Information Systems Strategy and Implementation: A Case Study of a Building Society

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The formation and implementation of strategy with respect to computer-based information systems (IS) are important issues in many contemporary organizations, including those in the financial services sector. This paper describes and analyzes an in-depth case study of the strategy formation and implementation process in one such organization, a medium-sized UK building society, and relates the process to its organizational and broader contexts; the organization is examined over a period of several years and under the contrasting leadership of two different chief executives. The case study is used to develop some general implications on IS strategy and implementation, which can be taken as themes for debate in any new situation. The paper provides an example of a more detailed perspective on processes in IS strategy and implementation than typically available in the literature. In addition, a new framework for further research in this area is developed, which directs the researcher toward exploring the dynamic interplay of strategic content, multilevel contexts, and cultural and political perspectives on the process of change.

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1. INTRODUCTION

Computer-based information systems (IS) are of vital importance to many organizations across a wide range of sectors of the economy. In deciding how to use IS effectively, these organizations need to cope both with major changes in information technology and with the kind of rapid changes in the wider social and economic environment that are endemic to contemporary society. In consequence, IS strategy and its linking to business goals are crucial and continuous aspects of the business strategy for many organizations. However, the development of IS strategy is insufficient in itself, since it is also essential to ensure implementation of the resultant information systems. Thus, the development of appropriate IS strategy and its effective implementation should be viewed as interdependent critical elements of the success of many contemporary organizations.

IS are certainly of central significance to organizations in the financial services sector, where the range, type, and cost of products offered to customers are critically dependent on the way information technology and the associated information systems have been developed and implemented. This paper will examine the process of IS strategy formation and implementation using as its basis an in-depth case study in one financial services sector organization in the UK. This organization was a medium-sized building society, whose primary business involved the supply of loans to purchasers of private houses, using funds generated from the personal savings market. The case can be divided into two phases. The first took place from 1981 to 1987 and involved a dramatic improvement in the Society's financial performance under the hands-on leadership of its chief executive, with information systems being central to the changes that occurred. The second phase—from 1987 to 1989—took place under a new chief executive and involved a radically different management style based on participation. Some difficulties were encountered, and no new information systems were initiated during this phase. A major reappraisal of management approach was being undertaken at the end of the research period.

The use of a single case study as a basis for drawing inferences about a particular area of study is related to an interpretive epistemological stance, as discussed, for example, by Craig Smith [1989]. He argued that, from an interpretive position, the validity of an extrapolation from one or more individual cases depends not on the representativeness of such cases in a statistical sense, but on the plausibility and cogency of the logical reasoning used in describing results from the case, and in drawing inferences and conclusions from those results. A similar point is made by Orlikowski and Baroudi [1991] in the specific context of information systems research; they argue that every particular social relation is the product of generative forces or mechanisms operating at a more global level; hence, an interpretive analysis is an induction, guided and couched within a theoretical framework, from the concrete case situation to the social totality beyond the individual case.

The theoretical framework used to analyze the case study in this paper relates to a focus on understanding IS strategic processes in their context, and draws from a number of sources, in particular from work on organizational change and management strategy. The next section of the paper discusses selected elements of the literature and develops the theoretical framework. This is followed by a section on research methods and by necessary background material on the UK financial services sector. The heart of the paper is contained in the next two sections, in which the case study is introduced and analyzed from the perspective of the theoretical framework, and key implications are discussed for the management and implementation of IS strategy. In the final section, some conclusions are drawn on the contribution of the paper; they are summarized here in order to motivate the reader. The paper provides a new way of looking at the dynamic process of IS strategy formation and implementation. This is illustrated by an in-depth case study, and some general implications are developed in areas such as business and IS vision, participation in strategy formation, and implementation of IS strategy. The theoretical framework can be of value to other researchers as a basis for empirical work in other situations; the implications of the case study can be taken as starting points for further research investigation on the important topic of strategy and implementation of computer-based systems in organizations.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The subject of strategy has been discussed extensively in the management literature; a much-cited writer in this area is Mintzberg. In an early article [Mintzberg 1978], he coined the term "strategy formation" to reflect the emergent nature of the strategy process. He argued that the usual definition of strategy encouraged the notion that strategies are deliberate plans conceived in advance of the making of specific decisions, whereas he defined strategy as a "pattern in a stream of decisions." Mintzberg and McHugh [1985] later gave a modified definition of strategy as a pattern in a stream of decisions and actions—the additional two words reflecting the point that decisions themselves represent intentions, whereas actions represent realized activity; we see here a key conceptual link between strategy and implementation.

Mintzberg and colleagues carried out in-depth case study work on the strategy formation process in a wide variety of organizations [Mintzberg 1979]. In summarizing this empirical work, Mintzberg and Waters [1985, p. 271] noted a further distinction between unrealized strategies, namely intentions not successfully implemented, and implemented strategy unsuccessful in its consequences. They presented a synthesized view of strategy formation:

> Our conclusion is that strategy formation walks on two feet, one deliberate, the other emergent...managing requires a light deft touch—to direct in order to realize intentions while at the same time responding to an unfolding pattern of action.

There is a large literature on information systems strategy in organizations, but almost all of it is concerned with prescriptive methods and frame-

works aimed at aiding management in the formulation of strategy. (Earl [1989] provides a summary of much of this conventional literature.) There is a much smaller body of work [Kling and Iacono 1984; Orlikowski 1992] on interpretations of the process by which IS strategy forms in practice and its links to implementation. A specific example, following the lead of Mintzberg, is provided by Waema and Walsham [1990], who use the methodological approach of "contextualism" to trace elements of the process of IS strategy formation in a developing country bank, and its links to organizational and wider contexts.

