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RE-THINKING SHARE DEALING AT THE SOUTHSTAR BANK: BUSINESS PROCESS REENGINEERING REVIVED?

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Abstract

This paper describes a case study of the development of an execution only share dealing service by Southstar, a bank in the UK. It is an exemplar of a successful e-Commerce systems development and in particular the re-thinking of the share dealing process enabled by technology. An analysis of the case in business process reengineering (BPR) terms is undertaken and BPR concepts revisited. Some final thoughts concerning BPR are provided.

Keywords: Case study, share dealing, business process, reengineering, systems development, e-commerce

Introduction

This paper examines the development of an execution only share dealing service by Southstar bank in the UK. It is described with a number of motivations. Firstly, simply as an interesting and successful exemplar of systems development. Secondly, as an insight into novel and smart thinking applied to a particular domain, enabled by technology. Thirdly, as a possible example of 'new form' business process reengineering (BPR), and finally as a framework for a debate concerning reengineering.

Research Methodology

The research methodology can be characterised as 'case based' in the sense that the author investigated the situation and environment of the Southstar Bank and its share dealing system. The name of the bank has been anonymized as Southstar. The case study approach is a common and legitimate research method in information systems research which enables systematic observation and in-depth understanding of the context of a phenomenon (Cavaye, 1996, Yin, 1994). Its strengths are in the degree of breadth and detail that can be obtained in complex real-world situations (Galliers, 1992). Cases can be carried out taking a positivist or interpretivist stance (Cavaye, 1996) and the approach adopted here is argued to be mainly interpretive.

The case was undertaken via a series of interviews with key players, supported by visits, observation, reading of internal documentation and other relevant literature. The case was originally conceived as an interesting example of successful information systems development and a semi-structured interview outline was designed to collect some basic factual information but allow the interviewee the freedom to tell their own story in their own words. Interviewees were encouraged to reflect on what had happened and what they regarded as important. Interviews were recorded and transcribed to ensure accuracy. Outside of the structured part no particular framework of analysis was adopted. In some senses this could be regarded as similar to a grounded approach (Glaser and Strauss, 1967) in that no pre-conceived analytical theory was used and issues were allowed to emerge. The data, including the interview transcripts, were analyzed according to the various issues that appeared to be emerging. Once an issue was identified as potentially important the data was clustered and organized around that issue. A significant example of this being the re-engineering issue that emerged, which is the subject of this paper.

Background of Southstar

Southstar was one of the largest Building Societies in the UK. A building society is primarily in the business of providing mortgages and loans for the purchase of houses and originally enjoyed some preferential legislation as institutions that were owned

by their members, i.e. the people who saved and borrowed, such companies were known as mutual. However, recently the benefits of being a building society were deemed by some to be eroding.

In 1997 Southstar had merged with another building society to make them a leader in their field with over 15 million customer accounts and around 20% of the UK mortgage market. In order to compete on a more equal footing with the existing banks and to raise capital they decided to abandon their traditional mutual status, i.e. being owned by their members (customers), and convert to a public limited company (plc), i.e. with shareholders owning the equity. To achieve this the membership had to vote in favor and whilst there was some opposition the carrot of free shares in the new company, worth on average over £3,000 per member, proved too attractive and they became Southstar plc in 1998. Such conversions have been common place in the UK over the last few years.

However, this was just the beginning of a process that saw the Southstar not only convert to a plc but put themselves in a position to become a major player in the new world of internet banking. To achieve this the conversion process had to be successful and it was 'highly complex... and a huge constitutional problem', according to the Finance Director. "You have two principle regulators to deal with, the Building Societies Commission and of course the Bank of England who will grant the banking license... The whole of the regulatory process, not just from a legal and accounting side, but from a logistics side as well, was monumental' (Pugh, 1998). One of the important elements of the conversion was the issue of new shares in the company and handling the consequent rush to buy and sell. Around 8 million members would be allocated shares and it was calculated that about 2 million would immediately sell on the first day to cash in on their windfalls. The traditional approach to share allocation and subsequent dealing was to ask one of the big existing city institutions to handle it. All previous conversions, including one of Southstar's main competitors, had outsourced the handling of their new shares. In the light of the massive workload associated with conversion it seemed a sensible option to outsource an activity in which Southstar had no experience and that was conceptually separate from their core business. The cost of the city institutions handling the share allocation and dealing for Southstar was estimated to be £18 million.

