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Some 'real' problems of 'virtual' organisation

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Introduction: the 'virtual organisation'.

The notion of the 'virtual' bids fair to become one of the most over-used concepts of the decade as its use spreads as quickly as the growth of the Internet which is, in large part, the occasion for the growing popularity of the term. It is also a concept which is receiving some attention in organisation theory and in management science with the notions of the 'virtual organisation' and 'virtual team' gaining some currency. (;Zimmerman, 1997; Siebel 1998). The concepts are intended to denote organisational forms which, it is claimed, address major transformations in the social, economic and technological environment in which organisations currently operate and will increasingly have to operate in the near future. These 'virtual' organisational arrangements consist of networks of workers and organisational units, linked by information and communication technologies (ICT), which will flexibly co-ordinate their activities, combine their skills and resources in order to achieve common goals but without very much by way of traditional hierarchical modes of central direction or supervision. Such



arrangements will form and reform as problems arise so providing a flexibility of response to changing circumstances and organisational needs.

The impact of such forms on other aspects of organisational behaviour are matters of some debate. Zuboff (1988:6), for example, writes of such forms as involving 'more intricate, collaborative' relationships in which 'mutual responsibilities to colleagues' rather than to the larger organisation itself become more prominent. In a similar vein, Casey (1995: 109) argues that the new forms of teamwork 'in which people share knowledge, skills and resources and work co-operatively in the manufacture of their products' will displace 'identification with an occupation and its historical repository of skills, knowledges and allegiances' in favour of 'relationship to a product, to team family members and to the company'. Such teamworking, 'less fettered by the constraints of traditional hierarchies and spheres of responsibility, engenders a heightened sense of empowerment, commitment and collective responsibility' (Casey, 1995: 45).

There are other, and less sanguine, views concerning the beneficent consequences of such organisational forms for effecting transformations in skill, team working, identification and empowerment (Kunda, 1992), and it is certainly too early to write the obituary of more traditional hierarchical organisational forms. In any event, it is clear that many of the claims involved in the debate are in need of somewhat closer empirical scrutiny. While in this paper we cannot hope to achieve this to the extent which is required, what we intend to do is throw some light upon these matters by drawing on materials drawn from an ethnographic study of some organisational changes in a retail bank.

Background to the study

The organisational changes referred to above have, and still do, involve concurrent changes in the bank's organisational form, its working culture and its technologies. Along with other financial institutions, which have long been in the forefront of the use of distributed computer systems, the bank has been exploring ICT to support decision-making, quality control and customer services as part of a long term strategy to transform its business processes in order to address increased national and international competitive challenges. To meet these the Bank embarked on a series of organisational, cultural and technological changes. The main elements of the changes can be summarised as follows:

A shift from the older 'administrative' working culture to a 'service and selling' culture

The Bank took the view that it needed to expand into other markets, including insurance and mortgages, as well as refine its traditional markets of lending and managing money. Such a shift would require a change in the conception of itself as responsible for the 'good husbandry' of customers' financial affairs toward a more proactive 'selling' culture.

The establishment of Specialised Functional Centres

This was the most significant organisational development which involved the centralisation and standardisation of 'back office' processing and placing them into larger and more specialised centres responsible, for example, for Lending, Services, Securities, each of which would service a number of 'high street' Customer Service Branches.

The provision of distributed decision-support

Although the Bank, as with other financial organisations, has been using distributed computer systems for a long time, it is now developing and using systems for more decision-making support, work representations and quality control. IT is seen as crucial to the changes it proposes

Fairly obviously, the kinds of changes in which the bank is involved necessitate significant adjustments in work practices and skills as well as major alterations in attitudes toward work. Indeed, these are the objectives of the changes. However, major organisational changes of this scale are rarely smooth and there are nearly always tensions between the desired changes and the actualities.



As part of these organisational innovations the Bank is moving towards using ITC to support shared work across organisational divides; that is, 'virtual teamwork' in which organisational function or process is seen as more important than organisational location. 'Virtual teams' are an organisational form established in the various specialised centres of the bank and are designed to replace the more traditional hierarchical administrative work organisation. The organisational objective was to replace the permanence of administrative structures with the flexibility of task oriented teams which bring skills and expertise together as and when required, and promote the development among workers and managers of a new variety of skills, competences and responsibilities.

The overall objective of the study was to examine the work of a variety of employees in the Bank as 'real world, real time' work activities in order to throw light on the day-to-day problems of managing innovation of the kind sketched earlier. However, in what follows we report on some ethnographic fieldwork in the Bank which has a bearing upon the utility of the notions of 'virtual teams' and 'virtual organisations'.

The notion of the 'virtual'

The obvious contrast of 'virtual' is with 'real' which, in its current usage, owes much to the fictionalised celebration of 'cyberspace' in novels and short stories as well as playfulness of journalism and futurology. The gist of the conception is that future computer technologies will allow users to become acting elements in a space engineered and defined by the technology; elements and spaces which need bear little relationship to how we understand our present embodiments and their spatial location. Of course, such visions, if they can ever be realised, are for the far future.

Our concern in this paper is with what the notion of 'virtual' provides in the context of organisations and the use of technologies, including ICT. In this context, the contrast with 'real' is a less obviously helpful one. The explicit difference is with what are seen as traditional forms of organisation which involve, *inter alia*, a hierarchy of authority, a high degree of centralised control, specialised roles and responsibilities within the structure, and a bureaucratic stiffness of performance. But why such arrangements should be implied to be more real and the proposed alternatives 'virtual' eludes us. Be this as it may - and it may be that we are being too picky here - there can be little doubt that a growing number of organisations are certainly doing more than just flirt with the notion of virtuality in reshaping themselves in response to what are regarded as very real changes in the social and economic environments in which they operate.

