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9. Master Data Management (MDM)

9.0 Welcome

You are invited to follow developments on our Web Site :-

- <http://www.databaseanswers.org/index.htm>

You can also join our Database Answers Community

- <http://databaseanswers.ning.com/>

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9.1 Introduction

This Chapter will discuss MDM for CRM, Law Enforcement and Local Government.

9.1.1 What is this ?

MDM is the common abbreviation for Master Data Management.

Master Data is the Reference Data, such as standard codes for Countries, Currencies, Languages, Products and so on.

9.1.2 Why is it important ?

MDM is important. because it is part of establishing a 'Single View of the Truth'.

9.1.3 What will I Learn ?

In this Chapter you will learn how to establish MDM, both from a Data Management point of view and from an organisational point of view.

9.1.4 Best Practice

Best Practice for MDM establishes a "Single View of the Truth".

It identifies the Sources of Data and determines how the Sources are integrated and analyses matching of Reference Data, Products, Customers and so on.

9.2 MDM for CRM

This Section covers MDM for CRM.

During this short Tutorial, we have covered the following Topics :-

1. An Approach to MDM
2. Creating a Data Dictionary
3. Mapping from Sources to the Target MDM Data Model.
4. Reference Data

This Tutorial presents the Steps involved as Best Practice.

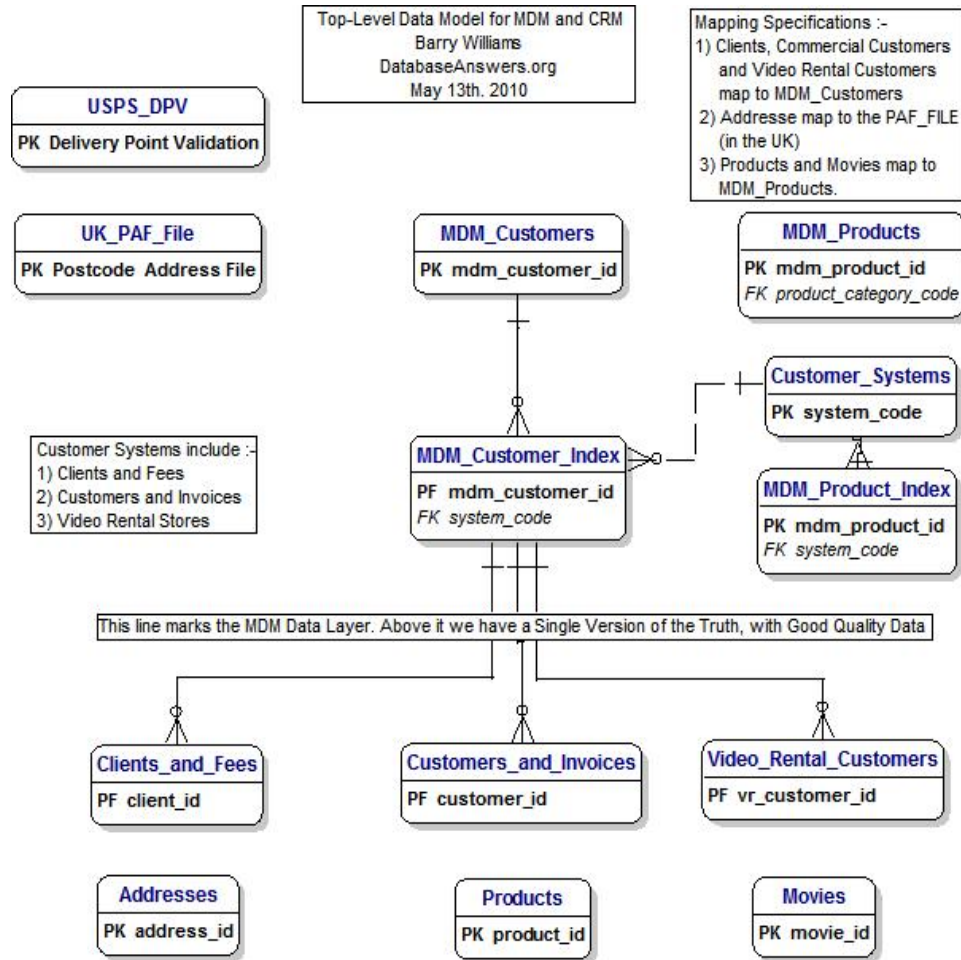
Topics covered in this Tutorial include Data Sources and Targets, mapping between them, Data Quality, Data Governance and Reference Data

These are the Steps in the Tutorial :-

1. Agree the Scope of the Project
2. Identify the Data Sources
3. Determine the Target
4. Specify the Mapping between Sources and Target.
5. Review Guidelines for managing Reference Data
6. Address the Issue of Data Quality
7. Ensure compliance with Data Governance
8. Check that the MDM Data Model can provide data for Performance Reports.

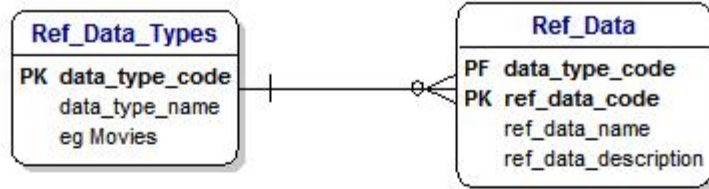
9.2.1 Top-Level CRM Data Model

This is the MDM CRM Data Model which is the Target for Data Migration.



9.2.2 Reference Data Model

Top-Level Data Model for MDM and CRM
 Barry Williams
 DatabaseAnswers.org
 May 9th. 2010

