Customer centric analytics based on Data Vault
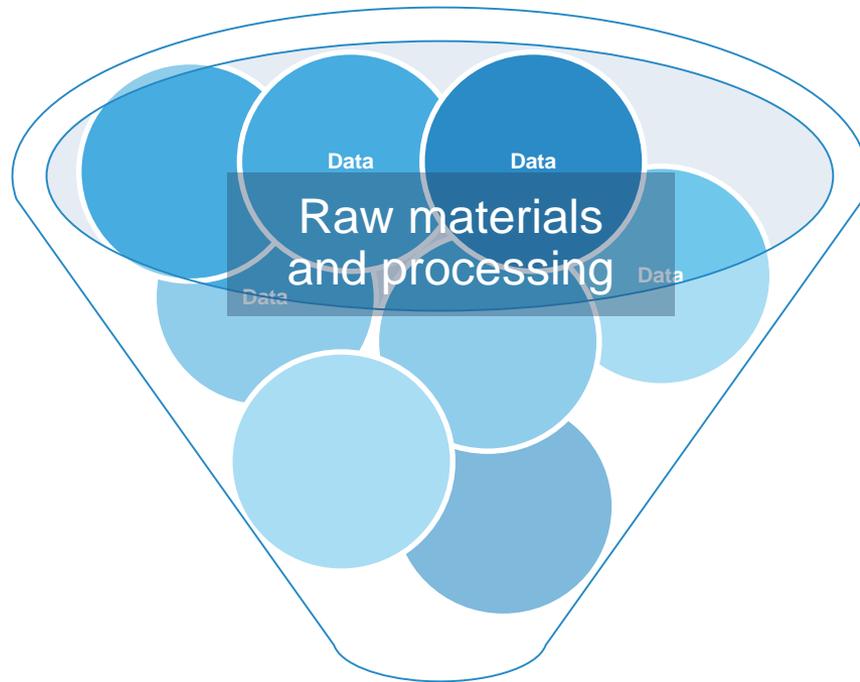
Data Vault User Group Hamburg

2016-09-15
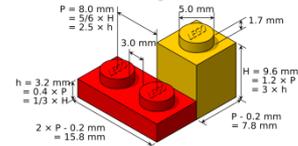
Roelant Vos
General Manager
Business & Customer Insights
Market Management
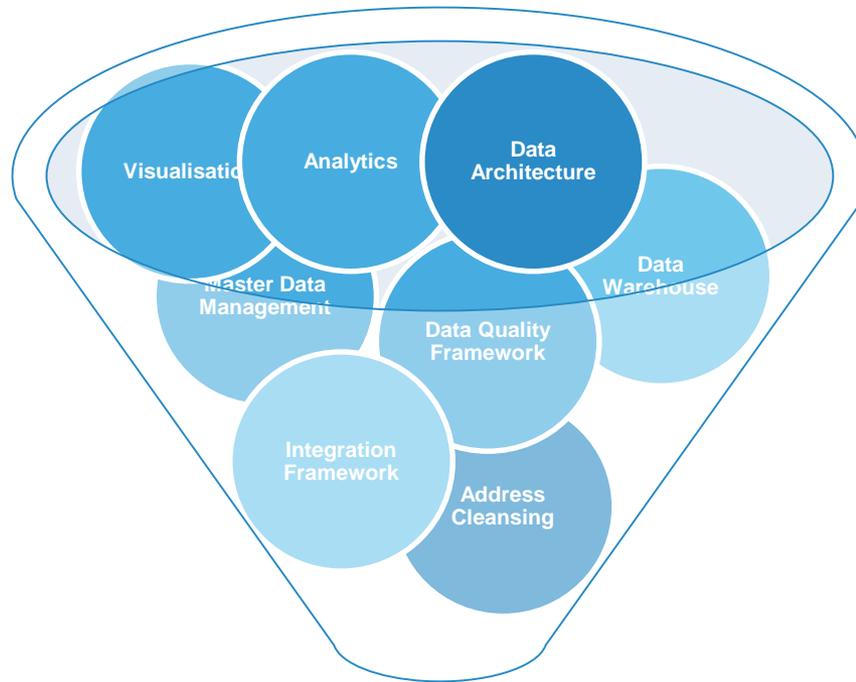Allianz Worldwide Partners

Business Insights

Data availability sparks creativity

Data   Data

Data

Raw materials and processing

Data

Business Insights

Data & Information Management

Providing the **right product** with the **right price** through the **right channel** at the **right time**

