

# Strategic Change in Financial Services: The Social Construction of Strategic IS

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## Abstract

This paper is based on empirical research into the role of IS functions in shaping strategic changes in a sample of financial institutions in the late 1980s and early 1990s. It argues that the implications of IT for organizational redesign are worked through the social construction of different classificatory systems; “strategic versus non-strategic IS” being an important example of such a system. The construction of these classifications encompasses wider institutional factors, the competitive relations between different expert groups, and the unfolding characteristics of IS projects. In this competitive arena, constructing IS as a strategic concern within the business depends on IS functions enlisting both the immediate contingencies of the project at hand and the wider institutional context.

## 1. INTRODUCTION

How do certain IS projects or activities come to be seen as “strategic,” while others are viewed as merely “operational”? Although these terms are extensively employed in the literature on information systems management to denote differing approaches to planning and implementation, this question is rarely addressed in any depth. Instead, a “common sense” epistemology tends to prevail in which the strategic character of certain tasks and activities is either taken as given or is established through logical induction from their effects on business goals or competitiveness. In contrast, this paper views strategic IS not as a self-evidently important task domain but as the outcome of organizational processes of classification based on the strategic/non-strategic schema. Systems of classification are powerful methods of ordering organizational realities. They not only shape the management of particular activities — cueing particular decision criteria and development techniques — but also supply retrospective legitimation. A project which is defined as strategic, for instance, will be managed quite differently from its operational counterpart, and the label itself will serve to retrospectively justify its existence as well as the relaxation of the usual controls on development and resources.

Although the strategic/non-strategic continuum (Hirschheim 1982) is typically defined in purely cognitive terms, this paper will argue that these categories are neither robust nor self-evident in the emergent context of new IS projects. Rather, the inductive exercise involved in labeling a project strategic or operational is heavily shaped by the organizational context and, in particular, by social and institutional processes of classification. As the allocation of IS activities to either strategic or operational categories has emerged as a key element in IS management practice (Wilson 1989; Niederman, Brancheau and Wetherbe 1991), it has become increasingly important to understand the social construction of these categories within organizations.

The following study addresses these social processes of classification through an empirical account of the emergence of strategic and non-strategic IS projects in the financial services sector of the UK. This study tracked the design and development of a number of IS projects, some of which had been designated as strategic by senior IS management and others which were viewed as more routine. Instead of taking the concepts of “strategic” and non-strategic as *a priori* or ontological categories, the study concentrated on the way in which these labels were selectively applied to the management of particular projects and the organizational processes involved in developing and securing this labeling.

## 2. MAKING IS STRATEGIC

Using Whittington’s (1993) terminology, views of strategy can be broadly assigned to two different schools of thought. In the still-dominant “classical” perspective, organizations are seen as basically market-driven and having to constantly adapt to the changes and contingencies of the external environment. IT is seen as a resource to be deployed according to the needs and pressures of that environment. Strategy has the job of transmitting such pressures by forging links between internal structure and resources, on one hand, and external product-market moves, on the other. In brief, this perspective sees the relationship between strategy and IS as essentially having to do with recognizing the contingencies of the technology and the product-market environment (Premkumar and King 1994) and relating these factors to business objectives.

In contrast, the “processual” approach (Pettigrew 1985) rejects formal plans and methodologies as simply the tip of the organizational iceberg. It delights in exposing the hidden world of the organization, where social values, political interests and structural inertia shape the formal instruments of rationality. It rejects the idea that organizations are engaged in a ceaseless struggle to adapt to changing environments. Its focus is more on the ceaseless struggle within the organization, as different groups within the structure of the business compete for power.

In contrast to these established schools of thought on strategy, the social constructionist view (Berger and Luckmann 1967) challenges the fundamental assumption that there is a singular external reality confronting organizations. It is skeptical about the ability of organizations to rationally identify relevant contingencies in their environment (Smircich and Stubbart 1985). Equally, it does not subscribe to the view that the internal reality is the dominant one. Rather, its concern is not with the focal organization adapting to its environment but on the way in which social groups within and across organizations actually construct the realities which seem to

confront them. In this context, the notion of strategy is neither a concrete reality in its own right nor an outcome of political bargaining, but a resource which groups use to construct reality. To say that the concepts and classifications employed in organizations are socially constructed is to make an important epistemological point: a distinction between correspondence and consensus views of truth (Knights and Murray 1994). Substantiating this point, however, involves developing an empirically grounded understanding of the social structures and processes which shape organizational cognition. In particular, the social construction of strategic IS draws attention to organizational processes of classification which are a central element in the way organizations order reality.

