

 *Database Answers*



Smartphones and
Key Performance Indicators
for Airport Management

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Smartphones and Key Performance Indicators (KPIs) | 2

1.What ?.....	3
2.Why ?.....	3
3.How ?.....	3
4.KPIs are Everywhere	3
5.Smartphones are also Everywhere.....	4
6.Action Required.....	4
7.Behind the Scenes.....	5
8.Data Architecture	6
9.Data Models	6
10.Conclusion	7

Smartphones and Key Performance Indicators (KPIs) | 3

1.What ?

This is a note describing how Alert apps and Key Performance Indicators (KPIs) can be used to notify senior management about situations requiring attention.

We use Airport Management as an example but, of course, the same principles apply wherever dynamic situations need to be monitored and Alerts sent to Smartphones for urgent response.

2.Why ?

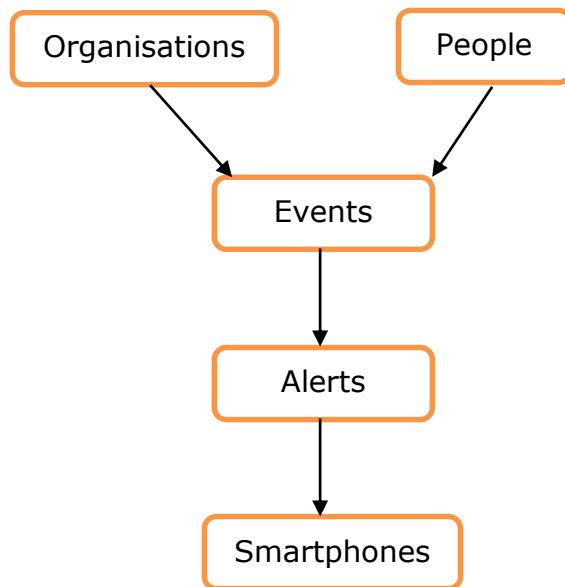
The reason is that apps offer a new, unique and very powerful technique to meet a common business requirement in a new and very effective way.

3.How ?

We combine apps with state-of-the-art Data Management techniques to provide a unique solution.

4.KPIs are Everywhere

The world includes Organisations and People with Events that can be monitored using a combination of Smartphones, apps and up-to-date Data Management techniques.



Smartphones and Key Performance Indicators (KPIs) |4

5. Smartphones are also Everywhere

Every commercial organisation has Customers and sells Products and Services

We can use Smartphones with KPIs to keep us aware of situations that require our urgent attention.

The final Step is to set up Alerts to monitor 'Spikes' and tell us whenever a business situation occurs that we need to respond to.

This might, for example, involve a value for a Sales figure becoming too large or too small.



6. Action Required

Here we see a golfer being interrupted with an alert about a situation requiring his urgent attention.



We can draft any Alert Message that we like and personalise it as we wish :-

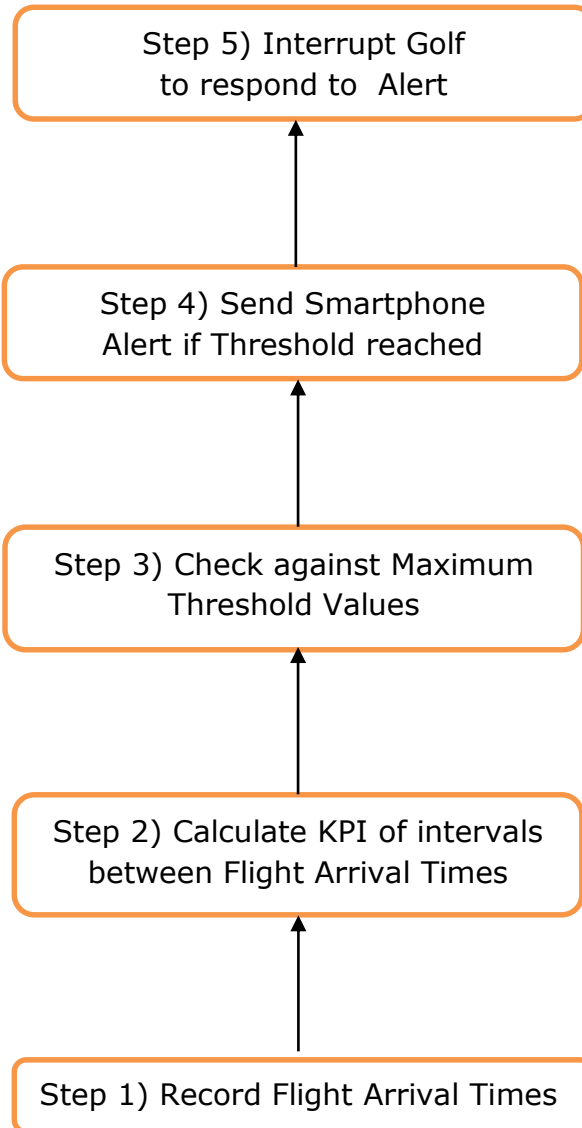


Smartphones and Key Performance Indicators (KPIs) | 5

7. Behind the Scenes

We set up Alerts to let us know whenever a business situation occurs that we need to respond to.