Contextualism as referred to above will be used as the basis for the theoretical framework in this paper. The ideas in contextualism arose from research on organizational change conducted by Pettigrew and colleagues at the University of Warwick [Pettigrew 1987; 1990]. A key feature of the approach is to consider three elements of organizational change programs, namely, content, context, and process. These are viewed as interrelated, and the main focus of the research process is to trace their dynamic interlinking over time. For example, Pettigrew [1985] describes a major study of organizational change in the UK-based chemical company ICI. A key element of strategic content in the 1980s, associated with the leadership of the Chief Executive, Harvey-Jones, emphasized a sharpening of market focus and a greater entrepreneurial approach from more decentralized units. The processes under examination included the activities of the main board with respect to strategic change. Context in the study included various levels in the organization itself, but also the higher level of the chemical industry as a whole, and the changing economic and political context of the UK. An example of the dynamic linkage among content, context, and process is the way the strategic content of market-led change outlined above was justified by cultural and political processes that included the difficult economic context at the sectoral and national level. This, in turn, created new economic and cultural contexts for ICI.

Contextualism was chosen as the basis for the research reported here, since the key aim of our work was quite similar to that of Pettigrew, but with an IS focus. Our aim was to trace the dynamic interlinking among elements of IS strategic content, the process of IS strategy formation and implementation, and the different levels of organizational and wider contexts. Certain modifications were made to contextualism, as described by Pettigrew, in order to adapt the framework to the IS domain. The resultant framework is summarized in Table I; the rationale for the choice of particular conceptual elements is now outlined.

The first component of the framework is the intended content of IS strategy, which varies over time, is drawn on in the process of debate and action, and can be regarded as an aspect of the organizational context at any particular instant. Strategic content can involve planned changes to products and services, business processes, formal organization structures and roles, and human perceptions, with the last including attempts to bring about cultural and political change in the organization. Associated changes in the

Table I.   IS Strategy and Implementation—Framework for Analysis

Components	Definition and Associated Elements
Content	Intended strategy, drawn on in process and can be viewed as an aspect of context
	Organization—planned changes to products and services/business processes/organizational structures and roles/cultural and political attitudes
	IS—changes to hardware/software/related technologies
Context	Phenomena at different levels that affect and are affected by process
	Broader organizational, sectoral and national contexts
	IS context—(based on web models) social relations/infrastructure/history
Process	Interconnectedness of events and actions over time
	Cultural perspective—aspects of strategic content and context are used as symbols in sense making, thereby maintaining or altering contexts of meaning
	Political perspective—aspects of strategic content and context are used in political action and the exercise of power, thereby maintaining or altering contexts of power relations

computer-based IS involve hardware, software, operating systems, and related technologies.

The second element of the framework is the context within which IS strategy formation and implementation takes place. The theory of contextualism places an emphasis on the importance of multilevel contexts, including not merely the organization itself, but also broader sectoral and national contexts. Context can be defined as phenomena at different levels that affect and are affected by the strategy process. For example, changes in business strategy and deregulatory changes in the financial services sector are two aspects of context at the organizational and sectoral levels respectively that have a two-way relationship with the process of IS strategy formation and implementation. The organizational context element in contextualism can be further enriched and made more specific to the domain of information systems by bringing in concepts from work on "web models" [Kling and Scacchi 1982; Kling 1987]. Web models draw broad boundaries around a focal computer system and examine how its use depends upon a context of complex social actions. The models define this social context by taking into account the social relations among the participants concerned with the information system, the infrastructure available for its support, and the previous history within the organization of commitments made in developing and operating related computer-based technologies.

Contextualist research requires, as well as models of context, a description of the process under examination, which in this case is the interconnectedness of events and actions in IS strategy formation and implementation over time. An explanation of process requires a model of human behavior underlying the research [Pettigrew 1987]. Further, the linkage between context and process is viewed in contextualism as a crucial aspect of analysis; processes are seen as both constrained by existing contexts and involved in shaping

contexts, either by maintaining them or altering them. The model of human behavior and social process underlying the analysis in this paper takes both cultural and political perspectives. The rationale for the choice of these two perspectives in examining process was twofold. First, these perspectives were identified as valuable in the original work on organizational change reported above. Second, they have also been identified as important in the IS literature, and appeared particularly appropriate in describing the complex sociopolitical process of IS strategy formation and implementation. A brief outline of these perspectives is now given, and related to some earlier work in the literature.

A valuable paper by Smircich [1983] pointed out that the culture concept has been borrowed from anthropology, where there is no consensus on its meaning. The primary view taken here will be that of culture as shared meaning, linked to symbolic anthropology [Geertz 1973]. When this perspective is applied to organizational analysis, culture is conceived of as a pattern of symbolic discourse and action. The research agenda is to document the creation and maintenance of organization through such discourse and action. With respect to the concept of culture in the IS literature, an early article by Feldman and March [1981] viewed the use of information in organizations as embedded in social norms that make it highly symbolic. Thus, for example, the requesting of information is not simply a basis for taking action, but symbolic of competence and social virtue in contemporary western civilization, where the concept of intelligent choice is a central ideology. Some further work in the IS literature on culture is that of Boland [1979; 1985], where information systems are viewed as an environment of symbols within which a sense-making process takes place. He suggested a cultural approach to information systems requirements, including a dialogue on the problems and processes currently felt appropriate for the organization. Other work in the IS literature that relates to the symbolic aspects of culture includes Robey and Markus [1984] on ritual in IS design, and Hirschheim and Newman [1991] on myths, metaphors, and magic. The cultural perspective on IS strategy and implementation taken in this paper sees aspects of strategic content and context as being used in sense making or the creation of meaning, and thereby maintaining or altering such contexts of meaning.

