store, Extract and Apply handle all reviews sequentially.
</td></tr>
<tr><td>Reasoning</td><td>Because of the pipeline structure and the assumption the data is not regarded as big data the system won't be able to process more external sources when they become big data.</td></tr>
<tr><td>Architecture Diagram</td><td>¡INSERT GRAPHIC¿</td></tr>
</table>

Stakeholder	**¡question¿**
EU Claim	¡answer¿
AirFrance-KLM	¡answer¿
Dutch Government	¡answer¿
Initiator	¡answer¿

Scenario	¡text¿
Attribute	¡text¿
Environment	¡text¿
Stimulus	¡text¿
Response	¡text¿
	Architectural Decision | **Sensitivity** | **Tradeoff** | **Risk** | **Non-risk** ¡text¿
Reasoning	¡text¿
Architecture Diagram	¡text¿