MANAGEMENT UTOPIA OR USER DYSTOPIA? A CRITICAL ANALYSIS OF A UNIVERSITY ADMINISTRATION SYSTEM

Completed Research Paper

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Abstract

Enterprise Systems (ES) have been introduced into many large organizations and are found across many sectors including Higher Education which is experiencing unprecedented levels of competition, government regulation and growth in student numbers. These systems based on ‘ideal’ models of business and organisational ‘best practice’ promise vast improvement in efficiency and effectiveness according to what might be seen as utopian visions of management. In reality they can result in a more dystopian reality. This empirical study takes a critical theoretical approach to an ES implementation in a UK university which procured and installed a large scale ES, SITS (Student Information Technology System). The study uses an inductive approach using interviews, document analysis and data from high level strategic meetings. This is analysed using a critical theoretical framework. Conclusions are that SITS has effected a significant de-skilling of academics resulting in the rise of a new managerialism within the HE sector.

Keywords: Enterprise Systems, Human Behaviour and IT, Higher Education, Critical Research in IS, IS Implementation, New Managerialism
Introduction

The development and implementation of large scale integrated systems, Enterprise Systems (ES), has been a goal for many organisations in their quest to provide more and better information to compete in an increasingly global business environment. In recent years Enterprise Systems have been introduced into many large organisations particularly manufacturing (typically Enterprise Resource Planning (ERP) Systems such as SAP) where they have been used to facilitate all aspects of the business from sales through to production and dispatch (Davenport 1998; Moller 2004; Alvarez 2008).

A growth area for ES has been in developing administrative and management control systems to support Higher Education (HE) within Universities (Fowler and Gilfillan 2003; Pollock and Cornford 2004). Little research has been undertaken in this area and most research to date has focused on ERP implementation covering many issues such as technical approaches (Holland and Light 1999), Critical Success Factors (Bingi et al. 1999; Somers and Nelson 2001; Sharif et al. 2005; Woo 2007); strategy (Fowler and Gilfillan 2003; Umble et al. 2003) organisational change (Yusufa et al 2004; Lowe and Locke 2008), failures of ERP (Trunick 1999; Vogt 2002; Elbanna 2007) and fashions (Westrup 2005). Westrup (2005:146) characterises these types of Enterprise Systems as being ‘digital concrete.. and a congealing of social relations in and around technologies”. When examining the literature one area that continues to be identified as critical for their implementation has been the organisational and social domain where detrimental effects of the IS has consequences for some stakeholders (Boersma and Kingma 2005; Krumbholtz and Maiden 2001; Wainwright and Waring 2004; Kayas et al 2008). However, critical empirical research into the adoption and use of Enterprise Systems is scarce (Alvarez 2008; Newell et al. 2003) and critical research looking into how these systems impact on an organisation and its staff is limited (Waring and Wainwright 2002; Westrup 2005). Implementation factors can impact upon the organisation’s ability to function as well as individual stakeholder lives and cause stress and frustration. Thus a critical approach within the context of an Enterprise System implementation is important if organisations are to enlighten themselves as to the implications for their organization, working practices and for their organizational well-being. (Cecez-Kecmanovic et al. 2008)

The empirical study we present in this paper was undertaken over three years in a UK University which implemented a large scale integrated Enterprise System, SITS (Student Information Technology System). Unlike the study of a SAP implementation within a university discussed in Pollock and Cornford (2004) and Fowler and Gilfillan (2003) which focused on Finance and general administration, the SITS implementation was intended to integrate student data across all departments, provide enhanced management reporting and control and to ‘make life easier’. However, the reality has seen the growth of some power bases within the University, new roles and responsibilities supported by the formalised SITS approach to information management, the increasing isolation of academics from policy and decision making as well as the loss of valuable staff with years of experience and organisational knowledge.

It is not our intention within this paper to discuss at length the extensive research on Enterprise Systems integration but to establish how critical theory and emancipatory practice can provide a relevant theoretical base to study the impact of an Enterprise System on organisational life – both from managerial (utopian ideals) and other user experiences (dystopian practices) and perspectives. The next section of the paper discusses critical theory highlighting its relevance to the information systems field. Section three discusses the research methodology used in the project and section four discusses the findings and their implications for critical IS research and practice. Finally we draw conclusions from this study that may be of benefit for other researchers and also for practitioners involved in Enterprise Systems adoption within complex HE administrative environments.

Critical Research and Enterprise Systems

The emergence of a ‘critical management studies’ or a ‘critical information systems’ perspective is a comparatively recent development, evolving from previous traditions of critique, such as Labour Process Theory, in the early 1990s (Grey and Willmott 2005). In the IS field it has been argued that critical IS has
its roots in the early work of Enid Mumford, the Tavistock Institute in London and several researchers in Scandinavia (McGrath 2005). Howcroft and Trauth (2005) provide a handbook of critical IS research and show how critical IS research is more directly influenced by the Frankfurt School of critical social theory and in particular the work of Jurgen Habermas. This basis for critical studies of IS can be seen in the work of Lyytinen and Klein (1985); Lyytinen (1992); Ngwenyama and Lee (1997), Doolin (1998) and Brooke (2002) to name but a few. Howcroft and Trauth (2005) identify five elements of critical IS research to demonstrate the possible breadth of definition: emancipation, critique of tradition, non-performativity, intent, critique of technological determinism and reflexivity.