The difficulty we have is not so much with the effectiveness or otherwise of the proposed changes to organisational forms - these must be judged according to the relevant criteria of effectiveness - but with what the idea of the 'virtual' offers to organisational analysis. For us, the answer is very little and, what is more, almost conceals elements of virtuality - if we want to retain the term - which are familiar aspects of organisational life and which *are* currently being affected by the widespread introduction of ICT.

What we have in mind here are the prevalent and utterly mundane ways in which organisations represent their activities by records of all kinds, work flow diagrams, job descriptions, cash flow accounts, and so on. Such representations are designed to index aspects of organisational processes as a means of, to put it generally, supporting decision-making and evaluating the performance of various aspects of the organisation. Such representations can have, we would want to argue, a virtual aspect to them in that their representational function means that they 'stand for' persons and processes and are not, so to speak, the 'real' persons and processes which they index.

As we have said, these are features of organisational life which have long been noted. Indeed, as has been noted by a number of commentators (Yates, 1989; Harper and Sellen 1997), features such as these are closely related to the kind of problems organisations come to face. However, it will be our contention that there is an uneasy fit between the rhetoric of virtuality and the day-to-day problems of running an organisation. As we shall see in the case of the bank, the move toward specialised centres has increased the scale of operation and necessitated the development of systems which impart a 'virtuality' to much of the activities of



supervision and control. Nevertheless, this renders problematic the connection between the representation achieved by the procedures and the 'real world' work that is the daily diet of organisational decision-making.

The focus of the paper is the extent to which certain features of 'virtual organisation' or 'virtual teamwork' such as non-colocation and the increased use of electronic technologies for communication, monitoring and control bring about changes in 'managerial work'. Our empirical research suggests that despite the hype surrounding virtuality, managerial work, managing personnel, resources, customers and so on remains very much 'business as usual' and that the problems that typically and persistently preoccupy managers do not simply disappear with the move towards the virtual organisation or the virtual team.

Managing Virtual Teams: from management by 'walking about' to management information systems

The reorganisation of the Bank, particularly the redistribution and centralisation of functionality, was initiated by strategic plans — first through the 'Delivery Strategy' and then through 'Building the New Retail Bank'. As the scale of the functional units — the Specialised Centres — increased issues of management control and information became paramount, particularly in the identification and calculation of labour costs among other requirements. It became a major topic in management meetings. Management information served a variety of purposes and had been, hitherto, collected in a variety of ways. But as the move toward larger and more geographically dispersed units got under way, various forms of electronic monitoring became increasingly important.

In the early stages, and as a result of a consultancy report, the Bank had instituted the Productivity Management Programme (PMP) designed to realise a number of benefits, including the measurement of productivity and efficiency and assist management in the allocation of staff to work tasks. Each working day, the Assistant Managers completed a PMP sheet of work pending and then calculated, using the PMP and Work Tally Sheet, how much work there was to be done, the Assignment Planner. Each staff member completed a Daily Work Management sheet which detailed what they had accomplished the day before and how much time each activity took. These documents were then used - in theory at least - to allocate work, identify backlogs and bottlenecks. The 'Assignment Planner' used PMP and the Work Management Sheet (and sometimes the 'Customer Volume Tally Sheet') to work out how much work was accomplished 'yesterday' was thereby supposed to form the basis for the allocation of work tasks 'today'.

However, PMP was very time consuming. Even in those units involved in routine, machine driven work, such as Entry Handling, a number of calculations and document entries had to be done by hand. Tallying the work, using a formula (and calculator) to calculate the amount of time required to complete it, and examining each section member's Work Management sheet to see how much of the work had been done was a time-consuming lengthy business. On the whole, there was little enthusiasm for activity. What little support there was for the PMP was couched in terms of what it indicated for those 'above' about how hard the staff were working. However, among the managers who had to use the technique, there was widespread scepticism about whether it was 'really needed' as 'in an office of this size' one could see when someone is 'slacking' without the need for the over-engineered PMP. It was also suggested that PMP was only of much use to 'poor' managers. 'Good managers' could make decisions about the allocation of work tasks because they were familiar with and involved with the work force under them. To 'good managers', PMP was seen as time consuming and told them little that they did not already know by 'walking about' the office.

As indicated earlier, as the process of centralisation got under way, electronic forms of monitoring are becoming increasingly important. One example of this is the varied reports available via sophisticated monitoring software used in the telephone 'call centres'. The monitoring kit, positioned on the Manager's desk, provides a real-time display of inbound, outbound, available and unavailable phones with times attached to each. Each 'operative' is represented on screen by a block - the colour of the block indicating their present status as inbound, outbound, unavailable, etc. - while on the manager's screen a series of calculations and indicators appear. These change in accordance with the state of the service, for example:



'grade of service' (a calculation based on speed of response, waiting times; calls abandoned, etc.), 'queuing time' (in seconds.), 'calls abandoned', 'total calls abandoned', 'calls recorded', 'average answering speed'. Each indicator can be examined in more detail. The equipment will show, for example, how long the caller was waiting before they abandoned - 5 secs. 10 secs. and so on - and can show whether the call was abandoned before or after hearing the queuing message. On the walls of the office an electronic message board continuously displays the current status of the phone team - the grade of service; how many calls are waiting; the average response time in seconds, and so on.

Management information is initially provided in the form of a number of computer generated reports; for example an 'agent report' provides details of what individuals are doing throughout the day in terms of whether they are available or unavailable for calls, how many calls they took, average time of calls, etc. These reports are then used to create spreadsheets, again as part of a management information pack, which effectively summarises the information for those higher in the management hierarchy. This process is outlined in the simplified fieldwork extract below:

X & Y have gone upstairs to the 12th floor to 'get some quiet' and avoid interruptions whilst they devise a 'Management Information Pack' that can be used by the Manager of the Lending Centre at a meeting at Regional Office next week. The manager has already, in a previous managers' meeting, forcefully emphasised the importance of this information and of the time frame within which it has to be produced ("*Can you produce it by Monday?*" "*Well,...*" "*No, I said can you produce it by Monday?*" "*Yes*").