The second model of human behavior and social process we will use adopts a political perspective, centered on the nature of power relations. Power can be viewed as a pervasive and continuous element of all human action [Giddens 1984], and local actions can be seen as linked in a complex way to more general networks and institutional frameworks [Foucault 1976]. The importance of power and political action has received significant attention in the IS literature. An early article by Keen [1981] pointed out the importance of the politics of organizational change as related to information systems. A classic case study by Markus [1983] described power and political action over an extended period of several years in the introduction of a financial information system that had significant effects on both divisionalized and centralized accounting functions and led to a major conflict between them. Kling and Iacono [1984] described the postimplementation politics related to a material

requirements planning system, and discussed how key actors used the language of efficiency to help push the IS development in a direction that increased their own capacities for control in the organization. Markus and Bjorn-Andersen [1987] discussed how IS professionals can exercise power over users in a variety of ways, including the use of technical knowledge and procedures and the symbolic shaping of users' desires and values. The political perspective on IS strategy and implementation taken in this paper sees aspects of strategic content and context as being used in political action and the exercise of power, and thereby maintaining or altering contexts of power relations.

The framework developed in this section, and summarized in Table I, was used to guide the empirical research, but two qualifications are worth noting. First, although elements of the various components have been identified separately for analytical purposes, they are invariably interconnected in practice. For example, although the process component is broken down into a cultural and a political perspective, these perspectives are inextricably interlinked; an attempt to influence the evolution of organizational culture and perceptions is also a political action. A second general qualification is that a framework such as the one developed here does not provide a complete aid for the social process of the research itself. This process requires social skills and awareness that are practical in nature, and it is important that the researcher does not place too great an emphasis on fitting the data to the framework, rather than seeking to interpret events and actions as encountered in the field research.

3. RESEARCH METHODS AND CASE BACKGROUND

3.1 Research Methods

A major reason for the choice of Sky Building Society for a case study was its successful financial performance over the period 1981 to 1987, with IS being central to this achievement. Research access was initially negotiated via the Chief Executive in the first half of 1987. The field research was carried out during a period of about two years up to mid-1989. The research involved both a historical reconstruction of the period 1981–87 and a longitudinal study of the period 1987–89. There are valid concerns here about comparing two periods, one based on the historical reconstruction of participants, and the other based on a period studied in real time. Every effort was made in the historical reconstruction to try to distinguish between participants' views at some historical time and their enactment of them at a later period. For example, interview information on historical periods was cross-checked where possible against other sources of evidence, such as published data and company reports written at the earlier time. Results from the historical period could then be compared to the real-time period where the researchers had direct access to such changing views. Despite the above precautions, the different research methods for the two periods must imply the need for

caution in interpreting the results as directly comparable. A further comment will be made on this point in the section on implications from the case study.

The principal method of data collection was in-depth interviews with a range of organizational participants. Many were interviewed several times over the two-year period in order to monitor process. A further reason for this repeated interview method was to allow participants to become more comfortable with the researcher, and hence more frank and open. A total of 34 formal interviews was conducted with the 12 members of Sky, as detailed in Table II. Additionally, many informal discussions were held over tea and lunch breaks with these and other staff members of Sky. The selection of people interviewed can be related to the web model of IS context described earlier. Kling [1987, p. 319] suggests two methods for tracing the context of a focal information system, one based on resource dependencies and the other on elements of context "taken into account" by actors in the focal situation. The approach followed in this case study was broadly related to the second of these methods, with all interviewees being asked who else it was worthwhile to interview, and with the interview process only stopping when all such interviewees had been seen at least once.

Many of the interviews were tape-recorded and subsequently summarized or transcribed. The interviews were tailored to each particular person and focused on their perceptions of what happened and why; on how decisions and actions were influenced and made and conflicts resolved; on the influence of various aspects of context on the process of IS strategy formation and implementation; on the interviewee's particular role, attitude, and motivations; and on the consequences of previous actions in terms of organizational change and future actions. Other sources of data included documentary evidence from both primary and secondary sources. Some primary sources were minutes of meetings, strategy documents, internal memos and reports, and the organization's staff magazines. Secondary sources included articles in newspapers, and various financial services sector publications.

The analysis of the data collected from the various sources reflected the analytical framework in trying to identify important content, context, and process elements of IS strategy and implementation as perceived by different individuals and interest groups. However, the data also informed the framework as presented earlier, since an iterative process took place throughout the data collection and analysis phases. For example, the particular perspective on organizational culture was developed at a fairly late stage after analyzing participants' perspectives, and seeing the importance attached to symbolic elements.

3.2 UK Building Societies and the Financial Services Sector

In order to gain a better understanding of the broader context of the organizational events in the case study, described in the next section, this subsection provides background material to locate the history of Sky Building Society in the 1980s within the context of the major changes in the UK financial services sector prior to and during that period. With respect to the

Table II. Formal Interviews Conducted

Number of times formally interviewed	Number of people in this category	Functional position
6	1	⨯ MIS Manager (later Corporate Planning Manager)
5	1	* Deputy CEO
4	3	* Second CEO
		* DP Manager (later Assistant General Manager—Computing)
		* Mortgages Manager
2	4	* Systems Development Manager (later Mortgage Systems Project Leader)
		* Systems and Training Manager (later Assistant General Manager—Training)
		* General Manager—Finance
		* Systems Development Manager
1	3	* First CEO
		⨯ Microcomputer Manager
		* Deputy DP Manager

analytical framework, the objective here is to describe important elements of the multilevel context of the case, including both the sectoral and national levels.

Building societies in the UK up to the end of the 1960s occupied a relatively comfortable market niche, dominating the market for the supply of mortgage loans for the purchase of private houses by owner occupiers, and raising their funds from the personal savings market. They enjoyed tax advantages over other financial institutions, investments with the societies were perceived to be highly liquid and secure, and the absence of intersociety price competition due to the Building Societies Association interest rates cartel provided a further element of a safe environment.

