The business logic and enterprise systems ventures – the enterprise system as a political tool

Professor Alf Westelius
Department of management and engineering
Linköping University, Linköping, Sweden
Email: alf.westelius@liu.se

ABSTRACT

One of the larger types of investments in Western companies the past years has been enterprise systems acquisition and implementation – typically promoted as making the enterprise more efficient. But such projects are often part of power struggles concerning preferred business logic and management principles, struggles often not openly discussed in the organisations. In this article, I examine attitudes to enterprise systems and examples of implementations, to expose underlying conceptions of business logic and management control. Perspectives presented by enterprise systems providers, and in case studies, serve as illustrations and material for analysis. The examples are discussed in terms of change management and competing business logics, resulting in a suggestion for an approach to enterprise systems ventures that acknowledges political dimensions.

Keywords: Socio-technical change, Change management, Organisational change, Change practice, Change stories

The basic idea – and the attraction – of the enterprise system lies in standardisation, coordination and overview. The enterprise system concept does not primarily support local practices, variation and independence within an enterprise. Standardisation, coordination and transparency are words that have held a strong positive connotation at least since the 1990s. This is demonstrated by the strong interest in business process mapping; ISO 9000; ISO 14000; ISO 26000; strategic congruence; rationalisation; core business; concentration; synergies – the list can easily be extended. Simultaneously, the IT development has been rapid and use of IT has been viewed as desirable and laudable. The ”digital divide” has been depicted as a problem – not keeping abreast with the IT development makes you fall behind, and creates or cements an economic and social lower class. Modern organisations use modern IT, and enterprise systems (like SAP, People Soft and Lawson) is one of the large classes of use of IT that an organisation is expected to exhibit in order to be viewed as modern. All this makes it easy to depict resistance to an enterprise system implementation as old-fashioned, reactionary or subversive. But *de facto* an enterprise systems venture can be a political tool in the struggle for dominance between adherents of different business logics. Those who view local businessmanship, decentralisation, customer adaptation, empowerment, etc, as the important and legitimate basic values can find them threatened by an enterprise systems venture. And those who try to steer the business logic in the direction of standardisation, benchmarking, synergies, etc, can view the enterprise system as an attractive ally.

In this article, I critically examine attitudes to enterprise systems and examples of implementations, to expose the underlying conceptions of business logic and management control, and derive a possibly more fruitful approach to conducting enterprise systems ventures. Starting with perspectives presented by enterprise systems providers, I then turn to academic literature – less problematised and more critical case studies on enterprise systems ventures, and writings on strategy, IT, and change management. Then follows a discussion of the examples on the basis of competing business logics, power and control, concluding with a more nuanced approach to enterprise systems ventures than the provider view.

ENTERPRISE SYSTEMS PROVIDER PERSPECTIVES

If we study the websites of enterprise systems providers, a rational image of systems appears. We encounter words such as cost-efficient, standardisation, satisfied customers, development in collaboration with customers, and component-based. Standardisation is beneficial for the customer: it protects the customer from being locked in, and it enables flexibility. Standardisation enables the customer to adjust the systems support to meet changed customer demands, regulations, market conditions, and other unanticipated changes. On their websites, in addition to descriptions of the product, their philosophy and approach, the providers present brief customer cases, often with the customer's project manager as narrator or stated source. Below, I provide examples from large enterprise systems providers' websites: three with Swedish roots and one with German. The first is a bit more comprehensive, the following ones briefer, mainly presenting similarities and differences in comparison with the first.