Y is talking about what management information is required and looking at a hand written outline of the kinds of categories and calculations he thinks they should include. On one sheet of paper he has written a number of ideas; 'non-utilisation periods', R/E (reasonable expectancy) how many calls could we have taken?', 'what does the productivity gap equate to in man hours', speed/quality/control', industry comparisons' and so on. On another he has divided the sheet into columns as the precursor for producing a spreadsheet. Heading the columns are categories such as 'calls offered', 'staff required for 100% calls handled', 'staff required for 90% calls handled'. A series of comments are written down the side - these are later to form the basis of their discussion - 'figures as at certain date with customer base of X'; 'do subsequent charts/spreads for take-on of Centres for rest of year multiplying calls offered by factor of X (customer base in future divided by customer base now'; 'when new 'actuals' are obtained from future ACD information revise figures for comparisons and compare to model'; 'do we want to put in model numbers of staff to see divergence?'. A final sheet has a complicated calculation by which they might obtain a measure of effectiveness.

Whilst this is going on X is looking at the BBS (Balanced Business Scorecard) as it will be important that the measures reflect elements of the BBS both for the section and him personally and at a basic set of management information spreadsheets that they produced last week for the managers' meeting which forms the basis for this current MI pack.

Y uses the computer to get an Excel spreadsheet on screen - 'AOBT accuracy' (advice of borrowing terms) - they then chat about the layout of the spreadsheet. The talk centres on how much information they need to display and how to present it; the emphasis is on 'totals', totalling columns because "... all he'll (the Centre Manager) be interested in is that (pointing at total)". They then work together setting up the various 'macros' (calculations) for the various parts of the spreadsheet, talking about its use for making predictions with the suggestion that "*that would be good for 'Hours by Design'*" (a new initiative on hourly working within the Bank). They then turn to the MI figures they produced last week - "*these are great . . . but I think we need the graphs and a comments box . . . he (the Manager) doesn't need all that (the detailed figures)*". They then use the computer to access the spreadsheets they produced last week - unfortunately they do not appear to be in the folder and drive they expected - "*where are they?...its a bit of a bummer when you cant remember where you kept it..*".



The point about this rather lengthy, even if simplified, extract - although it actually covers only a small amount of the time spent on producing a Management Information Pack - is the recognition of the 'work' and decision making involved in the accomplishment of management information. Despite the use of relatively sophisticated monitoring software, the bald figures produced need considerable interpretation before they can have any value as 'management information'. So, for example, one manager (in a different centre but using the same call-monitoring software) pointed to some of the figures and commented; *"his % time was low because he kept wandering round the office..I came in with a ball of string and tied him to his chair...his times are better now"*; *"her time on the phone was low because she came in and then went out to work with another team"*, or commenting on the figures for grade of service, *"we try to keep it above 90%... last Monday it fell to 72% - ... - three staff were on holiday and three were sick .. we couldn't answer the phones any quicker ... last week I promised them cakes if they got the GOS up to 94%.."*. Above all, the main point to make about the decision making process and the usage of information (whether on paper or computer) is concerned with appreciating the careful consideration that needs to be given to what the figures mean in terms of the actual events and circumstances which they index. That is, it is not a question, as Harper (1989) points out in his ethnography of accounting, of 'just any old numbers' but that making sense of the information, and any decision making based on that information, is dependent on certain 'nuanced' understandings. And these are themselves very much a product of 'management by walking about' or, to put it more generally, local knowledge of the personnel and the particular circumstances of their work.

The task here is one of producing some representation of the work done for the purposes of management support. In more practical terms it is producing summations of the performance of the team for those managers who were not, and could not be, witnesses of the actual work done in the period covered. However, despite the constraints of the categories and calculations provided, there is an effort to make entries at least bear some 'reasonable' relationship to the actualities of the local circumstances of work.

Working the division of labour

Human relations, technology & the virtual organisation: working the division of labour.

On phone to Business Centre - "no you cant.. because its past 3 o'clock and the cut-off time and they wont accept the instructions.."

"..thats why you've got a cut off of 12 o'clock .. so that we've got 3 hours to get the paperwork and phonework done.."

".. sorry about that but it is the rule.."

One of the main purposes of examining 'real time, real world' work is that it directs attention to the manifold ways in which divisions of labour are achieved as day-to-day activities (Anderson et al., 1989). The rules and procedures which formally specify a division of labour as a process of work have to be applied 'here and now' in *this* organisation at *this* time using *these* resources. The notion of a 'working division of labour' points to the division of labour not so much as an abstract specification but to the actual course of activities as they are socially organised and understood by parties to the work. It is intended to capture the sense of work as it is experienced by parties to the division of labour. The orientation of the individual within the social organisation of work is not primarily 'to the work as a whole' but rather to the tissues of connections and separations as they fan out from the particular position which s/he occupies. The orientation is an 'egological' one (Anderson et al, 1989) concerned with engaging one's own activities, and their boundaries, with those of others along with the resources 'to hand', in terms of 'decisions-that-I-can-make' and 'actions-that-I-can-take' as against those that others deal with. Working through the stream of tasks means 'doing-what-I-can-do' and passing on tasks to others 'so they can do what they do'. 'Gearing into the work' (Gurwitsch, 1979) is about having the resources of knowledge and relevant practical skills to 'insert oneself into the flow of work' and, as a consequence, render the division of labour silent and invisible.



