
The learning organisation – myth or reality? Examples from the UK retail banking industry

Lisa Harris

The author

Lisa Harris is a Lecturer in the School of Business and Management, Brunel University, Uxbridge, UK.

Keywords

Learning, Innovation, Technological change, Banking

Abstract

This article considers the issue of learning in the context of new technology projects that have recently been implemented in the UK retail banking industry. Continual changes in the business environment have focused attention upon the need for organisations to “learn” if they are to retain their market positions. Interviews were conducted with 42 bank managers and industry consultants over an 18 month period. Five case studies of major new projects are drawn upon which provide evidence that learning from past mistakes, or even building upon past successes, continues to be the exception rather than the rule. As a result, even successful projects had a limited impact upon the activities of the organisations as a whole. It is concluded that reluctance to disseminate lessons learned throughout the organisation means the full potential offered by new technologies will continue to elude banks until their apparently complacent attitude towards learning is addressed.

Electronic access

The research register for this journal is available at <http://www.emeraldinsight.com/researchregisters>

The current issue and full text archive of this journal is available at <http://www.emeraldinsight.com/0969-6474.htm>

Introduction

The need for organisations to “learn” if they are to thrive in increasingly competitive and rapidly changing markets is well established in the literature (see for example Senge, 1990; Garvin, 1993). The learning process within organisations requires an ability both to adapt or discard particular features which have been unsuccessful, and also to sustain and build upon those which have worked well for the company in the past. Whilst the logic of these statements appears unassailable, this article draws upon the work of earlier writers, and recent empirical research in the UK banking industry, which together provide evidence that such learning seems to be the exception rather than the norm.

The pivotal position occupied by banks in a rapidly changing society means that the UK banking industry is a particularly interesting and topical context in which to study the phenomenon of learning. The issues raised in a number of detailed case studies may have relevance in a wider context than is often provided by concentration upon one particular industry. The article begins by noting recent changes in retail banking before describing the case studies and research methodology. By comparing the management of major new IT project implementations in five different organisations, it is contended in this article that the absence of learning was instrumental in compromising implementation of the new technology projects studied. There are two major aspects to this phenomenon. Firstly in some cases failure of the project itself was observed. Secondly, and perhaps more significantly, these banks were also failing to learn from the mistakes made. In addition, even project successes merely formed localised “pockets” of learning. As such, they had a very limited impact upon the activities of the organisation as a whole because in none of the cases was full advantage taken of the opportunities presented by the new systems beyond the boundaries of the specific project concerned. The article concludes that this reluctance to disseminate the lessons learned from success or failure throughout the organisation means that the full potential offered by new technologies will continue to elude the banks until their apparently complacent attitude towards learning is addressed.



The UK banking industry

The banking industry is an important area for study as it plays a major role in the changing fortunes of the UK economy as an instrument of government monetary policy. It is also the largest investor in new technology within a society that is rapidly becoming dominated by service industries. The banks have enjoyed years of operating within an informal cartel, but progressive deregulation in the financial services industry, and the availability of new technological opportunities, has meant that many traditional barriers to market entry have now been removed. This has also resulted in greatly increased levels of competition in the industry (Fincham *et al.*, 1994). In addition, of course, Internet banking has enormous potential to influence the whole structure of the banking industry, although such services are still in their infancy in this country.

The banks regard technological investment as the key to generating competitive advantage and maintaining their threatened domination of the market for financial services. According to a survey by the *Financial Times* in 1999, the total spending by European banks on IT systems was expected to exceed \$23 billion in 2001. The survey results indicate that the rate of expenditure growth is expected to increase further over the next ten years. It will be argued in this article that while IT applications in the banks have undoubtedly increased processing capacity by automating tasks previously accomplished manually (the proliferation of automated teller machines bears witness to this), the opportunity to utilise technology to instigate more fundamental change has not been maximised. For example, the cases will show that new systems introduced in the banks to provide cross-functional management information or new types of service mechanism, often make no impact upon productivity and stimulate little change to established routines.

Despite the scale of their IT investments, and the level of knowledge built up over some 30 years of computerisation, Gates (1995) has dismissed banks as “dinosaurs” in their use of IT. The computerisation of banks has been referred to in the *Financial Times* as “the biggest bank robbery of all time” (Nairn, 1996). Technology companies have made handsome profits by encouraging banks to spend more and more money on

technological innovation, but the benefits are often elusive. Significant problems are associated with updating and linking the diverse computer systems that have evolved in the banks over many years. These systems are often put together in a piecemeal fashion and have to be maintained and operated to support day to day banking activities. Customer data in particular tends to be scattered between the computer systems of different functional areas, which cannot always communicate to utilise the data effectively. Consequently the banks often have no means of forming an overall picture of profitability or activity by customer, which is essential for effective marketing campaigns.