The comfortable position of the building societies started to change in the 1970s when other financial institutions such as banks began to provide serious competition in the retail savings market. Competition intensified in the late 1970s and early 1980s; by 1984 the societies no longer enjoyed favorable tax treatment; the interest rates cartel had been abolished; and the Conservative government's privatization program provided a further major source of competition for personal savings. By the early 1980s, banks were also providing significant competition in the house loan market, enabled by the abandonment of government constraints on bank lending, and encouraged by the relatively safe nature for the banks of this form of lending compared, for example, with loans to Third World countries. From 1985 onward, other financial institutions, notably foreign banks, entered the house

loan lending business; both they and the main UK banks could undercut building societies in mortgage pricing, funded from the cheaper wholesale money markets, to which the building societies had little access.

The societies were thus under severe competitive pressure during the 1980s in their traditional market, but a series of legislative acts from 1986 onward allowed the societies to diversify into new areas from which they had previously been excluded. These included retail banking with a full range of money transmission services, such as check books and overdraft facilities; insurance brokerage; dealing in stocks and shares; and, in the housing area, estate agency and conveyancing services. Thus, the 1980s for the building societies was a period of new opportunity as well as competitive threat.

The changes in the financial services sector, outlined above, were intimately connected with information technology and its use in the sector. Advances in IT—notably, reduced hardware costs, increased software capability, and greatly improved communications technology—gave rise to a range of product and process innovations. These included automated teller machines (ATMs), electronic funds transfer at the point of sale (EFTPOS), on-line real-time systems rather than daily batch processing, and integrated customer database systems. The result was a greatly increased range and quality of financial products and services, a significant reduction in entry barriers, and a changed basis of competition in areas such as the provision of money transmission services via cooperative ATM and EFTPOS networks.

4. CASE DESCRIPTION AND ANALYSIS

This section contains the description and analysis of the case study. (See Waema [1990] and Walsham [1993] for earlier accounts.) The first subsection can be considered a prelude, since it provides an overview of the events and actions over the whole period 1981 to 1989. This is followed by a description of aspects of the context of Sky in 1981 and the content of strategic change as viewed at that time by the chief executive. The remaining four subsections analyze the process of strategy formation and implementation over the two periods from 1981 to 1987 and 1987 to 1989, first from a cultural perspective and then a political perspective. The focus in these latter subsections is on the process elements of the framework outlined in Table I, but aspects of context and strategic content are intertwined in the analysis, both in terms of being drawn on in discourse and action, and in representing the outcome of intentions and actions. The dynamic interplay among the content, context, and process elements of the framework can best be illustrated using this approach; a summary of some key elements in the two periods under different chief executives is given in Table III.

4.1 Overview of Events and Actions

Sky Building Society in the 1980s could be considered medium size in its sector, with assets in the middle of the decade of something over one billion pounds sterling, over 250 branches and agencies, and over 400 employees. A new chief executive, who will be called Brown, was appointed in August 1981.

Table III. Content, Context, and Process in Sky—Key Elements

SKY UNDER BROWN 1981–87	SKY UNDER TAYLOR 1987–89
Content	*Content*
Changes in organizational structure, e.g., "thin" senior management team	Introduction of participative decision-making style
	Formal corporate planning
Shift in business strategy to focus on increased profitability through better customer services	Business policy by end of period focused on loan market linked to mortgage loan systems in the IS area
Introduction of new decentralized IS	
Context	*Context*
Competitive pressure in retail savings and home loans markets	Further competitive pressure, and deregulation permitting a wider range of services
Poor financial performance and low growth before 1981	Taylor's views on the need for ownership of strategy through participation
Brown's history in marketing and knowledge of IT	Climate of covert resistance resulting from Brown's
High profitability and growth during Brown's tenure	autocratic approach IS systems inflexible and not well integrated
Process	*Process*
Brown used organizational crisis and sectoral turbulence to legitimize strategic change	Taylor attempted to use symbols of participation, e.g., corporate planning, to gain broad commitment to strategy
Brown used his knowledge of IT and marketing to pursue autocratic approach to strategy development	IS staff used inflexibility and lack of integration of systems to justify greater control on their part
Brown used his symbolic involvement, e.g., in design and development, to influence changes in attitudes	Systems development manager used knowledge of corporate planning process to link business and IS strategy
Brown used Sky's initial success to help maintain his strategic control	Senior management used competitive and deregulated climate to justify priority of loan systems in 1989

Brown's previous job was as general manager in charge of marketing in one of the top-five building societies. Prior to his appointment, Sky Building Society had stagnated for some time, and its operations were considered very costly. Brown himself said that the Society was "high cost, low growth—essentially in a defensive and sinking position."

In September 1981, very soon after his appointment, Brown made some major changes in the senior management structure. The new structure was characterized by a relatively "thin" senior management team with a wide span of control, and involved loosely defined job descriptions, flexible reporting arrangements, and informal communication channels. A notable aspect of Brown's personal style was a rather autocratic approach to strategy and decision making at the senior level. In addition, he often became personally involved in decision making at lower levels. He expressed his goals for the Society in terms of a "focus on profitability" and "customer orientation."

Brown was very knowledgeable about information technology and computer-based IS from experience in previous jobs, and he estimated that he spent up to 25% of his time on issues related to computerization and management information. Major new information systems were implemented during the time of his leadership. The first involved the decentralization of investment account processing from the mainframe system at the administrative center to the branch front counters in 1983. This was followed by a similar decentralization of mortgage applications processing in 1985. These two systems enabled improved customer service in terms of up-to-date account information and a much quicker turnaround for mortgage applications. Further benefits arising from the new systems included the availability to senior management of an instant profile of the Society's lending on a branch and regional basis.

Attempts to merge with a larger building society in 1986 fell through, and Brown resigned in the first part of 1987 to become the chief executive of a major UK financial institution. During the period of Brown's leadership, the Society had been completely transformed. Its assets had multiplied by about four times; operating costs had gone down from over 1.7% to 1.0% of total assets; advances on mortgages had multiplied by about eight times; and the total number of employees had only increased by about 50 people. Sky had become one of the fastest growing and most profitable of all the 150 or so UK building societies.

