Risky business: when a CRM vendor masqueraded as an ERP specialist

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RISKY BUSINESS: WHEN A CRM VENDOR MASQUERADED AS AN ERP SPECIALIST

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Abstract

Taking a social shaping perspective we unpack the development trajectory of a packaged software product to show, that contrary to mainstream accounts, design is not completely specified a-priori and that the process continues throughout implementation, and use. We show how developers, in this case third party vendors, can continue to engage in shaping packages during implementation and also how users contribute to the development effort. In particular, we illustrate how a customer relationship management package application targeted at a particular organisational function was configured to make an enterprise wide system and the key role of the vendor in this effort. To do this we refer to a 3-year qualitative field study of an expanding United Kingdom based consultancy company undergoing extreme ICT related change. This empirical research is used to explore an often ignored phenomenon, that of the role of vendors in appropriating ICTs and the potential risks they bring. Through this, we highlight the plight and responsibilities of low-level organisational actors in this process in cognisance of the fact they usually have a minor role in ICT selection but become a major player in dealing with vendors at the implementation stage when the devil is truly in the detail. The risks we identify relate to: vendor sales pitches of products as specifically related to their capabilities and the products they put forward; the calling upon of organisational resources by vendors; vendor knowledge of the application are and the actual 'social', 'technical' and 'organisational' capabilities of vendors to deliver a working product. We also point to the risks managers in vendor and consumer organisations create by placing their staff in difficult conditions within appropriation processes. The implications of our work centre on the need for further research related to: vendor/developer risks of packaged software, custom and open source projects; notions of professionalism and ethics in the software industry and project working conditions.

Keywords: Packaged Software, Risk, CRM, ERP, Vendors, Consultants.

1 INTRODUCTION

Software packages have become a popular mode of systems development since IBM was forced to unbundle its hardware and software in the late 1960s. Of course, there are different kinds of packaged software products that are developed for a variety of contexts, and which may have different commercial and non-commercial licensing agreements associated with them. In this paper we are concerned with pieces of software that that require extensive configuration to weave them with daily work practices. Although early studies of packaged software indicate that there was an intention to customize products as a short cut to development (Gross and Ginzberg, 1984; Weing, 1984; Trauth and Cole, 1992), througout the 1990s and into the 2000s, packaged software has been linked with the minimisation of customization activity (Golland, 1978; Dolmetsch et al., 1998; Brehm et al., 2001). Thus a typical view of such software packages is that they standardise work and provide integrated support for organisational practices such as sales, distribution, manufacturing, human resources and finance (Davenport, 1998; Klaus et al., 2000; Shanks and Seddon, 2000). Indeed, until very recently,

it has argued that appropriation should take the form of consumer adherence to the standard design rationale inscribed within the software (Dolmetsch et al., 1998; Klaus et al., 2000). Moreover, it is suggested that rejecting a 'vanilla' implementation, which is closely allied with a-priori specified user representation, is prohibitively expensive (McCall, 2003) and that customisation activity may result in the loss of vendor support for the product (Markus and Tanis, 2000). The idea is that a software configuration strategy should be pursued which requires minimal effort in contrast to undertaking customisation work. However, in recent years, some vendors have become more honest regarding the nature, extent and utility of customisation work. Nevertheless, there is still a strong strand of customisation work denial resulting in a reinforcement of the tradition of a 'no customisation rhetoric' where it is argued that the problems of maintaining customisations, are replaceable, by working within the parameters of the a-priori design (Gremillion, 1982; Lynch, 1984; Deloitte and Touche, 1996; KPMG, 1998; Bingi et al., 1999; Butler, 1999; Scheer and Habermann, 2000; Sumner, 2000; Willcocks and Sykes, 2000). Thus, a view that is still quite popular in IS research and practice, is that pieces of large scale packaged software, such as those that support Enterprise Resource Planning (ERP), will determine organisational operations (Deloitte and Touche, 1996; PriceWaterhouse, 1996; Champy, 1997; Davenport, 1998; KPMG, 1998; Markus and Tanis, 2000). However, in line with the realities of package appropriation, a small but significant, and growing thread of research highlights the difficulties those in organisations have appropriating the a-priori design. In particular this stream of work sheds light on several cases of planned and unplanned customisation work and the futility of technologically deterministic assumptions regarding packaged software application appropriation, especially in cases such as ERP (Hanseth and Braa, 1998; Soh et al., 2000; Pollock et al., 2003; Scott and Wagner, 2003; Light, 2005; Grant et al., 2006; Light and Wagner, 2006; Wagner and Newell, 2006). Much of this tradition draws from the Social Shaping of Technology (SST) school.