Share Dealing Objectives and Redesign

However, Southstar did not take the obvious option. They had longer-term objectives beyond simply handling shares for the conversion. These longer term objectives concerned the capability for further development and it was recognized early on that it would be possible to make share dealing a new, revenue generating, business for the Group. The design would be such that although it was initially just dealing in Southstar shares they wanted the ability to offer an 'all share' dealing service to their customers. It was also recognized that the developed systems should be able to support different channels in the future, e.g. the internet, Digital TV, WAP phones, etc. They thus decided to set up their own execution only share dealing service, initially just for trading in their own shares but also with an eye to the future and a new e-Commerce business. (An execution only service provides just the ability to buy and sell shares on the instructions of customers, no advice or recommendations are given). They also had an idea that they might be able to re-engineer the share dealing process, given that they were starting completely from scratch. This was a bold thought as they essentially had no experience of share dealing.

The Nominee Account

Their first thought in terms of re-engineering was to reduce the paperwork involved. Southstar were well aware that the process was heavily paper based including the massive overhead of the share certificate itself. A share certificate is a piece of paper, sometimes quite ornate, which acts as proof of legal ownership of the shares. Southstar knew that a substantial portion of the £18 million they had been quoted would be for handling the paperwork, not to mention the inevitability of introducing errors. Every one of the 8 million qualifying individuals would need to be issued with a share certificate and then straight away 2 million would sell, requiring the transfer and reissue of the certificate. Southstar found this bizarre and felt that there must be a better way of doing things, and they were right.

They discovered the possibility of a nominee account. A nominee account is a company created for the purpose of holding investments on behalf of investors. The individual's name does not appear on the share register, the shares are registered in the name of the nominee account operator, although the individual remains the beneficial owner. Essentially the company then maintains the record of who owns what shares negating the need for a share certificate. Without the need for a share certificate the dealings could be handled electronically, and dealings could occur without waiting for the issue of a share certificate by the company registrar. The discovery of this possibility was described by the operations director as 'the rabbit out of the hat' which meant they could now see themselves not only able to undertake the share dealing but also saving themselves a substantial amount of money. In fact the nominee account idea was not that new it had been around for some time. Indeed it had been part of the TAURUS system developed by the London Stock Exchange a few years earlier. Unfortunately TAURUS became a bit of a notorious failure and the system was scrapped. To enable a full end to end electronic process required the London Stock Exchange

to be able to handle transactions and settlements electronically and fortuitously they were in the process of developing a follow-up system to TAURUS known as CREST which Southstar were able to utilize.

Share Price Freezing

The second area where Southstar were able to change the established habits of the industry was in relation to the quotation of prices. Traditionally, when buying shares, a customer is quoted a price and then they decide whether to sell or not. If they decide to sell the price they actually receive is not necessarily the quoted price but whatever price is current when the transaction is actually processed, which might be a few minutes or more later, and might be somewhat different. Southstar felt that any difference would be difficult to explain to their customers who did not understand share dealing. They had expectations that prices quoted were fixed, as in their other transactions with the bank. Southstar felt that not having fixed price quotes would cause bad feeling, disputes and require undue administrative attention. Not only that but as M, the Operations Director says, “we don’t want to explain to our customers how the Stock Exchange works... people want to know the time not how the clock works!”. So they asked their advisers and consultants if the price quoted could be guaranteed to be the price actually obtained. M recalls being told, “No, no one was doing that. We couldn’t do real time acceptance of prices but we persevered and persuaded everyone that it could be done and Southstar became the first ‘what you are told is what you get’ share dealing company”, and others have now followed this lead.