IFS Presentations

At the IFS webpages, we meet statements of modern systems development principles. Not only the English texts, but also the Swedish ones are heavily laced with English trendy concepts: IFS applications build on SOA (Service Oriented Architecture) for increased user friendliness, lower TCO (Total Cost of Ownership) and easier upgrades. The design of the enterprise system enables easy integration with the best systems on the market for POS (Point of Sale: cash register and related systems), WMS (Warehouse Management Systems) and all types of handheld terminals. The enterprise system has multi-site functionality, which reduces the risk of errors in connection with planning, and simultaneously it enables increased efficiency in the supply chain and decreased lead-times throughout the value chain. The consistent focus on open standards results in cost-efficient enterprise systems, both because it facilitates IFS' systems development and recruiting of personnel, and because it facilitates the interface between IFS applications and the customers' existing IT portfolio, and helps the customer avoid lock-in to one provider. IFS strives for long-term, close customer collaboration by being an efficient, committed and businesslike partner, not by locking the customer to proprietary technical solutions. The importance of the systems also *appearing* modern is specifically stated: "You need to reach the iPod generation. You need to give them tools that they want and that appeal to them."

It is pointed out that the enterprise system is not only technically efficient and modern, it is also based on considerable business experience: "IFS Applications 7 is the result of more than 750,000 hours of development, many of them in collaboration with our customers." It is user-friendly and economical by "not only providing numerous business functions, but also a user interface that increases employee productivity." Also the customer mini-cases promote the image of the efficient, integrated, transparent information processing, In the quotation below, I have highlighted some keywords.

> **DEBUT - Consolidation of All Information into One System:** Debut implemented IFS Applications for Service Management to *efficiently manage* the contract. IFS is a complete solution designed to help service organizations with processes such as all management, service order handling, reactive and preventive maintenance, contract management, resource planning, logistics, and service analysis. IFS Applications consolidates all project information into *one comprehensive system* providing the 800 Debut project users with *total visibility*. "IFS Applications has *linked the Delivery Sites together*, so that *all project members and the customer can check how the project is going at any time*. Due to the open and component-based architecture, Debut has not had to deploy any major modifications to the application," adds Brendan Viggers (Debut's Business Application Support Manager).

Thus, the integration enables efficient management and control, and the transparency (total visibility) is entirely beneficial. This tone is repeated in both IFS' and other providers' customer cases. The problem that is sometimes raised is that implementation can take time away from the regular work, and can add pressure on the employees.

Lawson Presentations

The tone is similar at the competitor Lawson: "Why Lawson? Because simpler is better." They claim to help enterprises streamline their processes, reduce costs and become more efficient, and simultaneously more flexible. Again, we meet the idea that the system is built on open standards and widely used technology in order to simplify and to increase flexibility. SOA, easily integrated Java solutions, and compatibility with the customer's other solutions, provide lowest Total Cost of Ownership. Like on the IFS web, the focus is not singularly technical. Lawson proposes business consulting in a standardising spirit: "The solutions, in combination with our professional services, support enterprises throughout the product life cycle by focussing on best practice and delivering value."

IBS Presentations

When moving on to IBS, we again meet claims of delivering solutions that support companies in making their business processes more efficient. These processes include everything from procurement, customer service, order management, manufacturing, inventory management and business performance measurement, to financial control. IBS offers open systems for a number of popular operating systems. But IBS claims not to compete mainly on software: "What differentiates IBS from many other providers is that we are a total solution provider. We can offer everything that is needed in an enterprise system: software, consulting, hardware and infrastructure, and financing." This way, they want to help improve business processes and deliver measurable value. It is pointed out that the staff has both a wide experience in business, systems development and IT, and that 80% hold a university degree. The texts emphasise that it all revolves around being able to adapt to what works for managers and employees at a local level. But this is not in contradiction to standardisation, integration and transparency: "Yet, despite cultural differences, everyone can still share common values and stand on the same platform."

SAP Presentations

The fourth, and last, example is from the giant in this field, SAP. Integration is again a central word, but here, the enterprise system is even more in focus: "SAP ERP delivers a comprehensive set of inte-

grated, cross-functional business processes." and "With SAP Business Suite, your company can improve the strategic alignment and efficiencies of financial, human capital, and operational processes." Measuring and evaluation are also central: "Gain deep visibility into your organization with financial and management accounting functionality combined with business analytics." and "Link employees' performance to compensation programs such as variable pay plans and long-term incentives." Here, the use of wide-spread, open standards is not a selling point. Rather, the proprietary technological innovations are presented as one of SAP's strengths. But there is still an emphasis on *modern* technology, and also in SAP's descriptions, the catchword SOA (Service-Oriented Architecture) appears.