The SST perspective is premised on a rejection of social and technological determinism. What is meant by this, is that recognition is given to the mutually constitutive nature, and negotiable boundary between, society and technology (Pinch and Bijker, 1987; Bijker and Law, 1994; Williams and Edge, 1996; Mackenzie and Wajcman, 1999). Therefore, ICTs cannot have predictable outcomes as they are thought of as being shaped as they are designed and used dependent upon those involved, or not, in these processes. However, as mentioned earlier, pieces of packaged software are often reported as being delivered as complete solutions, which are sufficiently specified a-priori. Yet, it has been argued that the reality of the situation is that organisational features are products of constant social negotiation and consensus building and this means we need to rethink how ICTs are developed (Truex III et al., 1999). For example, it is recognized that development and use is loaded with power and politics on 'both sides' (Markus, 1983; Franz and Robey, 1984; Yourdon, 1986; Markus and Bjørn-Andersen, 1987). Yet, the 'two sides' of users and developers in ICT efforts are still a key feature of IS research. Although producer-user relations research has afforded interesting and valuable insights into packaged software and custom development oriented research, we agree with (Burns and Light, 2007) who argue that it might still be useful to consider the ongoing work that those deemed users and developers put into sociotechnical systems in situ. This idea of ongoing work in use is well known within the body of work known as the social shaping of technology (Fleck, 1994; Rohracher, 2005; Stewart and Williams, 2005). It is this area that we aim to make a small contribution towards. We are interested in shedding light on the role of a vendor in making a CRM application work as an ERP system within a small UK consulting organisation. In doing this we emphasise the vendor related risks involved in getting a piece of packaged software to work in situ. In order to do this, we consider in greater detail the role of vendors in the packaged software industry. Following this, we move on to describe our approach data collection and analysis, and we provide an interpretation of our data. We then discuss our findings, provide some conclusions and suggest some recommendations for further research, and implications for practitioners in producer and consumer organisations.

2 VENDORS IN THE PACKAGE SOFTWARE INDUSTRY

The packaged software market has been described as a prime target for disintermediation. (Giaglis et al., 2002) argue that given the dominance of companies such as Microsoft, intermediaries have struggled to differentiate themselves in order to attract customer. However, the software product market exists in part because of the participation of other non software-vendor participants (Sawyer, 2001). We include consulting groups, system integrators, trainers and other software producers under the category of intermediary. These intermediaries facilitate the linkage between software purchasers and producers because vendors often minimise their role in implementation. A dominant goal of software vendors is to sell (or 'vend') their products, leaving it to others to implement them in consumer organisations (Sawyer, 2001). Intermediaries may even sell the vendor's products on their behalf and, confusingly, are sometimes also referred to as vendors, resellers or third party vendors. In our case we use the term vendor as shorthand for third party vendor. Of course, such vendors, may also sell their own services such as: consultancy to assist with finding a product and implementing it; support services; customisations and bolt-on products. The software product market therefore gives rise to a software services market. The intermediaries that comprise this market can thus, affect implementation processes.

In contrast to custom approaches where close links between users and developers are considered critical (Flynn and Davarpanah Jazi, 1998; Peppard, 2001), software purchasers and software vendors often use a variety of mediated means to communicate. However, even where direct contact occurs between a vendor or intermediary and those in the consumer organisation (the preferred kind of link according to (Keil and Carmel, 1995)), it may be that those involved in the link are unable or unwilling to convey requirements and interpret them (as with custom development (Curtis et al., 1988; Flynn, 1998; Lai, 1998). The dynamics of consumer-vendor links are therefore important considerations in the packaged software industry as they give an indication of a consumer organisation's opportunities for influencing the development trajectories of vendors and how they might deal with other matters, such as support, post purchase. Unsurprisingly, these relationships amongst purchases, vendors and intermediaries can be fraught with risks.