More recently the agenda of issues that have been examined within this critical perspective has steadily expanded and has recently encompassed the area of project management and Enterprise Systems implementation (Cicmil and Hodgson 2006; Raisanen and Linde 2004). As many critical IS researchers have argued (Avgerou et al. 2004; Brooke 2002; Alvarez 2008; Stahl 2008; Waring 2010) the mainstream management and information systems literature has been characterised by a heavily functionalist, instrumental view of organizing, perhaps consistent with the engineering orientation of the Operation Research/Management discipline that has shaped all forms of management. They also share a scepticism of the dominant forms of management and organization which some may find morally indefensible (Harrington 2008). Thus:

“Critical IS studies aim at revealing, criticizing and explaining how the development and use of IS in organizations and society in the pursuit of efficiency, rationalization and progress also increase social control and domination, with potential detrimental consequences for some stakeholders and society as a whole” (Ceecez-Kecmanovic et al. 2008)

The critical perspective is not homogenous, is often contested and different strands of work have been influenced by different theoretical positions and intellectual traditions, for example Postmodernism and Critical Theory (Alvesson and Deetz 1996). Fournier and Grey (2000) identify three common threads that unite the perspective namely: denaturalization, anti-performativity and reflexivity. Denaturalization refers to the questioning of existing orders of thought and action, and the challenge of phenomena which are taken for granted or explained by arguments of ‘nature’ and necessity. Anti-performativity questions the instrumentality that characterises much management theory and practice and the view that only knowledge which enhances performance (and maximization of output) is of value. As Grey and Willmott (2005) suggest however, this is not merely an antagonistic position but is one which acknowledges the political and ethical aspects of human activity. Finally, reflexivity requires researchers to recognise their own place and assumptions in creating knowledge, something which has been lacking in the tradition objectivist scientism of management thinking and some would say IS. These three principles are certainly worth bringing to bear on integrated systems implementation, which has typically been characterised by functionalist and manageralist assumptions that ES implementation is an increasingly necessary feature of organizing geared towards the maximal achievement of formalised outcomes (utopian management ideals) through the deployment of idealised processes and the ‘system’.

It is only in recent years that authors have been critical of this and have begun to discuss the hegemony of the management and the IS discourse, its narrow implicit theory and its lack of reflexivity (e.g. Cicmil and Hodgson 2006; Alvarez 2008; Ciborra 2004; Kayas et al. 2008). The recent emergence of a critical IS community with a desire to address these issues is significant and special issues in esteemed journals (Journal of Information Technology 2002; Information Systems Journal 2005, 2008) represents a chance to challenge mainstream thinking. It is claimed that the implementation of ES require the adoption of standardised business processes embedded in the software and a move away from their traditional way of organising (Al-Mashari et al. 2003; Benders et al. 2006; Davenport 1998; Morton and Hu 2008). The colonization of social and organizational life by rules, technique and principles has profound implications, (the dystopian reality for users) fostering further instrumentalism and shaping experiences and identities for a growing body of social actors (Pollock and Cornford 2004). In order to examine this process we draw on the Critical Social Theory (CST) of the Frankfurt School of Sociology, a body of knowledge that has a long tradition of critical evaluation of technologization and technique in contemporary society.

One focus of CST is on the rise of instrumental reason and rationalization of human activity (Held 1980). Building on Weber’s concept of rationalization CST examines the mathematization of experience and
knowledge, the growth of means-ends rationality involving the increasingly precise prescription of means, and the development of goal-oriented ethics. Each of these features is evident in the integrated systems/ES domain, and more specifically they are at the heart of the ES philosophy. This technocratization of organizing is founded on a notion of best practice which is objectively determined by some scientific method (Alvesson and Willmott 2003). In turn the resulting predetermined techniques, modules or IT screens discipline the standards by which people then work, requiring a compliance and subordination to those pre-given goals and standards (Marcuse 1941).

More recently Jurgen Habermas has also expressed concern about how the technical knowledge interest has come to dominate society through technocracy (Alvesson and Skoldberg 2000:115). By technocracy Habermas means that expertise and social engineering, supported by a narrow positivist view of science, have been handed the task of solving an increasing number of society’s problems. This has been at the expense of political and ethical debate. His main concerns have been with the spread of instrumental reason to many areas of social life - the definition of practical problems as technical issues. This is highly relevant in the context of ES implementation. People in society or at work are no longer encouraged or, in some instances, able to engage in independent debate as their ability is undermined by a technical rationality to which industry and government leaders subscribe. Pollock and Cornford (2004) argue that to some extent this happened in a university IS implementation at “Big Civic” where certain stakeholders were involved in early discussions about the SAP system but only after the decision to implement “Enterprise” had been made by the Pro Vice Chancellor. This put many individuals under stress as they found the new system very inflexible and it could not do many tasks necessary in a research intensive university yet it was too late to change as the system had been installed. Compliance was all that was left and this resonates with the work of Harrington (2008) who argues that universities have changed from pre-enlightened ‘protectors’ of societal knowledge to typically modern ‘business’ orientated bureaucracies fuelled by the domination of the positivist epistemology.