Given the extent of the investments made in new technology in an attempt to generate competitive advantage, it is not unreasonable to presume that the banks themselves would be concerned about the apparent lack of value obtained from IT projects. A survey by Morton (1999) found that 71 per cent of the banks questioned had no idea whether their new technology systems delivered value for money, and 50 per cent had no measures in place to assess the effectiveness of their investment. The survey also reported that banks tended to patch together existing inefficient systems to maintain established business practices, and hence avoid the uncertainty associated with the learning curve of new system introduction. The author concluded:

In the long term this will be a ball and chain, limiting the ability of the banks to run their business and constraining development of new services.

A report on IT in the banking industry by *The Economist* (1999) discovered few success stories. Most banks expressed disappointment with their new systems, despite the high level of investment made. After more than 30 years of investment in new technology, 90 per cent of bank payments still involved the use of paper at the time of this study – a figure that was predicted to fall only to 70–80 per cent by the year 2000.

The situation has been succinctly summarised by Coombs (1992) as follows:

Sometimes it seems that the technological potential increases, the claimed business advantages multiply, and the boxes get cheaper and cheaper: but the budget and the headcount still rise, the benefits seem elusive, and the strategic direction of the IT investment and

development programmes becomes ever more of an organisational battleground.

This phenomenon has become known as the “IT productivity paradox” (see for example McLoughlin and Clark, 1994). Harris (2000) argued that the absence of learning observed in the banks is a major contributory factor to the continued existence of this paradox.

Two important questions arise from this brief review of changes in the banking environment and its use of information technology:

- (1) Why does so little learning appear to have taken place despite 30 years of significant investment?
- (2) Why do the banks appear to be unconcerned about their apparent failure to maximise technological opportunities?

Methodology

The issue of learning was assessed in the context of practical experience of new technology implementation in five major new technology projects within the traditional retail banks and industry newcomers. They can be described as major players in the traditional UK retail banking market. Face to face interviews were conducted with 42 bank managers and industry consultants over an 18 month period. The interviewees were drawn from various levels in the banking hierarchy, from junior managers with operational responsibilities through to general managers with a more strategic perspective. Some came from a technical background, others were business analysts with an understanding of both business and technical issues, and the remainder were career bankers with no technical experience whatsoever. Semi-structured interviews were conducted with each participant on an individual basis, with the sessions lasting approximately 90 minutes on average. Initial interviewees were selected on the basis of relevant personal contacts and subsequent interviewees were recommended by early participants on the basis of their centrality and commitment to the projects studied. The smallest number of interviewees per project was seven and largest ten. The author was also able to draw upon ten years' full time experience in the industry as a participant observer to provide background information to support the interview data. In

three cases (referred to here for reasons of confidentiality as Banks A, B and C) the projects were categorised by the participants as “failures” in terms of the gap between the original project objectives and the final results obtained. In each of these projects little evidence of learning from mistakes was observed (for example by means of a formal review and evaluation) and in some cases the same problems are now recurring in new projects in the passage of time since the study was conducted. The factors underpinning the management of the other two projects, (referred to as Banks D and E) formed a useful area of comparison and contrast. These projects could, in a sense, be regarded as “successful” when assessed against the same criteria by which Banks A, B and C were judged to have failed. Indeed, they were certainly regarded as such by the participants. However, few of the lessons learned were disseminated more widely to capitalise upon project success in a broader organisational context, as the projects remained isolated from the day to day business of the bank concerned.