SAP, too, claims to reduce the customer's total cost. But here, this is not to be achieved by easy integration with the customer's existing IT portfolio, or with components from niche providers. Here, the need for expensive integration is eliminated by relying exclusively on SAP's "comprehensive set of integrated, cross-functional business processes", optimised right from the start. The system can be delivered with pre-configured, industry-specific parameter settings. For example, standardised work processes and best practices will result in efficient HRM and compliance with regulations. Interestingly enough, this business process standardisation is said to provide the basis for sustainable competitive advantage and profitable growth. Tightly integrated business processes and increased transparency and access to business information will lead to a superior flexibility, enabling the customer to meet new business challenges.

Concurrently with this strong emphasis on standards and best practices, they claim that the system can support the individual's needs through tailored views, individual measures and indicators. But the belief in centralised management is strong. The customer will reach success because the concepts and the software package will free skilled accountants and analysts from routine chores and provide them the possibility to create more value by providing the basis for strategic action through improved insight in the operations and understanding of what generates value and improved financial results.

Observations from the Provider Presentations

Generally, the presentations claim that the technical solutions are modern and cost-efficient, at least in a lifecycle perspective. All the providers talk about reduced, or lowest, Total Cost of Ownership. All the providers also promise to help achieve efficiency and flexibility – without any notion that these two could be incompatible. To some extent, the results will be achieved by adjusting to the individual or to specific customer demands. But mainly, the desirable effects are to be reached through standardisation, integration, access to data and compatibility, a transparency where "everyone" can reach "everything". However, SAP distinguish themselves by emphasising the role of skilled accountants in capturing the improvement possibilities: "the SAP ERP Financials solution empowers your finance department to transform its role into that of a strategic business partner – providing the critical business insight your organization needs to improve financial performance." Here, centralisation includes

where the analyses are made, not just the provision of a centrally designed, optimised information systems architecture. The smaller providers note how their architecture and development principles reduce the customer's risk of being locked in to a single provider and enables the integration of components from different providers into a functioning, enterprise-wide system. The dominant SAP, on the other hand, declares the advantages of relying solely on their integrated solution for efficient and competitive business operation. The smaller ones thus attempt to position themselves as providers of adaptive enterprise systems, while SAP emphasises the advantages of a controlling enterprise system.

It is also notable how the providers mainly provide positive images of enterprise systems projects. They do not point out the potential conflicts in the companies acquiring the systems. Extra work required during the implementation project and the go-live is sometimes mentioned, but not outright conflicts. That there can actually be people who believe in small, self-governing units ahead of a large, coordinated whole; who view far-reaching local adaptations, not standardisation, as the ideal – that is not part of the business world the providers describe. Nor do they raise the point that a shared database and the possibility to access data vertically and horizontally in the organisation is not just efficiency-enhancing, but could also enable a degree of scrutiny and evaluation that can be viewed as threatening.

OTHER SOURCES ON ENTERPRISE SYSTEMS PROJECTS AND USE

Why should we want to install enterprise systems? One idea is that some infrastructure for administrative data processing is needed in a contemporary organisation. Perhaps the use is not a differentiator for the organisation, or provides strategic advantages, but it does entail costs and risks. In an article in HBR in 2003, the journalist Carr proposed that IT lacks strategic importance. The article sparked a debate, not only in that journal, but also in traditional media, on blogs, in business and in academia. Innovative IT systems can not provide sustainable competitive advantage. Experimenting can be expensive and costly, and good ideas will quickly be copied by competitors. But to say no to IT support does not work; the infrastructure is needed. The wise company should then limit the risks and costs of the IT support they need. Those who believe in this line of reasoning should seek a cost-efficient, tried and stable solution that provides for the organisation's needs of structured information processing. Business systems providers claim to be able to deliver this, and many IT managers join in and testify that, according to them, the promises have been fulfilled.