The danger is that in creating an environment where the ‘system’ is all encompassing and can only work in a particular way the critical reasoning capability of professionals is eroded. Powers of critical reasoning need to be actively encouraged and stimulated if they are not to be suppressed or lost. Therefore, in the context of modern management and work practices, Alvesson and Willmott (1996:13) argue that CST must encourage people to reflect critically upon oppressive practices and thus ‘facilitate the extension of domains of autonomy and responsibility’. What constitutes oppressive is a moot point but in our opinion this need not mean the worst excesses of managerialist domination, but can also include seemingly innocuous programmes, techniques or methods which erode autonomy and a person’s ability to think for themselves beyond the prescribed. Autonomy in this context means the ability of human beings to make informed judgements without them being influenced greatly by wealth, power and, most relevant here, knowledge, a factor which is at the heart of this paper as will become clear in the empirical section. Responsibility relates to social responsibility which appears to some to have almost disappeared in modern society. Here people recognise that they have a responsibility for each other and a collective responsibility for society. Habermas argues:

(CST) takes up a partisan position in the controversy between critique and dogmatism, and with each new stage of emancipation it wins a further victory. In this kind of practical reason (as contrasted with technical reason), insight and the explicit interest in liberation by means of reflection converge. The higher level of reflection coincides with a step forward in the progress toward the autonomy of the individual, with the elimination of suffering and the furthering of concrete happiness. (Habermas 1974: 254)

Whilst these sentiments may appear somewhat grandiose in the context of this paper Alvesson and Willmott (1996) make the important point that CST can move us incrementally towards these lofty aims. According to Alvesson and Willmott (1992, pp 432-5):

“emancipation describes the process through which individuals and groups become freed from repressive social and ideological conditions, in particular those that place socially unnecessary restrictions upon the development and articulation of the human consciousness. ...Emancipation necessarily involves an active process (or struggle) for individual and collective self-determination...Any substantial and lasting form of
emancipatory change must involve a process of critical self-reflection and associated self-transformation...”

They propose a heuristic model summarising types and foci of emancipation which could be used to develop and conceptualise emancipatory micro-projects (Figure 1 below).

The model proposed has two axes. The horizontal considers three types of emancipatory projects. A **Utopian** approach is about providing a ‘vision’ which counteracts ideologies and social arrangements that obstruct human freedom. **Questioning** can involve challenging ideas and practices that may be taken for granted within an organisation and its intent is to doubt and resist without proposing an alternative approach. **Incremental** projects focus on participatory processes but may include elements of both ‘questioning’ and ‘utopian’ approaches. The vertical axis considers the main focus of the emancipatory efforts. **Ends** refers to the purpose of the managerial activity. **Means** refers to discourses and practices that enable ends to be achieved. Thus Enterprise Systems implementations could be viewed as the means to delivering a specific way of working across a business or in this case Higher Education sector. Finally the inclusion of **social relations** it is argued is to draw attention to the social organization of power and privilege (Alvesson and Willmott 1996:176-178).

In terms of emancipatory intent our research aims to explore what took place during the implementation of an Enterprise System, SITS, and to investigate how staff at New University were involved in the process. The next section introduces the research methodology adopted and also provides the background and context for the study.

**Research Methodology**

The organization used in this study is New University, a large post 1992 institution located in the United Kingdom. The research described here is part of a longitudinal study which started in 2006. The data used in this paper was mainly collected during 2008 but does refer to earlier documented data as well as recent data collected from an external audit by a high level academic quality audit organization. The roles of the researchers were disclosed to all organizational members who took part in the research project. The research team developed a series of semi-structured questions that were used during the early interviewing process and these were revised and refined in an iterative manner as further interviews were conducted. A total of 22 interviews were carried out which related to over 35 hours of text. One of the researchers transcribed all of the data. The research participants were members of New University and all had unique positions within the institution. We were able to interview senior academics, academics who were involved in managing degree programmes, senior administrators such as registrars as well as junior administrators who worked on a daily basis with SITS. We interviewed the SITS project manager as well
as some of the technical staff involved in the implementation. Predominantly the administrators were female while the academics were a mixture of males and females. The interviewees were chosen based on the post they held and the department they came from as it was important to ensure there was a balanced representation from across the whole University.

After the interviews had been transcribed the researchers used qualitative analysis (Miles and Huberman 1994; Crabtree and Miller 1999) and in particular Template Analysis (King 2004; Wainwright and Waring 2007; Waring and Wainwright 2008). The Template approach involves coding a large volume of text so that segments about an identified topic (the codes) can be assembled in one place to complete the interpretative process.

Our approach and starting point was the micro-emancipatory framework provided in Figure 1. This was adapted from the work of Alvesson and Willmott (1992; 1996) and provided the initial focus and structure for our research. Using the matrix we developed a semi-structured interview schedule that we used in the early interviews. It is important to realise that the framework was only a starting point and our understanding was revised in response to the concerns of the interviewees. Respondents were able to discuss at length issues that they felt were important to the implementation without prompting from the interviewer. The next section provides the findings and interpretive data analysis.

**Findings**

It is impossible within this paper to explore the extensive rich data captured during the research process. Therefore we have focussed on data that provides insight into the implementation and how it has not just delivered an IT supported integrated system but also other challenges for the organization that they had not foreseen or even contemplated. We start with the Utopian vision of the University for its data management. Each coded section has been developed using Figure 1 and has emerged from the data allowing the voices of participants to speak.