Bank A began a project in 1993 that was supposed to integrate all the services offered by the bank into one IT network. This would mean that each operating area could access the complete record of a customer's relationship with the bank. In practice, business areas were far more ready to adopt new technologies than the IT department itself. Indeed, the degree of resistance to change demonstrated by the IT staff played a significant role in the eventual failure of the project they were charged with developing. While the business users across the bank could foresee the tangible benefits of systems integration as proposed by the project and were keen to progress, the IT staff perceived only a threat to established skill sets. It can be regarded as a failure because even a scaled-down version of the project is not yet fully implemented and it has significantly exceeded its budget. Little evidence of learning from mistakes was observed. Bank B aimed to link its international payment systems with those of a number of selected partner banks throughout Europe. Despite many years of technological development, international money transmission is an area of banking which still relies upon procedures and timescales established in the Victorian era. While the technological capacity existed to

devise more radical solutions, the project focused instead upon improvements in the quality and cost efficiency of existing services. The long-term goal was to facilitate the international business of the bank within a single currency environment, but no formal system links have yet been made and over 70 per cent of payments are still exchanged in the traditional manner. Once again, little evidence of learning from mistakes was noted. Bank C aimed to develop a new system that would integrate the activities of all its branches around the world into one IT network, enabling each branch to ascertain the business levels in all its centres on a real-time basis. Differences in culture, legal reporting requirements and business priorities around the world combined with extensive internal power struggles meant the project was terminated. The individual in charge of the project lacked the authority to enforce decisions on either the system developers or the multifarious business users. The opportunity to commission an independent review to analyse the reasons for project failure was foregone on the grounds that it was too expensive, despite costing a mere fraction of the amount already spent on the abandoned project itself. Bank D developed an electronic home banking system as a new service targeted at the “affluent professional” market segment. To get all the necessary staff working more closely together, people were physically removed from their roles within operating areas and given permanent roles as liaison officers in the IT area, while IT staff were transferred to fulfil similar roles in the relevant operating areas. The project was successfully implemented within budget and agreed timescales, and has so far attracted a significant volume of new customers to the bank. However, little learning from this success occurred more broadly across the bank because the organisational changes implemented here have yet to be replicated in other areas working on new technology projects, despite the acknowledged contribution they made to success in this particular case. Bank E set up a telephone banking service that is available 24 hours a day on each day of the year, and at one point could not open new accounts quickly enough to satisfy demand. The problem of employee adherence to historical working practices was obviated by the total separation of the new venture from traditional banking activities.

Despite this success, the project’s continuing geographical and functional separation from the parent bank has created little opportunity for dissemination of the learning that took place and ensured that few wider organisational changes have been made.

The next section examines the constraints that have been identified upon the learning process from analysis of existing literature and the empirical study.

Inhibitors of learning

Reliance upon established routines

Dougherty and Hardy (1996) undertook a comprehensive study of innovative projects within a number of mature industries. They found that although specific project success was largely dependent on the efforts of certain inspirational leaders who were able to make use of their power and influence, this success rarely engendered long-term organisational commitment to learning because of the limited scope of any one individual within the company as a whole. Despite the large sample size and range of industries studied, the authors found few examples of organisation-wide support for learning:

Sometimes individuals were able to resolve project-to-organisation connection problems successfully by accessing resources, establishing collaborative processes, and creating strategic meaning for their innovation. But connections made in this way were fragile and vulnerable, because they depended on the initiatives of the incumbents of specific positions and their particular networks rather than on organisation-wide systems.

In fact, the authors went so far as to claim that prevailing organisational systems actually encouraged conformity and stability, rather than learning. Particular successes could only have short-term value while the principles upon which the organisation was based remained as before. The potential for learning was constrained because of an often overwhelming desire to maintain organisational continuity. This problem occurred at Bank C where the project leader was actually seconded from a business area to run the project, and he had no prior technical experience. After implementation of the scaled-down version of the new system he was returned to a business area, and the IT and project management experience that he had

painfully accumulated “on the job” was therefore lost to this part of the bank. As the policy of bringing in inexperienced outsiders to run projects has not been changed as a result of this experience, future projects will thus also be run by other new incumbents who can expect to be faced with exactly the same learning curve.

Hackett (1994) sought to ascertain why low returns were being made on the massive technological investment in the banking sector. He showed how productivity in the service sector as a whole had not improved, and in fact had actually been in decline since 1977 in the banking and insurance industries. Hackett blamed increased automation expenses due to a lack of integration between new technology and business operations. By focusing merely upon the automation of existing (but often outdated) procedures, organisations were missing opportunities for learning in terms of business redesign and the associated productivity improvements when IT is integrated with business strategy:

Many operational units were never planned. Instead they evolved to fit the apparent needs of the business they support. Work tends to be executed in the same fashion as it was a decade ago, while the competitive environment has become much more complex.