A few studies have mentioned the problems of vendor knowledge. From one perspective, consultants may be viewed as holding too much power, influence and knowledge which may 'walk out of the door' when they do (Skok and Legge, 2001). However, as packaged software is a generic product, popular products may see overwhelming demand for implementation and this may lead to a dearth of support for selection and implementation. The ERP market in the late 1990s is a good example. The ERP market grew so quickly that this led to a shortage of competent consultants (Bingi et al., 1999; Sumner, 2000). Purchasing organisations therefore widely complained about consultants with only a few months training who charge US$ 2,500 a day (Martin, 1998). This further manifested itself in a widespread lack of knowledge about the details of ERP products, particularly where integrations and partner products were concerned (Markus et al., 2000). This issue is not new, nor ERP specific. An earlier packaged software study reported difficulties in engaging users in the implementation process as the development team were perceived by the users as not possessing adequate knowledge of the product in question (Lynch, 1984).

Agenda differences have also been identified. Although (Natovich, 2003) focuses upon commercial custom development, he raises such risk related issues as adversarial relationships between vendors and those in consumer organisations and vendor commitment. Adding to this, in a packaged context, in one study it was found that vendors wanted to get the ERP project completed as quickly as possible because they could see a glut of business opportunities on the horizon (Skok and Legge, 2001). Differences in agendas may be further amplified and complicated where multiple vendors are involved due to the existence of multiple packages and custom components as in 'Best of Breed' implementations (Light et al., 2001; Stefanou, 2001). Moreover, even when a consumer organisation has entered into an agreement with a particular software vendor there may be a problem of path

dependency. This is closely connected the risks Natovich (2003) highlights in breaking contractual agreements in commercial custom development projects. In a package context, consumer organisations are effectively committing themselves to upgrading software periodically (and mostly at the behest of the developer) if they hope to avoid major conversion headaches (Markus and Tanis, 2000). Indeed, the hidden costs forced upgrades and incremental licensing agreements were bemoaned by 33 per cent of respondents in one study (PriceWaterhouse, 1996). Lock-in and switching costs may also become a problem if the vendor an organisation has purchased from drops out of the market. It has been argued that, due to the relatively low costs of entry into the industry, the financial stability of some vendors is questionable and a cause for real concern (Gross and Ginzberg, 1984). Indeed, only a few years ago in an ERP context, the Baan company entered into difficulties leading to its purchase by SSA Global Technologies Inc. and initially it was SSA policy was that it would not support prior versions of the Baan product (Songini, 2003).

In sum, the literature invites us to think about vendor risks in relation to the knowledge of vendors, agenda differences and path dependency. However, our study suggests the area requires further investigation. It has been argued that the package selection process often does not include the social orientation or the compatibility of the newly formed team, vendor and the organisational actors (Pollock et al., 2003). Thus, often limited consideration is given to the role of the vendor's staff who will be working closely within the organisation, their first exposure often taking place once the contracts are signed. The reality is an outsider is immediately instrumental in the interpretation of complex business processes, resolving conflicts and providing solutions to accommodate a diverse user group. This is the focus of our study. Clearly, implementing packaged software, and working with vendors is a risky business yet minimal direct attention has been given to this area in IS research. Some of the studies here do mention the role of vendors in passing, and some do look at vendor links, but overall the role of, and risks associated with working alongside, vendors is fairly neglected.

3 METHODOLOGY

This three-year ethnographically informed qualitative field study of a small UK based Management Consultancy, which we shall call Jarman, presented us with the opportunity of observing organisational life in relation to existing systems, the selection process of a software package, the reality behind the rhetoric, what and who the implementation process really involves. This meant our familiarisation with the existing organisational processes, working alongside organisational actors at all levels and accessing wide-ranging organisational documentation. We were invited to observe and participate in meetings with the vendors, were present at all the package software selection stages and also present at the preliminary meetings that led to the decision to 'buy' rather than 'build'. In this paper, we focus upon the data, post-selection.