Our observations in the Bank and elsewhere have consistently identified the extent to which the accomplishment of work tasks is associated with informal teamwork, or 'constellations of assistance', which sometimes depend on various forms of 'local knowledge'. Close teamwork and informal team discussions result in a commonly accepted 'view of the world' and facilitate the rapid exchange of information about particular cases or correct procedure. Amongst the usual office banter, which in itself plays some part in the development of 'teamwork'; advice and training is dispensed in an informal fashion. However, the organisational and geographical dispersal that has accompanied 'Delivery Strategy' has had some unfortunate side effects for teamworking across the different functional units of the Bank, most notably in the potential for the emergence of a 'blame culture', a culture of 'passing the buck', with poor communications leading to the lack of a consistent, customer-centred approach - and the espoused organisational goal of identical treatment in 'Glasgow or Southampton'. This clearly impacted on teamworking between the different functional units - that is, between different parts of the 'virtual team'. Collocation creates and encourages particular, often very fierce, group loyalties, loyalties to the particular unit (Lending Centre, Service centre etc) rather than to 'the Bank' as a whole, and the development of a 'them and us' attitude, in which 'we do it right but they do it wrong' becomes a common, if not constant, refrain and the other functional units have the resulting opprobrium heaped, more or less randomly, upon them. As one Assistant Manager commented;

"We piss a lot of people off because we do things right...in the old days of the branch.. a big customer could phone up for money.. .and whenever they phoned it was singing, dancing and taking your clothes off... when we came here and they phoned up and said can we have £2 million today I said 'No'" .. "We do things right, we do things by the book and it upsets people .. particularly people in Corporate.. they cant use their superiority and clout to do things..."

This developing 'them and us' culture had an obvious organisational relevance in the early stages of 'Delivery strategy', through, for example, the effective creation of two 'cultures of lending' within the bank. Observations of differences in the treatment of lending between the branches and the Lending Centre suggested that, particularly within the branches, decision-making, despite the range of sophisticated computer support, often came down to 'gut feeling' or as one Lending Officer put it; *"in the end do you trust him to pay the money back?.."*. Lending on 'gut feeling' clearly benefits from the kind of detailed 'local' knowledge of the customer commonly found in the branches; *".. we know him quite well... ..the Lending Centre.. they take the view that they're a control situation ..one letter then they bounce. As a branch we take a more practical view - tend to be a little more sympathetic The Lending centre...(are) much more rule driven.."* and perhaps explains some of the differences in lending practise between the Lending Centre and the Branch, with the Lending Centre being much less free and much less likely to take an idiosyncratic view of lending proposals. Whilst it clearly is the case that distributed coordination is achieved through institutionalised plans and procedures whose explicit point is to co-ordinate the work of numbers of people in order that separate work activities and tasks come to have a coherence; rigid adherence to such plans and procedures ignores the extent to which the successful accomplishment of work is dependent on various 'local logics', gambits of compliance', the deployment of local knowledge and so on.

It is in this context that 'awareness of work' becomes an important aspect of 'virtual teamwork'. By 'awareness of work' we mean the way in which work tasks are made available to others and the important role that this plays in the 'real world real time' social organisation of work. The various ways in which 'awareness' is developed, in which work is made public and available to others, are essential ingredients in 'doing the work' as part of a socially distributed division of labour. One aspect of 'awareness' that seems of particular importance in highly distributed 'virtual teamwork' concerns having an awareness not only of what has been accomplished prior to the work being handed on to any particular individual, but, importantly, what happens to that work once any individual or team have carried out their own particular task. That is, having such a knowledge of what is required of any particular task that it can be accomplished in such a way as it enables others to do their work. Observations of virtual teamwork revealed a number of failures in this respect most notably in the temptation simply to 'get work off the desk' and pass problems on to other units. In the following, trivial but commonplace example a Records Clerk has had some work returned from another unit



because she had entered the wrong codes; in the course of a number of phone calls she eventually discovers the correct code;

Chat with colleagues re: SIC codes - have been returned as wrong; looking at Action Sheets and reading out codes;

".. they say its causing inaccuracies to the Bank's regulatory and statistical reporting.... they should tell us what they think it is..."

Still looking at Action Sheets "what do we do if we think the SIC codes are right?" "Give them a ring and ask them"

Phoning.. explains ".. so I dont know what you want us to change it to.. it just says here it should be changed.. so if I think its right I just leave it?"

Talking to colleagues..

.. ".. have we got time to piss about with this?.. she says its on Table 3.." Looking at sheets.. "Where's Table 3?"

On phone .."It comes under EU? Even though it says National Bank of Greece?" (Because they do not have offices it comes under 'overseas') Writes number on sheet.. "Where's that listed in the SIC codes then? cos we're going to get loads of these"

Talking to colleague.. "Have we got time for that?..." "What a palaver.. I dont know why they dont just write it on"

One of the main purposes of examining 'real time, real world' work is that it directs attention to the manifold ways in which divisions of labour are achieved as day-to-day activities (Anderson et al., 1989). The rules and procedures which formally specify a division of labour as a process of work have to be applied 'here and now' in *this* organisation at *this* time using *these* resources. The notion of a 'working division of labour' points to the division of labour not so much as an abstract specification but to the actual course of activities as they are socially organised and understood by parties to the work. It is intended to capture the sense of work as it is experienced by parties to the division of labour. The orientation of the individual within the social organisation of work is not primarily 'to the work as a whole' but rather to the tissues of connections and separations as they fan out from the particular position which s/he occupies. The orientation is an 'egological' one (Anderson et al, 1989) concerned with engaging one's own activities, and their boundaries, with those of others along with the resources 'to hand', in terms of 'decisions-that-I-can-make' and 'actions-that-I-can-take' as against those that others deal with. Working through the stream of tasks means 'doing-what-I-can-do' and passing on tasks to others 'so they can do what they do'. 'Gearing into the work' (Gurwitsch, 1979) is about having the resources of knowledge and relevant practical skills to 'insert oneself into the flow of work' and, as a consequence, render the division of labour silent and invisible.

In the case of the managers using the systems in the Call Centre, among the resources of knowledge and practical skills are an understanding of what 'the information' means in relation to the particular circumstances such as 'days off', 'sickness' and 'idleness', among the many other contingencies that have a bearing on 'getting the work done' and done 'in conformity' to the procedures and regulations. Other collections of resources are informal relationships and 'constellations of assistance'. These two concepts are glosses for an immense variety of activities such as, 'asking for help', 'seeing that X is busy for the moment', 'Y can always be relied upon', 'Z knows everything about securities', 'getting L to do the whiteboard because she can draw better than the rest of us', etc. It is activities such as these which make teamwork, as a 'natural' ingredient of a working division of labour, possible.