Visualisation

Analytics

Data Architecture

Master Data Management

Data Warehouse

Data Quality Framework

Integration Framework

Address Cleansing

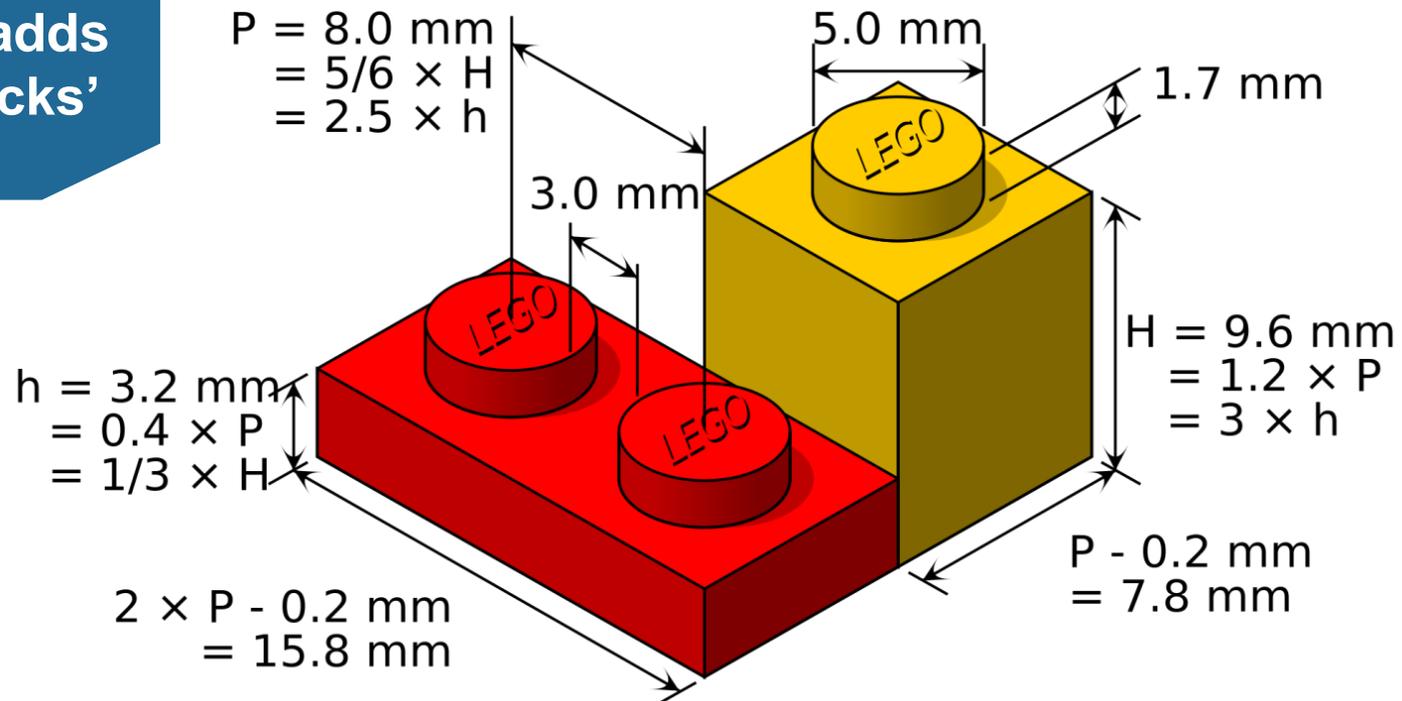Quality Data

Business Insights

Pricing Optimisation

Customer Intelligence

Product Optimisation

It's all about the (data) building blocks

- Collect
- Integrate
- Expose

Every project adds new 'Lego blocks'

