



## **Chapter XV**

# **The Retail Payments System and Internet Commerce**

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## **INTRODUCTION**

The payments system is a linchpin of the modern economy. Transactions involving non-cash payment for goods, services, or the transfer of asset ownership rely on the payments system to effect payment. The development of electronic commerce as an extension of the way in which people carry out transactions will depend crucially on the development of efficient and secure payments methods capable of supporting electronic delivery. At the same time, the preferences of consumers regarding different payment methods, whether it is cash, credit cards, debit cards or stored-value cards, are determined by a complex mix of economic, behavioural, cultural, and institutional factors. Consumer preferences and attitudes towards different payment methods are an important factor that must be taken into account by firms offering their products and services on the Internet.

Payments may be divided into two broad categories. The term “wholesale payments” is used to refer to very large value payments, typically interbank transfers related to the clearing and settlement functions of banks. “Retail payments” refers to all other payments, including consumer-to-business as well as business-to-business payments. While wholesale payments have been electronic since the 1960s, retail payments remain predominantly based on cash and paper (primarily cheques). In this chapter we focus on developments in the retail payments system, and particularly on its capacity to serve the requirements of consumers in Internet commerce. Because the development of electronic commerce technologies has been driven in large part by considerations of efficiency, it is essential that the supporting payments system be able to match the efficiency of the underlying transactions.

The attitudes of consumers to the various payment methods in the physical world have important implications for their use on the Internet. These attitudes will to a large degree determine the relative frequency of use of alternative payment methods on the Internet. It is therefore instructive to look at the different payment methods that are currently available,

which we do in the next section, and at trends in the patterns of use as well as the factors that affect the decision to use a particular payment method.

We then move on to examine the implications of the developments in the retail payment system for Internet commerce before summarising.

## BACKGROUND: PAYMENT METHODS

The payments system consists of a network of services that both complement and compete with each other to provide those services. It has evolved over time into a highly efficient system offering a wide range of choices of payments media to users, both individuals and institutions. The range reflects the diversity of transactions, each payment method having evolved to serve the needs of a subset of possible transactions. Thus, for example, low-value, everyday consumer purchases are predominantly paid for in cash, while higher-value transactions may be settled by cheque or credit card.

The basic model of a payment method envisages the transfer of value from the payer to the payee without the involvement of intermediaries. This may be called the “direct transfer” method of making payments (Ledingham, 1996). In the case of currency (notes and coin), the transfer takes the form of currency being handed from the payer directly to the payee.

When money is represented by physical objects, the storage and transfer of monetary value involves a logistical as well as a security problem. The costs of holding and transferring money with an adequate level of security would constitute a significant proportion of the costs of conducting any transaction paid for with money, and it is not difficult to see why physical forms of money have evolved down the ages towards progressively less cumbersome forms.

Variations on the method of direct transfer involve some other form of value which substitutes for currency and which is accepted as payment for a range of goods and/or services. This range may in fact be quite limited, as in the case of telephone cards and travel passes; or it may be virtually as wide as that for currency, as with some “stored value cards” (SVCs) whose acceptability is limited only by the availability of merchants with the appropriate card-reading devices. The substitute value is purchased from an issuer who assumes the responsibility for redeeming it.

A less direct means of effecting payment involves at least one financial intermediary which manages an account on behalf of the customer (the payer or payee in a transaction). This may be termed the “account transfer” system of making payments (Ledingham, 1996). When people’s holdings of money are stored in bank deposit accounts, the holding costs are correspondingly reduced — money having taken the form of an entry in the bank’s records. The cost of transferring that value has also fallen: all that is required is a debit of the payer’s account balance and a corresponding credit of the payee’s account balance. The instructions to effect the transfer may vary — e.g., the writing of a cheque, which is an instruction to the payer’s bank authorising the transfer to the payee’s account; a telex or fax instruction; or some other form of communication. Transfer of value therefore relies on a transfer of information from the payer to the financial intermediary. When a payer wishes to make a payment to another party, the payer sends an instruction to his or her financial intermediary authorising the release of a specified amount of value from the payer’s account in favour of the payee’s account. The payer’s financial intermediary, of course, is not necessarily the

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