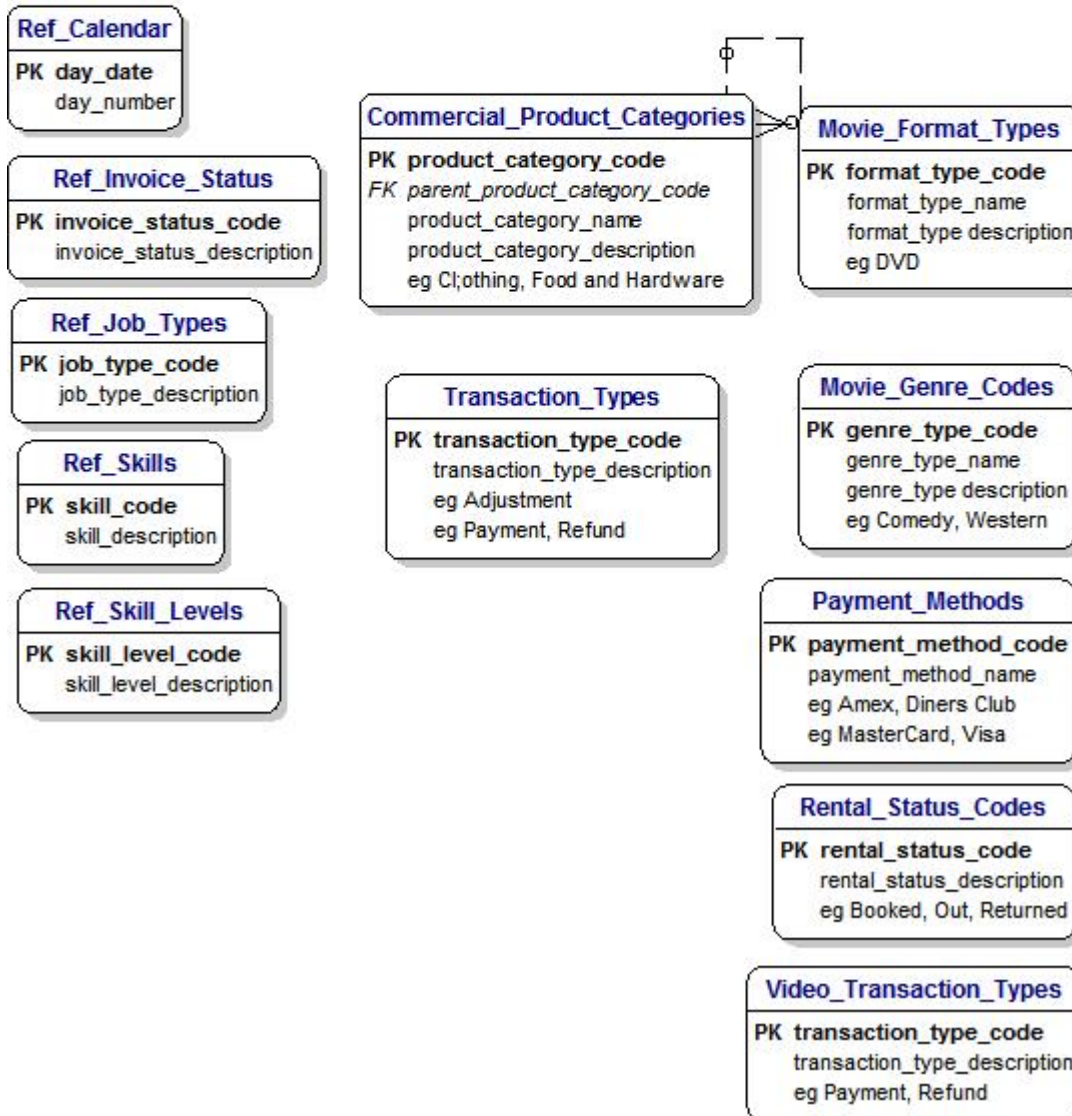


This line marks the MDM Data Layer. Above it we have a Single Version of the Truth, with Good Quality Data