The following observations from a Lending Centre show how team discussions resulted in a commonly accepted 'view of the world' and facilitated the rapid exchange of information about particular cases or correct procedure. Among the usual office banter, which in itself plays some part in the development of 'teamwork', advice and training are dispensed in an informal fashion. In the example the Lending Officer (ZZ) is preparing an interview brief for the branch concerning a 'takeaway' restaurant. The Lending Officer discusses the brief with the Assistant



Manager, a discussion which soon involves other members of the team as they consider issues of insurance and security.

ZZ talking to Assistant Manager.. "do you think this comment is fair enough?..(reading from brief) .. on the issues for the proposition... 'whilst we note comments on last report that business may be seasonal previous owners of the business did not make a success of the business, account at IDR, and conduct of the account since opened gives great deal of cause for concern.."

AM "yeah.. certainly not give .. the OD"

ZZ: " I've put that on there..I think they're going to have to consolidate it but on strict credit working and full security"

AM: " concerned at the lack of turnover through the account... I don't think you've got a cat in hells chance of turning it around.."

ZZ: " I don't"

later..

ZZ ..I think. it ought to be consolidated on a secured BDL..

AM: get a charge on the lease.. even if it's of minimal value.. it will save him flogging it on and disappearing.... just put lease question mark.. tie him into the business if nothing else ... question terms of lease.. we've lost money on that business once I've no intention of losing it again..

ZZ: I think we've already lost it quite honestly

AM: well, no more then shall we say..

The decision emerges in the course of the discussion, a decision which is represented in various ways — to the applicant, to the tellers, to Regional Office, and in the file. The emergence of a 'them and us' culture had an obvious organisational relevance in the early stages of 'Delivery strategy', through the effective development of two 'cultures of lending' within the bank. Observations of differences in the treatment of lending between the branches and the new Lending Centre suggested that, particularly within the branches, decision-making, despite the range of sophisticated computer support, often came down to 'gut feeling'. As one Lending Officer put it: "in the end do you trust him to pay the money back?.."; and another, "for a one man band like that you either lend him a couple of grand because you trust him .. they're (computer generated Risk Grades) fairly meaningless..". Lending on 'gut feeling' clearly benefits from the kind of detailed 'local' knowledge of the customer more commonly found in the branches; ".. we know him quite well....its not a bad account but we've been bouncing on him like nobody's business.. The Lending Centre.. they take the view that they're a control situation ..one letter then they bounce. As a branch we take a more practical view - tend to be a little more sympathetic of that excess..... he's only about £100 over his limit.. he's brought it on himself really....he should've phoned. The Lending centre [are] much more rule driven..." and perhaps explains some of the differences in lending practise between the Lending Centre and the Branch, with the Lending Centre having much less freedom of action and, accordingly, much less likely to take an 'idiosyncratic' view of lending proposals.

Virtual teams and managing customers: getting to know the 'customer in the machine'.

A number of writers have pointed to the growing importance of the 'consumer' or the 'customer' as a significant feature of the movement towards post-Fordist economies in which "consumption rather than production is dominant as consumer expenditure further increases as a proportion of national income; new forms of credit permitting consumer expenditure to rise, ...and the ...reaction of consumers against being part of a 'mass' and the need for producers to be much more consumer driven, especially in the case of service industries and those publicly owned; the development of many more products each of which has a shorter life...." (Urry 1990: 277)



While the extent of post-Fordist consumption and consumer sovereignty is a matter of some considerable debate, Burton (1994) argues that financial service producers have gone to considerable lengths not only to retain existing but also attract new customers;

"There has evidently been a shift from organisational cultures which were conservative, reactive and cautious, and where the main element of the job was administration. Contemporary financial service personnel are required to be proactive, entrepreneurial and possess a high level of interpersonal skills and marketing expertise." (Burton 1994:5)

As we indicated earlier, a greater emphasis on service to the customer was one of the main planks of the change strategy. As the bank began 'Delivery Strategy' and the process of centralisation, there was a recognition of some of the tensions that would develop between a policy of centralisation to promote cost reduction and a desire to continue to appear as a local 'high street' bank along with some of the problems this conflict might subsequently create for its avowed policy of customer service. This tension manifested itself in a number of interesting ways in terms of the working of 'virtual teams', most notably in the conflict between 'relationship management' - in the sense of managing accounts according to what was 'known' about the customer as the product of a longstanding relationship - and management according to expert risk grading and assessment packages.

The Bank was conscious that although its policy of functional centralisation might well benefit the customer in all kinds of ways, not least by keeping costs at least stable, it ran the risk of losing the 'personal touch' that was seen as one of the distinctive services offered by the high street branches. An early response was to try to maintain the illusion to telephone customers that enquiries were still being handled by local branches by simulating, at the Service Centres, that the call was being received locally. A much longer term strategy was concerned with what can be succinctly referred to as 'reconfiguring the customer and the staff' as part of a process of increasing standardisation and consistency in decision making. This involved developing a set of expectations as to how accounts should be handled; a set of expectations that emphasised the application of standard procedure as opposed to the more personalised approaches of the past.

So, for example, a standard set of letters were developed to send to accounts that were 'out of order', accompanied by a 'script' to be used whenever customers complained;

"complaint.. she wants to *know why we bounced the same day she paid in...*" *"..did we not write back and say same day was too late?..take the normal line with her and see how it goes.."*

".. we haven't got time to write those kinds of letter .. because of volume and we are process driven .. we haven't got the time to make exceptions.. we know the Bank will stand by us .. because it's rule driven.. it works because we're dealing with sheer volume.. we're not being asked to get involved deeply with every customer who comes on the phone.."