**Utopian visions/ends**

The complete academic administration system: SITS is used by over 60% of the UK Higher Education (HE) market, and 25% of the Scottish Further Education (FE) market and it has become the de facto standard for student information systems. [http://www.qas.co.uk/partners/tribal-8.htm](http://www.qas.co.uk/partners/tribal-8.htm) (accessed 26/02/2010) The vision presented by the vendors is one that states that SITS manages student administrative processes from enquiries through to graduation and alumni. The system is intended to act as the central point of information on students and their qualifications, and integrate with supporting applications such as finance systems e.g. Oracle, campus access systems, library systems, estates management, human resource systems and virtual learning environments e.g. Blackboard. In the case of New University the extent to which it does all of this is debatable. SITS consists of a series of core and optional components that are intended “to provide universities and colleges with a flexible and functional system to manage their back-office databases, as well as the delivery of student information and data via a self-service web portal for the use of students, staff and alumni.” The vendors also insist that each module has been designed by working in partnership with “our extensive customer base to provide a solution which is rich in functionality and meets the specific needs of the higher and further education sectors” Which customers they have consulted is not clear.

A better life for staff at New University: In order to understand how SITS became central to the University it is important to reflect on a little history of New University and explore the rationale for the integrated approach. New University is an HE institution which became a University in 1992. It began life as a college offering a variety of vocational courses and then went on to become a polytechnic managed by the local authority. The bureaucracy of the local authority management was replaced by another hierarchical system of university governance in 1992 and this has continued to grow over the last eighteen years. In 2008 it was reported that New University had approximately twenty thousand undergraduate students from which fifteen thousand were full time students and the remainder part time. It employs
over nine thousand people across nine different schools and support services and offers over six hundred fifty programmes to more than thirty thousand students in the UK and internationally overseas.

However, towards the end of the 1990s with the growth in student numbers larger systems developed by skilled academics began to emerge. There was one system for student information, known as the Student Administration System (SAS), a separate system for programmes and modules, the Academic Programme Database (APD) and a third system for capturing marks, the Marks Recording System (MRS). The SAS held the student personal details, the programme they were on and what modules they were taking. The MRS held students details, the programme that they were on, the modules that they were taking and their best marks for each of the modules. The third system, the APD held all of the programme information, the modules that formed the basis of the degree and behind that were the module descriptors. However, none of those systems were integrated. Many of our interviewees had been told that SITS was introduced for the benefit of all and would make life better. However, it is clear from reading university documents and talking to senior managers that it was changes in the funding mechanisms and increasing accountability to the UK Government as well as the growing volume of student data which was instrumental in driving the senior management of New University to try and capture all of the student information in one system. The first attempt at integration occurred when the university purchased an Oracle system. However, this was abandoned after a period of time due to its complexity and lack of expertise in the organisation (Manager,6).

Means - Vendor staff will work with the University and support the implementation: Senior staff in the University fully expected that the vendor would be present to see through the implementation. This would involve training relevant staff and providing ‘hand holding’ as the crucial times. This type of support, of course, comes at a price and the amount of vendor consultancy was underestimated. Training was seen as essential and initially all SITS staff would be trained by the vendor who knew the system intimately.

New teams in the University: Initially the senior management thought that a SITS implementation team and staff versed in project management would be sufficient to see the implementation through. This had been discussed in meetings with the vendor. These people would lead the construction of the coding hierarchies, supervise the data entry on to SITS across the University and ensure that processes were in place to standardise access to and procedures on SITS. This would go smoothly and all departments would benefit.

Social Relations: The vision of senior management in New University was that SITS would improve the relationship between the University and students by giving them access to data they previously never had. Queues during the first week of the academic year would disappear and students could engage better in induction programmes. SITS enrolment by students would remove a burden on administrative staff who previously had spent hours in overtime and weekends entering student data into legacy systems. Academic staff would have student lists faster and know numbers enrolled on programmes. The Virtual Learning Environment (VLE), Blackboard, would be accessible easier for newly enrolled students and they would be able to download their learning material.

Questioning - It’s SITS or nothing: The Oracle debacle and the pressure from central government meant that the implementation of a ‘system’ was imperative:

“They got themselves into a mess.. They had two choices – buy a package off the shelf and fit your processes around that system or customise the system to your processes. I think we went half way and that is where the mess occurred. We spent a lot of money and we had to get out. They then went for SITS because other institutions have got it... What I still can’t believe is that no academics were involved in those discussions. Academics are the end users of SITS and it must be there to support their work. We have had tremendous problems with SITS and Blackboard ” (Academic 3)

The staff involved in the decision to buy SITS were senior managers and the university registrar. Academic input was not deemed necessary nor was the expertise of developers of the earlier systems.
Dystopian Practices – Users Perspectives

Questioning Social Relations - Training – what training?: As the time for ‘going live’ approached training took place. The cost of using the vendors to undertake extensive training the university was prohibitive so it was restricted to the SITS implementation team. They could dictate what would happen internally in relation to training and they decided that they would deliver it. The problem was that there were insufficient trainers to cover every administrator who needed training on SITS in time for the cut over. Staff began to become stressed. The training was also inadequate for administrators’ needs and the SITS team also would not allow cascade training ‘in case the wrong message was given’

It’s not my fault: When the system did go live in August of 2006 the problems due to lack of training and expertise grew and this led to stress, anxiety and emotion in the workplace. The first issue arose when the programme codes were being set up. SITS had to have a particular hierarchy of coding. Lack of understanding of university degree programmes by both the SITS vendor consultants and the SITS team led to courses being coded incorrectly from the system perspective.