$P = 8.0 \text{ mm}$
$= 5/6 \times H$
$= 2.5 \times h$

5.0 mm

1.7 mm

3.0 mm

$H = 9.6 \text{ mm}$
$= 1.2 \times P$
$= 3 \times h$

$h = 3.2 \text{ mm}$
$= 0.4 \times P$
$= 1/3 \times H$

$P - 0.2 \text{ mm}$
$= 7.8 \text{ mm}$

$2 \times P - 0.2 \text{ mm}$
$= 15.8 \text{ mm}$
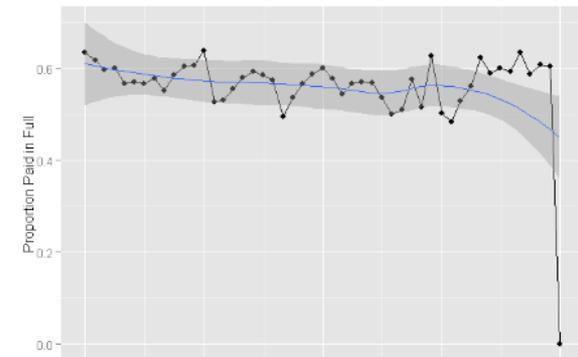
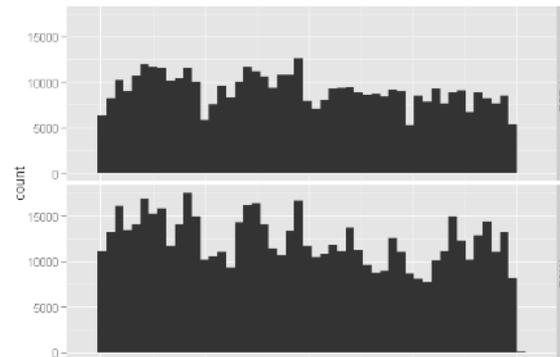# Project 1 - Foundation – Policy, Incident, Customer
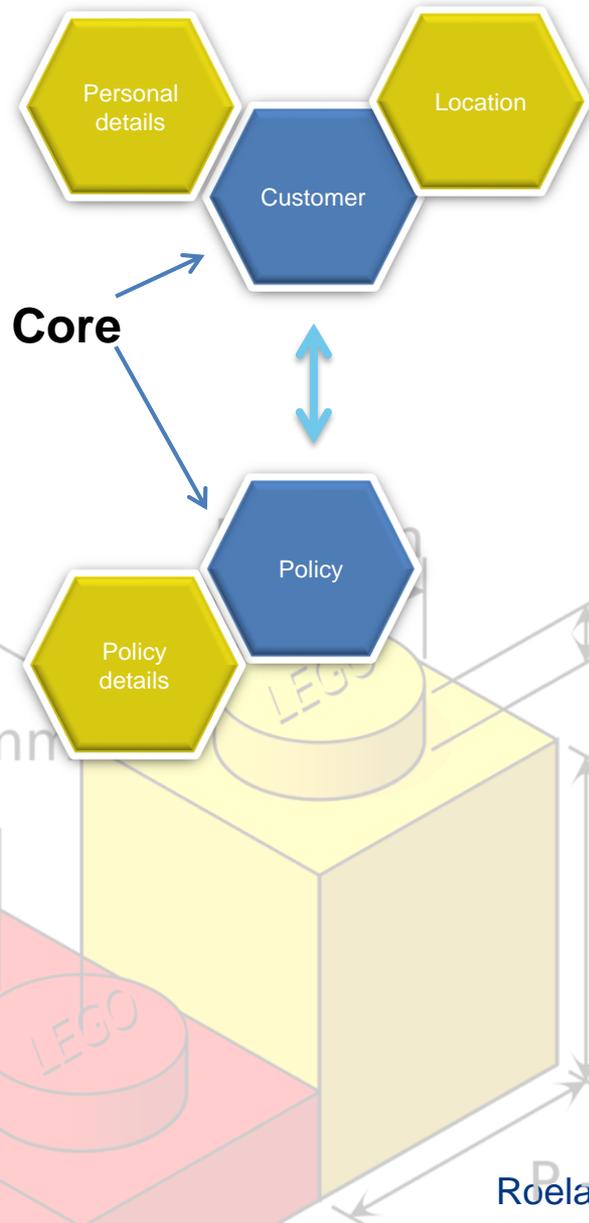
Implement DQ / MDM to change existing fulfilment process
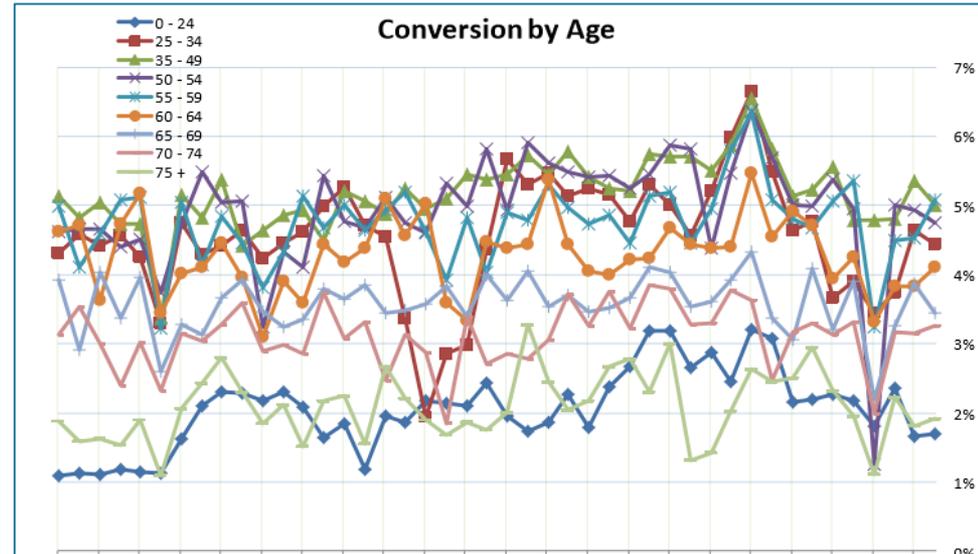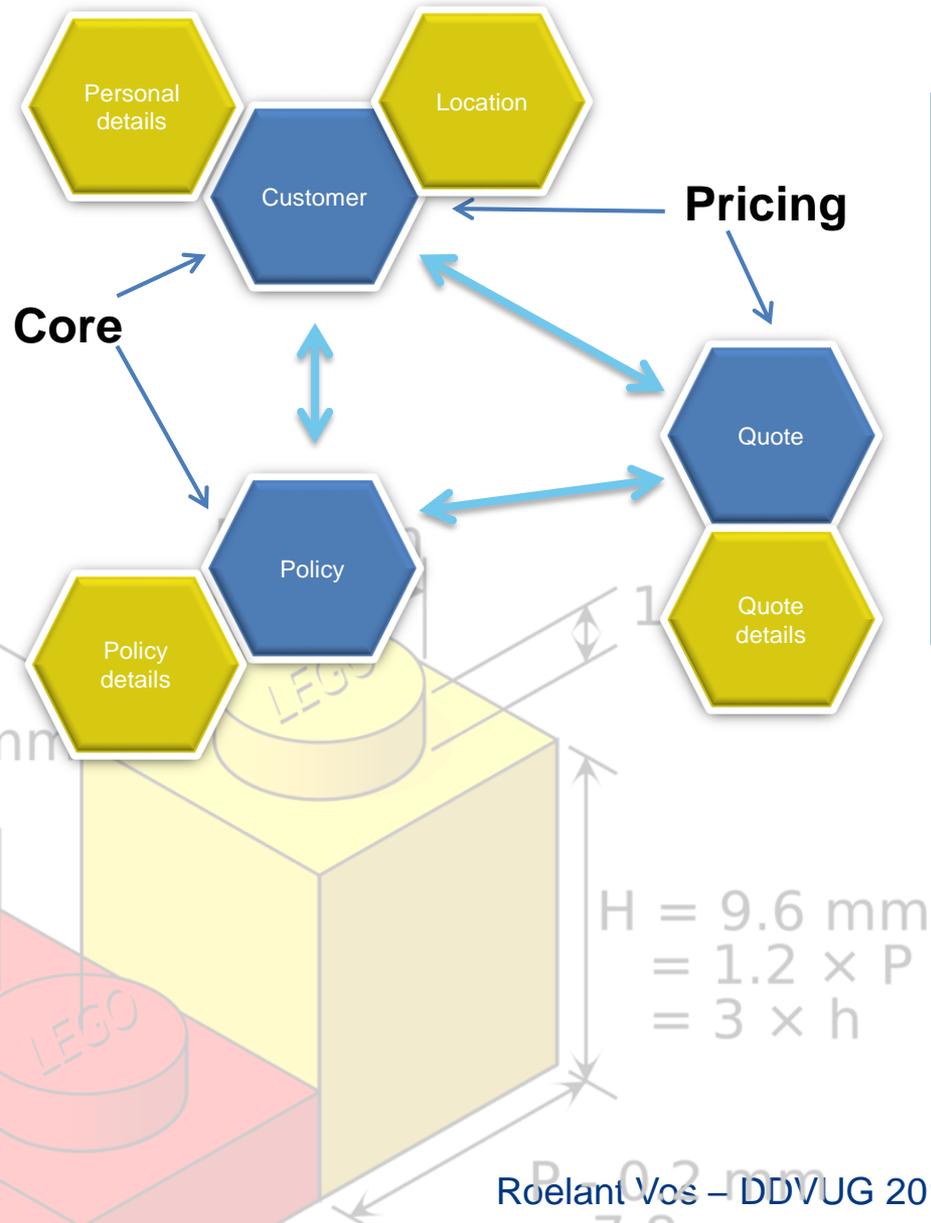
Reduce FTE and system rationalisation