Carr's opponents maintained that it is the use of IT, rather than IT in itself, that is difficult to master. The use depends both on training and on organisational routines and values that take a long time to develop, and that, according to the strategy researchers Zander & Kogut, among others, are more successfully transferred within an organisation than copied between organisations, partly because of the sense of identity that can be developed in a firm, making people willing to share for the sake of the group, even when the individual does not get immediate compensation (Zander & Kogut 1995; Kogut

& Zander 1996). The providers could be seen as exploiting both sides of this debate when they claim to be able to offer a standardised, communication-enhancing IT solution, but with the flexibility to meet changing demands. The combination of standardisation and flexibility will enable the adopters to become competitive. The apparent paradox in promising sustainable competitive advantage by offering standardised solutions would then be resolved, because standardisation enhances efficiency, while flexibility allows each organisation to (further) develop its distinctiveness. ”Best business practice” serves as a starting point by bringing the buyer up to the efficiency frontier. The flexibility then allows those adopters who well understand to use it, to stay at the forefront and to differentiate from other successful companies. The line of argument is logical, although perhaps not entirely convincing.

In the academic literature, there is no shortage of articles describing successful enterprise systems implementations, mainly relying on the proponents’ accounts, and, like the customer cases provided by the systems providers, without suggesting that the enterprise systems ventures were anything more than a part of an effort to increase efficiency (e.g., Yusuf, Gunasekaran & Abthorpe 2004; Markus, Axline, Petrie & Tanis 2000). Problems in the projects are depicted as of a technical or training character, not as due to differences in views regarding the goal, or the value, of the enterprise systems venture. But there are also articles that expose the conflicts between business logic or management ideals, conflicts wherein enterprise systems ventures play a concrete part, and where the IT venture’s image as a modern, efficient business aid is an asset to its proponents. At the same time, opponents to change can formulate their resistance as criticism of the enterprise system, rather than openly question the underlying governance ideals. Below, I provide four examples from different sectors of society.

In the IT enthusiasm at the turn of the millennium, a web-based enterprise system was meant to support the development of a more co-ordinated and network-based organisation in the outdoor activity NPO **Friluftsfrämjandet** (Westelius 2006a). The idea was to develop a standardised software package in collaboration with a software company. The information system would facilitate communication within each type of activity and across existing organisational units, in addition to supporting communication according to the traditional organisational structure. Those who saw the system’s potential in improving the information exchange between participants and activity leaders, viewed the lack of interest in many parts of the organisation as scepticism towards the technology. This interpretation was supported by the criticism of the enterprise system delivered by opponents to the organisational change. The technology criticism also derived fuel and focus from the slow development of the application at a time when development of web applications in society was vivid and constantly provided new points of reference, gradually making the Friluftsfrämjandet application appear outdated.

Even though the average utilisation of the application was low, in some parts of the organisation the system soon became a prerequisite for the operations. These areas, where the web application

really was adopted, were ones where networked organising gave both leaders and participants clear advantages as compared with a traditional, geographical organisation. But due to these successes, the application could also be experienced as a clear threat to the established order.

In an ABB company the enterprise system project was complicated by its support of a new, centralised management concept and impeded the existing, informal "fixing" culture. This cultural shift was not fully anchored, and the impact the enterprise system implementation would have on daily work did not become apparent to the employees until the go-live. The project manager did not have the authority to force compliance with the new management concept, and the opponents, even at high management levels, undermined the venture by scorning it as a mere computer project (Askenäs 2000).