“At enrolment we found problems with the modules. Students were attached to the wrong modules.... This was due to misunderstanding about codes... I spent so much time correcting data, checking... It then impacted on Blackboard.. students going to the wrong lectures.” (Administrator 4)

The academics who were not really aware of the changeover date or involved in the implementation only began to experience the chaos that ensued when they returned from their summer leave and the students arrived. Staff did not know where they were meant to be for lectures, students were missing from class as they had the wrong timetable and student data was totally inaccurate. To add to the problems the SITS implementation team were not prepared to acknowledge that there were difficulties:

“... the message came back from the centre was always that SITS implementation is going well. The feedback from individual departments was that there were tremendous problems. The centre would say you were the only one complaining about this problem. But when we talked to other departments they would say ‘Oh yes we have the same problem’. We couldn’t get help so we brought in our own resource to overcome the difficulties” (Academic 3)

Questioning Means - SITS is too difficult: Another problem that was highlighted was the complexity of the access to SITS data, the unfriendly screens and the need for ‘going out of the system’ to go back and update a screen:

“The system is so complicated, using codes, jargon and real problems with screens that it takes five times longer than the previous one... It is time consuming and complicated... we have a full time team working on it... SITS is their job now... and we have good housekeepers who know the system very well. We didn’t have them with the MRS as we knew the system inside out.” (Administrator, 10)

The rise of the Good Housekeeper: The early days of SITS saw the SITS implementation team coming under a lot of pressure as more and more problems were discovered. The SITS team failed to support the administrative staff sufficiently during the weeks following going live. Phone calls to the team were ignored or staff were told it was their problem. One innovation which was rolled out across the university was a system of super users called ‘good housekeepers’ These people resided in departments and had developed a better knowledge of the system than other administrators. Staff could go to them for help and only if they could not sort things out would the SITS team be contacted. This procedure still exists today with only the good housekeepers being allowed to request reports or changes from the team. Some administrators believe that being a good housekeeper has led to some people being promoted:

“We have four [Good housekeepers] now.... One person is really good... she was the first one and now she got a promotion out of it. Well I suppose it is better than sending out to another department or the SITS team.” (Administrator 4)

The Computer says No!: The problems post-implementation from an academic perspective relate to the inability of SITS to provide information in the manner the academics expect it, the lack of interaction with the system, and the difficulty SITS has in interfacing with the virtual learning environment (VLE),
Blackboard. Even by 2009 SITS was not producing information to the standard of the pre-implementation smaller systems.

Many tensions arise around pressure points in the academic calendar. In September student enrolment is done either by the students themselves via a web link or with the support of administrative staff especially in the case of international students. Senior managers of the university see this as a much more efficient process. This has led to academics being excluded from the process where before they had to sign every student enrolment form. If students are not enrolled then their data cannot be downloaded into the VLE and academic staff find for a number of weeks that students cannot access the learning materials staff have made available in Blackboard and to make the situation worse they are powerless to help the student.

At the end of semesters modules must be assessed and marks recorded in SITS. For one academic this is a frustrating period:

“I put my marks into an EXCEL spreadsheet that does not talk to SITS. I put the marks into the Blackboard gradebook that does not talk to SITS. So not only have I recorded my marks three times – on the exam paper, EXCEL and Blackboard which increases the possibility of mistakes BUT I then have to put them onto a piece of paper that I hand to an administrator who then inputs them into SITS. This is nuts! I have asked if my spreadsheet can be uploaded into SITS or the gradebook – but the system says NO! I get into trouble for asking the questions.” (Academic, 10)

**Social Relations - Can academics be trusted?** Although in some HE institutions academic staff are able to enter their marks into SITS, New University have chosen to only allow administrative staff to have direct access to the system. Administrative staff have some strong opinions about the ability of academics to deal with SITS if given access and it was not unusual to hear criticism of academics:

“A couple of departments have trialled letting academics put in their own marks. It is not something I would encourage in this department.. We have enough problems getting information from academics to get them to meet their own deadlines and that’s with administrators helping quite a lot”.

(Administrator, 7)

This means that academic staff do not fully appreciate the potential information that SITS can produce. Where a member of staff does require specific information for managing their degree programme then they have to request a report from the administrators. They in turn have to request that report from the SITS team. This can be time-consuming but once delivered does allow academics to see statistics they may not have had before.

**Incremental Change - Life after SITS:** SITS is a reality in New University but there are still problems. Interviewees dealing with standard taught undergraduate programmes believe that SITS is working. Nevertheless New University has seen a big turnover of administrative staff since the introduction of SITS. SITS is a major component of many jobs and that requires attention to detail and familiarity with a system that is not intuitive. Staff are expected to put in lots of overtime to deal with the data and for some this is a step too far. One of our interviewees left suddenly after we met with her and she indicated that after 26 years in post she was too stressed to cope.