We report on what was observed, our experiences and interpretations regarding the social, cultural, technological and economic conditions that influenced the research domain at that period in time. We were not outsiders looking in, but insiders working within the company, absorbing its cultures, company rules, creating relationships and very much contributing to organisational life and politics. The challenge was to combine participation and reflexive observation so managing a dual role of an insider and outsider. Vickers (2002) argues that authentic insider research is becoming an acceptable research process in that becoming native or an insider enables a lucid view of processes, phenomena and group and individual dynamics that are invisible to others or outsiders. Going native allows access to a trust relationship that the insider, as a researcher, has built enabling a certain empathy with those involved but with the added ability to record what is being said and more importantly what is not being said in a reflexive fashion. This could be described as a unique research opportunity as both time and emotion was invested when capturing this detail of data that may have been left unnoticed or ignored if we had used an alternative research instrument – such as an interview based approach, common in interpretive studies (Nandhakumar and Jones, 1997). Both researchers and participants

often revealed their true selves behind the organisational professional masks thus generating mutual respect and support.
Multiple techniques of data collection were used, the most predominant being participant and non-participant observation, formal and informal interviews. One of the researchers was based on site full-time as a researcher for three years, initially as an associate for a UK DTI/EPSRC funded Teaching Company Scheme and then a further year in an IT Management/Consultancy role. Another researcher attended the organisation in support of the project, and a follow on scheme, at least one day per week for 3 _ years (beginning in June 2000). Both researchers have maintained contact with the staff of Jarman to date. This allowed both to observe and participate in the project, attend over 100 meetings, have unrestricted access to communications and activities regarding the project, importantly working alongside the organisational actors as they endeavoured to juggle their day-to-day job role in conjunction with their steering committee role. In addition historical documentation was made available together with unlimited access to the project documentation. A thorough contextualisation exercise (Klein and Myers, 1999) was enabled which lends this empirical data more depth. Importantly the often hidden 'behind the scenes' precarious relationship of the vendor and client was overtly observed which resulted in very rich insights into this complex relationship (Oates 2006).

4 FROM CRM TO ERP: A RISKY BUSINESS AT JARMAN

Jarman provides services to senior executives to identify new career opportunities when they have been made redundant. This is done through processes of mentoring and networking facilitated by a personal executive career consultant. At the time of the field study Jarman was experiencing accelerated growth, quadrupling in size over an eighteen-month period. It expanded from two-sites to a six-site operation with a national UK coverage. The business functions that supported the core operational activity, Client Services, were Sales, Research, and Accounts. The Sales Team approached companies to make them aware of Jarman's services resulting in clients being sponsored by their employer as part of any severance package. Clients would then be matched with an appropriate Careers Consultant who would advise on personal matters, CV building and training needs (such as interview skills). The Research Team provided a bespoke business intelligence service for each client to enable them to target job opportunities. This included making targeted mailing lists and generating statistics pertinent to the client current status. The Accounts Team ensured that the 'Sponsors' paid for their services and that the Career Consultants were paid for theirs. The ultimate goal of senior management was to reduce the job search time to under the six months in a professional manner without being perceived as pushing the client towards a certain direction 'taking a taxi rather than catching a bus' in the words of the Managing Director. Goldmine was selected as a product that could meet Jarman's relationship management needs in the area of client services and research, but in reality it was more suited to the sales function. However, despite concerns being raised by various internal and external parties late in the selection process, and before any contract was agreed, the Managing Director of Jarman, led by assurances of the third party vendor representatives, felt confident it could be made to fit a wider range of processes - CRM became ERP.

4.1 All for One and One for All – You Can Only Have One Screen

Our story begins after the purchase of Goldmine had been authorised. It was at this point that it became clear to the vendors that it was going to be a difficult task to make Goldmine work simultaneously for the staff in the various functional areas of Jarman. This was communicated to the IT facilitator two months into the project when progress had been made on configuring Goldmine for the sales function. By this time the vendor had gained more detailed knowledge of the organisation and the requirements for Goldmine. At this point the Managing Director was informed that if the system was to work, it would be necessary to include other functions in the design of Goldmine during the configuration process for sales. The situation that confronted the vendor and Jarman personnel was that each function had individual databases with individually personalised interfaces that all had