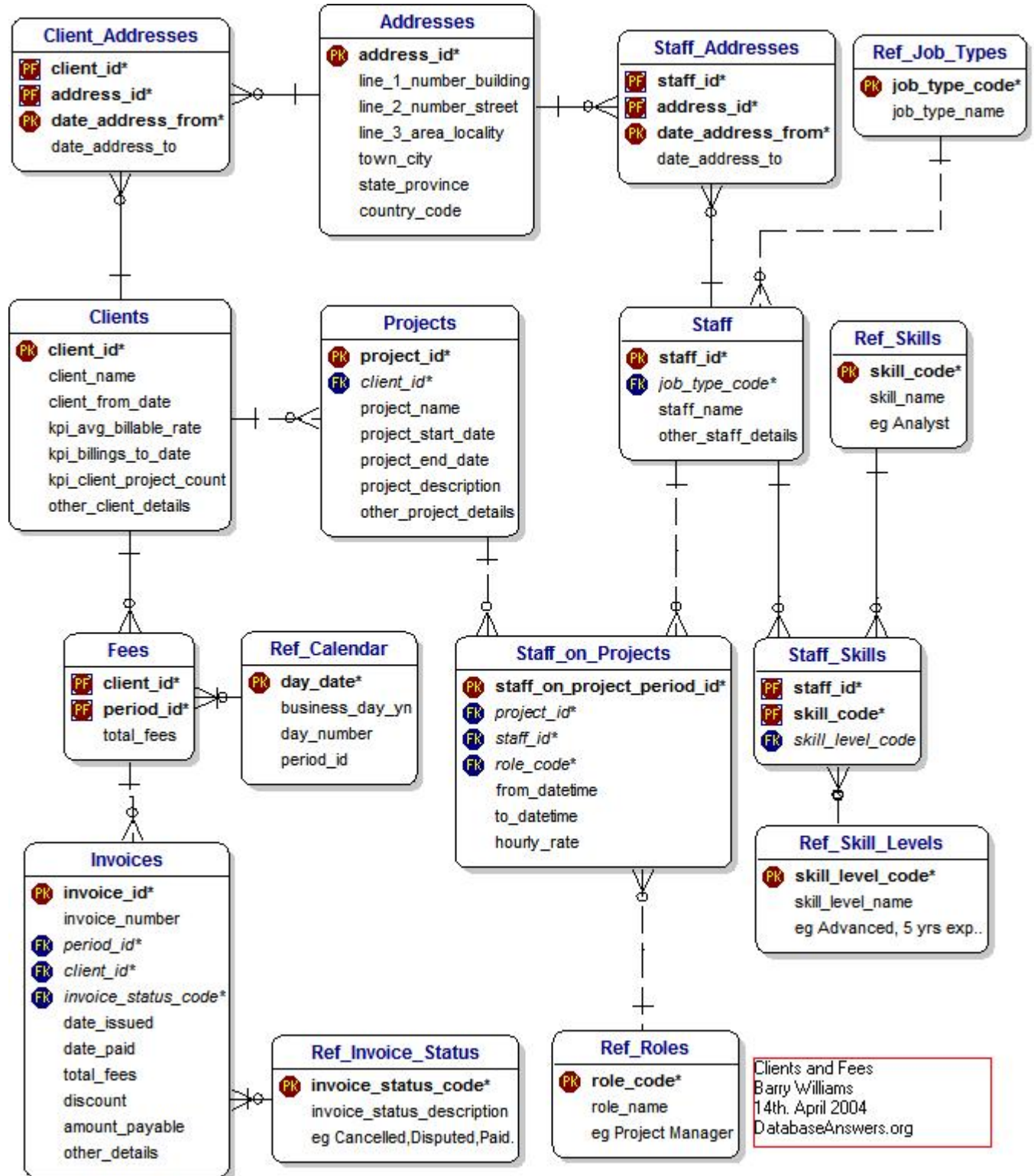
Ref Data for Clients and Fees

Ref Data for Customers and Invoices

Ref Data for Video Rentals



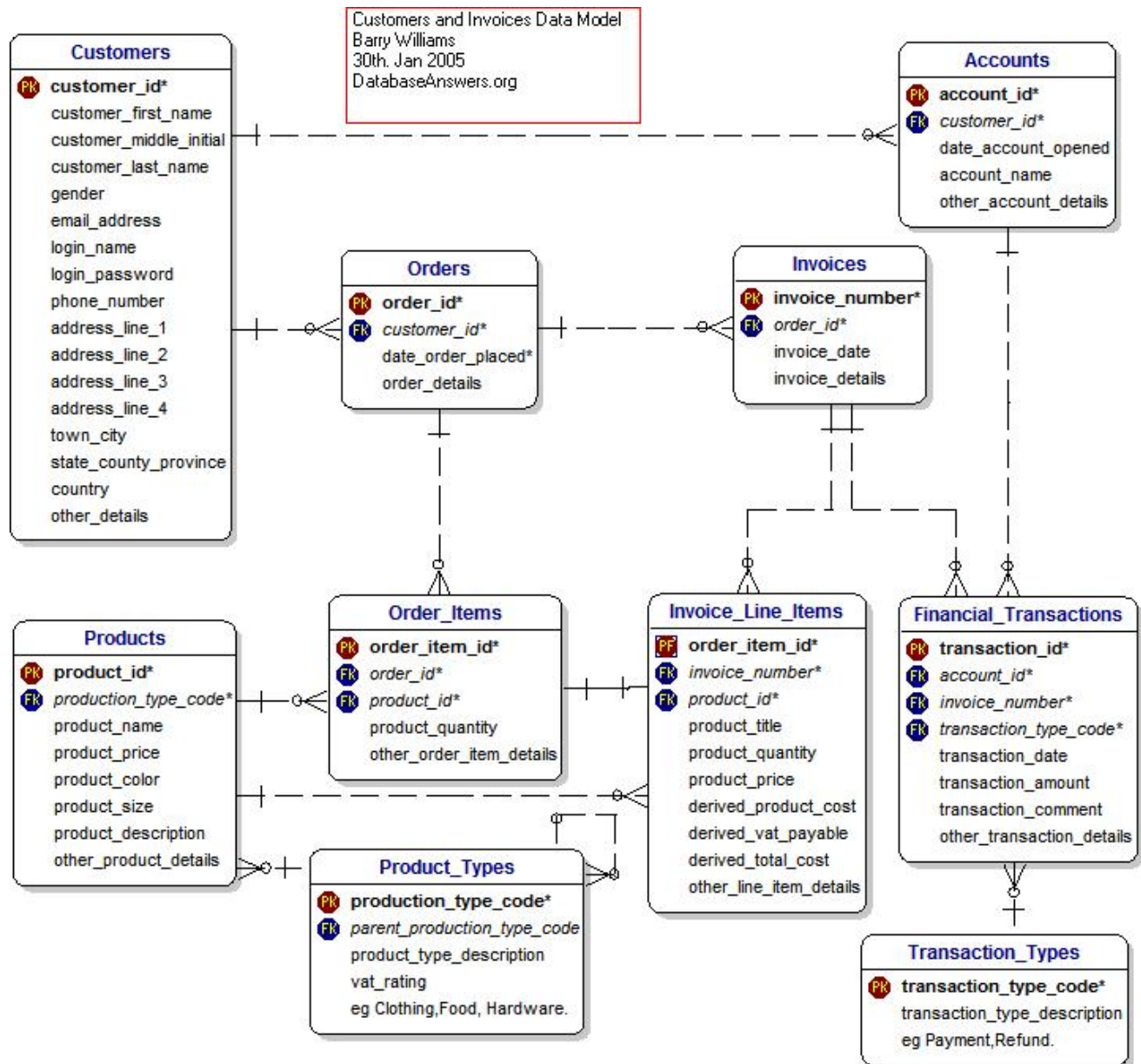
9.2.3 Clients and Fees



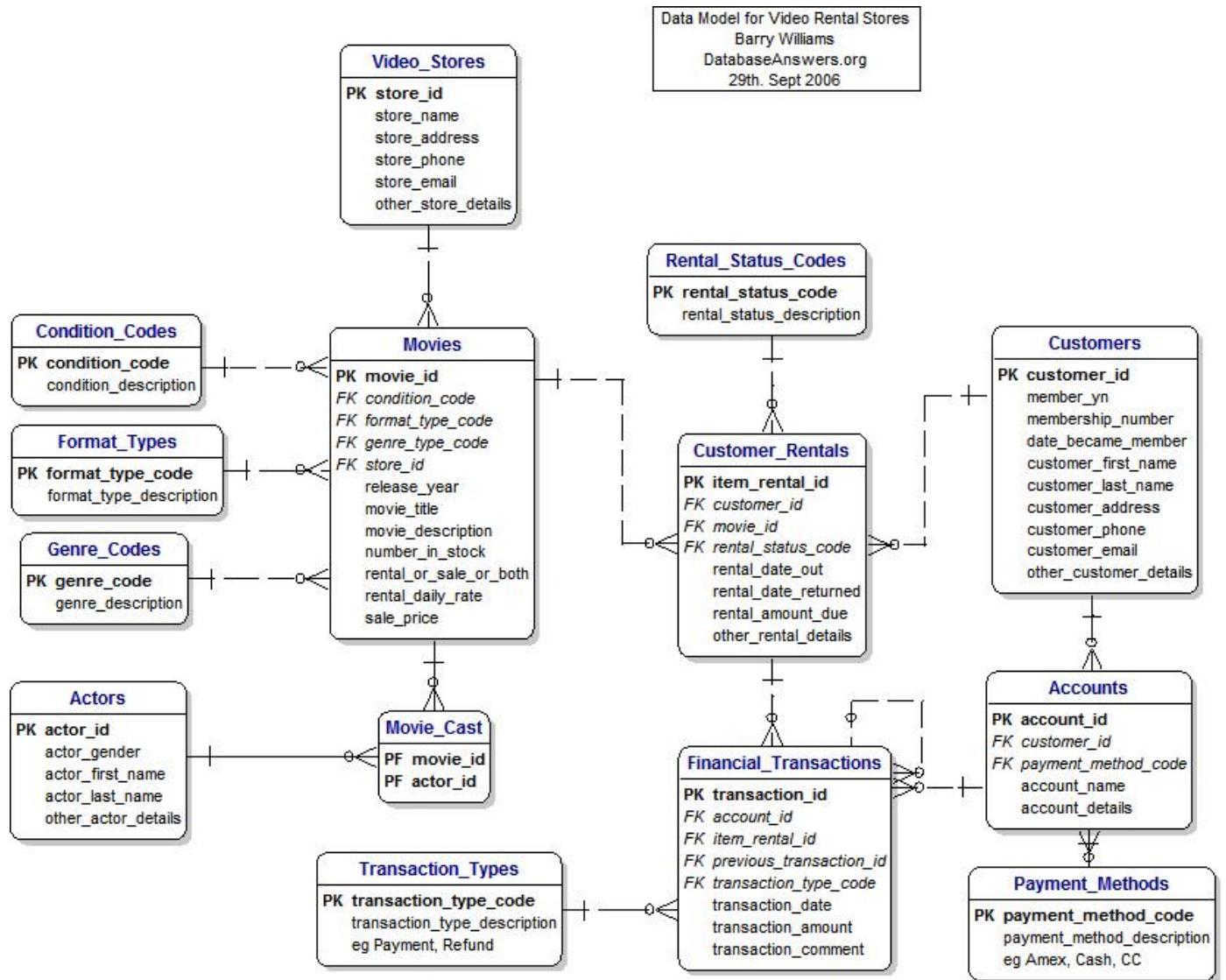
Clients and Fees
 Barry Williams
 14th. April 2004
 DatabaseAnswers.org

9.2.4 Customers and Invoices

This Model shows that Customers receive Invoices for Orders that they place.



9.2.5 Video Rental Stores



9.3 MDM for Law Enforcement

This Chapter covers **Master Data Management** for Law Enforcement

It presents the Steps involved as Best Practice.

Topics covered in this Tutorial include Data Sources and Targets, mapping between them, Data Quality, Data Governance and Reference Data

I hope you find this Tutorial interesting and helpful.

Please email me and let me know at barryw@databaseanswers.org.