Of course this did not guarantee that customers would respond to what were computer generated letters informing customers of the state of their account in quite the same impersonal way, as the following customer's letter illustrates:

"Might I enquire as to what particular charm school gave you your wonderful way with sarcasm and barefaced cheek! You were bloody rude... I demand, by return an apology. Your failure to do this will result in my solicitor writing to your head office to take the matter further. May I remind you, the Bank is in business to make money, not high handed moral judgements. You have overstepped the mark in a most appalling way and in your position cannot be excused.."

It is then evident that such an approach to customers is far from unproblematic. Consequently, one of the skills of team working that appeared of particular importance, and was regularly manifested in the fieldwork observations, was that of 'demeanour work' and 'emotional work' (Randall and Hughes, 1994; Hochschild 1983). While until recently considerations of 'emotion' have been missing from accounts of organisational life, with its emphasis on the 'rational', and by implication 'non-emotional', actor. And while equally clearly



banks are not supposed to be emotional hothouses, 'emotion work' - the managing, control and occasioned display of appropriate emotion - was also clearly part of 'doing the work'. Individuals working in the various sections of the bank are expected, and sometimes have no alternative, as members of a team, to embark on various forms of demeanour work or emotional control. This is not simply a feature of Bank policy, as reflected in "smile, your next customer may be the mystery shopper" or the comment "a complaint is a sales opportunity". Demeanour work - often translated or interpreted as 'smiling down the telephone' - was a regularly observed feature of customer contact, as in the following example where the discussion concerns bank charges;

1. *On phone - re: charges - and Bank policy;*

Demeanour work.. "I'm sorry that you're disappointed with our service...if I can be of any further help..

2. *Using screen while on phone...giving details of acc over phone...*

"I will pass on your comments to my manager...its not so personal as in a Branch...I'm sorry about that..if I can be of any assistance.."

3. *Call ends - says to colleagues - "You cant get a word in edgeways with him.."*

4. *Goes to find and talk with Supervisor..*

.....later

Discussion with X about charges - man had phoned from Australia re charges to complain about charges - Bank charges likened to buying underwear (?) - "it's like Marks & Spencer's or Jaedgers...you make your choice"

Despite the emphasis on routine that attends the implementation of 'Delivery Strategy', as Suchman (1987) notes, routines are not slavishly adhered to and generally and typically involve the use of judgement. Specifically the circumstances under which the routine is to be strictly followed and the circumstances under which modifications or 'short-cuts' may be employed through the utilisation of informal teamwork or 'local knowledge' is a matter for 'occasioned determination' in the course of the work. Such 'local knowledge' is seen as providing short-cuts to task completion and containing customer dissatisfaction. 'Local knowledge' also often incorporates ideas about methods for short-cutting or facilitating tiresome and time-consuming routines comprising what Bittner (1965) calls 'gambits of compliance'; that is, techniques that enable workers to 'get the work done' whilst giving the appearance of complying with the formal rules.

The move toward the centralisation of function was intended to reduce the dependence on local knowledge of the kind just sketched. Further, each worker was expected to deal with a larger number of accounts which, in its turn, created the need for more procedural formalities in dealing with the accounts. However, the use of local knowledge remained a regularly observed feature of the work. The important point is that in the vast majority of cases local knowledge about the customer was used for the customer's benefit in an effort to try to meet the substance of the customer's request even though this might involve negotiating or overcoming standard procedures. So, for example, even in the Securities Centre, where the work was most closely driven by software and most divorced from customer contact, local knowledge was still an evident feature of 'doing the work'.

What comes across, and contra many of the tales in the literature about the evils of Taylorism, is that local knowledge is still used, and used with judgement and skill, to expedite the subtleties of the work which 'following procedure to the letter' would ignore and, possibly, create even further problems. Although one might see this as a reconfiguration of local knowledge, the important point to make is that it remains local and derived directly from the experience and knowledge of the work itself. Importantly, it also remains a resource by which the procedures are made to work more smoothly than they might otherwise in avoiding problems that might arise through a strict use of procedure.

This tension between the customer as a person and the customer as an account number, the 'customer in the machine' as it were, is clearly seen in the work of the Business Managers. A



number of managers would commonly describe their jobs as 'relationship management'. A great deal of time is spent in face-to-face interaction with customers, balancing their needs with the needs of the bank, trying to develop and maintain a relationship between them. This relationship is not between abstract organisations, but between the manager and the owners of the business and involves meshing his sense of 'the work that they do' with 'the work that I do'. Much of this is achieved through ordinary everyday practices in interaction, through locating his own set of relevances within the work that they do (be it turnover, profit margins, plans or whatever) and making them subject to ordinary everyday work in their conversations. But his work is also about building and preserving a personal bond between himself and his customers.

Dealing with 'virtuality'

Yet managers are members of an organisation that has professedly bought into the 'virtual' ideal. Notions of distributed co-ordination mediated through IT, of empowerment, of product loyalty are an integral part of the plans and procedures that inform his work. A whole range of technological support and decision-making packages become a resource that he is expected to draw upon in his interaction day-by-day. Whilst the manager is clearly aware of, and makes reference to, this organisational backdrop, in practice most of his decisions come to be based upon his personal knowledge of the customer. Having said all this, however, the manager also spends a great deal of his time working with and using the technology, most notably by completing forms which, in turn, become a resource through which he seeks to justify to the 'virtual organisation' the real decisions, based on real interaction, that he has made. In that way, then, he is effectively a locus through which the 'virtual' ideal and the need to practically achieve the 'real' work with 'real' customers gets negotiated. While he must engage with his customers and arrive at practical decisions, he must account also for those decisions in the terms (or the 'style') of the organisation within which he resides, as it is made manifest within the forms and procedures, the edicts and notions of 'best practice' that his workaday environment provides. This is illustrated in the following extract where a Business Manager is making lending judgements supported by the kind of local and informed knowledge of the customer that might be regarded as being 'in the spirit' of rather than being 'by the letter' of 'campari and ice' - a mnemonic that was intended to guide lending decisions. Here the Business Manager is considering a very small increase in lending to a doctors' practice which is 'in trouble' and under Regional sanction and exercising 'managerial discretion' to make a judgement in favour of granting the loan, and writing a report in a style and a format that will ensure Regional sanction.