Viewing strategic IS in these terms demonstrates that it is only one of many possible schemas that can be applied to IS work. The management of IS is characterized by a proliferating variety of typologies and other frameworks — for example, the “stages” model and its many variants. Even within the literature of strategic IS, it is possible to discern different approaches to categorizing IS work. There are, for instance, both internally and externally derived classifications. The internal arguments focus on the top-down ordering of organizational goals through planning mechanisms (Premkumar and King 1994) while the external arguments highlight the competitive advantage to be derived from IS (Kettinger, Grover and Segars 1995). In both variants, however, the emphasis is firmly on the cognitive domain of classification. Sweeping assumptions of managerial rationality allow writers to pursue elaborate forms of classification based purely on “objectively” defined business and technological contingencies. The oft-cited McFarlan and McKenney (1983) matrix is the locus classicus for this form of classification.

However, as Farbey, Land and Tagett (1995) have noted of the evaluation of IS investments, the content of these schemas is less important than their social context. If we wish to understand why certain classificatory systems are implemented and others not, we had better unpack these matrices and ask what institutional codes underpin their axial principles. Douglas (1987) in explaining the different classifications of wine used in the French and Californian vineyards (the French based on region, the Californian on types of grape) shows how different institutions produce different classificatory styles. She argues: “Institutions bestow sameness. Socially based analogies assign disparate items to classes and load them with moral and political content..” (Douglas 1987, p. 63).

In turn, King et al. (1994) have identified a number of institutions which may produce such classificatory effects on “IT innovations.” These include government agencies, universities, banks and trade unions, and, most importantly, the role of “trend setting corporations.” As subsequent cases will show, many of the crucial institutional influences on IS in financial services emanate from the sectoral context. Business strategies are heavily influenced by the “recipes” defined by leading firms within the sector (Child and Smith 1987). Likewise, the spread of the strategic IS label can be related to the demonstration effect of the small number of cases which “have become the models of how to use information technology to improve a firm’s competitive advantage” (Kettinger, Grover and Segars 1995, p. 35). Significantly, these cases typically demonstrate the strategic character of IS through a retrospective account of impacts and benefits, providing few clues for a prospective pursuit (Kini 1993).

### **3. THE INSTITUTIONAL EFFECTS OF EXPERTISE**

What distinguishes the construction of classificatory systems in the technology field is their greater reliance on professional expertise. Where folk classifications lean heavily on analogies with nature (Douglas 1987), the frameworks applied to IS work show the imprint of an evolving knowledge-base. Networks of researchers and practitioners are constantly engaged in producing new frameworks and new ways of classifying reality. This activity, moreover, is self-conscious in its intentions, if not sociologically conscious in its effects.

This being said, the influence of IS expertise on the classificatory systems of IS practice is partial and constrained. IS specialists are in constant competition with other occupational groups, such as accountants and marketing specialists, to promote classificatory world-views in which their own expertise is central. IS specialists promote taxonomies based on information processing while accountants map organizational processes through financial measures and labels. Organizations become, in effect, a contested terrain across which these different classificatory systems slug it out. For example, the classificatory system defining strategic IS cuts directly — and not incidentally — across the categories and criteria defined by accountancy expertise. The stakes are high since the victory of one system over another will determine both winners and losers. As Kettinger, Grover and Segars (1995) note wistfully of the heyday of strategic thinking: “Strategic information technology was once viewed as the catalyst to propel IS managers from the back room into the corporate suite. Many consultants and researchers still push strategic IT” (p.35).

Note here the close relationship between the concepts and categories of strategic IS and the interests of occupational groups and institutions. This way of classifying IT serves to “propel” IS managers and it is “pushed” by related interest groups. However, at the same time as IS groups promote a strategic framework for their work, other groups such as accountants and marketing specialists are also laying claim to the strategic high ground, but with different criteria and arguments. The strategic category of IS work has to be socially constructed in an arena where the claims of IS specialists are competing with the clamoring voices of senior managers from other functions and interests. From that competition of concepts and occupational groups emerges the dominant classificatory systems for interpreting the realities facing the business.

