

Developing, Managing & Using Customer-related Databases

Prof. Gennaro Iasevoli

UNIVERSITÀ LUMSA

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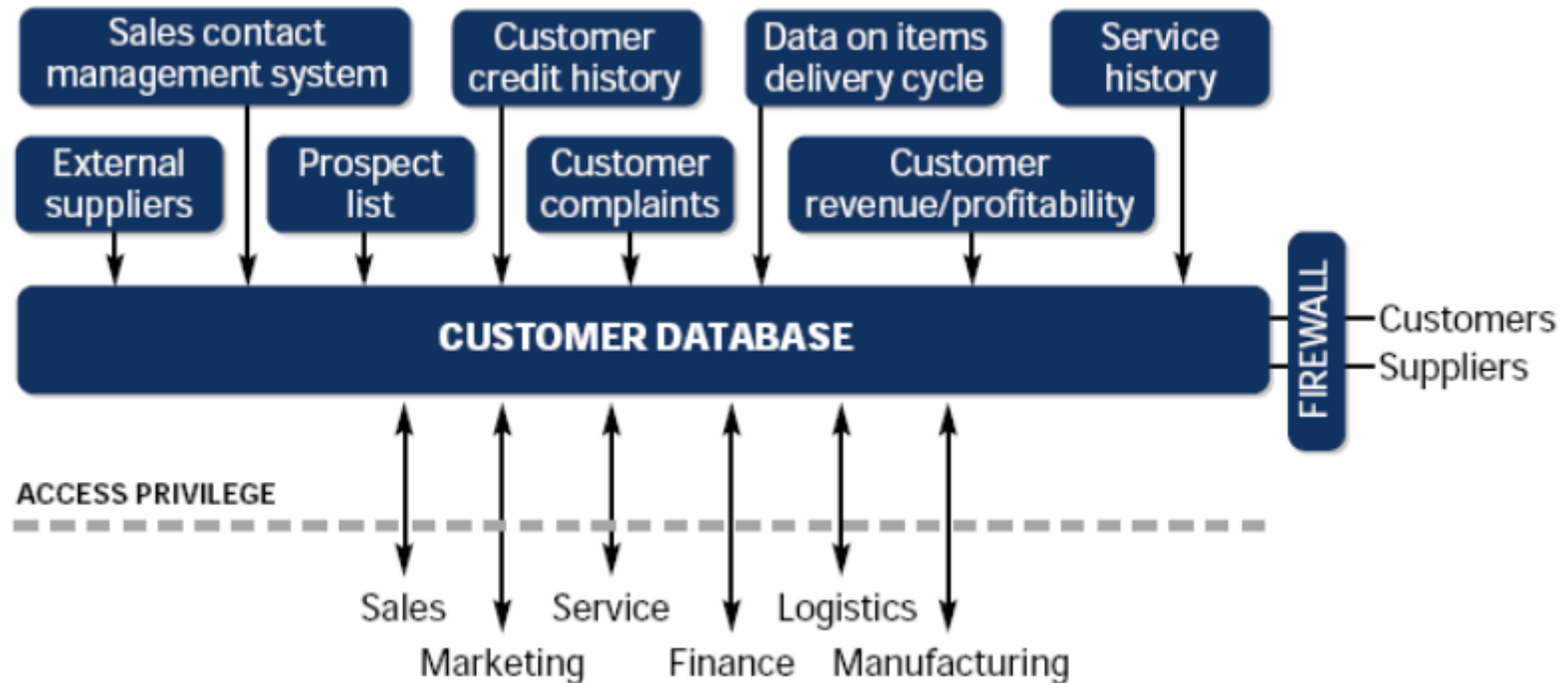
Learning Objectives

- ❖ Understand the central role of customer-related databases to the successful delivery of CRM outcomes and the importance of high quality data to CRM performance
- ❖ Identify the issues that need to be considered in developing a customer-related database

The Importance of Customer-related Data

- ❖ All forms of CRM – strategic, operational, analytical and collaborative – rely on customer-related data
- ❖ Customer-related databases are the foundation for the execution of CRM strategy
- ❖ Proficiency at acquiring, enhancing, storing, distributing and using customer-related data is critical to CRM performance

Unified View of Customer



❖ Characteristics

- Departments linked around same data, e.g. manufacturing planning can be tied to marketing campaigns
- Visibility across enterprise
- Better customer service
- More effective front- and back-office operations

What are Customer-related Data?

- ❖ Customer-related data is anything pertinent to the development and maintenance of customer relationships
- ❖ Customer-related data can have a current, past or future perspective
 - focussing upon current opportunities, historic sales, or potential opportunities
- ❖ Customer-related data might be about individual customers, customer cohorts, customer segments, market segments or entire markets
- ❖ Customer-related data might also contain product information, competitor information, regulatory data

Where can you find customer-related data?