1. Been to see some Drs who have business account with the Bank. Asked for an additional £XXXX for computer - ... asked to sanction purchase. Outside DP (discretionary power) (since under Regional Sanction - Agreed - because business is entirely satisfactory - GPs with turnover £XXXXk - profit £XXXXK - not reasonable to tell them to wait for such a paltry sum;

"I've worked in Regional Lending for 6 years and I know how it works....you've got to put into context my background, the amount of the loan..."

2. Looking at report to Region - checking for spellings etc. - report phrased to support decisions

3. Sales - product - appropriate to needs.

4. 'Face sheet' - NWB 1258 face sheet - WP template

Application form (Advances) - trying to give customer service

- dealing with advances is time consuming - it needs to be screen based

- paperwork goes to Assistant - to do all the connected acc forms.

5. Form for security - for loan - writing to Drs to get informal deposit of security for loans (for surgery)??



6. *Going through forms in file - looking at letters re: insurance; life policies - (this is a part of a process whereby the request for a loan - for the computer seems to lead to an appraisal of the entire account)*

7. *Dictating - looking at letter - master and copy of Insurance doc; and other docs in file tells secretary - copy of early letter - tells her which paras to include.*

8. *Goes to get front sheets for typing - to put on typing of letters and sent downstairs to secretaries.*

Other letters - have to be tailored slightly because different.

9. *Dictating - another letter re: securities and loan*

10. *Interr - phone - takes message*

11. *Back to dictating - adds names to correspondence form - to be sent with tape to secretaries for typing*

12. *Going to put note on ISS - (gets card of acc No) - using screen - puts in password.*

- Interview Notes - enters details of letters - deposit of policies as security (personal pension plans)

In the context of the bank, it is very often the managers who have effectively become the locus of change. They are the ones who have to implement the new proposals. They are the ones who have to negotiate, day in and day out, ways of making changes work in the context of their ongoing routines. They are the ones who have to balance and resolve at a practical level the tensions involved in reconciling the centralisation of processes with the decentralisation of customer service; the centralisation of administration and record keeping with the decentralisation of 'selling'. As one CSB manager commented;

"If you take out the non-customers and you take out the business customers, and you take out the runners... if you take out that lot, then you take out the customers of other branches, I'm actually seeing very, very few of my own... customers. So then we got to say 'where are the rest of them?' because I can produce a printout that says I've got fourteen thousand customers. And that was the answer to it: 'How well do you know your customers?' 'Not very well'. Some of them have credit balances of twenty, thirty thousand pounds. And we never see them. We've never even heard of them..."

This CSB manager can see - 'in the machine' - that he has 14,000 names, 14,000 customers on a computer printout, but most of them he never sees. Yet the computer tells him that they are his customers so they must be there. The problem then becomes how do you sell your products to someone you never see?.

For the bank one answer to this problem is 'Managing Local markets' (MLM), a sales approach focused within the bank's CSBs and Business Centres where face-to-face customer contact has been retained. All of the CSBs and Business Centres have been involved in progressing through a number of distinct phases in the setting up of MLM. Initially all of the staff were asked to play a part in an 'Analysis' exercise. This was partly a matter of sensitisation as to what it actually was they needed to know about customers. However, for the staff in question a great measure of it amounted to going out and finding what lay 'beyond the walls' of the bank. Employees literally went out in the streets on walkabouts and drive arounds, trying to assess the character of particular areas and gain some measure of the competition and what it was like.

At the point of application MLM is computer driven with customers being categorised into 5 basic categories - A+, A, B, C and D - with the A+'s being the "super accounts" and the Ds being the ones that "cost money to run". These categories are based upon a thorough knowledge of the customer's dealings with the bank, the nature of their credit balances, the running of their account, credit cards, investments, mortgages, insurance, etc. The target products in MLM - insurance, pensions or whatever - tend to be ones that are currently in focus throughout the bank, and a complementary sales drive operates under the banner of 'Business as Usual' where they attempt to sell the same products to the people they *do* see



regularly. To establish the ones they do not see they use computer screens to discover their normal mode of contact with the bank. Beyond this they will engage in other considerations such as what products customers already hold (there's little point in trying to sell one of your mortgages to someone who's already got one). Where it was once the case that 'Products in Focus' would be the subject of blanket mailshots their aim is now to develop a 'Local Market Tactic' and to specifically target certain customers they do not see and send them a letter, perhaps following up with a telephone call. This process of finally deciding just who is going to be sent a letter is referred to as 'hygeining'.

In the actual context of the workplace it becomes quickly apparent that MLM has a number of important implications for the achievement of computer supported co-operative work since computer derived models of market segments are being used to devise a whole set of organisational and marketing rationales which underlie an increasing number of management activities and decisions and the way these are achieved. Additionally there are efforts underway to arrive at ever better depictions of customers 'within the machine', a 'virtual customer' one might say. And there are at least two important aspects to this. One of these is the representational issue of the nature of such virtual customers and how they are arrived at and engaged with from day to day. The other is the question of how managers (and others) negotiate some sort of 'fit' between 'virtual customers' and the 'real' customers they see over the counter or talk to on the phone.