Bulk Dealing

Another example of what might be termed business process re-thinking was the bulk dealing system that Southstar introduced. G, the Business IT Manager, states, “Dealing initially in only a single stock made things easier, but it also meant that we could be much more efficient than anything our competitors would have. Our system is very cost efficient because we bulk all the trades up at the same price, and only execute them when certain limits have been reached or the price changes, and then we put them on the market as one big deal and thus save transaction costs. As G stated, “we do one big deal, instead of a hundred small ones, so our CREST charges for settlement are in principle 100 time less. That’s not the figure of course but substantial savings are made and that was quite clever and novel”.

System Development

The use of the nominee system meant the Southstar could effectively re-engineer the share dealing process, introducing technology into what was traditionally a very intensive paper-based process. G emphasizes the continuing focus on technology. He says, “the way you make money out of execution only share dealing is to perform a transaction for a customer and then they pay you a fee or a commission. There are not a lot of other ways of making money out of it. So doing it as efficiently as possible, and as quickly as possible, that gives you an edge. The use of technology meant that we could take paper processes out of the equation and thus handle more volume at less cost”.

Southstar had already developed ‘Southstar Direct’ their telephone based banking system, which had been in place for 18 months and they decided to build the share dealing service on this technology. Thus one part of the service would be telephone based dealing. G states, “we had the call center infrastructure, we didn’t set this up from scratch. We took advantage of all the infrastructure that was already in place. All the automatic call distribution, the recording, the IVR (Interactive Voice Recognition) and CTI (Computer-Telephony Interface) capabilities were in place, we were already using touch-tone keystrokes to fire applications, we just exploited that”.

Partners

In terms of systems development Southstar identified three key external suppliers or partners to provide the necessary major components, together with a number of internally developed bespoke elements and interfaces. The first key partner was the Registrar. A registrar is an organization that takes responsibility for maintaining a company’s share register. They provided all the registrations and receiving bank activities, and in this case the company nominee system, which the Southstar systems linked directly into. They also did all the administration behind the nominee. The second key partner was the principal retail Market Maker for Southstar shares. Market Makers are essentially wholesalers who provide both bid and offer prices for a particular stock ensuring that someone who wishes to trade can always find a buyer or seller. The third key partner was the software supplier. They were a well respected, independent suppliers of software to the securities and stockbroking sector, with major retail stockbroking clients. They already had a core electronic dealing and settlement system that was client-server based which appealed to Southstar with their long-term on-line objectives.

The Share Dealing System

The system was developed in collaboration with the key partners and from the perspective of a customer wishing to sell their shares it worked as follows:

- They phoned Southstar Share Dealing and were greeted by a voice recognition system that asked various questions (including their 10 digit folio from the allocation of shares document) and then it routed them to the next available relevant operator.
- The folio number was then checked and verified via an interface with the registrar who held the folio details, i.e. the nominee account, and then the details of the nominee would be loaded to the operator's screen. The screen then displayed the customer's name, address, shares held, shares traded, etc.
- If the customer was deemed eligible to trade, the current price at which they could sell would be displayed and the customer informed. This was obtained via an automated satellite feed from the Stock Exchange.
- A countdown timer would then start and the customer had 15 seconds to decide whether to sell, and if so how many shares. The price offered was frozen for that period and if the customer decided to sell within the 15 seconds the transaction was made and that would be the price they received. All calls were digitally recorded so that disputes or mistakes concerning the price stated or the number of shares to sell could be resolved.
- Payment would then normally be made directly into the customers' Southstar account but payment into other accounts via BACS or by check could be requested.

After the transaction the details were then sent back to the registrars for updating of the nominee account. The system then decided to which bulk order the individual trade was to be added, based on various factors including price. They were simply added to a current open bulk order which was only passed to the Market Maker when the price changed, or a maximum number, or time limit was reached. A bulk order update then occurred, including updates to the Market Makers system and to CREST so that settlement could be made. Various supporting batch activities also took place if necessary, such as check issuing, BACS payments, Debit card payments, CREST references, reports to the SFA (Regulator), etc.