Data Loading adjustments

Core

Claims Assessment

NOT_PAID_IN_FULL	445,434	43
PAID_IN_FULL	600,779	57
UNDERESTIMATED	964	0

Project 2 – Conversion

Personal details

Location

Customer

Pricing

Core

Quote

Policy

Policy details

Quote details

Conversion by Age

- 0 - 24
- 25 - 34
- 35 - 49
- 50 - 54
- 55 - 59
- 60 - 64
- 65 - 69
- 70 - 74
- 75 +

7%
6%
5%
4%
3%
2%
1%
0%

Target lower conversion segments using more aggressive pricing

$H = 9.6$ mm
$= 1.2 \times P$
$= 3 \times h$

Project 3 – Call Support

Telephony

Marketing

Personal details
Location
Customer
Call
Call details
Quote
Quote details
Policy
Policy details
Marketing Camp.
Event details
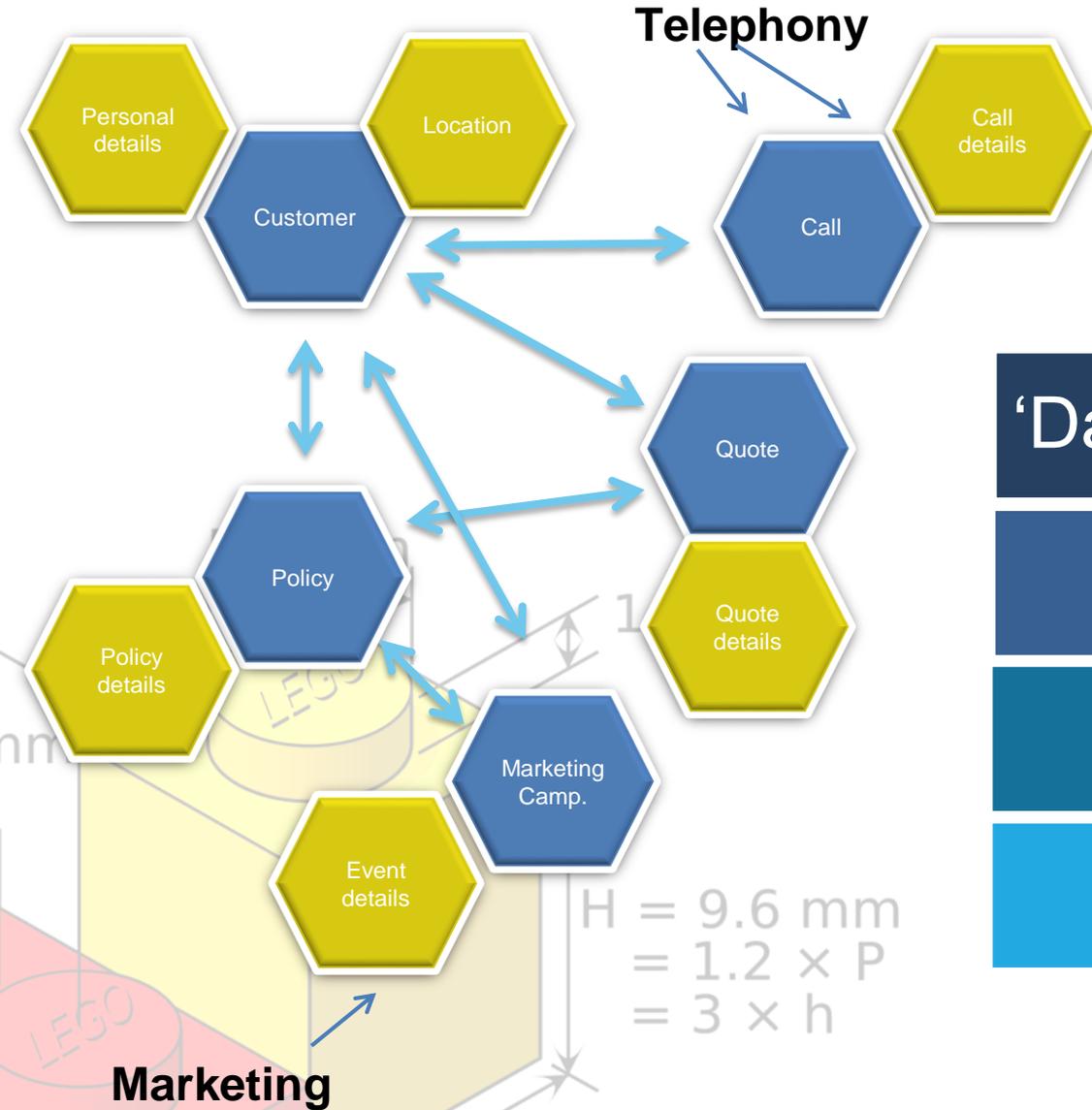
Targeted telemarketing