New University provides central government with data that supports their claim for funding so senior management are happy with that aspect of the system. The post graduate research department cannot use SITS easily and they run parallel systems to support their needs. This is also the same for all placement units across the university. These units find work placements for students and monitor their progress. One administrator stated:

“We are still running the old ACCESS database for placements set up in the 1990s because SITS cannot do what we want. We still have to put some data into SITS” (Administrator, 5)

We also found other departments cannot use SITS in its current form: departments with ‘unusual’ students such as clinical or education students where they have periods of work interspersed with their studies. The staff in those departments spend a great deal of time doing ‘work arounds’ or recording data on SITS to allow counting of students while other local systems manage the programmes.
One real issue that academic staff do feel has changed their role in the university is at exam boards. The SITS system has been programmed with algorithms that determine the final degree classification of each student. “... discretion has now almost disappeared at the exam board. Degrees are now awarded mathematically. So if you get 59% and more than half of your modules are over 60% then you get a 2.1. If you get 59% and half of your modules scored less than 60% you get a 2.2.

Thus academic participation in boards is not as essential as it was in previous years and most are now carried out with a minimal number of participants which include administrative staff, external examiners and a few academics. Academic staff, on the whole have accepted that their role has changed. Some may not be happy but they comply and only complain when things get really bad.

Outliers and other rebels: Not everyone in the university is so compliant and we found pockets of resistance. In one interview we were told about at least fifty staff in the University who have access to data in SITS but through another web enabled system designed by Academic 9:

“I always had access the student information I needed... I can provide that information to others through my web pages.... Lots of people use them because they prefer the way the data is presented rather than the way SITS provides... These are people across the university... I have to give you access as it is housed on a computer system external to SITS. My system is much more user friendly and allows easy querying”

This informal system has grown out of user frustration with poor quality information and exclusion from SITS. The university only has a limited number of user licences to and these are not for academics. Whether this system will be closed down by authorities at the centre of the university remains to be seen but the user base is growing through informal channels of communication.

Incremental Change Social Relations - Who is in charge?: Although New University has always tended to be bureaucratic the introduction of computers to administration of the student body has led to more formal systems being put in place. However, the previous smaller systems e.g. SAS were developed by academics for academics and administrators. The introduction of SITS was a major shift in the locus of control. Academics were excluded and administrators have taken over the running of the system. Academics must now defer to the administrative staff in all SITS matters and have no way of accessing data except through them. This change has been engineered from the central services of New University and it is too late to do anything about it. Power lies in the administrative domain.

“At the moment we’ve got more control because we are reporting the exam boards. So it might be a bit awkward if we went the other way and the tutors had more control of the system...” (Administrator 8).

“Between administration staff there are a lot of commands and control, lack of trust, witch-hunting and checking up. Because of all this, administrators are so defensive that they do not like anybody looking at their work and they do not accept criticism or suggestions on their work. This prevents academics and administration staff working together to solve students’ problems” (Academic, 9).

New subcultures: The university has also seen the rise of new groups of staff – the good housekeepers and SITS team. As specific bodies in the institution they did not exist before SITS but now they have their own power base and have influence over what happens to academic processes within SITS. They meet regularly together as a ‘user group’ with senior university managers but the group has no academic input.

Loss of trust: It is also clear that relationships have changed between academics and administrators – some might argue not for the better:

“it has to do with power, but it is more than that. It is the defensiveness, paranoia of being criticised and there is the habit of witch-hunting in the administration department certainly. If they admit that something needs improvement it is like saying that it was not done right before. But it is also the attitude of “how dare you tell me how to do my job?” (Academic, 5)

Trust also appears to have disappeared between the two groups of staff. Administrative staff check and re-check academic marks and calculations while academics dislike the power that senior administrators are gaining on the back of SITS. What is emerging is a ‘blame culture’ where each group of staff blames the
other when things go wrong. Administrative staff no longer go to academics’ offices when they need some information but email them. Their offices are becoming more of a fortress that can only be accessed by an electronic key. This can only be detrimental for the university as academics become more isolated from the decisions of the institution.

**Incremental Change Means - The growth of ‘technospeak’**: Through our research we have observed the amount of jargon associated with SITS. Jargon is an inevitable part of any organisation and in the case of New University people have a diversity of opinions regarding jargon and their influence in their work routine. Most administrators felt that the old systems were very straightforward and that they did not have a lot of jargon. Others believe that the old system had as much jargon as the new system and that it is just matter of getting used to it. The main advantage of the old system was the way that it was structured because all the data seemed to be in one screen, along with two or three other screens behind it so there were not too many components to use or look for, making the old system very simple to use. A big difference of the SITS system compared to the legacy systems is that SITS has many different pages and different screens and every screen has a particular name. It is also very difficult to amend data if mistakes are made without leaving the system and going back into it. More recently academic staff have seen some new developments in the university related to SITS. First students can access their module marks of SITS almost as fast as the administrators are entering them. One academic stated:

“I came back to my room after submitting marks to the administrator for my module and was greeted by some students who wanted to know why they hadn’t got the mark they thought they should have been awarded. I was shocked as no one had told me the students could see their marks on SITS.” (Academic 10)

Although it may be considered good practice to allow access to personal data it also involves communicating new processes to staff so that they can be prepared. Students are now more assertive than ever before and this is putting even more stress on university staff. This is not helped by the university documentation that continually refers to students as customers and as is often the case with that status comes new expectations.