### **4. THE EMPIRICAL STUDY**

Research was carried out in the period 1989-1991.<sup>1</sup> It focussed on IT projects in six Scottish-based financial institutions spanning the insurance and retail banking sectors. The account begins with a survey of the sectoral and institutional context in which these case-study firms were located.

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<sup>1</sup>The study was carried out by a multidisciplinary team drawn from the universities in Edinburgh, Stirling and Warwick. It was supported by a grant from the Joint Committee on the Economic and Social Research Council and the Science and Engineering Research Council. Its detailed findings are reported in Fincham et al. (1994).

#### **4.1 Sectoral Context**

The evolution of financial institutions in the UK has typically involved the elaboration of branch networks controlled from a central headquarters. This in turn established the classic infrastructural patterns for computing and IT, where large mainframes served a large number of branch systems. IS expertise inevitably developed around this pattern, with consequences — notably, the development of sizeable central Information System functions — which are still being felt today.

These sectoral factors not only shaped IS expertise, however. They had equally important repercussions for the emergence and subsequent pecking-order of many other forms of specialist expertise. In particular, sectoral evolution helped to establish the centrality of financial intermediary roles which came to be occupied by specialist bankers, accountants and actuaries. The latter have in turn inhibited the emergence of other forms of expertise, notably in the areas of general management, marketing and corporate planning (Dalbey 1986).

Against the dominance of these established professions, technological trends in the 1980s and 1990s promised to increase the centrality of IS expertise (Scarborough 1992). As financial services are information-based, there seemed to be ample opportunities for new product development and the creation of new electronic delivery systems. Equally, the power of IT to appropriate the expertise of specialist groups seemed to presage greater consumer accessibility to once esoteric intermediary skills. As Child and Loveridge (1990) note:

The ability to rationalize service provision through the application of new technology depends upon an ability to codify transactional information which consumers can then use to make their own choices, in principle on a self-service basis. [pp. 36-37]

However, there were also important constraints on the pervasiveness and centrality of IT in financial services. These included the continuing importance of financial intermediary roles in profit generation and more generally the weakness of IS professional groupings. Equally, it would be a mistake to see the role of IS functions as being wholly oriented toward product marketing and innovation. Much IT investment and IS expertise was still dedicated to the maintenance and development of infrastructural technologies for funds movement or shared ATM networks, which had little direct connection with product-market competition. Even in the highly fragmented US banking industry, around 65% of systems expenditure in banking was going to supporting “invisible” functions such as funds transfer with only 10% going into potentially competitive product-market areas. In short, it seemed that “the vast bulk of systems investments support products or services that are commodities throughout the industry” (Steiner and Teixeira 1990, p. 45)

Although these factors limited the extension of IS expertise into other fields, the nature of IS work itself continued to preserve IS autonomy from deskilling and the detailed specialization of jobs. Both the proliferation and the nature of IT applications limited the incorporation of IS skills into hardware. Moreover, the uncertainty generated by the spread of innovative applications effectively inhibited the routinization of IS work. As Friedman and Cornford note,

Technical progress...which arises from the cumulation of individually minor improvements is also important today. What distinguishes computer systems development is the extent to which technical change of this...type occurs. This is, in turn, dependent upon the inherent creativity which still characterizes systems development. [Friedman and Cornford 1989, p. 360]

If IS expertise was sustained by constraints on management deskilling and rationalization, its position was also underpinned by the inability of other organizational groups — specifically users and accounting professionals — to exercise effective control over IS work. This is not to say that IS expertise was blissfully unaffected by these groups' expectations and pressures. The growth of distributed IT and the waning of the mainframe, for instance, had greatly boosted the role and knowledge of user groups in shaping IT developments. Indeed, the 1980s were dubbed the era of "user relations" constraints by Friedman and Cornford. However, given the integrated and centralized character of IT systems in financial services, this shift effectively gave a new twist to the tensions between centralized control and user demands. In our sample organizations, this tension expressed itself in the work organization of IS staff and in the allocation of IS resources. For example, while IS personnel typically worked in teams that shadowed user departments, they were not devolved to those departments but were managed from the central IS function. Similarly, while IS work was largely driven by user demands, IS expertise was effectively rationed through systems of project prioritization. Revealing asides from IS staff — "priority 4 never gets done" or "it's the greeting wean that gets fed" — demonstrated that prioritization was as much a question of political expediency as of the rational allocation of resources. These tensions might have ultimately been resolved in favor of user control, but this decentralizing tendency was countered in most of our sample firms by the continued need for a centralized IS resource to sponsor and develop organization-wide IT projects.