Virtual Teamwork: working to make routine work routine

One final aspect of virtual teamwork consists in the consideration of the 'work' done to make routine work 'routine' - that is the fact that people are able to respond quickly to customer requests, to process or present information in organisationally relevant ways is itself a product of the work of others. This is perhaps most obvious in the work of someone like the Technology Co-ordinator in one of the large centres whose work largely consists of ensuring that people's machines are working adequately, that they can log on, that the relevant applications are functioning adequately and so on. It is also apparent in other people's work. The Transmission Officer, for example, is involved in a range of tasks administering, co-operating with and co-ordinating the work of others in the Business Centre; monitoring 'activity through the account', the turnover in the year and the facilities used, thereby shaping the negotiations over pricing policy and attempting to ensure, in a delicate balancing process, that neither does the Bank make a loss nor is the customer overcharged for the use of the Bank's facilities. This process, that precedes, for example, the annual interview for small business customers, involves the perusal and careful consideration of a range of printouts and forms. This monitoring and co-ordinating work also includes supervision of some aspects of the sales process as illustrated in the following fieldwork extracts;

Next.

- 1. Looking at sales figures from Wirral BMA (sales figures have come from Region) - each manager has sales targets. Business Centre gets them all because they monitor them.*
- 2. Separates docs - highlights all branches in the BMA.*
- 3. Looking at figures on sales performance - columns on 'plan' 'allocated' 'potential'*
- 4. Gets blank form (template on secretary's machine downstairs - Word for Windows) - writes in what has been achieved*
- 5. (Tape) - does calculation on commercial savings - uses calculator to check figures - entered manually on sheet/form.*
- 6. Has achieved 'Q' (half target) in most areas - has to write in when 'Q' will be achieved.*
- 7. Phones -X - comes up to explain how to calculate on the form - forms given to Manager to monitor them.*
- 8. Continues completing form - getting figures from past Sales Performance Form and new figures from Region.*



and later, doing sales figures and priorities;

Next.

- 1. Looking at graphical representation of targets and achieved.*
- 2. Will go and get typed up to give to Boss.*
- 3. Highlights 'interesting' bits.*
- 4. Looking at figures - to analyse - those interesting for the Boss to look at - looks at what XXX has done in the past - decides to just highlight rather than analyse.*
- 5. Finds mistake in figures - between sales performance data and that on sales.*
- 6. Checks another set of figures - "I'll phone Regional Office and find out if there's a reason why"*

The various forms of paperwork also act to facilitate the co-ordination of work but the actual process of 'doing the paperwork' itself requires various co-ordinating activities, involving the 'meshing' and 'modal transformation' (Anderson et al. 1989) of other paper and computer information. One example of this is the 'Interview Notepad' which, designed to be used as part of the annual review and for lending interviews, involves the Business Manager's Assistant in the lengthy perusal of other records, the 'scorecard', records of past reviews, the computer 836 printout and so on; and then using a range of information to 'GAPP' the account. In this extract the Assistant is talking about this process of accumulating information in preparation for the customer's annual review;

"... its the annual review on Thursday, ...(getting things ready for the interview) 'I did it yesterday, but I just had to GAPP it, thats ready apart from up-to-date balances which I've put on there,.. (what's there?).. there 's a standard ...now ..brief that we have to fill in, like an interview note pad, then you get the customer brief off the computer printout one, and then that's it basically, (pointing at printout) GAPP graded, ...we only do GAPP grading if we've got more up-to-date financial information.. (where did the information come from?) .. got data from machine and from reading through the file " - (first time she's dealt with this account)

As the Assistant works through the different sections of the 'Interview Notepad' the processes of administration and control of the account, relationship building and the sales process are linked. The Assistant also needs to consider how the information she is compiling may actually be used in the review - that is, the linkage between the 'virtual customer', (the customer as represented in various computer printouts and records) and the 'real customer' that the manager will face in the interview.

Conclusion

This paper suggests some of the varied tension involved in attempting to implement a form of 'virtual teamwork', and as a consequence begins to sketch out some of the problems associated with the rush to 'virtualise' contemporary organisational forms in much of the literature. It is our contention that a reliance upon notions of 'virtuality' might too often obscure the very real issues associated with the relationship between ICT and everyday working practices within changing organisational contexts.. In particular this paper has focused upon the notion of 'virtual teamwork', making clear that such a notion is not unproblematic, reporting ethnographic research detailing the interactions between the 'virtual' and the 'real', between organisational change, performance and skill by focussing on the ways in which such strategic plans as 'virtual teamwork' are instantiated in day-to-day working practices.

.Virtual teamwork, it is suggested, places a particular emphasis on communication and the development of 'awareness' skills. With increased geographical dispersal of the specialised centres, however, a 'buck passing' culture may emerge, with poor communications impacting on teamworking across the organisational divide. Co-location by task in itself creates and encourages particular, often very fierce, group loyalties and the development of a 'them and us' attitude, (where 'them' is effectively any other organisational unit). Clearly one of the major



problems facing any virtual team is that of 'communication'; ensuring that work proceeds smoothly from one phase of activity to the next, that it is passed on in a timely and coherent fashion, that plans and procedures with their associated paperwork and records are understood and adhered to and so on. However implementing such improved communications is hardly straightforward and raises a number of other issues connected to 'standardisation' and software development.

Ethnographic fieldwork also reveals how 'virtual' teamwork creates managerial problems in the form of monitoring and control. Despite the prevalence of various management information systems for monitoring organisational activity the value of these systems and their impact on the work itself can be poorly understood. In this instance the introduction of monitoring and targeting systems has proved of dubious value, with the systems becoming ends in themselves, often to the detriment of effective working. The development of forms of 'virtual' teamwork also places a heavy responsibility on middle and lower level managers to manage the concurrent changes in the practical day-to-day work of the teams. Our research suggests that managing innovation of this kind is a complex and difficult business since 'virtual' teamwork involves 'real' workers and 'real' customers and managers are placed at this interface between the 'virtual' and the 'real', attempting to manage the 'real' problems of 'virtual' teams.

To highlight the complexity of these issues in contrast with the apparent simplicity of transformation implied by the use of 'virtual teamwork' in some quarters is in no way to reject the notion of the virtual team or organisation out of hand, to assert the unassailability of the status quo. Rather it is to take the notion extremely seriously, to see just what it looks like 'on the ground' and to come to an understanding of just how it works in the lived practice of everyday work.

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