These are the Steps in the Tutorial :-

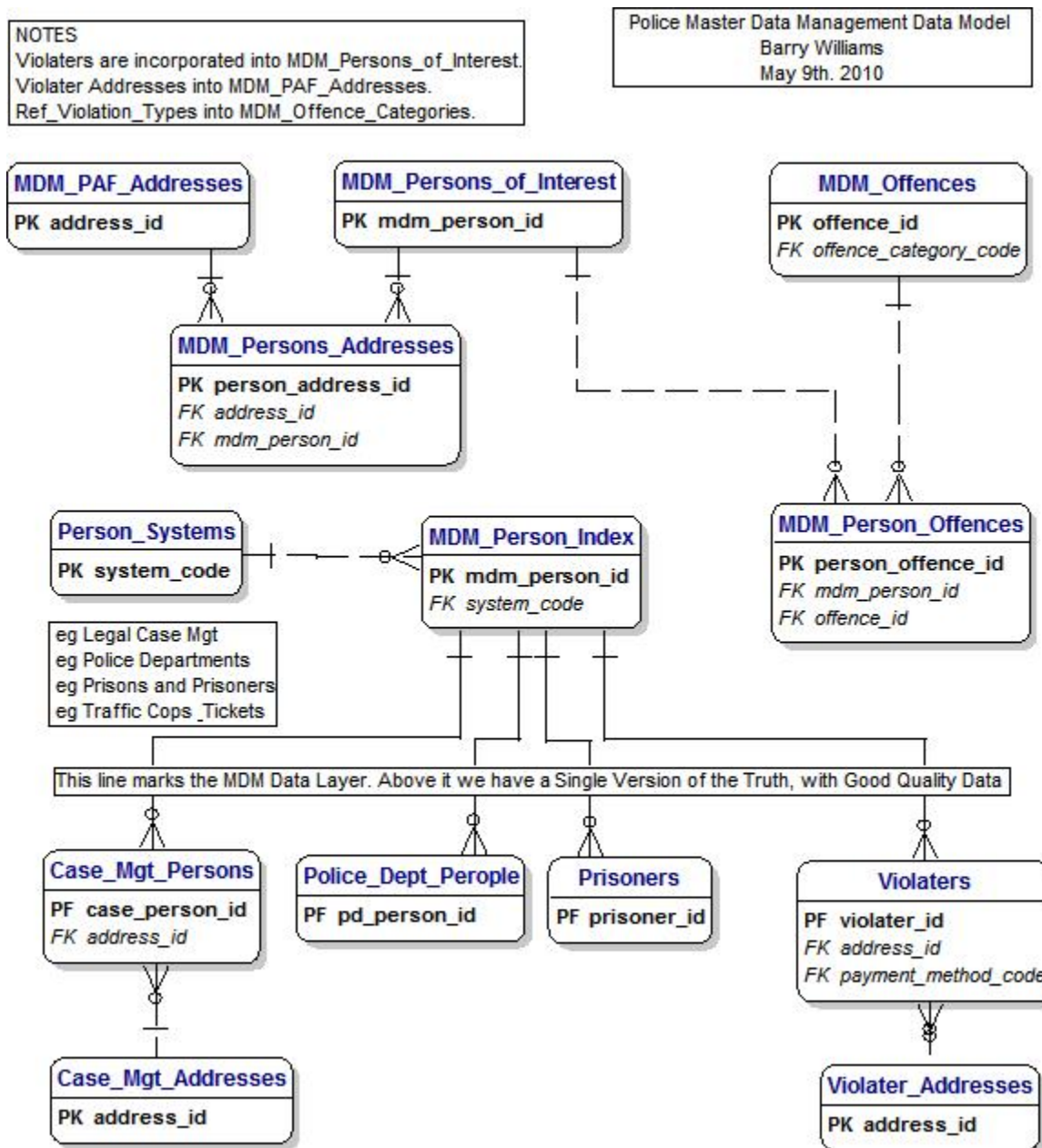
1. Agree the Scope of the Project
2. Identify the Data Sources
3. Determine the Target
4. Specificy the Mapping between Sources and Target.
5. Review Guidelines for managing Reference Data
6. Address the Issue of Data Quality
7. Ensure comliance with Data Governance
8. Check that the MDM Data Model can provide data for Police Information Reports and the National Intelligence Model.

The starting-point is a list of relevant Data Models for Law Enforcement.

9.3.1 Top-Level Police Data Model

This is the MDM Police Data Model which is the Target.

It shows how data from a number of sources is integrated into one Generic Master Data Management Model



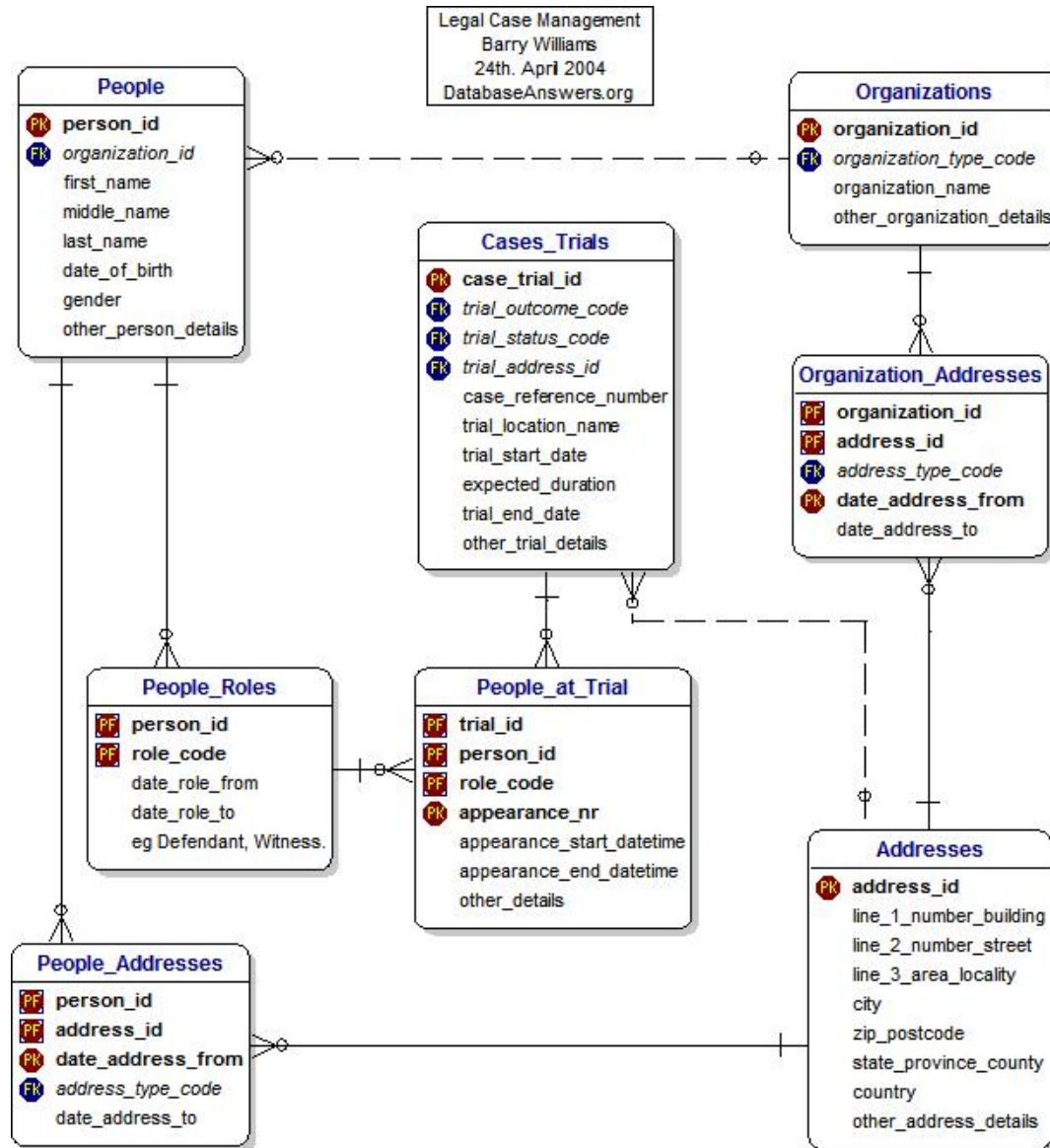
9.3.2 Reference Data

Each Data Source will have its own sets of Reference Data.

These have to be mapped to a common set of Data, which in turn is subject to corporate Data Governance.