The politics of IS expertise were also shaped by the role of the accounting functions in our case-study organizations. The IS function poses a particular set of problems for the application of financial controls and hence for the way in which it can be structured. These problems relate to the "tyranny of shared costs" noted earlier: the difficulty of apportioning the central mainframe costs of development, maintenance and processing to user departments. In this period, our sample firms typically handled such accounting issues through cost-center and budgetary controls for IS functions. The infrastructural and integrated nature of IS technology created significant constraints on the allocation of IS costs to users. At one bank, for instance, progress in linking IS projects to costs had only been made in the last three years: "Three years ago...you didn't know if it would cost you £1/4 million or £10 million...we know the basics of the technology, but it didn't necessarily translate into the bottom line of cost."

Even accountants acknowledged the difficulty of achieving a precise breakdown of costs:

You can look at an engineering factory and you can see the product being built and you can say "well that should not have taken twice as long as that," except maybe there is a bit more stress or a bit more sophisticated welding in doing that. It's very difficult to do that with a development project when it is all done on a computer....If you can record your man-hours on the project, you have still got this problem with processing capacity. Its difficult to isolate completely.

## 4.2 Case Studies

The cases<sup>2</sup> have been organized so as to provide paired comparisons. The aim of these pairings is three-fold. First, coupling projects involving similar tasks, technologies or product-market contexts helps to highlight the influence of the politics of expertise on the management of IS projects. Second, the distribution of strategic and non-strategic projects between the different pairings sheds much light on the distinctively organizational processes underpinning the development of strategic concepts and categories. Taken together, these comparisons then help to reveal the different classificatory systems applied to these projects.

- Bank of Scotland VISA CENTRE and Premier Financial Service\* (PFS) INDEX: customization of card processing packages.
- Clydesdale Bank's TELEBANK and Royal Bank of Scotland's ROYLINE: remote banking systems.
- Bank of Scotland's CABINET and Home & Auto Ltd's\* MIS: a Branch Information Network and a Corporate MIS (Management Information System) respectively.

Although a number of the projects were deemed strategic by IS management, the focus in our research was not on a predefined conception of what constituted strategic IS, but on the social processes involved in constructing such concepts and categories. In that sense, the local meanings attached to strategic IS were the end-point rather than the starting-point of our study.

### VISA CENTRE and INDEX

This first pairing of cases brings together two projects where the main IS developments involved the acquisition and maintenance of software packages for the processing of credit card accounts. Although there were important issues to do with customization, the technology was well-defined and the IS development process itself was reasonably routine. These features corresponded closely to the "factory" category of IS defined by McFarlan and McKenney. That model suggests that the key decision criteria for these projects would not be strategic but rather operational goals of cost and efficiency.

However, this contingency-based classification was only partly reflected in the development processes for these projects. Certainly, the acquisition of the software packages was largely governed by operational issues of cost, reliability, and processing efficiency. But, in the PFS case the organizational context for the project gave it an added political significance that pre-empted a "factory" style treatment. Although the INDEX package was a routine card-processing technology, its acquisition for PFS was complicated by that company's status as a recently acquired subsidiary of a larger clearing bank group — ScotBank Group. In the previous year, the diversification of the Group had prompted the establishment of a "Group Services" function,

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<sup>2</sup>Whenever possible, actual company names have been used. In some instances, which are asterisked, pseudonyms have been used.

which was dedicated to maximizing the effective use of the Bank's technical resources. As control of IS developments in the Group had previously rested almost exclusively with the in-house IS function of the clearing bank part of the Group, this aim brought Group Services into direct conflict with the management of that function. The acquisition of INDEX became a key issue in that conflict.