'Data Quality sufferers'

'Non-convertants'

Target Audience

Segmentation

$H = 9.6\ mm$
$= 1.2 \times P$
$= 3 \times h$

That's a great story, but how did you really go?

Technology bottlenecks

Strategy & maturity

Culture
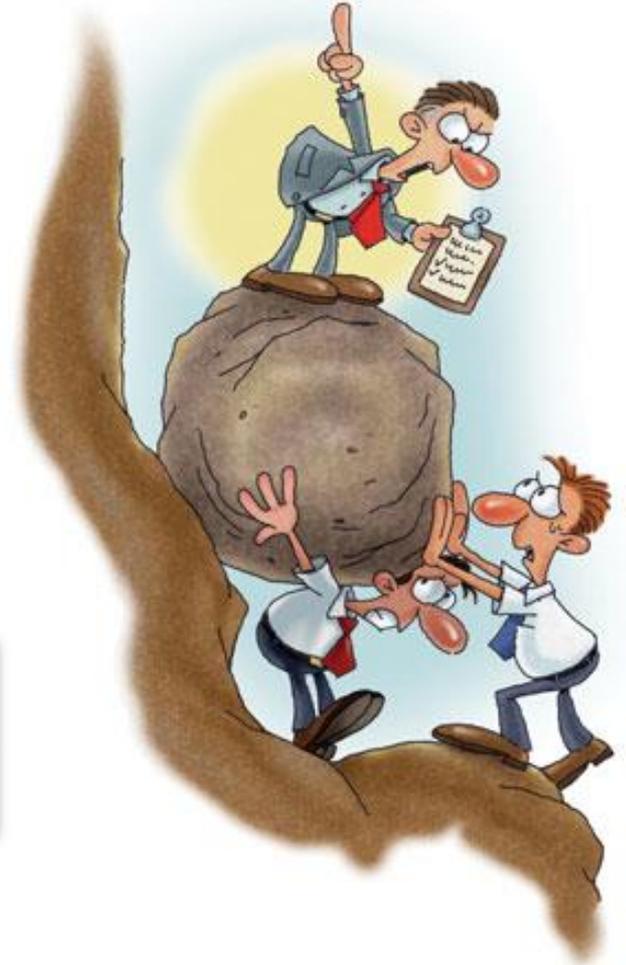
Relationships with MDM and Analytics

'Analytics'

'Data Platform'
(Data Vault)

'Single View of
Customer'
(MDM)