In June 1987, Sky appointed a new chief executive, who will be called Taylor. Taylor had been the operations general manager in one of the top-ten building societies. He brought into Sky a leadership style that was a major departure from that of his predecessor Brown. The key feature of this new style was increased participation in decision making at all levels, and the principal aim was to create a sense of "ownership" and thereby commitment to organizational objectives. Various methods were used to encourage this new level of participation, including quarterly management conferences involving group brainstorming sessions, a formal system of corporate planning, and widened participation at senior levels.

With respect to computer-based IS, Taylor initially took a much less central role than Brown, and other managers, such as the deputy chief executive and the systems development manager, became important actors. An issue dormant under Brown came to the forefront again in 1987 after his departure. This was a proposal to bring together mortgage administration processing, run under a central batch system, and the investment and mortgage applications systems, to create a new decentralized and integrated customer-oriented system. Immediate commitment was given to this project by senior management, who felt that the project was of high strategic value, given the increasing competitiveness of the lending market, and that it could not wait for the business and IT strategies to emerge out of the formal corporate planning process.

A steering committee was set up for the IS project, and work went ahead over an 18-month period on developing a detailed specification, using a formalized systems development approach. By the time this was completed, in the last quarter of 1988, the results from the corporate planning approach were available, and the priority business area was identified as mortgage lending, with increased emphasis in the IS area on mortgage loan systems. The systems development manager had been a participant in the corporate planning process and had tried to ensure that planning for the IT systems remained linked to the evolving business strategy. In April 1989, a decision was reached that both loan systems and the customer-based system should be designed simultaneously, with a view to having the loan systems in place a year later, although doubts were expressed by some managers as to whether this deadline was realistic. In summary, no major new information systems were implemented in the two years following Taylor's appointment, although much resource had been devoted to IS strategy and planning.

By the end of the research period in mid-1989, senior management were beginning to express doubts about progress over the previous two years. Taylor admitted that he had found it "hard, time-consuming, and expensive" to introduce an effective participative management style. With respect to computer-based IS, senior management expressed similar reservations about the utility of the participative and structured approach for the strategy, planning, and development of new information systems, mainly in terms of the slow progress due to these methods, and the strategic dangers, as expressed by the deputy chief executive, of "designing systems for today with no awareness of tomorrow."

4.2 Aspects of Context and Strategic Content in 1981

The historical context of Sky prior to the arrival of Brown in 1981 was characterized by poor financial performance, low growth, and no significant innovation. This stagnation had continued during a time of change and turbulence in the financial services sector as a whole, and it was recognized in 1981 that further major sectoral changes were about to occur. Thus, Brown was in a good position to introduce strategic change; he was well aware of

this favorable context as the following quote illustrates:

"It's not easy to change working practices, but it can be done. You can usually do it when times are difficult. Sky had its problems in 80 and 81.... This meant that people would respond to change because they knew it was needed and, therefore, you first have to have, I think, the right climate for change. This can be achieved by crisis; exploit a good crisis to get the changes that otherwise would take years."

The above quotation could be taken to imply that Brown had a rather short-term view of the strategic change process, but this is far from the case. Indeed, a key historical element is Brown's own background in the 1970s, when he was primarily concerned with customer needs and marketing; this experience helped to form his strategic vision for Sky in 1981. This vision was focused on a customer orientation, and a key element involved the use of decentralized computer-based IS to help the staff at the branch offices to deliver better customer service and better information on performance for senior management monitoring and control purposes. The following quote from Brown illustrates his strategic vision for IS in Sky:

"So many management information systems I've seen have been corporately imposed downwards.... They are not there to help run the business; they are designed to provide more figures for a centralized management... So the first thing we did... was to bring computer service right up to the customer interface for investors and subsequently in 1985 for mortgage lenders too... But you also of course get the spinoff of management information which comes from being able to capture information economically, in quantity, precisely, with an identified individual who did it."

4.3 Cultural Perspective on Strategy and Implementation 1981 – 87

Brown's vision for change captured above and the supportive climate for change in Sky in 1981 can be regarded as favorable starting points. Nevertheless, the strategic change process over the period 1981–87 cannot be explained simply in terms of initial conditions. Brown was undoubtedly the key actor attempting to manage strategic change over this period; some aspects of his relationship with particular subcultures and the approaches he used to influence cultural change are discussed below.

With respect to the senior management group in Sky, Brown started the change process in a rather dramatic fashion by creating a new slimmed-down team with a wide span of control. Subsequently, Brown established and maintained a dominance over this group and an autocratic style with respect to strategy development. This is illustrated by the following quote from a member of the senior management group:

"In Management Committee meetings, Brown tended mostly to state the things he had decided on. He would say "I have decided on this and that and the other"... We tended perhaps not to go deeply into things as we ought to have done or we tended not to argue about them because really we thought there was very little to be gained by it. He was working in a very autocratic way."

Although Brown's style was overtly accepted by the senior management group, we see signs of covert resistance in the above quotation; this resistance

was an important contextual element in the period immediately following Brown's resignation.

A second important subculture in Sky was the IS developers; Brown influenced their work and attitudes by directly involving himself in the details of IS implementation. The finance general manager commented:

> "Brown would call the DP department or come down here and meet them informally for lunch and tell them exactly what he wanted. He would ask them to come up with a proposal. They would often say that it was not possible and he would then tell them what he wanted again until they said it was possible. He was perhaps in a good position in that he knew what computers could do and therefore would not take no for an answer."