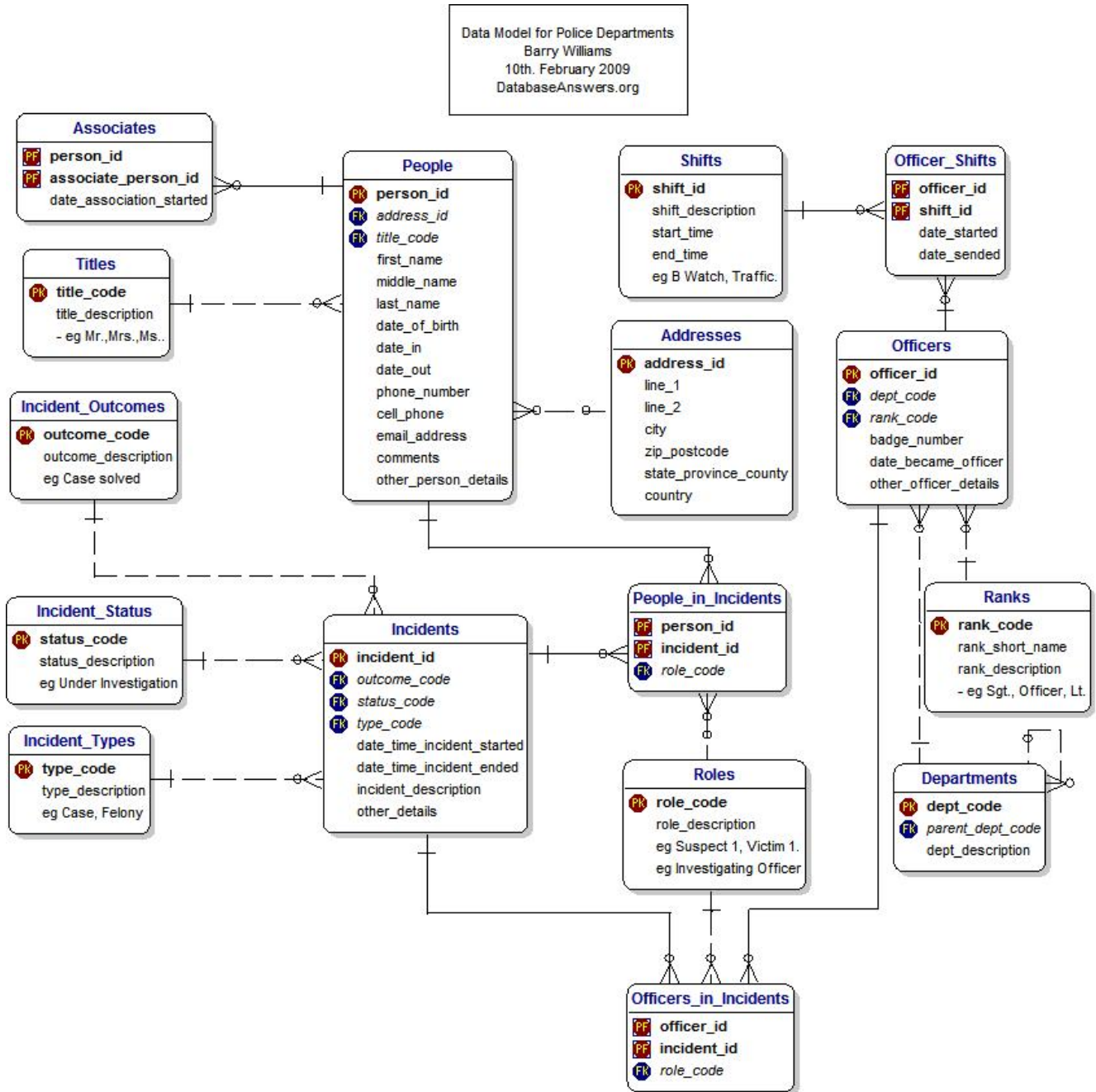
9.3.3 Case Management

This Model shows that Cases go to Trial where People are in attendance, playing specific Roles.



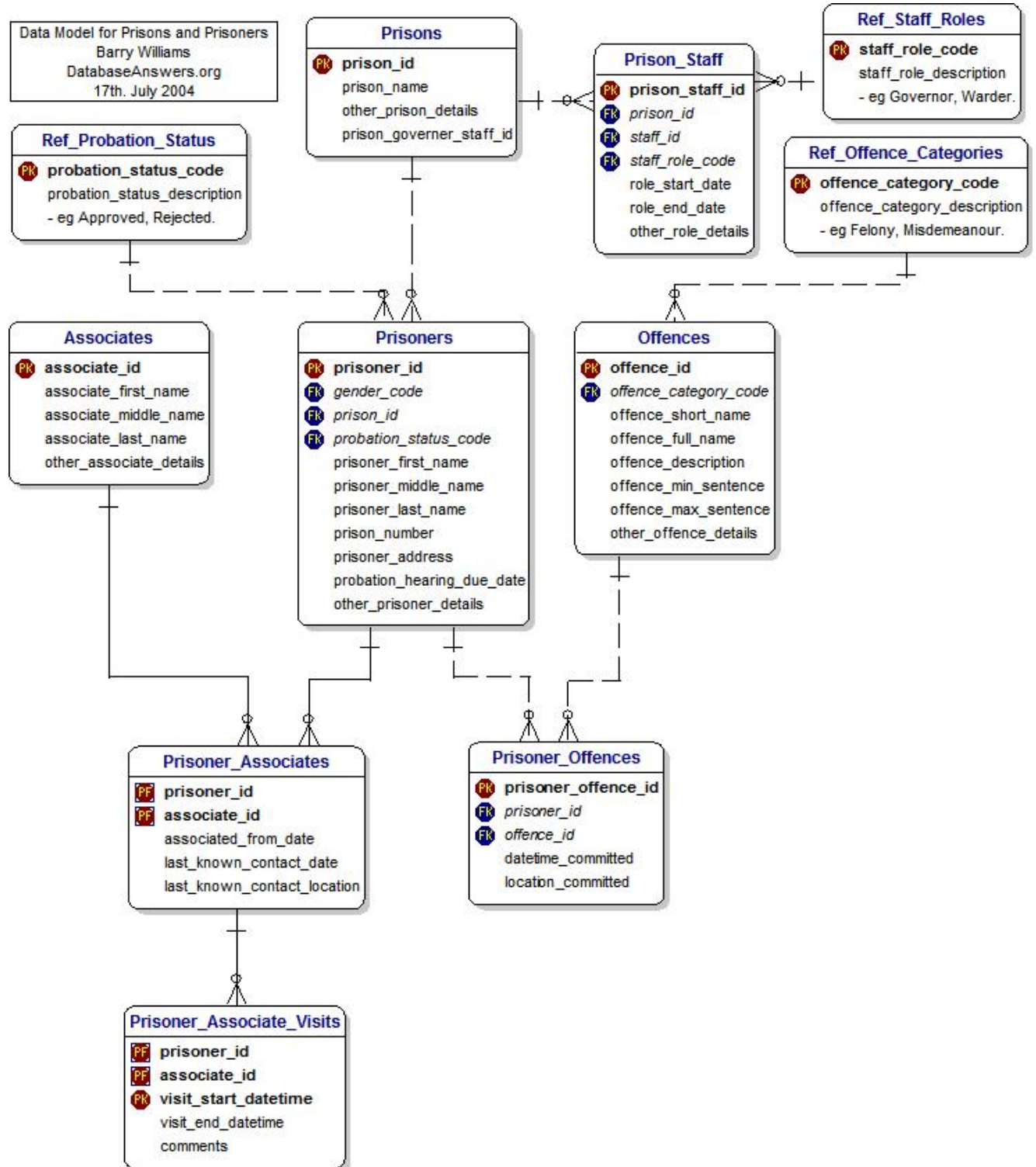
9.3.4 Police Departments

This Model shows that Incidents are central to a Police Department and People are involved in Incidents, playing specific Roles.