Group Services saw IS developments at PFS as a unique opportunity to establish their influence over the allocation of IS resources. Exploiting their new mandate to the full, they were able to insist that both the customization and the maintenance of the new package be turned over to the software supplier. Since both of these tasks would normally have been the responsibility of ScotBank's in-house IS function, the effect of this decision was to establish an important precedent for the future organization of IS resources. Thus, the political significance of the project effectively overrode the more immediate concerns of efficiency and practicality. Indeed, the technologically routine nature of the project only made it a more important precedent for such decisions in the future. One member of the Group Management team hinted at the possible repercussions:

I think what we're really talking about here is power. We're talking about a historical environment where nothing, but nothing, would happen in a computer development unless it was done either directly or under the control of IS Division. Now the implications of a user getting a system in and running without ever going anywhere near Management Services...if you were in IS Division in a senior position, you would say, "Wait a minute!"

The political nature of the PFS case is highlighted by the comparison with the Bank of Scotland Visa Centre project. Although the technological component of both projects was very similar — the acquisition of a credit-card processing package — the Bank of Scotland had not followed a diversification strategy of the kind pursued by ScotBank. Consequently, there was no need for a Group Management function nor the attendant conflicts. When the Bank established its new Visa processing center in 1988, it did so very largely under the auspices of its in-house Management Services Division (MSD). Although labor market factors led to the Centre being located a few miles away from the Bank's Computer Centre, its senior management were in the main transferees from MSD and the Visa Centre itself drew heavily on the Division's technological resources. With no structural conflict to darken the mood, the decision-making processes around the Visa Centre's systems were placid and uncontentious; the outline organization chart, for example, was reputedly drawn up in a local hostelry over a quiet drink. The same untroubled calm pervaded the decisions on the processing systems which would be the technological core of the new Centre. The selection, customization and maintenance of the supplier package were all handled by MSD itself, with none of the obtrusive interventions that marked the ScotBank case.

Two points emerge from the comparison between the PFS and Visa Centre cases. First, it shows that contingencies such as the routineness of a technology are not exogenous determinants of the classificatory moves around a particular project. Rather such contingencies stand to be enlisted, or ignored, in the active construction of a classificatory schema that respects organizational politics as much as it does technical characteristics. Interestingly, the deployment of the Factory



IS classification was not a product of the technological routineness or otherwise of the projects but of the organizational context in which they were being applied. This is not to say, however, that technological or business contingencies have no effect upon the way projects are classified: the INDEX development was not managed as a Factory IS project, but there was no question of it being classed a strategic project either.

### **TELEBANK and ROYLINE**

Our second paired comparison shows how organizational politics can help to sustain a strategic classification for a project if it is actuated by the advancing claims of a powerful expertise. The relevant comparison here is between the development of two remote banking systems. At Clydesdale Bank, the in-house IS function conceived (and subsequently justified) the TELEBANK remote banking system as a strategic project. They argued from the evidence of market and technological trends that remote delivery systems would play an increasingly important part in the Bank's future product range. TELEBANK was conceived as one element in a range of remote banking products and as an important competitive response in a rapidly changing marketplace. One senior IS manager claimed:

So we had made greater sense of home and office banking; we'd taken it a lot further than anyone else had. We'd moved from being second to Bank of Scotland, and through the use of this telephone system which was innovative, we've moved ourselves to being market leaders in the UK.

In contrast, at the Royal Bank of Scotland there was no attempt by the in-house IS function to classify their ROYLINE system as strategic, even though in purely technological terms it was a more sophisticated remote banking system. Significantly, the impetus for ROYLINE came from senior management who were aware of similar developments in the USA and were concerned to extend the range of services available to business customers. Far from playing up the strategic or competitive aspects of the new technology, however, IS management took a decidedly pragmatic view: "There are business requirements for which we are finding technological solutions.... You can't utilize technology for its own sake."