He also noted that the tendency to replicate existing processes when introducing new systems reflected a general antipathy towards change and a preference for the security of familiar and established routines. This finding is supported by Tidd *et al.* (1997) who showed how an organisation’s existing knowledge base could constrain its capacity to exploit the opportunities presented by technological advances, because the learning process required would be “path-dependent”. This meant that the new knowledge acquired would be strongly based on existing knowledge in order to reduce the perceived risk associated with the change. The more committed an organisation became to a chosen learning curve, the more difficult it would be to switch the learning process to a radically different area.

The leader of Bank B’s project to develop new payment systems was also head of the department responsible for the bank’s existing international payment operations. This meant that there was a direct conflict within his department between the need to meet performance targets – and hence qualify

for bonus payments which were based upon volumes of traditional payment business – and the task of developing and implementing a new service which would ultimately replace the existing methods. The large margins that the bank currently earns on international payment traffic would also disappear, and this meant that even the project leader had no real incentive to make the project succeed. Some six years after the project began, the vast majority of international transfers are still handled in the traditional manner. The same leader remains in place, and the slow progress has not been questioned within the bank. The competition from industry newcomers such as Internet banks is not yet considered significant enough within Bank B to disturb this rather complacent attitude.

Gulf between technical and business areas

A study of the financial services industry by Currie (1995) identified a gulf between systems and business staff, which led to power struggles, rigid demarcations and the development of separate languages and working practices – activities which were hardly conducive to learning. The author argued that new technology projects would be more likely to succeed if entrenched perceptions could be overcome, thereby creating an environment in which learning could occur. In Bank A, the interviewees noted that there had been a more ready adoption of the new working practices by the business users than the IT department that developed the new technology. Indeed, the degree of resistance demonstrated by the IT staff had played a significant role in its eventual failure. For example, there was a general reluctance to learn new skills and newcomers were ostracised as they were perceived as a threat to existing power positions. Although such problems may have been anticipated in areas of the bank accustomed to a rule based and hierarchical culture, it might have been expected that people employed in a systems development role would be more accustomed to change. In practice, the business users across the bank could foresee the tangible benefits of systems integration as proposed by the project and were keen to progress. In contrast, the IT staff perceived only a threat to established skill sets.

Child and Loveridge (1990) noted the adverse impact of resistance to change and a lack of communication between functional areas upon the learning process:

The greatest single barrier to effective learning in this most vital of developments for our future lies in the organisational inhibitions that prevent the free interchange of views from all who have something to offer.

Their study found that system development groups considered to have “expert” knowledge were separated both geographically and structurally from the prospective users of the technology. In addition, the system operators at low levels of the organisation were not consulted about technological change issues, and had no input to decision-making. Their expertise was therefore not utilised or indeed valued by senior management. Bank C maintained rigid demarcations between systems and business staff, and it did not encourage cross over between the areas. This separation meant that there was no capacity for either the IT division to impose the new system on the businesses, or for the business divisions to enforce their particular requirements from the new system. One interviewee also noted that users were reluctant to admit to their lack of technical knowledge when checking that system specification matched their business requirements, which led to misunderstanding and errors.

The level of interaction between business and IT departments was also found to be a significant issue in the context of project success or failure in the other banks studied. While interviewees from both Bank A and Bank C cited poor communication between the two areas as a major contributor to project failure, the successful project run by Bank D was characterised by a close relationship between all project participants. This situation was facilitated by the effective leadership of a manager with both systems and business experience. Despite this evidence, few of the banks subsequently put any systematic procedures in place to encourage communication and co-operation between these areas. Once again this indicates that little learning has taken place from earlier experiences.

Poor management of learning

The projects studied in Banks A, B and C provided evidence of staff development

practices which reflected a deeply entrenched culture that did not facilitate learning and the acceptance of change. Each of these projects can be regarded as failures in terms of the gap between the original objectives and the final results obtained. For example, skills shortages at Bank A were temporarily alleviated (at significant expense) by employing external consultants or contract staff, but when these individuals moved on their accumulated knowledge moved with them. Bank A tried to address this problem by writing instructions into the contracts of temporary contract staff which obliged them to transfer their skills to permanent employees during the time period of their contract. The logic behind this “skill-scraping” policy was for the experienced temporary staff to train new recruits, who would then replace their mentors at a much lower salary. In practice, the contractors were naturally reluctant to pass on their knowledge and then lose their jobs. In organisational terms, therefore, the learning acquired from experience on this project that could be applied in new contexts in the future was never going to be accessible because it resided in the heads of outsiders.

