

## Chapter 18

# Banking and Finance

The importance of the social in socio-technical systems and some of the fundamental insights concerning the importance of the social in socio-technical systems, can be evidently seen in studies of financial organizations and their use of technology.

Banks, and financial services more generally, – since few banks merely store, dispense and lend money but instead have expanded their operations to include a range of financial services such as mortgages, share dealing, insurance of various kinds - have increasingly been seen to be at the sharp end of global economic transformations. These obviously include the recent financial crisis, the enforced 'bail-out' of the banks and the ongoing economic crisis but also include other, less dramatic precursors - processes of 'deregulation' and the emergence of 'universal' banking; transformations in employment legislation and the emergence of flexible working patterns; changes in the nature of consumerism; the growth and deployment of new theories of change management; and the development and widespread implementation of new technological infrastructures.

For Financial Services, information technology, especially systems that can facilitate group work, coordination and communication of decision making, is seen as a key element in the change to more flexible and responsive forms of organization. Collaborative work, a central feature of all distributed organizations, has increasingly moved from a 'physical' to an electronic basis with the advent of widespread distributed computing. Such developments are highlighted by the introduction within organizations of email, desktop video conferencing systems, the projected development of virtual reality environments and the expansion and use of databases of electronic documents running across internationally distributed electronic networks.

Information technology is sometimes (often) the source of considerable

imaginative hype. Nevertheless, it is a commonplace that many if not most diagnoses and 'solutions' to organizational change place tremendous emphasis on technology. This emphasis appears in supporting new organizational forms for the coordination and control of work, in facilitating a greater reliance on knowledge creation and conversion; in the decentralization of organizational structures; in the creation and support of more flexible patterns of intra and extra organizational relationships; and in encouraging a greater responsiveness to the consumer.

Unsurprisingly Financial Services have been quick to adopt, develop and deploy information technology in their everyday work, using a range of IT systems to deal with their increasingly wide range of operations.

1. Database systems: of various kinds – of customers, of staff, of financial products - enable Banks to keep track of customer and staff activity so as to inform decisions about the running of customer accounts and the targeting of products and advertising; as well as decisions about the daily staffing of the bank and the remuneration of staff. In the 1990s the banks embarked on a process of centralization of activities, closing many ordinary high street branches where staff had an extensive knowledge of their customers and relocating services in large regional centres. The disappearance of 'local knowledge' meant that decisions were increasingly based on knowledge of the customer derived from the logging of activity through their account. At the same time, as banks became increasingly involved in the selling of financial services, so the view of the 'good customer' began to change – from someone who merely had a high salary to one where the 'good customer' was identified by the number of financial products they had purchased.
2. Workflow systems – Logging, recording and storing activity also enabled Banks to make informed decisions about the staffing of their different units since details of daily, weekly and monthly variations facilitated such decisions. Such monitoring, as well as devices such as the Balanced Business Scorecard, based on recording the completion of particular identifiable tasks, also impacted on staff pay, promotion and bonuses.
3. 'Expert Systems': 'expert systems' of different kinds are increasingly used within the banking systems. In part this is a simple reflection of the 'audit culture' that exists in banks and in part it is a product of an attempt to automate, computerize and control a range of activities previously carried out autonomously by bank staff such as Lending Officers or Business Managers. Another feature of the 1990s and early 2000s was the increasing

restriction on the autonomy of bank staff such as Bank Managers who saw their lending limits – the amount they were allowed to lend before needing to get official sanction – increasingly reduced. Surprisingly then, perhaps, a rash of very bad lending decisions triggered the financial crisis of the late 2000s.

4. Security, monitoring and audit systems: are also, and unsurprisingly, strong features of financial services. What is interesting about their operation is the extent to which they remain reliant on a range of human factors. So, for example, banks often employ a 'mystery shopper' to ensure that staff are following appropriate procedures. Similarly, monitoring of individual transactions and accounts is often dependent on bank staff being alerted by suspicious activity in an account, or the behaviour of the account holder – for example in money laundering.

## **Retrospective**

Our work in this area is still current. Banks have continued their automation with the principal change being the increasing use of self-service in the form of digital banking. Associated with these digital banking systems are AI-based security systems that analyse patterns of transactions for anomalies.