Again, neither the technological characteristics of the projects, nor the features of comparable market contexts, can explain the variation in the way the projects were managed and developed. Although both projects clearly derived from a new sectoral recipe centered on remote delivery systems, the conceptual frameworks within which they were designed and justified were markedly different. In the Clydesdale Bank case, we found an IS function that was increasingly unhappy with its role. Clydesdale was a relatively small subsidiary of a larger banking group — Midland Bank — and in recent years ScotBank-style controls had begun to impinge on the autonomy of its IS function. In this context, TELEBANK not only represented a way of securing greater autonomy within the group structure, but also of securing a lead role in any future technological developments in that area. This was described by one of the system's major proponents. TELEBANK, he said,

is not highly important in terms of our own systems; though, remember, it was extremely important at the time. Politically, it was immensely important

politically. It was incredibly important that people here could see that we had something outwith the Midland Bank. Because beyond that point we were able to persuade Midland Bank that we should project manage the Group developments in home and office banking.

Apart from showing the political interests behind TELEBANK's strategic status, this quote also hints at the way such interests are not given by structural position alone but also reflect the collective identity or self-image which its managers are seeking to cultivate. Clydesdale's IS specialists had been involved in a number of important innovations in the preceding decade, including the development of a unique branch network, and also of a prototype EFTPOS (Electronic Funds Transfer at Point Of Sale) system. To develop a crude typology here, the IS specialists at Clydesdale Bank seem to have seen themselves as *Innovators*, with a responsibility for expanding the role of IS in the bank's services. They were therefore much more inclined toward exploiting the rhetorical and conceptual resources offered by strategic IS. Conversely, IS management at the Royal Bank of Scotland saw themselves as *Professionals*, emphasizing the need to serve specific needs of the Bank and priding themselves upon achieving the closest possible relationships with user groups. Given this image, they eschewed the pursuit of strategic projects, but viewed remote banking as a pragmatic and incremental response to customer needs.

#### **Bank of Scotland CABINET and the Home & Auto MIS**

In this pairing, we have a comparison of two important projects which were both labeled strategic by their respective IS managements, but which produced very unequal outcomes. In broad terms, one might say that CABINET was a successful project which validated the classificatory system propounded by IS management, while the Home & Auto MIS (Management Information System) was a comparative failure which actually undermined the credibility and claims of the in-house IS function.

The success and failure of these projects has much to tell us about the social construction of strategic IS. First, these projects suggest that success in developing a strategic category of IS has little to do with strategic rhetoric alone. Such rhetoric was a feature of both cases — if anything, more explicitly in the Home & Auto MIS case which was termed the "strategy project" by management themselves. On the other hand, the contingent features of the projects themselves do seem to have exerted a powerful influence. Even in its embryonic stages, the CABINET (Customer and Branch Information Network) project had all the McFarlan and McKenney hallmarks of a strategic project. As designed by the in-house Management Services Division, this was to be the major infrastructural investment for the Bank's branches well into the 1990s. It would provide on-line customer-based information to branches, replacing a current account-based information flow which involved the daily updating and despatch of thousands of microfiches. Moreover, it not only involved the development of a new information network connecting the bank's several hundred branches to its central mainframes, but also required the integration of existing account records into a central customer database. This last feature was particularly important because the Bank of Scotland, like most UK clearing banks to that date, had only recorded information on its many millions of branch-based accounts. There was no centralized record of its customers — many of whom might have a number of different accounts and contacts with the Bank.

For all of these reasons, CABINET was widely hailed as a major part of the Bank's product strategy for the coming decades. Said one senior manager: "CABINET itself is not a product. CABINET is a strategy. It's a strategy to attack the market place in the 1990s."

The Bank's Chief Executive was equally convinced of its importance, even while recognizing the risks: "The danger with CABINET is that you go down a blind alleyway from which you cannot escape. The danger of not doing it is that you go out of business."

With top management's backing, CABINET was firmly located in the strategic category of IS projects. Nothing illustrated this better than the Board's willingness to relax the usual accounting criteria in the face of the project's massive capital outlay. In their dealings with colleagues from the Accounting function, IS management had been able to argue successfully that the singular character of CABINET freed it from the need for detailed cost-benefit justification:

We knew that if we tried to cost justify each application as it came up, we would never be able to do it...because the infrastructural costs would always be too high. We had to take on a longer-term marketing view and accept that we would have to implement one project that was actually not going to be cost justified...provided we were sure it was taking us in the right direction.

Even a management accountant was prepared to accept that CABINET was "a strategic decision, and the cost of not doing it was more important than the cost of doing it."