After the system was developed it was exhaustively tested including prior live trading on the Stock Exchange, something the Stock Exchange had never done before.

Conversion Day and Beyond

On Monday 2nd June 1998 the Southstar became a public limited company and 8 million shares were successfully issued to members. The total value of the sale was over £4 billion, making it the largest trade ever on the London Stock Exchange. Additionally the telephone share dealing service dealt with 8,000 calls and processed over 4,500 purchase instructions on that first day. Not only all this but it was calculated to have been £9 million pounds cheaper than it would have cost to do it in the traditional way by the existing City institutions. After a year Southstar was handling greater daily volumes of deals than their major competitors but with 25-30% fewer order taking staff, indicating that their end-to-end processes were very efficient and effective and that their re-engineered processes were successful. Over 2.6 million postal deals had been completed and 514,000 telephone deals, with average call times of only 2.5 minutes. Customer satisfaction was high with dealing errors at a low 0.01% and complaint level at 0.1% of deals, compared to the industry average of around 1%. C, the Head of Share Dealing, felt that "generally people were very satisfied with the service that was offered... and it has been extremely well received... we also had high levels of referrals to other customers, which is a good sign".

In September 98, just over a year after conversion, Southstar launched their all UK share dealing service. This was also nominee based but this time the nominee was held by Southstar. The disadvantage for the customer is that they can only sell shares bought in this way through Southstar, although of course this is an advantage to Southstar. Then the range of instruments that could be traded was expanded to include gilts, trusts, investments, etc. In 1999 a touch tone service was introduced. When the instructions are entered by the customer via the phone the system reads back the details, asks for confirmation of the order, and executes the deal. So, as G says, "A customer can press a few buttons on their phones, get all the same information they do if they are talking to a human being, they get the real price and the settlement date and the amount. And during busy periods the touch tone service copes with over half our trades".

Finally in October 1999 Southstar launched its internet based share dealing service (e-Commerce business). According to G, this has been "hugely successful in terms of volumes. We have done 20 times our target volumes and we had done all of this years business by end of last year! We are doing over 40% of our all stocks dealing via the internet now".

Success Factors

Thus the share dealing service was deemed a great success, not only by Southstar but by the industry as a whole. Indeed many were shocked that Southstar had been able to achieve as much as it did. There were many success factors in the story. Their IT management was exemplary, their dealing with partners was crucial, and their ability to develop, manage, test and implement the system was impressive. However, perhaps the key element was their ability to innovate or re-engineer the share dealing processes.

Southstar themselves did not use the term re-engineering, or at least not frequently, and they certainly did not have anything that might be termed a re-engineering methodology. So how did they manage to achieve this? C states, “we have built on what we did originally in these subsequent programs and we have used essentially the same project management processes, with the business and IS working in partnership. It has been extremely successful and it has established Southstar in the mainstream of modern banking and share dealing provision”. She goes on to reflect that, “being able to start with a clean piece of paper and being able to do something using the latest technology has been a big benefit to us. And even now, with all the interest there is in internet share dealing, we’re one of only two companies in the UK that do proper on line, real time, straight through processing transactions on the internet”. Thus the green-field situation was very helpful but most important was that there were no pre-conceptions as to how it should be done. C was the only person who really understood share dealing, and she did not come on the scene until relatively late, when the basic reengineering decisions had already been made. It could be argued that the lack of detailed knowledge of the complications of share dealing enabled Southstar to focus on the key underlying issues but clearly the enabling effect of technology was also a crucial factor. They were lucky, nominee accounts were around already but it was only really with CREST that it all came together. Another crucial factor was clearly Southstar’s ‘can do’ attitude or rather their ‘we won’t take no for an answer’ attitude. They questioned why the prices could not be frozen for a period and finally they persuaded the Market Maker it could be done. They persuaded the Stock Exchange to have live testing. They just overcame all the obstacles. This is clearly down to people. They had this attitude and culture and they were led by someone who had it in gallons!