**Discussion**

We begin this discussion by exploring our use of the micro-emancipatory framework (Alvesson and Willmott 1992; 1996) and contrast it with its use and interpretation by Cecez-Kecmanovic and Janson (2009) in their study of Colruyt. We then go on to consider the achievements of the implementation and its perceived impact on various stakeholders. Our concern has always been with the affect the system has and is having on the end users whose voice is infrequently heard and often disregarded.
In the original work by Alvesson and Wilmott (1992) the authors were trying to make sense of critical theory and its application to management. Much of their research evolved from the Scandinavian view of participatory management as well as the power struggles within Western European with the unions. The framework of micro-emancipation that they developed was intended as a heuristic to support researchers in their emancipatory intent and not as some instrumental tool to be followed blindly. Very few researchers have taken up this challenge (Fournier and Grey 2005). However, recently in the IS area Cecez-Kecmanovic and Janson (2009) have interpreted the framework (Figure 1) in an innovative way and one that they say is congruent with emancipatory intent. However, they have looked at Colruyt as an ideal organization that has practices that supports the management utopian vision. It is our contention that their work might have been strengthened by further interviews with the staff who work there and have experienced the systems involved. Having considered their interpretation and the work of Alvesson and Wilmott (1992; 1996) we have developed our own interpretation (Figure 2) and have applied it to the implementation of SITS in order to make sense of a very large, complex and highly political change. Although we have used a framework to inform our data collection we have tried to ensure that we have listened to the voices of the research participants. Our framework has allowed the surfacing of emancipatory practices as well as those practices which lead to the undue behavioural control of the individual.

We turn now to the interpretation of the data elicited from research participants. The Utopian ideals and management visions that were discussed with our interviewees emanated from the top of New University and Government. Government since the 1980s has been concerned with New Managerialism which has a twin agenda of ideological restructuring (based on the principles of the new right) and cost control looking at efficiency and accountability of public services (Pollitt 1993; Fournier and Grey 2005). Grey (2005) provides a comprehensive review and critical analysis of the rise of a neo-liberalism agenda and reinstatement of conservative ideals within management education generally, business schools in
particular and by implication its attendant effects on the management of universities. This is seen to have its roots in the United States but has then been absorbed and adapted within a European business school context. Grey (2005:179) states that “the rise of UK business schools is related to the rise of the New Right, of a hegemony around market ideologies and of a utilitarian approach to education in general and higher education in particular”. This neo-liberalist agenda was translated into mainstream university management practice. New University was caught up in this as Government through HEFCE (Higher Education Funding Council for England) demanded student statistics in a particular format to justify their funding streams. Thus the Finance Director instigated the SITS project to provide much higher levels of reporting and control in order to demonstrate adherence to the new government policies. In order to accomplish this and due to the prevalence of many fragmented and disparate systems in operation, a new emphasis on centralised services was placed within the structures and strategic plans.

**Utopian Ideals**

However the message that went out in the university was somewhat different. They required ‘buy-in’ and in line with the espoused values of the university (embedded in the strategic mission and plans) presented SITS as some form of utopian system which mirrored the marketing literature and sales message of the IT vendors. This could be seen to reflect some of the concerns of Harrington (2008) and Macfarlane (2005) where “raw power demands obedience and thus in the end provides the conduit to the institutionalised and effectively politicised epistemology, whereby the oppressed become ‘epistemological slaves’ to the ‘Weltanschauungen’ of their masters.” (Harrington 2008: 179)

As IS researchers our expectations would be to see this vision implemented in a manner which would facilitate more democratic and participative processes within the workplace (Lyytinen and Klein 1985). The reality was different and various political agendas started to emerge and come to prominence. This resulted in different stakeholders either gaining or losing in terms of their separate agendas, individual and group goals and aspirations for a better working environment.

An ideal view would be that individuals’ and groups concerns would be taken into account for the design of new working practices and that there would be ample opportunity to engage in effective dialogue and discourse. It is not really clear why this ideal did not happen in practice. Interpretations by our research participants have suggested a variety of reasons.

Firstly it could be seen that there was a mistrust of academics own goals and agendas which were entrenched in current working practices within the smaller devolved and decentralised systems in operation. These systems in some cases were designed and developed by academics for academics. A new opportunity presented itself to change the rules and procedures to mirror the administrators views of how the systems should work based on tight deadlines, structure of work, and centralised control from the Registry downwards. Administrators are not so concerned with individual student performance but more with the collation of aggregate data in the most efficient and timely manner. The pressure to deliver the HESA statistics was intense during this period leading up to August 2006 and therefore ideals were ditched due to expediency and the need to demonstrate results. Strict financial penalties were possible if the data was inaccurate – reflecting the new public sector performance agenda.

**Incremental Change – Dystopian Practices**

SITS has enabled the reconstitution of formal management structures and processes within the university and has led to some groups of staff being winners and others possibly losers. In terms of winners three specific groups can be identified. Firstly staff in the central finance department no longer have to disaggregate and reconstitute figures to fit the governments HESA requirements as SITS automates this process as a by product of data collection. This has created more opportunities to focus on achieving tighter levels of financial reporting and control within the university both centrally and across School/Faculty level. This is also reinforced through the SAP financial system under the guardianship of School level financial controllers.

Another winner has been the university Registry department. They have now centralised the control of academic programme modules, timetables, student data, academic quality control within one growing department. They have been able to expand their portfolio of services and staff and increasingly dictate quality standards and performance targets to the university departments. This increasingly takes
autonomy away from subject groups, academics and departments and places control within the Registry and the School/faculty level academic registrars.