Viewed retrospectively, the CABINET project seems to deserve its strategic classification simply by reason of its innate characteristics. However, this post-hoc rationalization — the project is long-term and requires massive expenditure therefore it must be strategically important — too easily neglects the preceding hard work of the IS function in creating the categorical possibility of such a strategic project. In the first instance, the very fact that the Bank selected this project from many other possible investment opportunities serves to highlight the role of MSD itself in making IS a strategic item in the deliberations of top management. In part, MSD's success here involved mobilizing sectoral recipes emphasizing quality of customer service which happened to dovetail neatly with the operational facilities offered by new database technologies. However, it also rested on the role which MSD had carved out for itself within the Bank. The early 1980s had seen important structural changes in the IS area, with first a small strategic planning unit being established and then the merger of what had been separate (sometimes squabbling) divisions of Management Services and Computer Services. The new amalgamated Management Services Division succeeded in establishing a unified mandate for interpretation and action in relation to the changing technological environment. That new mandate was simultaneously reflected in an outpouring of project proposals — CABINET being only one of a series of innovative projects — and the fostering of a self-consciously strategic identity to define the Division's role in the Bank's affairs.

Given its mandate and self-image, the MSD function was keen to use a strategic system of classification to finesse the problems raised by new technological developments. Such problems came in two forms. First, new technologies — such as customer database systems — tended to generate significant managerial and technical uncertainties. The latter, in fact, were less the result

of intrinsic technical features than of the degree of fit between the new technology and the existing competencies of the IS function. The greater the gap between the two, the more useful the interpretive flexibility of strategic IS in patching over the resulting uncertainty. Second, one of the key problems raised by new technologies was the troubling effect they tended to have on the definition of task domains. Large-scale IS projects such as CABINET could not easily be accommodated within the established borders between IS and Accounting functions. Where previous "back office" systems had been efficiency-oriented and therefore amenable to the routine accounting criteria of payback or discounted cash flow, these new systems were predicated on less quantifiable gains in market share and customer loyalty. Hence, the deployment of a strategic category of IS investment not only helped to circumvent the standard accounting criteria, but also secured a new space for IS development less subject to accounting controls.

These steps in the social and organizational construction of strategic IS can be usefully contrasted with parallel developments at Home & Auto Ltd. Although its development of a Corporate Management Information system did not approach the levels of capital expenditure required by CABINET, it did offer important, if again relatively intangible, benefits. This was a system which promised to rationalize and improve what were hitherto rather patchy and sporadic information flows to product managers. The pay-off was to come through improving the quality and responsiveness of product managers' decisions on premium rates.

From the outset, the MIS project was classed as a strategic initiative. This was reflected particularly in the development methodology employed. By adopting, in almost textbook fashion, the complete paraphernalia of a methodology termed Business Systems Planning (BSP), the director of the IS function sought to ensure that the project was responsive to the long-term needs of the organization, as a whole. This approach involved taking an holistic view of information needs, moving in logical sequence from corporate goals, as identified through interviews with senior managers, to the technical features of the operational system. The adoption of BSP was partly a reaction to an earlier abortive attempt by the rival "Statistical Services" function to develop a workable system. This had ultimately foundered when it was belatedly discovered that supposedly up-to-the-minute MIS reports could take days of mainframe run-time to produce. BSP would avoid such oversights by beginning with a detailed assessment of information needs and then moving logically and carefully onto the possible IS solutions for those needs.

Like the CABINET project, one of the principal implications of the Corporate MIS' strategic status was the relaxation of the standard financial criteria. The project report's one and only statement of financial cost-benefits claimed it would produce a "decrease in claims ratio which in turn will be reflected as benefit on the Underwriting profit/loss in a year." Noting as a conservative estimate that a 1% reduction in the claims ratio would lead to a £5 million benefit across all classes of business, the report did not even attempt to substantiate the relationship between the MIS and the quality of rate-setting within the company. One of the report's authors noted of the 1% estimate: "There was no grounding for that really. It was just a figure that everyone accepted would be the case."