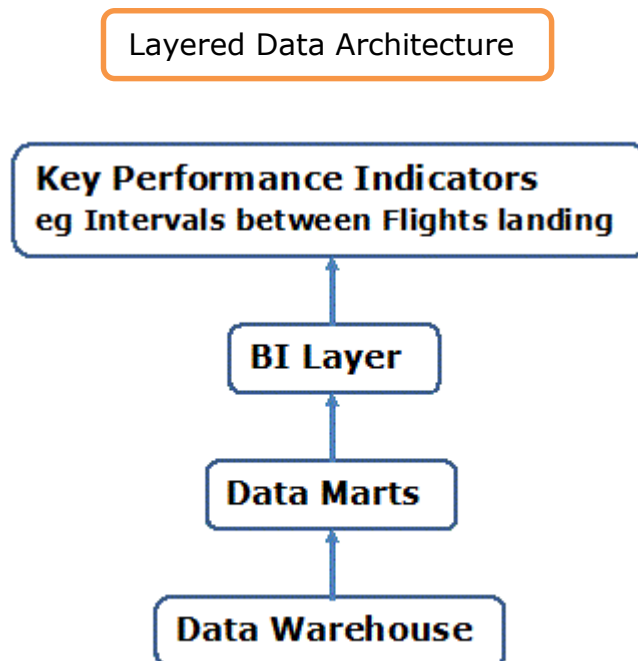
For monitoring Flight Arrival Times here are the Steps involved.



Smartphones and Key Performance Indicators (KPIs) | 6

8.Data Architecture

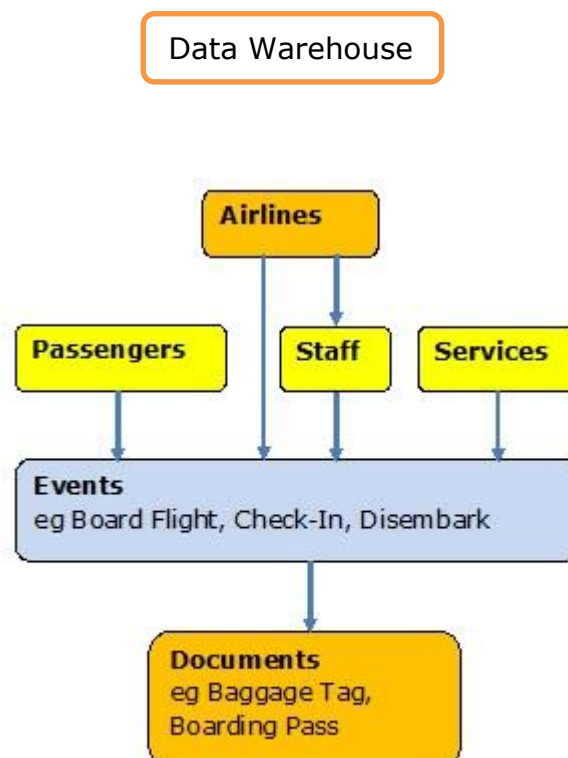
This shows that the Data Warehouse populates the Data Marts and finally the BI Layer and KPIs are produced.



9.Data Models

9.1Data Warehouse

This shows the Conceptual Data Model for the Data Warehouse.

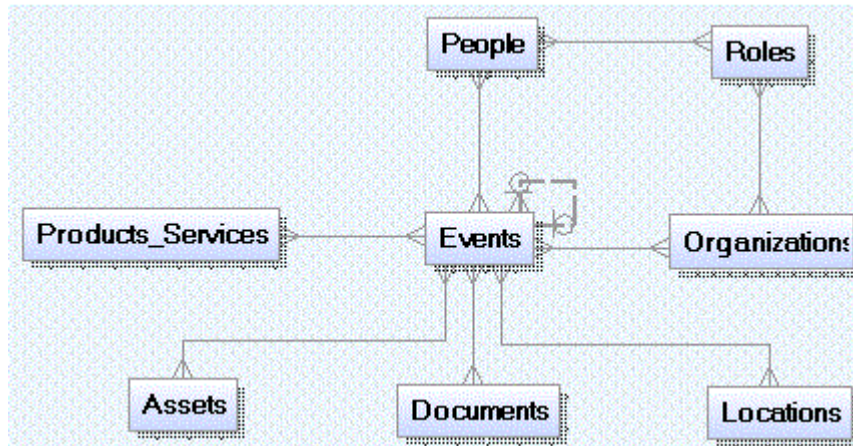


Smartphones and Key Performance Indicators (KPIs) | 7

9.2 Logical Data Model

This shows the Foundation for the Data Warehouse, which is our Canonical Data Model that can be found on this page :-

- http://www.databaseanswers.org/data_models/canonical_data_models/index.htm



10. Conclusion

If you are interested in learning about the Data Models that support the app, you can use this link to the page on our Database Answers Web Site that shows the details :-

- http://www.databaseanswers.org/data_models/bmews_design_pattern_1/data_mart_3.htm

If you have any questions, feel free to email me as dba_requests (at) barryw.org.