to blended into one screen. Goldmine could not support multiple views of data as it was made for one functional area. One manager described the system as merely an 'electronic rolodex'. In Goldmine, there were core contact details at the top of the screen with five permanent displayed hotspot fields for frequently required data. Each function was allocated a number of views of relevant data on the bottom half of the screen that were displayed similar to a card index with tabs that you selected. Immediately two major problems were raised, firstly that each function, even though there was a staggered implementation planned, had to have all their processes ready to be mapped across to the new application at the same time. This presented huge resource demands for all functions especially as the client services function was not yet even an automated process. The second problem was the shared core contact details and hotspot fields that sat at the top of the screen. Each function argued that their data was of importance and warranted the prime position on the front screen. The concern was that the respective current custom developed applications gave an at a glance view of data where Goldmine would inevitably require most users to click through the system to locate relevant data. These problems had to be resolved together with a scoping of the overall implementation project. It was deemed that everyone needed to be involved throughout the organisation which led to the development of a steering committee.

4.2 The Steering Committee

The steering committee, the Goldmine Steering Committee (GSC), drew from the rest of the staff base to make Goldmine work and reported to the IT Practice Group who were responsible for IT development more generally within Jarman. In turn the IT Practice Group reported to the Financial Management Team (FMT) who reported to the Senior Management Team (SMT). The organisational actors, which totalled 50, the whole of Jarman's workforce at that point in time, and their roles are shown in Table 1. In addition, the technical consultant who was facilitating the configuration of Goldmine was co-opted onto the GSC at the request of Jarman's Managing Director to indicate the strength of the working partnership.

Organisational Actors	**Role in the Project**
Senior Management Team	Required regular feedback and to be made aware of any major incidents. There role was to make the ultimate decision based upon knowledge and information delivered to the GSC via the FMT.
Financial Management Team	Their main concern is financial planning and they put the project on hold twice because of poor sales performance.
Goldmine Steering Committee	
GSC Chair	Overall Chair and a facilitator for each functional group.
Functional Chairs: Sales, Research, Client Services and Accounts	A member of staff from each department tasked with managing the process of requirements gathering and their incorporation in the design of Goldmine.
Functional Champions: Sales, Research, Client Services and Accounts	A member of staff from each department tasked with managing the promotion of the new system to the rest of their group.
Functional Knowledge Workers: Research, Sales, Client Services and Accounts	A member of staff from each department responsible for providing information and process requirements as deemed necessary by the Functional chairs.
IT Facilitator	To ensure that the existing IT infrastructure was factored into the Goldmine development trajectory.
Vendor – the Technical Consultant	Included to ensure they were aware of the project and as a political manoeuvre by the MD to ensure the commitment of the vendor.

Table 1: Organisational Actors and Roles

4.3 The Appropriation Process

Four GSC Teams were created and led by the Functional Chairs of Sales, Research, Clients Services and Accounts. Each was tasked with deconstructing and reviewing their business processes, and scoping the project against a pre-set timeframe with existing resources. The teams had to ensure that each function did not conflict, creating an integrated workflow. This was huge responsibility with added accountability to the named Functional Chairs. The teams were also expected to squeeze the additional workload into their already burgeoning work schedules. Moreover, the Researchers, Business Development Managers, Management Consultants were having to perform a system analyst role – one they were not trained for. The teams met, virtually and face-to face, 2 or 3 times a week, the pace was quickening and the work-rate intensifying. A key reason for the pace quickening was that what was perceived as expensive hardware had been purchased at the time the decision was made to go enterprise wide had been made several months earlier. Therefore, an SQL server sat in the corner of an office slowly gathering dust as the sell by date drew closer and the team were constantly reminded that this investment needed utilising as soon as possible by senior management. Additionally, as this was company wide project, members of each team were not necessarily based at the same location. Some work was conducted locally but team members were expected to travel to get the job done. Long hours became the norm as teams introduced GSC working breakfasts, lunches and conducted meetings as they travelled by using mobile phones. The requirements that each team arrived at had to be constantly approved by the vendor thus ensuring that all suggested activities could be configured. We could see this was a frustrating and often wearisome exercise as the teams were surfacing the limitations of the CRM product once it became an ERP. The vendor had not previously stretched the application across multiple business functions, and was therefore in unfamiliar territory. The GSC teams therefore spent a lot of time deconstructing and defining processes, only to be told by the vendor these could not be operationalised. Basically, the vendor did not know about enterprise operations as they were a 'specialist' in the functional area of CRM. Therefore they could not guide the GSC to examine and build processes in a particular way that would be supported by Goldmine. To make matters worse, decisions were sometimes reversed by the vendor or not adequately dealt with. Table 2 provides illustrations of some of these problems.