Possibilities within IT at Bank A were limited if a “technical” manager wished to make a career move within the organisation, whereas “commercial” roles carried more money and status. In these circumstances it was rare for commercial managers to seek a career move into IT. On the other hand, IT management were occasionally rewarded for technical excellence by promotion out of their area of expertise and into “people management”, a task for which some were ill equipped. To compound the adverse effects of such a strategy, the organisation would of course cease to benefit from their technical skills. These examples of poor knowledge management throughout the project compromised the opportunity to learn from mistakes.

The traditional career path followed within Bank B was for staff to join from school – or more recently university – at the bottom of the ladder and work their way up through a rigid grading structure over a period of many years. Length of service was therefore the primary criterion of promotion prospects, and the “job for life” maxim firmly entrenched. This policy meant that staff were effectively rewarded for getting older! As recently as 1990, it was considered unthinkable when a manager of

Bank B resigned to join the direct competitor Bank A:

When news of my resignation leaked out, people passed me in the corridors without speaking. After a series of high level crisis meetings I was asked for my car keys and escorted from the premises (project manager).

As the recession hit the UK banks in the early 1990s the predictable career structure began to break down. Morale suffered as a result and the more ambitious individuals began to leave (a phenomenon referred to by the press as “bright-sizing”). One interviewee described how some new employees were taken on for specific roles at junior levels, and there was a deliberate policy of targeting people without career expectations who were unlikely to become disappointed at the limited prospects on offer. Within this climate the scope for learning through reflection on mistakes and the instigation of change was minimal.

Complacency and the culture of blame

The staff recruitment policies described above in Bank B appear to be indicative of a culture of complacency within the organisation, based on past success and prominent market position. A similar attitude was observed by interviewees from Bank C. Not only was the world-wide branch integration project a spectacular failure, but there seemed to be little concern within the company about the amount of money wasted, and no impetus to find out why it had gone so wrong. The same problems that had compromised the project were subsequently repeated because no effort was made to address the organisational factors that had contributed to project failure. The issue of blame played a significant role in the reluctance to address these factors:

The review might well have pinpointed the finger at certain senior individuals who did not want to advertise their role in the failure of the project . . . so it was quietly swept under the carpet, and no organisational changes were made (project manager).

This scenario also applied in the case of Bank A, where a steering committee met once a month to check project progress. The review process was compromised by a fear that blame would be apportioned amongst certain individuals if too much emphasis was placed upon explaining the reasons for project failure.

This section has shown how the absence of learning from mistakes means that the same

problems tend to recur over time, often within the same bank. The next section draws upon recent research to illustrate the steps that have been taken to address these problems, and assesses the effectiveness of these measures.

Steps towards learning

Project evaluation

As noted in the previous section, none of the case study banks undertook any form of post-project evaluation. This was often because of the fear of blame being attributed to the individuals involved. Gulliver (1989) described the benefits that had accrued to British Petroleum as a result of implementing a “Post-Project Appraisal Unit” (PPA) which was responsible for analysing completed projects within BP. The results of this review were disseminated throughout the organisation so that particular successes could be repeated elsewhere, and lessons learned from past mistakes:

The PPA philosophy is that the company’s investment performance will only improve as more BP people learn what went wrong and what went right in the past (Gulliver, 1989, p. 454).

The author noted that despite the obvious value of such a strategy, he had found few examples of companies that made even a cursory attempt to evaluate project performance after completion. Maidique and Zirger (1985) studied a large number of both failed and successful new products in the electronics industry and concluded that knowledge obtained by analysis of failure was often instrumental in achieving subsequent success. They described failure as “the ultimate teacher”. In one of the few examples of post-project appraisal found, Garvin (1993) described how Boeing introduced new policies to learn from mistakes after experiencing difficulties with the introduction of both the 737 and 747 aeroplanes. A high-level project team was appointed to compare the new product launches with earlier, more successful efforts to analyse where mistakes had been made. The group was charged with developing a set of “lessons learned” for the benefit of people involved in future product launches. Individuals who had worked on this appraisal team were then seconded to the 757 and 767 start-up teams to transfer the lessons learned to these new projects, both of which

went on to be successfully launched. The scarcity of such examples of evaluation indicates that it is not only the banking industry that is failing to maximise the benefits of new technology, and a comparative study of IT project management in a variety of industries may provide valuable insights into this problem.