Claim Lodgement ↔ Claim

Policy

Customer Direct Marketing ↔ Campaign — Campaign details

Sale

Golden record

SVC ↔ Customer Match ↔ Customer ↔ Marketing Call

Address

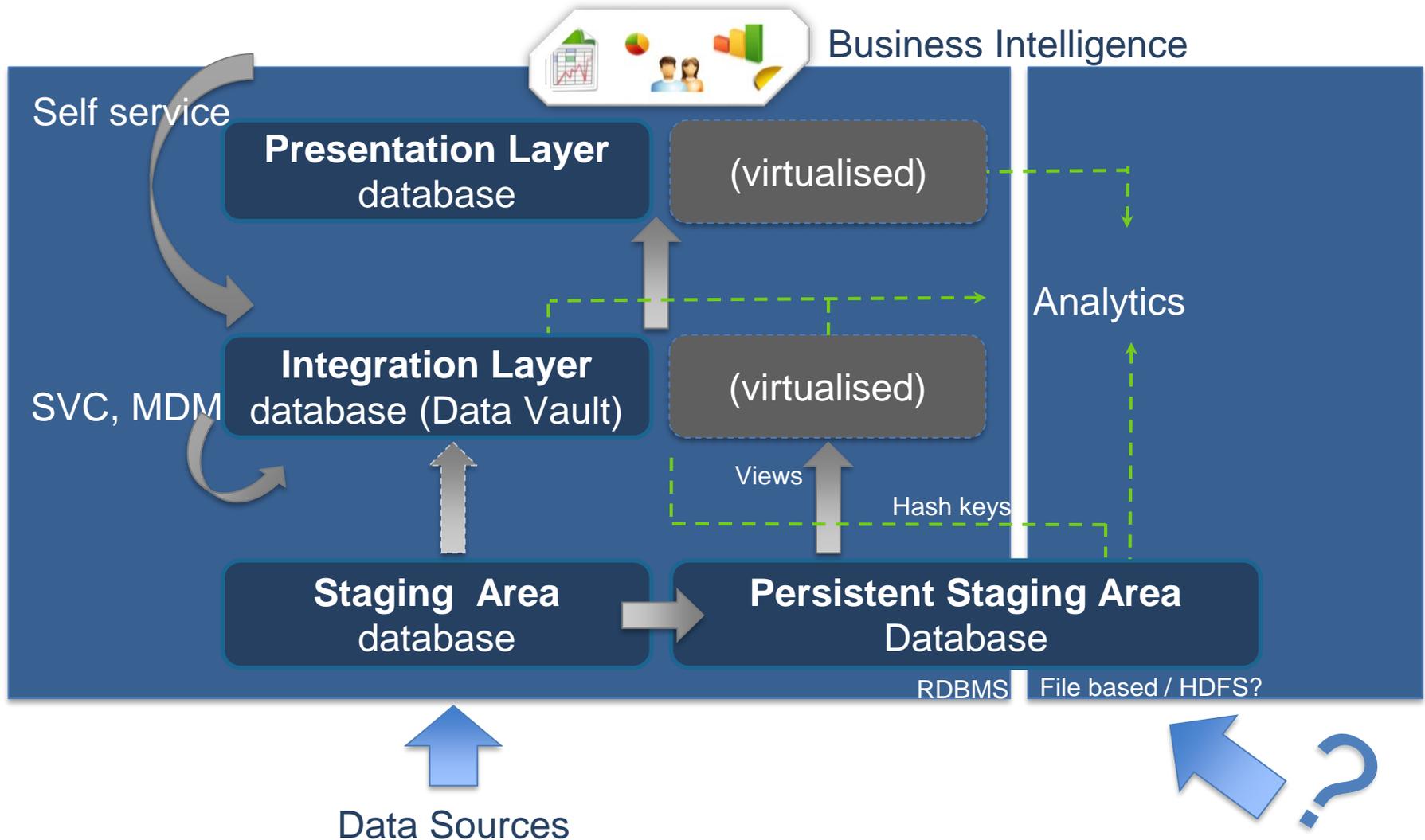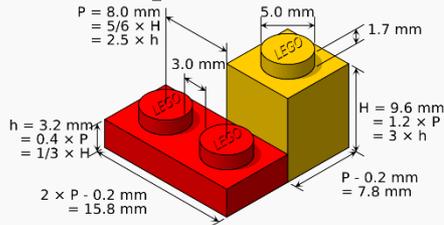Customer details