In BT Industries, an enterprise systems project was employed in the effort to reorient the previously very independent European companies, forming a more homogenous European division. The design of the project as a strategic partnership between a classical industrial enterprise and a growing enterprise systems provider was also, by some of the proponents, viewed as a signal to the business world and potential employees that BT Europe was modern and competent; the business processes were so good that an enterprise systems provider would use them as the model for a new set of system components. The development work came to be far larger and more complex than either party had envisaged, partly due to technical challenges, partly because the ideals favouring local customer adaptations and local self-determination were still strong in BT Industries.

Many years later, when the installation of the system finally came to an end, the European division had a far more uniform platform for administrative data processing than previously. But the compromises between the proponents for standardisation and for local adaptation had resulted in solutions that certainly did not sum up to one, integrated division from an enterprise system perspective. On the one hand, the platform and the experiences of the potential and complications of coordination and standardisation came to form the basis for more delimited and more clearly successful enterprise systems-based ventures with a coordinating ambition. On the other hand, the drawn-out and complicated venture meant that already by the time the project ended, newer versions of the enterprise system were available on the market. But the effort and energy spent, and all the negotiations required in the project, made the coordination proponents hesitate to propose an upgrade project that could result in more coordination and standardisation. It took many years, and organisational rather than IT-supported efforts, to create a more coordinated organisation, with more convergent ideals, before the division management judged the time was ripe for the next, large enterprise systems step (Westelius 2006b).

A fourth example comes from a university setting. In 1996, **an American Ivy League university** brought in a vice president from the business world with the mission to give the university a modern administrative infrastructure, and prepare it for the coming millennium. A part of this was to not listen to

university grassroots knowledge, but instead bring in what he saw as best business practice amassed and encoded by Oracle in their enterprise system. This would be quicker than bespoke system development. Oracle saw the possibility of a new business segment and entered a strategic partnership with the university to jointly develop an industry-specific solution for higher education (Scott & Wagner 2003).

The idea grew stronger in society that bespoke systems should give way to standard systems, and also within the university comments like the following were becoming the norm rather than exceptions:

> We all know that **nobody** builds their own systems anymore. *It just isn't an option*—life is too confusing now, *so why reinvent the wheel*? (p301)

In addition, the notion that it is the development in society that sets the rules, also for renowned universities, was gaining ground:

> There is what I call *the osmosis factor*—the osmosis factor was that in the old-days if we *did* nothing—*nothing happened*. The osmosis factor *today* is that the *world keeps changing* and there's ***nothing you can do about it***—gotta keep up—change **with it**. (p302)

But the project was dragging on, and when the vice president attempted to speed it up by pressuring Oracle and by modifying his own ambitions concerning how complete the system should be at the time of launch, the smooth façade started to crack. Faculty and local administrators, who found that the new system did not support their previous management logic, demanded that parts of the old system should be retained. The vice president saw that this would hamper the adoption of the new system, and ordered some corresponding logic to be built into it. But by the time this was ready for launch, people had already built – and exchanged – local spreadsheet solutions. The new system only partly conformed to the vice president's vision, the old management principles lived on, and the vice president went back to the business sector. But Oracle had already managed to sell the higher-education industry solution to a number of other universities, helped by the official backing of the Ivy League reference (up to the failed implementation).

These four examples display other pictures than the uncontroversial one presented by the providers (and many academics). There is dissent in the organisations concerning what constitutes desirable efficiency and which goals to strive for. Differences in opinion probably existed all along, but an enterprise system implementation, with its far-reaching support for the daily activities and routines, and its opportunities for co-ordination, standardisation and transparency, forcefully exposes the differences in practice. The actual installation will support some management control principles, and not others, or at least support some far better than others. For those who find their values compromised, the alternatives are to either change their mind, or to resist the enterprise system supported changes more or less visibly, in order to create room for the work practices and the business logic that they espouse.