To further compound the problems that were being experienced, the social skills of the vendor began to be called into question. When staff at Jarman asked questions about the implementation process or capabilities of Goldmine, these would often be ignored, avoided or deflected. This often involved the vendor using jargon loaded language that would confuse the Jarman staff member in question rather than giving them an explanation of why something was or was not possible in lay terms. Those members of staff that did have more ICT expertise recognised this and said that he often did this to cover up the fact that he did not know the answer to the question and it was to give him to time to go away and find out the answer. This was further amplified where staff were not dealing with him face to face, emails often took days to be responded to unless a senior member of staff from Jarman was copied into the communication. Similarly, staff were often promised a call back with a certain period of time only for the call not to be returned. Coupled with this, was the personality of the vendor, several staff members found him arrogant, lacking in empathy and with a tendency to assume superiority when it came to technical matters. This despite the fact he did not understand the workings of Jarman and that he was out of his comfort zone in the enterprise arena when he was more familiar with the Sales functions. Ironically, the vendor was chosen, because they too were a small organisation and the Managing Director of Jarman felt that this would facilitate the implementation because they would have an understanding of a small company environment. The problem was that once staff at Jarman identified weaknesses in the Technical Consultant, the company was so small that they did not have an alternative member of staff that they could place onto the project.

Requirements Issue	Vendor's Response
The Knowledge Screen. A snap shot view of one company's total interaction with Jarman was required. This Knowledge Screen was always deemed as a feasible deliverable by the vendors. But when delivered it was regarded as no more than a standard information screen with key data missing.	Not deliverable in the form intended. The Vendor recommended this requirement was dealt with at a later date. It was never revisited.
Contact Updating. Targeted mail contact details were updated every 6 weeks which involved telephoning companies. A date stamp indicated the last update. However, it was found that any changes made in to the screen this field sat on in Goldmine changed the 'last updated' field meaning extra work because they could no longer see when the contact information had last been updated.	The vendor said it was no secret that the date stamp changed as an indicator that an alteration had been made as this was this was a positive functionality for a standard CRM system. They could not offer a solution. The vendor suggested any changes made by sales/accounts to the front screen should be first checked with the research.
GM and Outlook e-mail system was not compatible. GM used its own e-mail system and is a major component the CRM system. There were promises that compatibility would/should be available in the next version if not a solution would be made. The vendors argued that companies normally moved to the full GM e-mail. The full extent of what this meant was realised by Jarman until part way through project.	The vendor suggested Jarman move to GM e-mail entirely or Continue to use Outlook and manually attach GM generated e-mails. There was a promise of a button to link the mail and diaries but this was to be added later once users gained experience of GM e-mail system. The vendors were confident that once the added benefits of GM mail system were witnessed there will be a company wide adoption. Issue not fully addressed

Table 2: Vendors Ambiguous Responses

Goldmine eventually went live, the Sales function 'won' the right to have the main screen as 'theirs' and the other functions had to settle for mining 'the rolodex'. However, the enterprise implementation project is still ongoing in 2006 and it is likely it will continue for the foreseeable future. As the Goldmine project progressed and the staff got further into developing the system, their requirements shifted and moved beyond the capabilities of what the package could be configured to do by the vendor in question. Two members of internal staff are now looking after the Goldmine development and one of the researchers is still in contact with the organisation and has recently been asked to comment on their plans for extending the system via web based systems and a business intelligence package in order to provide knowledge management capabilities.

4.4 Discussion

Several risks are made apparent in the Jarman case that relate to the use of vendors in packaged software appropriation.