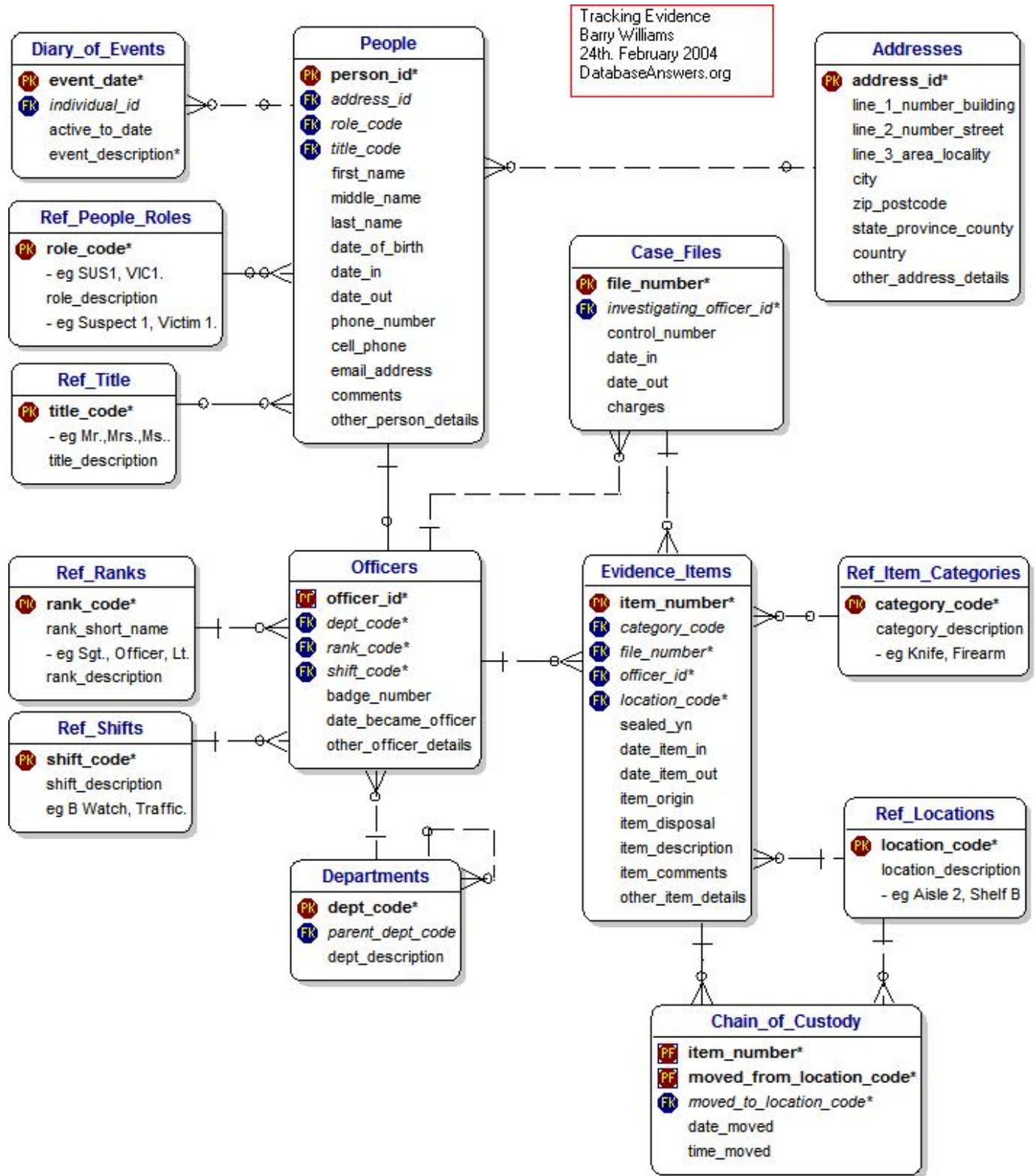
9.3.5 Prisons and Prisoners

This Model shows that Prisoners commit Offences and have Associates.



9.3.6 Tracking Evidence

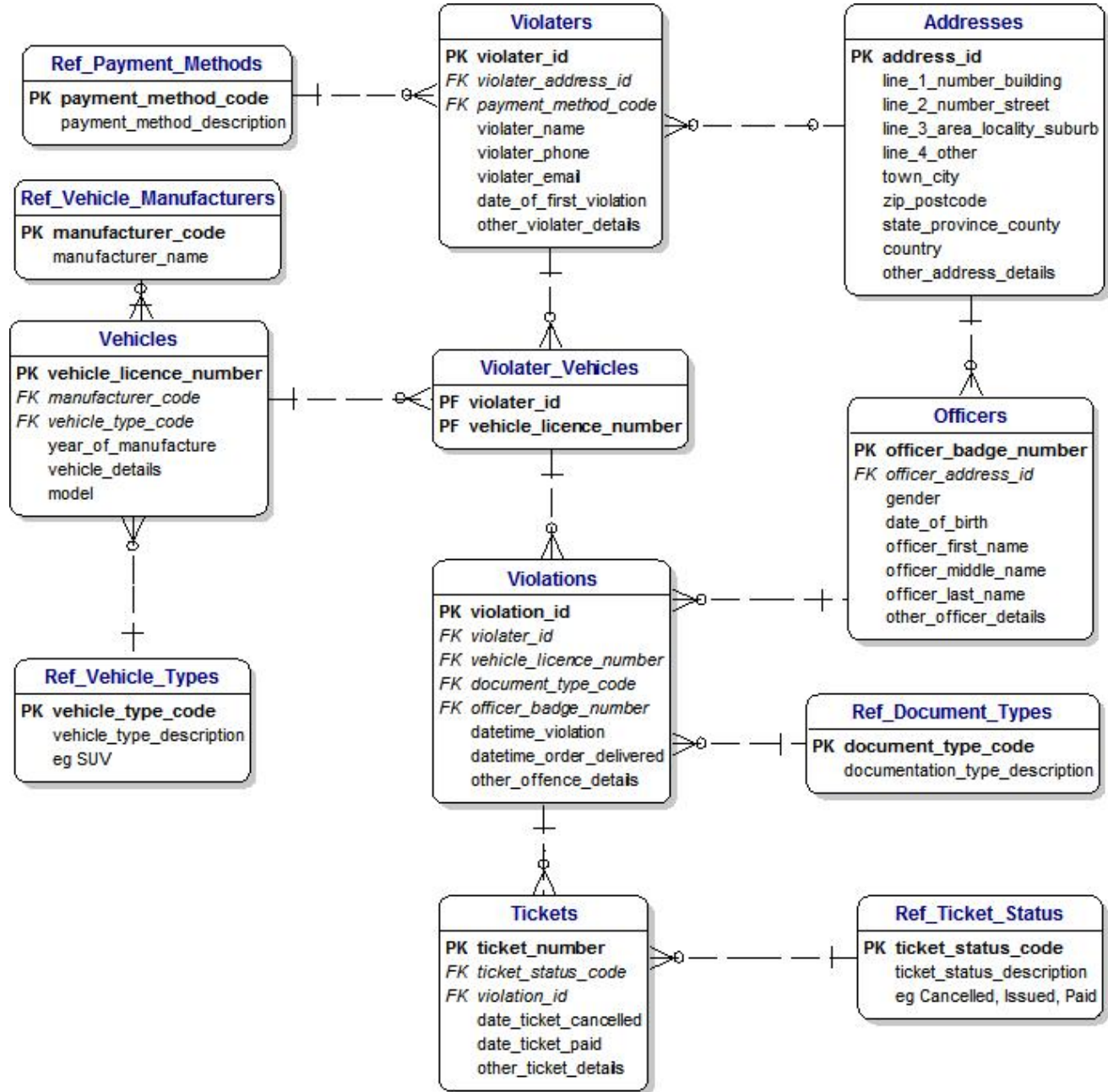
This Model shows that Officers track evidence for Cases and maintain a Chain of Custody.