DISCUSSION AND CONCLUSIONS

We have thus seen that enterprise systems tend to be described as modern, efficiency-enhancing – and flexible – solutions for modern organisations. From a technical perspective, much supports this view:

standardisation facilitates the transfer of data between components within the standardised system. But standardisation is always a negotiated solution and provides certain benefits at the cost of a less good fit with some purposes or perspectives, for example the omission of locally developed measures. Furthermore, through their standardisation and easy access to data, enterprise systems enable insight and scrutiny. This possibility need not be used in order to be experienced as a threat – its existence suffices. Based on that idea, the English 18th century philosopher and social reformer Jeremy Bentham developed the plan of the Panopticon, according to him the perfect building for centrally controlled activities – prison, education or factory. At the centre of a round building, the guard, teacher or supervisor would stay, able to see and make himself heard, but remaining invisible to the prisoners, pupils or workers, who would be placed in cells radiating from the centre. The supervised should not be able to determine whether they were actually supervised, but would know that the possibility existed. However, the supervision would not be complete – the supervisor's view would be partly obstructed to give the supervised a reasonable privacy. The point of the design was to obtain a desired influence on the behaviour of the supervised without the demand for resources that constant supervision would require, while the restricted visibility would make the supervised view the arrangement as acceptable.

Likewise, an enterprise system can provide possibilities to scrutinise and limit such possibilities. In principle, anything entered into the system can be accessed by someone else, but what is not entered is not accessible. This means that those who desire insight into something can move to have it included in the enterprise system, while those who want to protect themselves from scrutiny may want to see to it that some things are not included in the system. And, like Bentham's Panopticon, the enterprise system will contribute to the performance of the visible aspects of the operations in line with the centrally agreed directions. But in the Panopticon, the supervisor is placed at the centre. Proponents of enterprise systems also promote the advantages of unobstructed visibility between the cells. "Total visibility" is the ideal. The more access we get to data describing each other's activities, the better we can cooperate. This would work well if we trust each other and see no disadvantages with this transparency. But if there is competition between us, possibly encouraged by the evaluation and incentive systems in the organisation, and we do not have complete confidence in each other, unlimited transparency can be a threat: if you have full access to my customer data, you might be tempted to try to steal my customers; if you have full access to the details of my work practices, you might adopt the good ideas and become as successful – or even better. If we do not have full confidence in each other, we will not trust that agreements on how data may *not* be used are actually observed by colleagues as well as by centrally placed actors (controllers, managers) or by subordinates.

And if I hold other values to be more important than those according to which the system is constructed, the indicators used for assessment and benchmarking will probably show a less favourable

image of my operations than what I deem to be its relevant performance. If I judge that customer contact in order reception is important in building customer relations, but the enterprise system only provides a basis for assessing number of orders per clerk, I will have problems in arguing my case. Changes in information systems upset the power balance. If the data access available to central analysts increases, the ranking between employees is likely to change as more or other indicators become available. But the horizontal transparency – the openings in the walls between the Panopticon cells – also reduces the information advantage of the central position. This can make managers at the centre critical to horizontal data access. In the four cases presented above, there are numerous examples of how the new enterprise system changed the power balance and provoked reactions.

In Friluftsfrämjandet, there were people in the management team and at regional or local board level who were pleased that the enterprise would give them the possibility of increased insight into the operations – not least that of other sections or regions. There were also those who viewed the whole venture as an attempt to increase the central control of the operations – even though the initiators primarily saw the system as a means to facilitate horizontal contact. Others saw this facilitation of lateral contact as the problem – it risked decreasing the sense of identity in the local units and would also decrease the need for a regional level, that had previously served as a link between local units.

In the ABB company, controversy arose because some were expected to prioritise entering data that was only useful to others. And at the heart of it all, there was the contradiction between the existing informal ”fixing” culture, that many adhered to, and the new, rational, centrally planned material and production planning that the enterprise system would help promote. Earlier, the one who could somehow see to it that an important order was completed, for example by borrowing material from another work order that was less prioritised, or was championed by less vocal proponents, would be viewed as a hero. Under the new system, someone exhibiting the same behaviour would be a villain – the ”fixer” would destroy the central planning, so that the production planning, that the enterprise system provided to the work teams, would be incorrect.

