3 The Technology and its Applications

3.1 Data, data management and database marketing

**Key questions in this chapter:**

- Are your company website, call centre and other customer interaction systems integrated in your overall strategy, or does your company treat them as peripheral, less important or add-ons?
- Does your business seek to reduce costs of interactions with customers, for instance by using new technology and making customers compliant while meeting their needs and wants?
- How much importance does your business place on data, databases, database marketing, call centre and Internet-based service solutions? How valuable are your databases?

Only the more relevant technological innovations and key technological applications used by customer compliance businesses are reported and assessed here. Emphasis is placed on the nature and role of data, databases, database marketing, call-centre technologies and Internet-related technology solutions, more specifically the design and use of websites for customer relationship management driven by very innovative back-office software.

Academic literatures have long been intrigued by the importance of data, databases and database marketing to businesses which compete by applying modern communication systems and technology solutions. An up-to-date, accurate and complete database has become central to offering one-to-one marketing which would have been possible in the past only by personally knowing customers or by using laborious manual systems. Building databases, frequently of millions of customers by capturing and using hundreds of pieces of information on each individual customer, is a priority for most customer compliance businesses discussed here. Companies such as eBay, Amazon, Google and Ryanair have outcompeted their rivals and have become dominant operators in their sectors, greatly
due to the extensiveness and quality of data as well as the effective harnessing of such data for decision-making purposes. For many such businesses, databases constitute much of the value of the company, with some such companies having little in the way of tangible assets apart from unique in-house software.

Spencer-Matthews and Lawley\(^1\) are among many academic and business commentators who have noted the role of customer databases to modern organisations. They actually describe databases as a requirement for any successful organisation,\(^2\) as part of a description of the growth of database marketing from a narrow tool, used for specialist direct mail and direct marketing campaigns, to a widely applied technology solution with company-wide implications for managing relations with customers. Database marketing provides much value to organisations, due to its unique capacity to personalise contacts, improve responsiveness, and increase accountability.\(^3\)

As previously mentioned, businesses have maintained customer records long before the arrival of the technological solutions described in this chapter. Many companies across sectors have traditionally held datasets of customer accounts – among the first business areas to become computerised. Business proprietors and their staff knew their customers personally, including their preferences and dislikes. Such preferences were often memorised, noted and commented upon in written business records, allowing providers to match company offerings with specific customer needs. However, such data management attempts tended to be effective only with respect to a restricted number of customers, and they usually covered a limited geographical area only, where people knew one another personally.

More recently, data were at the heart of the operations of mail-order catalogue businesses. These came to dominate the supply of goods, especially those goods that were not readily available in a locality. Thomas Chippendale’s ‘The Gentleman and Cabinet-Maker’s Director’ in 1762 was essentially a mail-order catalogue of his furniture. At the time, ‘The Director’ would have been a very expensive book to print but was still economically viable for as a sales aid. In USA, Benjamin Franklin was among the pioneer cataloguers when he published a catalogue of scientific and academic books in 1744. However, it was not until Sears, Roebuck and Co. and Montgomery Ward that mail-order companies became firmly established. In the late 1870s, these businesses started offering goods at lower prices than those in local stores. It did not take long for what today we refer to as direct marketing to emerge. Due to their ability to sell directly to customers and because of their large buying power, mail-order companies sold at considerably lower prices than establishments with long supply chains. Sears, Roebuck and Co. website comments that ‘Thanks to volume buying, to the railroads and post office, and later to rural free delivery and parcel post, they offered a happy alternative to the high-priced rural stores’ – an argument that is applicable to modern online e-commerce sites as well. Early