❖ In functional areas

- sales, marketing, service, logistics and accounts
- each serving different operational purposes.
- each recording different customer-related data – opportunities, campaigns, enquiries, deliveries, and billing.

❖ In channel silos

- company-owned retail stores, third-party retail outlets and online retail, for example.

❖ In product silos

- different product managers might maintain their own customer-related data.

Building a Customer-related Database

1. Define the database functions



2. Define the information requirements



3. Identify the information sources



4. Select the database technology and hardware platform



5. Populate the database



6. Maintain the database

1. Database Functions

- ❖ Database functions are defined by the CRM-related purposes for which data is acquired, enhanced, stored, distributed and used
 - Analytical CRM
 - Strategic CRM
 - Operational CRM

OLAP and OLTP Databases

- ❖ Analytical data resides in an OLAP (online analytical processing) database.
- ❖ The information in the OLAP database is normally a summarised extract of the OLTP database, enough to perform the analytical tasks.
- ❖ The analytical database might also draw in data from a number of internal and external sources.
- ❖ Operational data resides in an OLTP (online transaction processing) database.
- ❖ OLTP data needs to be very accurate and up-to-date.

2. Define the Information Requirements

- ❖ The people best placed to answer the question 'what information is needed?' are those who interact with, or communicate with, customers for sales, marketing and service purposes, and those who have to make strategic CRM decisions.
- ❖ Many packaged CRM software applications come with industry-specific data models.

3. Identify the Information Sources

- ❖ Internal (marketing, sales, service, finance) and external sources
- ❖ Data audit before data acquisition
- ❖ Internal data are the foundation of most CRM programs
- ❖ The amount of information available about customers depends upon the degree of customer contact

Common Customer Information Fields

- ❖ contact data
- ❖ contact history
- ❖ transactional history
- ❖ current pipeline
- ❖ future opportunities
- ❖ communication preferences
- ❖ service history

Enhancing the Data

- ❖ External data can be used to enhance the internal data
- ❖ External data can be imported from a number of sources including market research companies and marketing database companies
- ❖ 3 main classes of external data
 - compiled list data
 - census data
 - modelled data

Secondary and Primary Data

❖ **Secondary data** are data that have already been collected, perhaps for a purpose that is very different from your CRM requirement

❖ **Primary data** are data that are collected for the first time, either for CRM or other purposes

Data-building Schemes

❖ **Competition entries**

- Customers are invited to enter competitions of skill, or lotteries. They surrender personal data on the entry forms

❖ **Subscriptions**

- Customers may be invited to subscribe to a newsletter or magazine, again surrendering personal details

❖ **Registrations**

- Customers are invited to register their purchase. This may be so that they can be advised on product updates

❖ **Loyalty programs**

- Loyalty programs enable companies to link purchasing behaviour to individual customers and segments.
- When joining a program, customers complete application forms, providing the company with personal, demographic and even lifestyle data.

4. Types of Database

- ❖ hierarchical
- ❖ network
- ❖ relational

Considerations of Hardware Platform

❖ **The size of the databases**

- Even standard desktop PCs are capable of storing huge amounts of customer-related data.

❖ **Existing technology**

- Most companies will already have technology that lends itself to database applications.

❖ **The number and location of users**

- Many CRM applications are quite simple, but in an increasingly global market place the hardware may need very careful specification and periodic review.

5. Processes in Populating the Database

1. verify the data
2. validate the data
3. de-duplicate the data
4. merge and purge data from 2 or more sources

Desirable Data Attributes: STARTS

- ❖ Sharable
- ❖ Transportable
- ❖ Accurate
- ❖ Relevant
- ❖ Timely
- ❖ Secure

Data Warehouse Attributes

❖ **Subject-oriented**

- The warehouse organises data around the essential subjects of the business – customers and products - rather than around applications

❖ **Integrated**

- It is consistent in the way that data from several sources is extracted and transformed

❖ **Time-variant**

- Data are organised by various time-periods (e.g. months)

❖ **Non-volatile**

- The warehouse's database is not updated in real time. There is periodic bulk uploading of transactional and other data

Data Access

- ❖ standard reports
- ❖ database queries
- ❖ data mining
 - the application of descriptive and predictive analytics to support the marketing, sales and service functions

Approaches to Data Mining

- ❖ Finding *associations* between data
- ❖ Finding *sequential patterns*
- ❖ Developing *classifications*
- ❖ *Clustering* like with like
- ❖ Making *predictions*

Privacy Principles

Based on the Organization for Economic Cooperation and Development (OECD), the principles are:

- Purpose specification
- Data collection processes
- Limited application
- Data quality
- Use limitation
- Openness
- Access
- Data security
- Accountability