- Those at the consumer organisation may be sold an inadequate product in the first place. Goldmine was never intended to be an enterprise system and yet, in order to secure the business the vendor convinced the Managing Director that it could do the job.
- The sales pitch was uninformed. The vendor said the application could be stretched to cover ERP functions without undertaken a thorough analysis exercise. We know this as it becomes apparent to the vendor, only after a few months of requirements work, that there are difficulties in configuring the CRM application as an ERP application. This is not to say that had, a more rigorous

requirements gathering processes been enacted, there would have been success. That would be to fall prey to the design fallacy. However, it does appear that the representation of an ERP user has, arguably necessarily, been 'designed out' of the CRM application to make it specific enough for a particular purpose. Therefore, risks arise as the vendor and GSC attempt to design 'back in' such users whilst being guided by the rhetoric of a vanilla implementation.

- Because, of the need to design back in an ERP user, the SMT of Jarman, under the guidance of the vendor, set up a GSC to construct this representation in conjunction with the vendor. However, because it is an 'enterprise user' everyone in the organisation is pulled into the project in some way with members of the GSC being utilised by the vendor as untrained system analysts. This, when a specific part of their contract was to undertake such work themselves. Thus, as further risk is that vendors may make demands upon consumer organisation resources to undertake work that they should be doing themselves.
- The vendor was unfamiliar with an enterprise application environment. This presents two problems. First, they are inexperienced in managing such projects where multiple functions need to be considered and they do not have the knowledge of processes outside of the sales function - thus linking back to the guidance to set up the GSC. Second, they did not instantly have the expertise to manipulate the CRM application to become an ERP application. This resulted in conflicting advice to the project team about what was, and was not, possible.
- The personality and social skills of the vendor himself brought risks. Given that he was in a difficult development environment, it would be expected that he might aim to carefully handle relationships with his customers better than he did. However, the staff of Jarman felt he was not socially adept and because he was working for a small organisation, he could not be replaced, arguably another risk.
- Underlying these risks is a further risk related to the operational staff of both the vendor and Jarman. Arguably, the senior managers put both sets of people in a very difficult position. Senior managers representing the vendor and Jarman effectively handed over the job of shoehorning a CRM application to an ERP application. They determined at a very high level the that job could be done, and in both cases, vendor staff and Jarman staff had to do this in addition to their own 'normal' roles placing many of them in positions that made them very uncomfortable. Neither vendor or Jarman management have admitted any form of error in decision making with respect to selling the CRM application, agreeing it could be made into and ERP nor how it should be appropriated. However, operational staff in both organisations have been the ones on the receiving end of the trouble caused by their decisions.

5 CONCLUSIONS

The longitudinal and intensive nature of this study allows very rich insights into the realities of the continuing work that goes into ICT development beyond the initial formal design phase. In our case several groups are involved in the shaping of the trajectory of a CRM application package. Although packages are often seen as inflexible and built for particular functional purposes, in this extreme case we show how a CRM package is, rightly or wrongly, manipulated and shoehorned into being an ERP application. Moreover, we show how those often deemed users, staff at the consumer organisation, take on analyst roles. We also make the role of vendors, as users of their products clearer. In this case, the vendor becomes a user as they make a living from selling an ICT artefact. Use for them, is as a product to sell and this becomes interwoven with development activity after the formal selling processes undertaken in the selection processes cease to be enacted, leading to a number of potential risks for both vendor and consumer organisation. These risks relate to: vendor sales pitches of products as specifically related to their capabilities and the products they put forward; the calling upon of organisational resources by vendors; vendor knowledge of the application area; the actual 'social', 'technical' and 'organisational' capabilities of vendors to deliver a working product. We also point to the risks managers in vendor and consumer organisations create by placing their staff in difficult conditions within appropriation processes.

Our research has a number of implications for research and practice. First, we add to the neglected area of understanding the risks of packaged software projects, particularly with a focus upon vendors. We believe further work would be valuable in this area as clearly, although packages are often implemented on the basis of trying to avoid the problems of custom development, they clearly introduce other issues that need careful attention. Indeed, some of the risks we raise could equally be levied at commercialised custom development or open source projects – this is an area of investigation that could be well worth pursing. Once could ask, are the software development categories of packages, open source and custom development clever social constructions? Our second implication is the need for a greater focus upon vendor ethics and professionalism which is neglected in IS research. Finally, we would suggest that such ethical considerations not only are levied at producer-user relations, there is mileage in holding the lens over vendor managerial-operational staff and consumer managerial-staff relations in terms of accountability for project working conditions and outcomes.

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