Effective management of learning

Fincham *et al.* (1994) noted an increasing tendency for power to move away from hierarchical management towards the possessors of technical knowledge, as IT projects became increasingly strategic and central to key business activities. At the same time, users became more demanding as they acquired a level of technical knowledge and ceased to accept solutions that could previously have been imposed by system developers. The authors suggested that the development of “hybrid expertise” was necessary to reconcile these dynamics, ensuring technology was integrated with business requirements. They quoted Earl (1989), who defined the hybrid role as follows:

... hybrids are people with technical skills able to work in user areas doing a line or functional job, but adept at developing and supplementing IT application ideas.

The development of hybrid managers would seem to be a practical solution to the misunderstandings between IT and commercial employees raised above that have tended to compromise the success of new technology projects. There has, however, been criticism of the hybrid manager notion in the literature. Critics focus upon the perception that such individuals lack credibility in either the IT or the business areas, because the necessary broad approach of the hybrid would mean that detailed knowledge of either speciality was hard to sustain (Simpson, 1991.) In addition, it has been claimed that the speed of change in the industry is such that the technical skills of the hybrid manager soon become outdated and redundant (Currie and Glover, 1996).

Within the case study banks, very different attitudes towards hybrid managers were displayed. According to an interviewee from Bank B:

If you put a banker into an IT role you can add value from a naivety point of view, you ask

strange questions ... bring in fresh ideas, different experiences (general manager).

Occasional attempts were made in Bank A to create “hybrid managers” with knowledge of both technical and business issues, to bridge the gap between users and system developers. These individuals tended to lack credibility in either camp and their knowledge was perceived as superficial or out of date. In contrast, interviewees from Bank D were enthusiastic about the value of hybrid skills in the success of the project:

We encourage the development of a team of “superusers” who have bought in to the project and been involved from the start. You pick the best users and use them to train the others. However, the best users are always going to be required elsewhere, and that is where senior management come in ... if they are prepared to spend whatever on the project then they should ensure that the best people are employed on it. The superusers have credibility in the eyes of their peers, and they can sell the project for you (general manager).

The interviewee defined the “superuser” as an employee of a business area who is able to use software development tools and tailor them to meet particular needs – without needing to ask a programmer for help. Another described how business analyst roles had developed from the “superuser” concept:

They are not programmers but they are able to fill the gap between business and IT ... have an empathy with both areas and talk the IT language. They are hybrid people really. It’s a matter of learning the jargon (marketing manager).

Success was also noted by Morris and Westbrook (1996) who focused upon the implementation of a new technology project at Midland Bank. They found that success was facilitated by the replacement of Midland executives at senior levels with people recruited from outside the bank, an unprecedented step in the industry at that time. These individuals brought in a fresh approach and new ideas that proved invaluable. At Bank E staff were selected from the open market on the basis of their communication skills rather than past banking experience, which was actually perceived as a disadvantage. This was because the policy of adopting a totally new approach to retail banking required no preconceptions of what the roles of the staff should entail. Many work part-time as the provision of a 24 hour service allows flexibility of working

conditions. Bank D recruits staff externally at all organisational levels, and it is considered acceptable to leave the bank and return to another role later on. One interviewee commented that this was common practice and often constituted a viable career move. He noted that the standard personnel forms completed by all staff include the categories “hire date” and “re-hire date”!

The preference for external recruits in Banks D and E provides an interesting perspective on learning. It indicates that employee experience of “the way we do things round here” does not necessarily constitute learning in a positive sense. The challenge for the learning organisation, therefore, is to be able to distinguish occasions when the accumulated knowledge base may be detrimental rather than conducive to new project success, and in these circumstances it may be best served by recruiting outsiders with a totally fresh approach.

Learning from structural change

Scarborough and Lannon (1994) described how Bank of Scotland lost significant market share as a result of a disastrous policy towards ATM introduction in the late 1970s. By recognising that the problem lay with the inflexible organisational structure, and taking appropriate remedial action, the bank ensured that more value was obtained from a subsequent home banking project, and came to be regarded as a market leader in the utilisation of new technology. In Bank E, the problem of employee adherence to historical working practices was obviated by the total separation of the new venture from traditional banking activities. There is a sense in which this strategy can be regarded as avoiding the problems of learning, by employing outsiders to work on the projects and “ring-fencing” the new activity from the rest of the organisation. The strategy encompassed the recruitment of staff from outside the organisation – or indeed the entire financial services industry in some cases – and was ratified by the advantages of investment in customised new computer systems. Such policies have obvious benefits for the individual project in terms of facilitating culture change by providing the ability to start with a clean sheet of paper. In each of the examples studied, however, it seemed that the benefits of the organisational separation policy were restricted only to the particular project in question. This was