On the other hand life is not so good for other stakeholders such as academics and some administrators who have both been deskilled resulting in becoming data entry clerks. Academics have little input into the new working processes and decision making activities within degree progression and awards boards. There is no scope for discretion and discussion of individual performance. Decisions are now highly algorithmic as SITS has the embedded decision logic and rules automated within it. This even extends to the principle of rounding marks and the abolition of the number 9.

The ability to be creative when designing new programmes and modules for students and external corporate clients has also been restricted by the enforced rules embedded in the SITS systems and associated administrative procedures. The lead time to get new academic programmes to market is now perversely longer and dictated by the standard administrative procedures and requirements of the new system. Changes can be difficult to manoeuvre through the convoluted processes and guardians of the new administrative systems. The guardians can be purely administrative or a combination of administrators and academics who have taken on the ethos of the SITS procedures.

Innovation also seems to be more difficult to achieve when the computer says NO! Some of the most creative innovators – both academic and administrative have left the institution due to frustration over obstacles to promoting new ideas and practices. This has also resulted in user led innovations that can work around SITS (for example academic 9). These are tolerated but not encouraged as a formal part of the systems.

Power relations have been strongly impacted and in some cases completely reversed. In a university whose core competence is education we are now seeing administrators and administrative managers determining policies, procedures and by implication the strategy of the university (Harrington, 2008; McFarlane, 2005). This is at the expense of academics. Administrators decide on the academic calendar, recruitment criteria (now an automated points based system), examination boards, quality audit, staff performance management to name but a few. Many of these areas used to be under the direct control of the academic faculty members and the head of department.

The jargon that has surrounded SITS has become exclusive and has led to SITS experts within the university that include the former SITS implementation team and a new category of ‘super’ administrator called Good Housekeepers. These individuals have gained privileged positions in the university and maintain a close attachment and enforcement of operations within the departments tied to the Academic Registry.

More power has also been transferred to academics involved in the management of teaching and learning activities. The emphasis has been on the propagation and extension of quality control procedures led by stakeholders engaged in the administration of teaching and learning.

**Questioning**

The stakeholders involved in this whole SITS process have been presented with a ‘fait accompli’. It is clear from the interviews that very few people from departments were involved in the process of acquiring SITS. They never had an opportunity to question its raison d’etre or why it was the preferred alternative and proposed solution. Other universities were also engaged in SITS implementation and experiencing difficulties but these experiences and concerns were not seen as significant to the New University senior managers.

A new culture of non-questioning and non-challenging has developed in parallel with the SITS introduction. It was not only a case of the Computer says No, but the IT project team says No. This was apparent in our research when we approached the SITS IT vendor to participate in the study, they chose not to. In terms of relationships there has been a retrenchment of individual positions. Academics and administrators do not work together as closely as in the past. Teams are now constituted within either administration or within the academic programme and subject management. In the past there would be more emphasis on multi-functional teams working jointly. This has become institutionalised where the lines of reporting are very separate and staff do not really engage together in social activities. It has also led to a culture of blame and distrust from both sides of the fence.
The SITS practices do not take into account the needs of all stakeholders in the main university functions. For instance there is an emphasis on traditional taught programmes at the expense of the Graduate School and PhD students including part time, distance learning and work placement students. This also extends to the management and administration of report for the Research Excellence Framework and enterprise activities.

There has also been a negative effect on working relations between students and academic staff. Students can bypass academic staff for recruitment, enrolment, and discussion of assessment results/processes. This has resulted in less personal contact between staff and students with administrators acting as intermediaries.

**Conclusion**

As has already been stated SITS is used by over 60% of the UK HE market. It is being used to support many education institutions and we have been told anecdotally that there are issues around it. Nevertheless our focus has been on one Higher Education institution and the individual stakeholders therein. The empirical research presented within this paper is grounded in a framework of emancipatory intent where the utopian ideals as espoused by the senior management at New University at the start of the SITS project are congruent with the University strategy which highlights values such as community, inclusivity and integrity along with professionalism and academic excellence. However, our work has signposted important issues (dystopian practices) that have implications for all organizations that choose to embark upon an integrated systems implementation without considering the consequences. First at New University there has been a re-constitution of management which has reified the SITS system and subjugated all other forms of management. The new management agenda has become firmly cemented within the new technology which has then become an agent and an enforcer of strict instrumental policy and power. There has enabled a significant power shift to central non-academic departments at the expense of academics who directly support the core competence of the University teaching and research and without which the university would fail. SITS has greatly enhanced performative management by having embedded within it structures and processes at odds with the nature of academic decision making, judgement and academic quality enhancement. Thus any spirit of creativity or innovation that may enhance programme development or respond to the requirements of business and industry fails as the system takes on a life of its own. Academics become wedded to formal inflexible processes and form filling and are unable to think outside the’ black box’ which is SITS. Well qualified and experienced administrators fight on a daily basis to enter data into a system that is unfriendly and non-intuitive and rely on an elite group of staff (Good housekeepers) to solve their problems. This in the long run cannot be beneficial to the organization. The question and challenge remains: How do you redress the balance between Utopian management ideals and Dystopian practices that may be the unintended consequences of uncritical approaches to IS adoption and implementation?
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