9.3.7 Traffic Cops and Tickets

This Model shows that Traffic Cops, who are Officers, issue Tickets for Violations.

These Tickets are defined as specific types of Documents.



9.4 MDM for Local Government

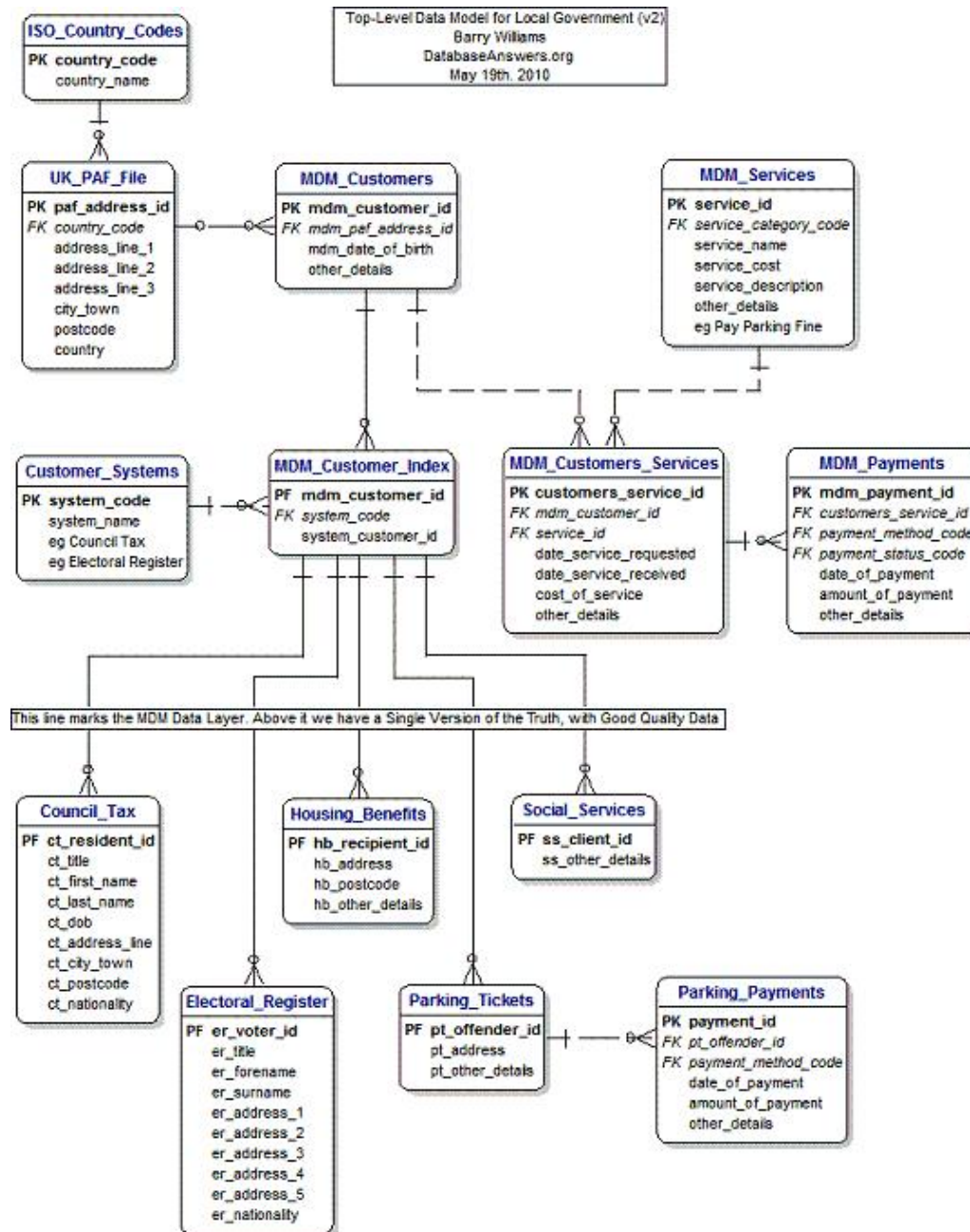
These are the Steps in the Best Practice :-

1. Agree the Scope of the Project
2. Identify the Data Sources
3. Determine the Target
4. Review Reference Data

9.4.1 Top-Level Data Model

This is the MDM Local Government Data Model which is the Target

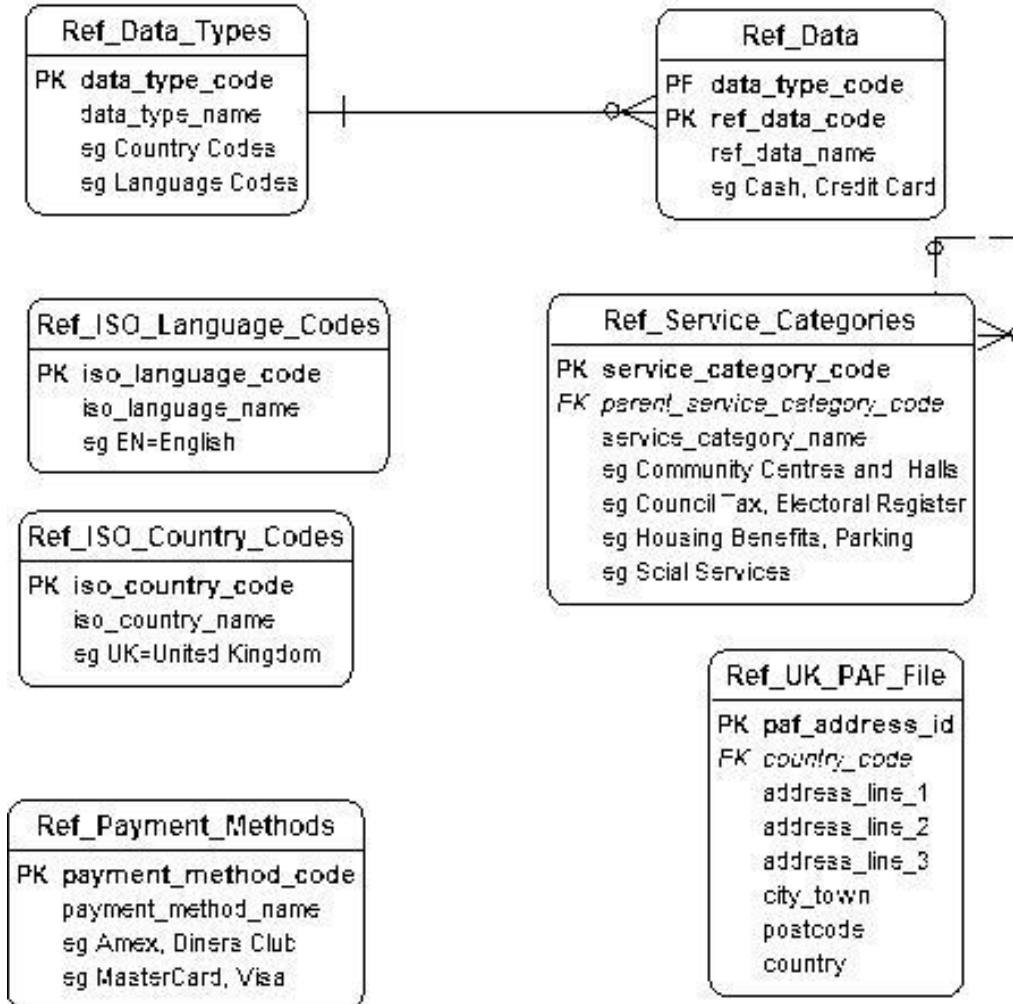
This shows how data from a number of sources is integrated into one Generic MDM Model.