because day to day activities within the banks were unaffected by the success of spin-off projects, as no specific systems were developed to encourage learning by integrating the new projects with existing operations. By ring-fencing the projects, the very opposite was actually the case. The success of Bank E has yet to impact on other areas of the bank in terms of the way in which it is structured and managed. By restricting the opportunities to learn from successful projects, no ongoing commitment to innovation can be generated in the mainstream banking areas. This finding supports the work of Garvin (1993) who noted how the existence of such intra-company boundaries inhibited the flow of information, encouraged isolation and reinforced preconceptions.

The London office of Bank D successfully implemented a new electronic banking system after poor financial results forced consideration of ways to improve efficiency. This consisted of a major reengineering exercise in which the areas of operations, finance and marketing were overhauled and a new team-based structure created. There are now just four levels in total, namely team member, team leader, director and managing director, so that lines of communication are very short. The managing director was previously the IT director and this has ensured that a focus is maintained on new technology developments. The new structure is admired by other parts of the bank, which regard the London office as the vanguard of new business practices in comparison with their own areas, which are still locked into bureaucratic hierarchies. This example shows that significant learning can occur if the commitment and incentive exist, and the people charged with running the change programme have the authority to enforce what can often be painful decisions.

It would be tempting for one to conclude from this section that the obvious way to encourage organisational learning is to develop each new initiative in isolation from the main organisation, with its own unique staffing and technological support arrangements. Whilst this strategy may alleviate internal resistance to new projects, it is rarely practical unless the project in question represents an entirely new venture for the bank concerned. Many of the new technology projects under consideration by

the banks relate to improvements or upgrades which need to be integrated with existing services that are already operating on a daily basis. In these circumstances it would be impossible to isolate the project in the manner successfully adopted by these organisations. A more realistic strategy for learning would appear to centre upon improving the communication and relationships between business and IT areas, to the extent of developing a more flexible and IT literate workforce, with a skills base that is relevant to the current needs of the industry.

Supportive cultures as an aid to learning

It was noted earlier that specific aspects of a “traditional banking culture” appeared to engender an attitude of complacency amongst the major players based upon historical success rather than commercial reality. This tended to reduce their perceived need to learn from past mistakes and hence inhibited the potential of new technologies, as illustrated in the cases of Banks A, B and C. At Bank D, however, the need for cultural change if the project was to succeed was recognised at an early stage. The learning process in this case encompassed the realisation that the traditional mindset upon which people’s expectations were based, in terms of grading and organisational structure, needed to be changed. Action was then taken to address this complex problem. An interviewee from Bank D described the new strategy as follows:

We are now concentrating upon broadening people’s experience rather than promoting them, and trying to wean people off the idea that you always need to get grade promotions. We try to pay them more for knowing more, and move them sideways within their grade to learn new skills. Giving grade increases tended to raise people’s expectations above the ability of the person . . . and sometimes those promotions reflected an individual manager’s personal preferences rather than ability. So we try to pay people better for experience and knowledge. Promotion is still available if people want to move to a different team or country. The career path cannot be vertical any more because we only have four levels (business analyst).

Despite the success of this project, which was widely publicised throughout the bank, there has been no attempt to apply the lessons learned in other areas in which the economic imperative is less critical. As seen in the case of Bank B, little pressure exists to instigate major change because the bank is still making millions while operating within its traditional

functions. The organisation as a whole remains hierarchical and bureaucratic, with a complex internal structure. Within this context, the London office of Bank D can be regarded as “ring-fenced” in a similar manner to the cases described above, because the change programme occurred in isolation from the rest of the bank.

One interviewee noted that some US banks have taken the ring-fencing scenario further and are starting to operate “parallel banks”. These are effectively new outlets with new systems and staff for the benefit of customers who expect “state of the art” banking facilities. The banks concerned run both their traditional and new operations alongside each other, rather than put existing staff through the learning process of extensive re-training and enable them to operate effectively in entirely new business environment. There is as yet no sign that UK banks are going down this route, and it remains to be seen how successful (and indeed expensive) this new development will prove to be in practice.