This approach to creating and changing information systems differed from the standard approach, according to a number of the IS analysts, and resulted in rather ad hoc systems development. In addition, the pressure from Brown for rapid change meant that the IS staff often had to work very hard—even on weekends—to meet deadlines. The fact that staff were in general prepared to do this can be seen as related to Brown's symbolic commitment to the importance of their work, expressed by his direct involvement in their activities.

A third broad subculture in Sky was the management and staff of the 250 or so branches and agencies dealing directly with customers. Brown's strategic thrust toward customer orientation was reflected directly in his approach to IS support for branch staff. It is interesting to note his view on how to manage the process of delivery of such systems:

> "So what I did in Sky...was to introduce a half-baked system which was then modified by a lot of feedback (from branch staff)—trying it on and polishing it until it fits the business...the important thing is that you keep on evolving the system, and that enables you to keep it relevant. So at no point are people going to say "this system is never going to work...let's ditch it"...That sort of responsiveness is very important, otherwise I think there is a view that "this system is being imposed on us". You must overcome that negative attitude developing."

Brown's attitude to the work of the branch staff, as to that of the IS staff, represented a commitment to their importance. This commitment was symbolized, and the process of cultural change mediated, through a major and costly training program. Brown described the rationale for this:

> "So staff training is important, communication, you do need to spend more...on continual training, monitoring. So that you go through a period when you have a peak in costs, when you have costs associated with introducing a new system, and costs still associated with running and then running down the old system. This is always the time when confidence is lowest...That's the time when you have to be fairly tough and stick with it until it works."

4.4 Political Perspective on Strategy and Implementation 1981 – 87

The dominance of Brown over other members of the senior management group was a conscious political act on his part, at least if we accept his own testimony after the event. Brown commented on ways to limit the power of other senior staff by talking directly to staff at lower levels: "You can play the

medieval game, you know; king will talk to the public and cut out the barons." He noted, too, that one could accomplish the same goal by limiting the use of committees:

> "Committees are useful, like Royal Commissions, for killing things. I actually wanted the process of computerization to happen, positively, and so it was necessary to take a leading (role)...I don't think committees do anything more, really, than reflect the existing vested interests, nicely balanced...all chaired together to make sure that nothing happens that upsets the existing balance of power."

No significant overt resistance to Brown's approach appears to have manifested itself. Nevertheless, the personal motivations of Brown himself were assessed by others, as shown by this quote from a senior business manager:

> "He (Brown) wanted to demonstrate to the outside world, as well as to the Directors, that he could turn the Society round and make it much more profitable, reduce staff, reduce costs, become more efficient generally...obviously with the ultimate view of being taken on by somebody else to do the same thing in a bigger organization."

This is indeed what happened, and the desire to run a bigger organization can be interpreted as a reasonable goal for an ambitious person. A less charitable interpretation, put forward by some staff, was that Brown only took actions likely to produce improved financial results in the relatively short term, but not necessarily best for Sky in the long term. Examples given were the ad hoc development of computer systems, and the stalling of the development of the customer-based system. These issues will be returned to in the analysis of the subsequent period.

A political perspective on the attitudes and actions of the IS analysts and managers, and the reasons for their general acceptance of Brown's approach, was commented on by Brown:

> "They (the computing people) saw it as a way of bringing computerization right into the front end. There wasn't much opposition at all from the established computer center because they saw their role within the company enhanced; the computer manager previously had a rather low status, that was enhanced by bringing computerization right up."

One price they paid for their increased status was a reduction in autonomy under Brown's strong control. A major shift in the autonomy versus control balance also took place with respect to the work of the branch staff. On the one hand, the new technology and systems enabled then to assume much more responsibility, particularly by providing direct customer service themselves with less reference to central control. On the other hand, Brown had a personal computer connected to the Society's mainframe databases, which he used to access local branch management information. Thus, the performance of the branches was monitored directly by Brown much more closely than previously.

4.5 Cultural Perspective on Strategy and Implementation 1987 – 89

Taylor's appointment as chief executive started a new period in Sky when an explicit effort was made by senior management to effect significant cultural

change. The context for Sky in 1987 included a sectoral climate increasingly competitive, where further deregulation in areas such as retail banking opened up new opportunities. A principal element of the content of Taylor's strategy was to involve the whole organization in deciding the best responses to these threats and opportunities. The key word in the new style was participation, aimed at creating broad ownership of strategy within Sky, and a variety of approaches and actions were initiated that symbolized the new approach.

An early step taken by Taylor was the introduction of a formal system of corporate planning, in which initially over 30 people from most levels in the Society were involved. However, the output from the new planning process was not received enthusiastically by all parties, and a middle-level manager summarized some commonly held doubts:

> "The corporate plan was something we had heard about, it had taken more than a year to produce...but effectively only a small percentage of the Society was involved...it (the presentation of the plan to staff) was largely a nonevent...It was presented very sleekly but I think the sleekness of the presentation was not what was wanted. What was wanted was a practical discussion..."

Another method of encouraging participation was through a change of style in the quarterly management conferences. Under Brown, senior managers had communicated what was happening to middle and line management. Taylor changed these communications into "brainstorming" sessions. One of the senior managers felt that this made them "more relaxed, informal, and refreshing" than previously but admitted they were "less informative." A more general comment on the strategic change from Brown to Taylor's style was made later by another senior manager:

> "Brown's culture shock in 1981 was overnight and was accepted readily...everything was "big bang"...Taylor has his foot off the pedal...another cultural shock is when you are asked to be an innovative thinker when you are used to receiving instructions. Moreover, this management style has not produced many tangible results."

With respect to strategy and planning for computer-based IS, the participative style initiated by Taylor was manifested and symbolized in a number of ways, including a major move to a structured systems development method involving significant user and analyst participation. This new approach was very time consuming, and a later comment by the deputy chief executive was that it took too long to develop systems by this method, and that user involvement was needed but "in a controlled way." By the end of two years under Taylor, no new systems had been implemented, and there was still debate as to the appropriate way forward in this area.