Business Process Reengineering

As mentioned above Southstar never really used the term Business Process Reengineering when discussing what they had done. It was essentially the researcher that suggested that in retrospect this seemed to be an impressive exemplar of business process reengineering (BPR). What exactly is BPR is a difficult question. As Melao and Pidd (2000) remark, “there seem to be almost as many definitions... as there are BPR books”. Although it can be argued that BPR is evident in some of the notions of Scientific Management it is usually suggested that the recent advent of BPR can be traced to the descriptions of Hammer (1990) and Davenport and Short (1990) and its rapid adoption by consultancies around the same time. This was followed by its popularization with books, such as Davenport (1993) and Hammer and Champy (1993). After its initial impact and seeming success a number of criticisms began to emerge, for example some suggested that there was little new theory underpinning the ideas and that the consultancies had usurped it for their own ends (e.g. Earl and Khan, 1994, Peppard and Preece, 1995, Grover and Malhotra, 1997). BPR has gone through a number of stages in its relatively short life and, according to Melao and Pidd (2000), is itself now undergoing reengineering. They suggest that recent literature (e.g. Davenport and Stoddard, 1994, and Burke and Peppard, 1995) has begun to ‘soften’ the radical approach to change associated with the early versions of BPR. Melao and Pidd (2000) identify nine issues, or continuums, around which they argue debate about BPR is centered.

The author uses these nine elements as a framework for the analysis of reengineering in the Southstar case. In each case the first element is the old or classic view of BPR and the second element is the newer, broader and softer, concept. So for example the first identified element is ‘novel v established’, where novel is the original BPR which was argued to require a ‘conceptually new business model’ whereas established is the newer view, which argues that it does not have to be novel but can be ‘the linking together of existing approaches in a novel way’. In this debate Southstar would appear to be towards established. Some elements are novel but it hardly represents a ‘conceptually new business model’. The basic underlying elements of share dealing are still undoubtedly discernable and mainly unchanged. Therefore Southstar would seem to be ‘new form’ reengineering rather than the old classic form. The second element of the framework of analysis is ‘radical v incremental’. Here it is argued that the improvements are not completely radical but simply incremental on an existing share dealing model. Third is ‘clean-slate v existing’. Here Southstar would at first appear to be clean-slate in that it was a green field situation, they had no existing share dealing service, but of course much of the system they built was centered on their existing strengths, e.g. their IT management processes and their IT infrastructure. Number four is ‘broad v narrow’. This is normally interpreted as whether the area of concern is cross-functional (broad) or not (narrow). In this case it can be argued to be single function, i.e. narrow, share dealing is essentially a single function, albeit a complex one. Number five is ‘IT-led v IT-enabled’ and Southstar is clearly IT-enabled, it was certainly not IT-led. Number six is ‘mechanistic v holistic’. This would seem to be somewhere between the two with mechanistic elements such as the ‘bulk-trading’ but a set of softer issues, such as the need to respond to the customers lack of knowledge of share dealing via the ‘price freezing’. Number seven is ‘dramatic v modest’ and Southstar is argued to warrant the

term dramatic. Number eight is ‘top-down v bottom-up’ and this would seem to be distinctly top-down, in the sense that it was top management driven and they established at least the broad overview of the new design. Finally, number nine is ‘inspiration v methodology’, and this must be classified as inspiration as no methodology was involved.

Thus it is argued that Southstar is a good example of BPR and that BPR is still relevant in the sense that business can benefit substantially from non-conventional and non-constrained thinking applied to business processes. Further, that although Southstar represents an example of mainly ‘new form’ reengineering, there are still elements of classic BPR that can be appropriate. In Southstar’s case the ‘dramatic’, the ‘top-down’ and the ‘inspiration’ elements were classic BPR and still very important.

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