In BT Industries, numerous actors did not view standardisation and total transparency as something clearly desirable, despite these being trendy management concepts. Therefore, the subsidiaries negotiated technical and informational deviations from the common enterprise system model, partly to protect from central insight and comparison, and to stop or limit the horizontal transparency.

In the university case, the vice president found that the proponents of the existing order not only criticised his rational new order when the enterprise system finally started being implemented, but could also muster such strength that he had to back down and compromise, up to the point where the enterprise system was no longer a good tool to introduce the new business logic he championed.

In all these cases, the modernity of the software solutions and the use of IT, that was initially used to promote the ventures, turned into a liability. IT use continues to be fashionable, but for this very reason, the development of functionality and user interfaces is carried out by so many actors and backed by so large resources, that a specific installation soon appears unfashionable and outdated. The tailored version or laboriously negotiated compromise that has been installed is not easily upgraded when the provider presents general upgrades. For organisational or economic reason, the modified solution, that was probably already appearing a bit outdated when it was installed, lives on for many years before an upgrade becomes organisationally prioritised and accepted. And the enterprise system is compared with “the latest”, even when the latest actually belongs to another sphere. IFS chose to spend resources and energy on developing a user interface that should appeal to the ”iPod generation”. The reason is that their strategists believe that if enterprise systems look boring and outdated, the young people who now enter the business world will not be willing to work with such systems. Therefore, it is not sufficient if a provider delivers rational business functionality. It also has to be appealingly packaged and modern-looking, not only to be at the forefront of enterprise systems providers, but also because the entertainment industry has now become a point of reference for computer-based systems.

Were then the visions of enterprise system supported changes wrong or unrealistic? Should these actors not have attempted these ventures to get a more networked operation under a strong, joint brand; a more predictable, planned and less capital-intense production through integrated information exchange and central planning; better conditions for cooperation and appearing as a European group, rather than a collection of separate companies; make the administrative routines more efficient and modern? My point is not that the basic ideas behind these ventures were inappropriate. The point is rather that these basic ideas where much more controversial than management fashion would make them appear. In particular, the images promoted by enterprise systems providers and enterprise systems proponents tend to base themselves on fashionable management concepts as if these where the only reasonable business logics. But the alternative, and less fashionable values and management concepts can have many adherents, as in the four cases above. Furthermore, the enterprise system does not in itself have sufficient power to convert those with rivalling ideas, or force them to comply. Drawing on Stewart Cleggs notion of circuits of power, this lack of power can be analysed thus: since the norms and values, that the efficiency-enhancing use of enterprise systems build on, are not uncontested, the social circuit of power is flawed; it does not provide the enterprise system proponents a dependable power base for making resisters conform. And part of their problem is that the systemic circuit of power, of which an implemented enterprise system would be an important part, disciplining members into becoming (more) efficient parts in a (more) efficient organisation, provokes resistance, precisely by appearing to be a potential tool for disciplining organisational members. The enterprise

systems are not universally viewed as the beneficial structures painted in their proponents' rhetoric. The cases show how proponents of alternative business logics sooner or later demonstrate their convictions, by more passively not using the system as intended, or more actively opposing them, and then preferably at a point when changes are difficult and expensive to make. And by making the enterprise system the object of the explicit, formal opposition, typically phrased as complaints about inadequate functionality, the underlying power issues are kept from the debate, remaining unresolved.