However, despite — or because of — this rigorous attempt to drive the Corporate MIS from strategic business needs, the project quickly encountered problems. This was partly because

the MIS project depended from the outset on the local knowledge and cooperation of a wide range of user groups. Eliciting the information needs of the different groups involved proved to be no easy matter. Also, another major barrier was the complexity of the existing process and its dependence on the tacit knowledge of those setting premium rates. All of these problems were further exacerbated because the IS function — located in the basement of the headquarters building — lacked the necessary status and credibility to gain the active commitment of the top management team, who were located on the top floor. One of the youthful team of systems developers noted: “The topmost level was banned from us, perhaps because we were pretty scruffy.”

Not surprisingly, the IS developers were unable to squeeze these complex and ambiguous features of organizational life into their formal BSP model:

We produced organization charts but this was one of the more difficult tasks. In a complex business you may leave areas of responsibility slightly grey. Like the individual Product Managers formally had some responsibilities, but they varied in their approach to product pricing and left different decisions to their product managers....That was the first big hole we fell down.

The Home & Auto MIS project thus offers a stark contrast to the CABINET project. The latter attained strategic status through MSD’s mandate and its infrastructural implications. Moreover, as it involved a product innovation, it did not have the same need to map existing norms and practices. Its early stages were therefore relatively independent of the local knowledge and cooperation of the user groups in the branches. In contrast, the Home & Auto project rapidly fell into the “big hole” of existing organizational practices. The complexity and time demands of the project were further compounded by political pressures from impatient user departments. There was a feeling that the IS function had “analyzed it to death.” Ultimately, this combination of political pressures and technical failure prompted a change both in the personnel and policy of the IS function. This involved a switch to a more “realistic” and pragmatic approach: “evolution not revolution” as the new IS manager put it. The holistic, strategic approach was abandoned and the MIS design was simply tailored to the specific needs of the largest (and most vociferous) user department.

The contrast between the CABINET and Home & Auto Ltd. cases is revealing. It suggests, for example, that mapping a strategic methodology onto a development process is not in itself enough to construct a robust classificatory system. Instead, factors to do with the internal distribution of expertise and the scope of the project at hand seem to play a crucial role. These include the credibility of the IS function itself, especially in the top management arena; the function’s basic competences in making the technology work; and the characteristics of the project, most notably dependence on user groups.

## **5. DISCUSSION**

Each of these case pairings tells us something about the social construction of strategic IS. Even the first pairing (of non-strategic projects) has some counterfactual relevance and

usefully underscores the importance of the IS project itself to the management process. At the same time, though, the PFS case challenges the contingency model of IS management by demonstrating that expert groups are not passive in the face of the tasks which they are set, but actively seek to exploit them in ways that enhance their own stature. However, if this leads in turn to the political aspirations of expert groups, the pairing of TELEBANK and ROYLINE also reminds us that such aspirations are malleable and closely related to the collective identity which such groups construct for themselves.

Our final pairing of cases shows that making IS strategic is a more complex construction than narrowly rational or political models would suggest. Although the structural power-bases of the IS functions involved were certainly relevant, broader questions of expertise were revealed by the unfolding of project development. For example, the distribution and range of knowledge enlisted by each project was a uniformly important factor in constructing a strategic system of classification. Thus, to cite one example, CABINET's strategic standing was more easily secured because the Bank's MSD function controlled so much of the relevant knowledge. Conversely, the strategic failure at Home & Auto was closely implicated with the distribution of relevant knowledge among user groups over whom the IS function had no control.

## 6. CONCLUSIONS

This study has focussed on the role of IS functions in constructing new ways of classifying IS activities in a context of organizational and technological change. Along the way, rational and political models of change have been contrasted with the ability of IS functions to project a compelling world-view in which the strategic possibilities of IS are central. Although it obviously helps if such a world-view is supported by wider sectoral features, the contingencies of the immediate environment are probably secondary to the way in which they are interpreted. In this process, the IS function's expertise, status and self-image are important factors.

For IS functions in general, though, the construction of a classificatory system based on business strategy remains a tentative and uncertain project. Although such a system presents itself as a timeless and universal representation of IS activities, its self-referential logic needs to be enshrined in institutional codes and organizational processes to become as fully metabolized (and therefore as powerful) as it aspires to be. As the rise and fall of normative systems such as strategic IS and Business Process Reengineering demonstrates, nothing is more ephemeral than a timeless system, nor as contrived in its appeals to logic and nature.

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