Conclusion

It can be argued that organisations first need to make mistakes in order to learn from them, so the banks should not be condemned too strongly for some of the errors made. However, the absence of learning from the mistakes of earlier projects was one of the more surprising issues to arise from the empirical study of technological change in the banks. It meant that subsequent projects within a bank tended to come up against exactly the same problems as had been experienced earlier. The considerable resources devoted to IT projects did not extend to measurement of effectiveness, or analysis of why mistakes had occurred. This scenario was particularly applicable to Bank C, where the lack of learning from project to project was emphasised by a policy of moving on project leaders with accumulated experience. Newcomers who replaced them faced the same difficulties in running a new project.

Bank D successfully implemented a new technology project, but the organisational changes that were introduced to facilitate the operation have yet to be replicated in other areas of the bank. The policy of “ring-fencing” new IT projects has limited impact

because the remainder of the organisation is unaffected by the change, and consequently has no opportunity to build upon project successes at the organisational level. The limited steps that the banks studied have taken to facilitate technological change have had some success at the individual project level, but have not yet instigated a more long-term commitment to innovation and change throughout the organisation. This lack of learning from past experience is not regarded as a major problem within the industry because the market position of the banks remains as strong as ever. It has been argued in this article that the complacent attitude towards learning is contributing to the continued existence of the IT productivity paradox. As a result, the full potential offered by information technology will continue to elude the banks until this issue is addressed.

References

- Child, J. and Loveridge, R. (1990), *Information Technology in European Services*, Basil Blackwell, Oxford.
- Coombs, R. (1992), "Organisational politics and the strategic use of information technology", *Programme on Information and Communication Technologies Research Paper 20*, ESRC.
- Currie, W. (1995), *Management Strategy for IT: An International Perspective*, Pitman, London.
- Currie, W. and Glover, I. (1996), "Hybrid managers: an example of tunnel vision and regression in management research", paper presented to British Academy of Management Conference, Aston University, Birmingham, 18 September.
- Dougherty, D. and Hardy, C. (1996), "Sustained product innovation in large, mature organisations: overcoming innovation-to-organisation problems", *Academy of Management Journal*, Vol. 39 No. 5, pp. 1120-53.
- Earl, M. (1989), *Management Strategies for Information Technology*, Prentice Hall, London.
- (The) Economist (1999), "Survey of technology in finance", *The Economist*, October.
- Fincham, R. et al. (1994), *Expertise and Innovation*, Oxford University Press, Oxford.
- Garvin, D.A. (1993), "Building a learning organisation", *Harvard Business Review*, July/August, pp. 78-91.
- Gates, W. (1995), *The Road Ahead*, Viking Penguin, New York, NY.
- Gulliver, F.R. (1989), "Post-project appraisals pay", in Forester, T. (Ed.), *Computers in the Human Context: Information Technology, Productivity and People*, Blackwell, Oxford.
- Hackett, G.R. (1994), "Investment in technology – the service sector sinkhole", in Rhodes, E. and Wield, D. (Eds), *Implementing New Technologies: Innovation and the Management of Technology*, 2nd ed., Blackwell, Oxford.
- Harris, L. (2000), "The information technology productivity paradox: evidence from the UK retail banking industry", *New Technology, Work and Employment*.
- McLoughlin, I. and Clark, J. (1994), *Technological Change at Work*, 2nd ed., Open University Press, London.
- Maidique, M.A. and Zirger, B.J. (1985), "The new product learning cycle", *Research Policy*, Vol. 16, pp. 299-313.
- Morton, F. (1999), "Braxxon technology survey of banks and IT", *The Times*, 29 May.
- Morris, T. and Westbrook, R. (1996), "Technical innovation and competitive advantage in retail financial services: a case study of change and industry response", *British Journal of Management*, Vol. 7, pp. 45-61.
- Nairn, G. (1996), "IT companies in mid-life crisis", *Financial Times*, 3 July.
- Scarborough, H. and Lannon, R. (1994), "The successful exploitation of new technology in banking", in Rhodes, E. and Wield, D. (Eds), *Implementing New Technologies: Innovation and the Management of Technology*, 2nd ed., Blackwell, Oxford.
- Senge, P.M. (1990), *The Fifth Discipline: The Art and Practice of the Learning Organization*, Doubleday, New York, NY.
- Simpson, J. (1991), "Educating IT managers: the hybrid manager", *Computer Bulletin*, 6-7 June.
- Tidd, J., Bessant, J. and Pavitt, K. (1997), *Managing Innovation: Integrating Technological, Market and Organisational Change*, Wiley, London.