4.6 Political Perspective on Strategy and Implementation 1987–89

The autocratic approach of Brown had the effect of suppressing much overt political action, but the lid on the political pot was lifted following his resignation; and legitimation of the open expression of the political interests

of individuals and groups was provided by Taylor's attitude to participation and his desire to stimulate, in his own words, "a heated exchange of opinion."

In the period under Brown, the status of the IS analysts and management had been raised, but they were largely told what to do; and the approach to systems development resulted in piecemeal extensions being made under severe time pressure. A context of covert resistance was created, and the arrival of Taylor provided an opportunity for the IS professionals to argue for a more standard approach to systems development, involving greater levels of participation. Their arguments were based on the inflexibility of the systems developed during the period under Brown, and the fact that these systems were not well integrated. The systems development manager considered that these problems had resulted from "a policy of ongoing development to old systems, without total review and development," and that this policy had been made worse by "the lack of user involvement and a controlled and formalized approach to systems development." The approval of a more formal approach by senior management provided IS staff with levels of autonomy not permitted under Brown.

A second group who expressed their political views in the new climate were the senior managers themselves; an illustration involves the deputy chief executive, who pressed the case for the development of integrated customer-based systems after the arrival of Taylor. The deputy chief executive, an ex-banker, had been a strong supporter of diversification into retail banking services, and believed that the customer-based system would provide support for a strategic change in this direction. As noted earlier, Brown did not support this development, and one view as to his reason was that it would not yield short-term financial gain, which was Brown's main personal objective. Brown himself, in the following comment after his resignation, provided a more strategic rationale for his attitude:

> "If you are a relatively small financial institution in the vast catchment market of the UK, then it is not a matter of intensively farming a small group of people for which an integrated database is essential. It is more a matter of skimming the profitable ones from a large pool."

It is interesting to note that, by the end of the research period in 1989, senior management were moving away from retail banking as a key strategic development. This shift of direction was based on the perception of the key role of mortgage lending arising from the corporate planning process, linked to mortgage loan systems in the IS area; in consequence it was uncertain whether the customer-based database would be implemented. More generally, Taylor was expressing doubts about his attempts to introduce an effective participative style. He was concerned about the time taken to implement strategic change, and appeared to be swinging toward a stance that resistance needed to be overcome by the use of power:

> "I think it is going to take a lot longer to bring about cultural change than I first thought...Not only is cultural change going to take longer, I realize that implementing some of the positive factors (of the strategic plans), such as open branch offices, is going to take a tremendous amount more effort than I thought. In other words, we are going to need a bit more muscle to put it through than I thought."

5. IMPLICATIONS FOR IS STRATEGY AND IMPLEMENTATION

The purpose of this section is to provide a synthesized evaluation of the actions of the actors in the Sky case study, and to draw some broader implications from this evaluation. Two qualifications are needed with respect to the following material. First, the periods in Sky under Brown and Taylor are not directly comparable, as noted earlier in the research methods section, since one deals with a total leadership period of six years and is largely based on historical reconstruction, while the second deals with an unfinished leadership period of only two years and is based on a longitudinal study. A second qualification is that inferences from the Sky case are synthesized concepts and ideas developed from specific circumstances, which are intended to have value outside those circumstances, but which should not be regarded as general rules or social laws.

Any evaluation of the Sky case must start with the observation that the period under Brown was remarkably successful in many respects. A major transformation in business performance was accomplished over the six-year period, and computerized systems were a key element in the successful turnaround. In the following two years under Taylor, business strategy was a major focus, but future direction remained unclear even by the end of the research period. Specification and design for new computer systems proceeded throughout the two years, but the uncertainty regarding business strategy was reflected in changing priorities with respect to new systems. We now examine some specific elements of this general picture.

5.1 Vision for the Business

Brown used his previous knowledge of IT and the marketing of financial services to generate and articulate a clear business vision of improved customer service linked to an IS strategy of decentralized systems. He used the organizational crisis at the start of his leadership period, and competitive changes in the sector, to legitimize the need for rapid implementation of his vision. The clarity of the vision enabled the development of a shared sense of purpose and meaning among different stakeholder groups.

The vision for Sky under Taylor lacked clarity throughout the two years studied. Admittedly, the sector was even more competitive and complex in 1987 than in 1981, and mortgage loan systems had been identified as a priority by 1989, but it took a long time to reach this latter decision; and a clear business vision remained elusive. IS strategy suffered from this lack of clarity: since priorities continued to shift in an unpredictable way, it was very difficult to focus on a particular strategic thrust for new systems. The successful period up to 1987 may have contributed to a sense that there was plenty of time to determine a vision for the future, but such optimism could be regarded as dangerously complacent in the turbulent market in which Sky was operating in the late 1980s.

Implication. There is a need for a clear business vision, linked both to the sectoral situation and to the strategy for computer systems. Such a vision can help promote a sense of purpose and shared meaning among stakeholder

groups. An organizational crisis or turbulence at the sectoral level can be valuable to senior management in legitimizing the need for strategic change. In contrast, there is a danger that a period of success can lead to a sense of complacency with respect to the need for speed in strategy development.

5.2 Participation in Strategy Formation

Brown did not encourage any significant input in this area, even from his senior management team; he pressed ahead with his own strategic vision throughout the period of his leadership. It must be said that his vision proved sound, both with respect to sectoral trends toward improved customer service and to the use of decentralized IS as a means of delivering better service. One negative consequence of Brown's approach was that his senior managers became unaccustomed to contributing their own strategic ideas, which created a significant contextual condition in the following period.

Taylor tried to involve a much broader range of people in strategy formation including all his senior managers. Not only their unfamiliarity with this task, but also the departure of Brown, took the lid off the political pot, and many different viewpoints were put forward in the ensuing strategic debate. This multiplicity could be seen as positive, but the long delay in reconciling the various views was worrying in the context of the rapid change and severe competitive climate in the sector as a whole.