9.4.2 Reference Data

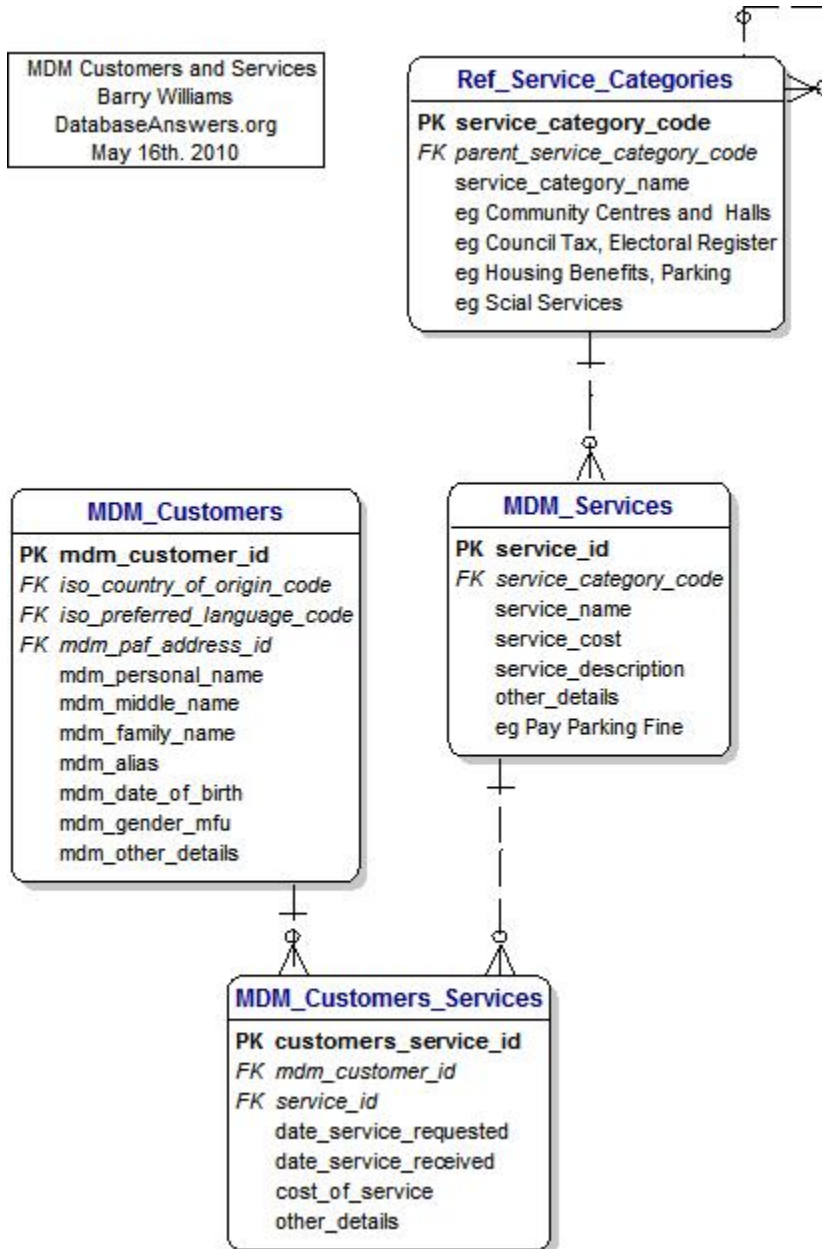
Each Data Source will have its own sets of Reference Data.

These have to be mapped to a common set of Data, which subject to corporate Data Governance.



9.4.3 MDM and Customers and Services

This is a generic Model that shows a Service Hierarchy where a Many-to-Many relationship between Customers and Services has been resolved into two One-to-Many Relationships.



9.4.4 Council Tax

This shows the fields in the Tables that are candidates for mapping to the MDM Tables.

Data Model for Council Tax
Barry Williams
DatabaseAnswers.org
May 19th. 2010

Council_Tax
PF ct_resident_id
ct_title
ct_first_name
ct_last_name
ct_dob
ct_address_line
ct_city_town
ct_postcode
ct_nationality

9.4.5 Housing Benefits

This shows the fields in the Tables that are candidates for mapping to the MDM Tables.

Data Model for Housing Benefits
Barry Williams
DatabaseAnswers.org
May 16th. 2010

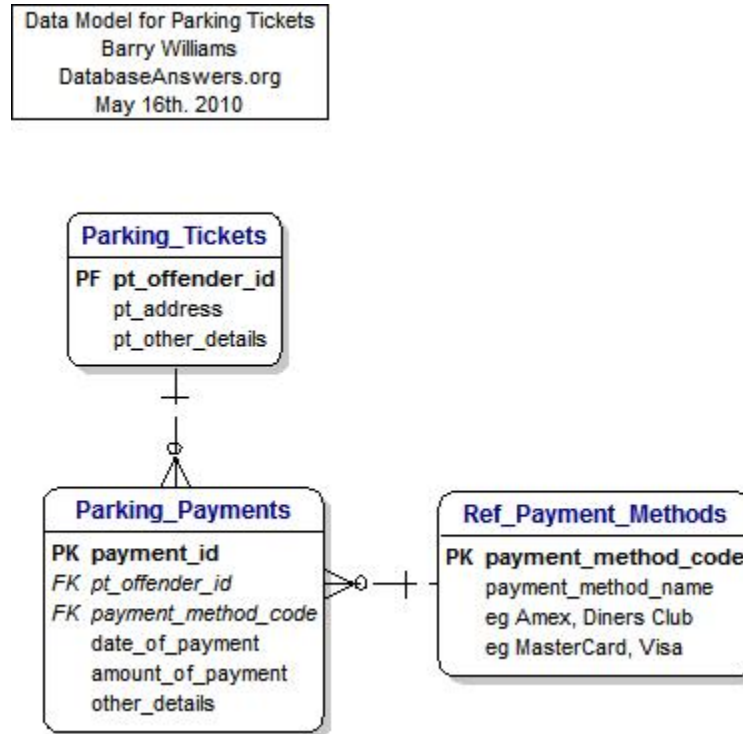
Housing_Benefits
PF hb_recipient_id
hb_address
hb_postcode
hb_name
hb_alias
hb_other_details

9.4.6 Parking Tickets

This shows the fields in the Tables that are candidates for mapping to the MDM Tables.

Parking Tickets are not Master Data and are not included in this mapping activity.

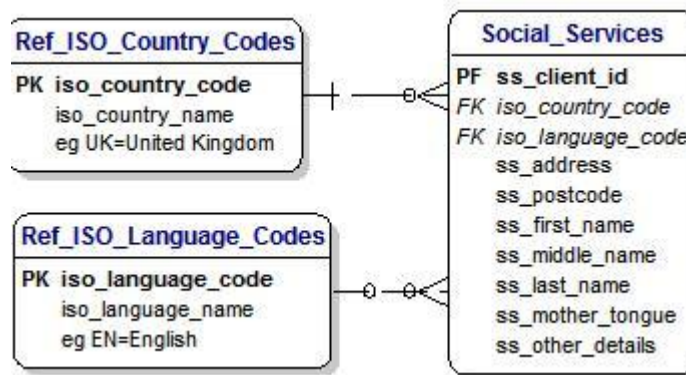
However, the Payment Methods are Master Data and they are included in the Reference Data category.



9.4.7 Social Services

This shows the fields in the Tables that are candidates for mapping to the MDM Tables.

The structure of the Social Services table must be evaluated as candidates for migration to the MDM Services Table.



9.5 What have we learned ?

MDM is becoming more important all the time.

Conceptually it is quite simple, as we have seen.

However, the implementation of MDM is complex and there is a wide range of products available from a number of commercial organisations.