There is probably yet much wisdom in the old idea to identify adversaries early on – those who see advantages in keeping the *status quo* and who Machiavelli termed enemies and Checkland termed victims. In the sixth chapter of his work The Prince, Niccolò Machiavelli depicts the difficulties in bringing change about. He warns "there is no undertaking more difficult, more uncertain to succeed, more dangerous to manage than to lead the introduction of a new order". Like Machiavelli, Peter Checkland takes institutional inertia and human motives and behaviour into account when he shapes his ideas about how you could, after all, attempt to bring change about. To emphasise the strong human and social foundation, he has named his approach Soft Systems Methodology, see for example Checkland & Scholes (1990). Machiavelli views the adversaries as those who energetically will resist the new order (in contrast to the proponents, who in the face of opposition will probably only deliver lukewarm support). Checkland views their *perception* of being victims of the change, as key. By showing an interest in their views, listening to them and make them participate and influence, it can be possible to influence their perception and make it less negative. And if they still have reservations, their objections contain valuable information that it would be wise to take into account when designing the change. One of Checkland's fundamental points is that a change can possibly be systemically desirable: apparently well lead to a desirable goal, according to a specific set of values and criteria. However, it can not be expected to be socially desirable – that all those affected will view it as the best course of action. The reasonable ambition is to see to it that the chosen course of action is socially feasible: a compromise that all concerned can accept. With this in mind, the chances increase to conduct a reorientation of the management principles, and supporting enterprise systems ventures, in a feasible manner. Perhaps, the initiators' ideas will not be implemented unchanged, but on the other hand, neither do the initiators reach their original goals in enterprise systems ventures like the four described above. Conducting enterprise systems ventures as if standardisation, coordination and resulting efficiency increase were the only reasonable goals in an organisation, makes it likely that one will have reason to concur with Machiavelli that "there is no undertaking more difficult, more uncertain to succeed, more dangerous to manage than to lead the introduction of a new order".

LIST OF REFERENCES

Material from the enterprise systems providers' websites, visited from Autumn 2007 to Spring 2009:

IFS: www.ifsworld.com and www.ifsworld.com/se

IBS: www.ibs.net/se and www.ibs.net

Lawson: www.lawson.com and www.lawson.com/Sweden

SAP: www.sap.com/sweden and www.sap.com

Askenäs, Linda (2000) *Affärssystemet. En studie av teknikens aktiva och passiva roll i en organisation*, In Swedish. (The enterprise system: a study of the active and passive roles of technology in an organisation) Licentiatavhandling, No. 808, IDA-EIS, Linköping University.

Bentham, Jeremy (1838–1843/1962), Panopticon; or, the inspection house, in *The works of Jeremy Bentham, published under the superintendence of his executor, John Bowring* Volume four, 1838–1843, Reprinted by Russell & Russell Inc.

Carr, Nicholas. G. (2003) IT Doesn't matter. *Harvard Business Review*, 81(5), 41-49.

Checkland, Peter and Jim Scholes (1990) *Soft Systems Methodology in action*, John Wiley & Sons.

van Iterson, Ad and Stewart R. Clegg (2008) The politics of gossip and denial in interorganizational relations. *Human Relations*, 61(8), 1117-1137.

Kogut, Bruce and Udo Zander (1996) What firms do? Coordination, Identity, and Learning. *Organization Science*, 7(5), 502-518.

Machiavelli, Niccolò (1513) *Il Principe.*

Markus, Lynne; Sheryl Axline, David Petrie and Cornelis Tanis (2000) Learning from adopters' experiences with ERP: problems encountered and success achieved. *Journal of Information Technology* 15, 245–265.

Scott, Susan and Erica L Wagner (2003) Networks, negotiations, and new times: the implementation of enterprise resource planning into an academic administration. *Information and Organization*, 13, 285- 313.

Westelius, Alf (2006a) Images and imaginators in virtual organising – the NPO Friluftsfrämjandet and www.frilufts.se. *International Journal of Public Information Systems*, 2(1).

Westelius, Alf (2006b) Muddling through – the life of a multinational, strategic enterprise systems venture at BT Industries. Linköping Electronic Articles in Computer and Information Science, 10(1).

Yusuf, Yahaya; A. Gunasekaran and Mark S. Abthorpe (2004) Enterprise information systems project implementation: A case study of ERP in Rolls-Royce. *International Journal of Production Economics* 87, 251–266.

Zander, Udo and Bruce Kogut (1995) Knowledge and the speed of the transfer and imitation of organizational capabilities: an empirical test. *Organizational Science*, 5(1), 76-92.