# Database Answers



# Barry's Secret Sauce

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## 1. Ingredients

Americans sometimes refer to a 'Secret Sauce' by which they mean a secret combination of ingredients that make a product special and unique. A simple example is Coca-Cola. I have defined my own 'Secret Sauce', based on a unique combination of technical features that I have found useful over the years. The foundation is the Model-View-Controller (M-V-C) which is the most commonly used framework for Internet Applications.

I have designed a Data Model for M-V-C:

• <a href="http://www.databaseanswers.org/data">http://www.databaseanswers.org/data</a> <a href="mailto:models/mvc">model</a> <a href="mailto:view controller/index.htm">view controller/index.htm</a>

Our Secret Sauce combine these fourteen powerful ingredient that provides us with a unique competitive edge:

- 1 CRUD Services (Create, Read, Update, Delete)
- 2 Design Patterns
- 3 Event Driven Approach
- 4 Generic Solutions
- 5 Industry-specific Service Delivery Platforms (Banking, etc)
- 6 Inheritance
- 7 Layered Data Architectures
- 8 Mapping (eg Passengers to Customers)
- 9 Model-View-Controller (MVC)
- 10 Platform Concept (eg Banking, Customer-Services, Logistics)
- 11 Reporting Toolkit (Patterns of Generic Reports and KPIs)
- 12 SOA Facilities
- 13 Triggers (for KPIs)
- 14 User-Defined Hierarchies

Validation will be achieved by building a Proof-of-Concept (PoC).

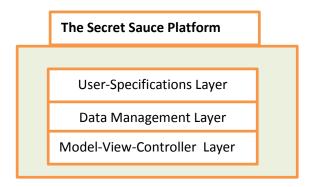
The PoC will include two User Scenarios :-

- 1. Enter one record to generate an Alert for a KPI on a Smartphone.
- 2. Drill-down from the KPI to the Data Marts and Data Warehouse.

# 2. Building the Secret Sauce Platform

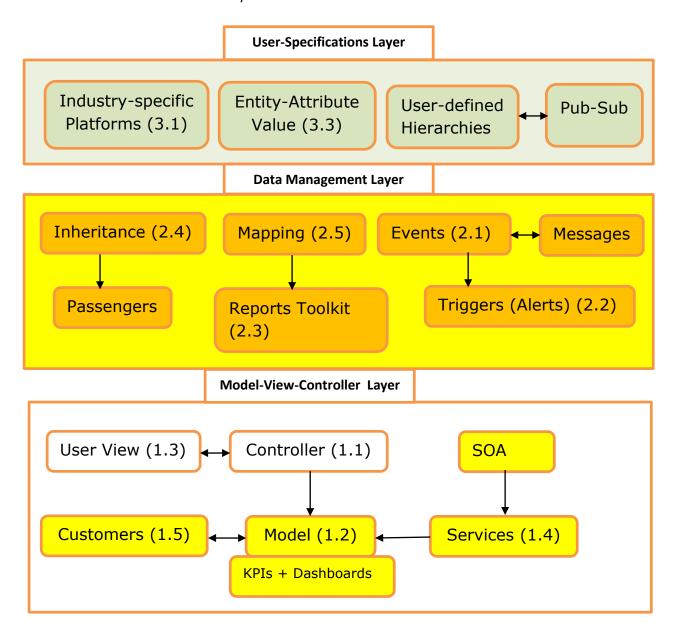
#### 2.1 Layered Data Architecture

There are three Layers in the Secret Sauce Platform :-



### 2.2 Components in the Architecture

Here we show details of the three Layers :-



# 3. Additional Components

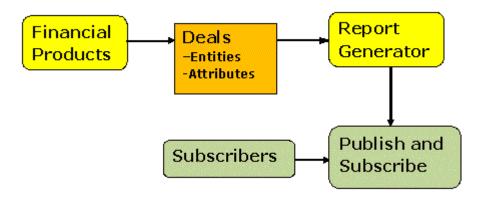
### 3.1 Financial Reporting Platform

This Component is included in the Reports Toolkit.

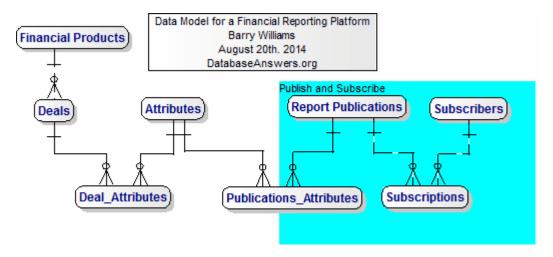
Here is the URL:-

• <a href="http://www.databaseanswers.org/data-models/financial-reporting-platform/index.htm">http://www.databaseanswers.org/data-models/financial-reporting-platform/index.htm</a>

And the Conceptual Model:-



#### And the Logical Model:-



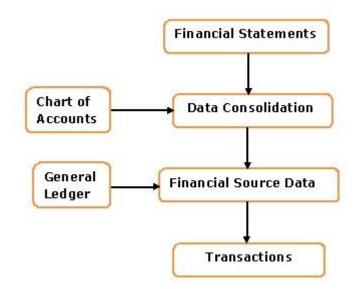
#### 3.2 Financial Statement Generator

This Component is also included in the Reports Toolkit.

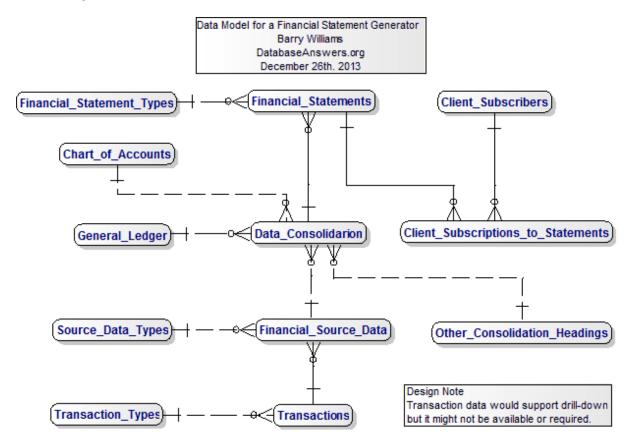
Here is the URL:-

• http://www.databaseanswers.org/data\_models/financial\_statement\_generator/index.htm

And the Conceptual Model:-



And the Logical Model:-

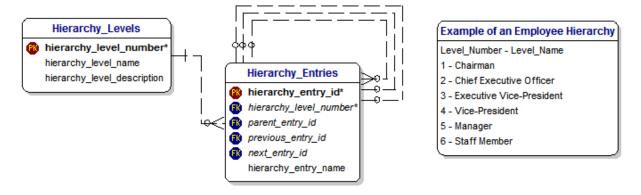


#### 3.3 User-Defined Hierarchy

Here is the URL:-

• <a href="http://www.databaseanswers.org/data">http://www.databaseanswers.org/data</a> models/user defined hierarchies/index.htm

And the Logical Model:-



#### **Example of Levels in a Product Hierarchy**

Level\_Number - Level\_Name

- 1 Category
- 2 Sub-Category
- 3 Sub-Sub-Category
- 4 Sub-Sub-Sub-Category
- 5 Etc

#### **Example of Levels in an Organization Hierarchy**

Level\_Number - Level\_Name

- 1 Enterprise
- 2 Company
- 3 Business Unit
- 4 Division
- 5 Department

#### 3.4 Financial Reporting Platform

Here is the URL:-

http://www.databaseanswers.org/data models/financial reporting platform/index.htm

And the Conceptual Model:-