Implication. An autocratic approach to strategy formulation may produce a clear vision, but can result in a senior management group unaccustomed to serious strategic debate. Participative approaches to the development of business vision and related IS strategy may not be effective in enabling the rapid development of a consensus or a clear way forward if they follow a period of autocratic control. Slowness of progress in this area is a particular problem during a period of sectoral turbulence.

5.3 Nature of the Vision for IS

Brown's explicit approach to the use of computer systems at the branch level involved task-related decentralization coupled to closer central surveillance and control. This approach followed a period of stagnation in Sky, when branch staff were underutilized and demotivated; this may help to explain their largely positive views of Brown's approach to their work. They responded well, and played a key role in the implementation of Brown's vision for improved customer services.

The use of new computer systems in the workplace and their impact on work and control is an important issue in contemporary organizations. Child [1988] notes that whether task-related decentralization, such as in Sky, represents a real increase in discretion for lower-level staff is debatable, since a strong element of central control is normally built into the local software. Orlikowski [1991] makes a similar point when she discusses the use of information technology that reflects "the more subtle and unobtrusive forms of control that emerge when production rules become embodied in the very medium in which workers conduct their activities." Zuboff [1988] appealed for

information to give workers more control of their own activities, in order to liberate their initiative and creativity; Sky under Brown would be viewed as largely the opposite of this approach, involving closer top-down control.

Implication. Task-related decentralization through computerized systems can be coupled with closer central control. This may be acceptable in the short term to lower-level staff in a period following organizational stagnation, but there are concerns that this approach may have negative long-term consequences in areas such as staff initiative and creativity.

5.4 Implementation of IS Strategy

Brown managed the process of IS implementation in a highly active manner. He mobilized the crisis in Sky in 1981 and sectoral turbulence to legitimize the need for strategic change in the first instance. He then used his personal involvement in the process to symbolize his commitment to IS implementation. For example, he devoted major financial resources to training programs, and was directly involved in aspects of IS design and development, even down to the level of screen design. His understanding of the interests of different stakeholder groups enabled him to manage change in a way that did not threaten major stakeholder interests. All of this may have backfired if Sky had continued to decline, but relatively early success reinforced his credibility. This enabled him to further tighten his control over senior management, and to legitimize his actions with regard to other stakeholder groups in Sky.

Implication. The implementation of IS strategy needs the active intervention of senior management in the process of change. The symbolic involvement of the chief executive at all levels, joined to a close understanding of the interests of stakeholder groups, is one approach to hands-on management of the implementation process. Early success, if achieved, can then be drawn on to reinforce this model of central control.

5.5 Design and Development

The period under Brown can be characterized as involving the ad hoc and rapid development of computer systems, related to clearly understood and articulated business goals. The resultant systems were effective in terms of helping to deliver a vast improvement in customer service, but they were not well integrated and were rather inflexible by the end of Brown's leadership period in 1987.

Design and development proceeded under Taylor's leadership and involved the use of formalized design approaches for mortgage loan systems and customer-based systems. These new systems were aimed at improving the flexibility and integration of the computer systems that resulted from Brown's leadership period. The resultant design specifications were considered by members of the senior management team to involve "systems for today"; this judgement can be considered harsh with respect to the work of the IS team, since systems design was being carried out in the absence of a clear business vision. Senior managers also thought that the overall systems design process

had involved too much time and effort, but here again the slowness of the corporate planning process led by senior management was a key contributory factor to the speed with which IS design took place.

Implication. An ad hoc methodological approach to the development of computer-based information systems, accompanied by a clear business focus, can lead to rapid systems development, but the price paid for such an approach can be inflexibility and a lack of adequate integration. Design and development drawing heavily on formalized methods can be slow and geared to "systems for today," if the development proceeds at a time when the business vision and the related IS strategy remain unclear.

6. CONCLUSIONS

This paper has adopted a broader perspective on IS strategy in organizations than normally found in the literature, which typically focuses on prescriptions for strategy formulation at a particular point in time. We have used a framework for analysis of the dynamic process of strategy formation and implementation, based on investigating the time-varying relationship among the strategic content of change, multilevel contexts, and cultural and political aspects of the change process. We have used an in-depth case study of a financial services sector organization, under the contrasting leadership of two different chief executives, to illustrate our approach.

The paper thus offers a new way of looking at the dynamic process of IS strategy formation and implementation. In addition, although the case study relates to only one specific organization, some more general implications were derived in the previous section. These inferences, on topics such as business and IS vision, participation in strategy formation, and implementation of IS strategy, can become valuable themes for debate in any organizational context. We have also suggested that the vocabulary of such a debate should focus on how human beings ascribe meaning and take action with respect to technology in their work lives. Important words in this vocabulary include culture and symbolism, politics and control, and vision and sense of purpose.

We believe the paper will be of interest to senior IS and organizational managers responsible for IS strategy and implementation and its linking to business strategy. We have discussed a case involving a transition from an autocratic management style with the chief executive providing leadership of the IS function, to a more participative senior management style with IS managers providing leadership of the IS function. Senior managers may wish to consider the management style and nature of IS leadership in their own organizations and ask themselves whether our analysis of Sky, and its more generalized implications, can offer useful insights with respect to their own situations.

We also believe that the paper can be of value to other researchers. The content, context, and process framework can be used as a basis for empirical work in other situations, and we have provided details of research method. In addition to the basic framework and research approach, the implications developed in the previous section can be taken as starting points for further

investigation. Research questions to be asked include whether the implications are valid in other situations, and how they can be extended. Further research in the area of IS strategy and its implementation is of high potential importance, since the issues addressed are central to an understanding of the development and effective use of information technology in organizations.

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