Family   Household

Contact Centre communication

Call ↔ Contact Centre ↔ Agent

Call details
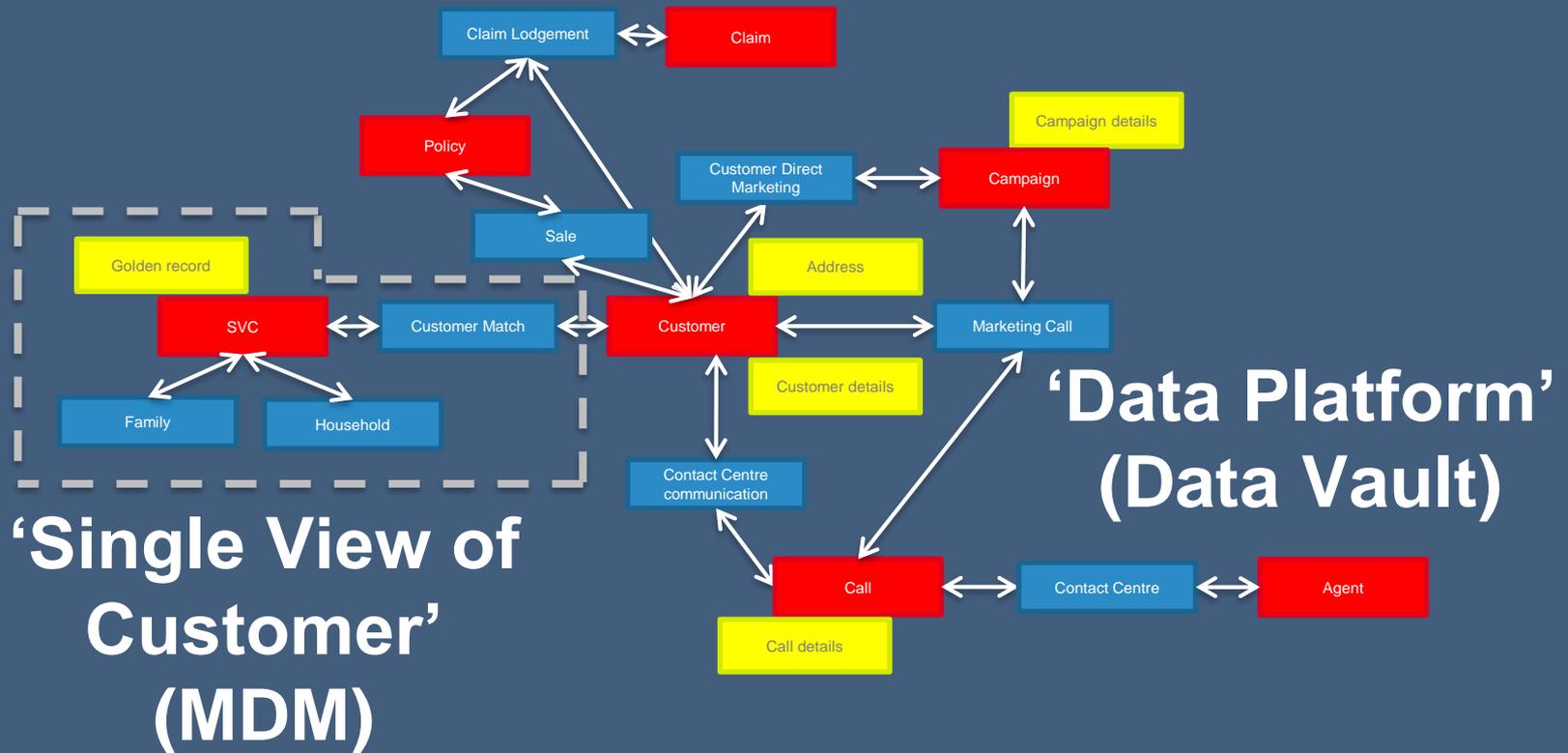
**Data Vault allows us to easily connect MDM
data into the greater data collection**

Reference Architecture – Technical Perspective

Business Intelligence

Self service

Presentation Layer
database

(virtualised)

Analytics

SVC, MDM

Integration Layer
database (Data Vault)

(virtualised)

Views

Hash keys

Staging Area
database

Persistent Staging Area
Database

RDBMS   File based / HDFS?

Data Sources

The 'Data Integration' factory

Architecture and patterns

Frameworks

Biml™   V-EDW

ETL results

| *SAS* |
| *SSIS* |
| *SQL* |

Visual Studio

Metadata Model

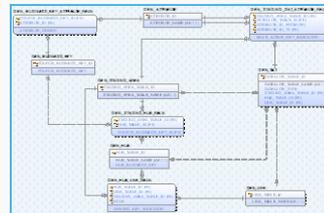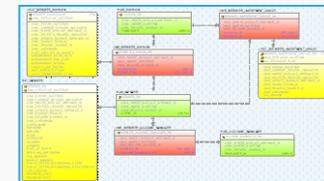## Metadata

V-EDW

- Source / target table rel.
- Source / target attribute rel.
- Source business key def.

Data Modelling

- Relationships
- Driving Keys
- Types of history
- Key names
- Attribute names
- Multi-active etc.