

December 2002

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Recommended Citation

Robinson, Paul and Brown, David, "PERSPECTIVES OF IST STRATEGY DEVELOPMENT AND ENACTMENT: A VIEW FROM THE TOP" (2002). *AMCIS 2002 Proceedings*. 184.
<http://aisel.aisnet.org/amcis2002/184>

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PERSPECTIVES OF IST STRATEGY DEVELOPMENT AND ENACTMENT: A VIEW FROM THE TOP

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Abstract

Developing and enacting IST strategies can be an immense task for organisations. Not only is IT becoming increasingly integrated into organisational processes but new IT dependent business models are now in existence. IST strategy reorientation invariably involves large investments for organisations. Therefore, meeting strategic intent is of paramount importance for organisations. This paper investigates IST strategy development and enactment in six large UK based organisations. The paper takes a specific angle by focusing on a number of key aspects, which the IT Directors in these organisations believe are crucial to ensure effective IST strategy reorientation. The results of this research illustrate that IST strategy development is not only a technical issue but also incorporates 'softer' organisational issues.

Introduction

The strategic development of information systems and technology (IST) within organisations is still a complex task for strategists and executives alike. As information technology (IT) becomes increasingly integrated into organisational processes then the evaluation of IT dependent business initiatives needs to reflect both the technical and organisational issues involved. No longer can the problem be delineated and treated, as a technical issue subservient to business needs. The problem is exacerbated even further by the fact that IT, and the means by which it can be made available to organisations are subject to continuous and rapid change. This change may or may not prove to be significant to any given situation but they cannot be ignored and need to be investigated. Because investments into IT are commonly seen as strategic investments and involve large sums of money, making an informed decision is of paramount importance for organisations. Meeting strategic intent is crucial for organisations to ensure that their strategic investments add value to the organisation.

These issues sit at the core of this paper, which presents the results of multiple case-study research project to explore IST strategy development and enactment. The research presented within this paper is part of a wider research program being conducted at Lancaster University by the two authors. Stage one of this research (2000-2001) was a pilot study that tested some of the key issues within IST strategy development and enactment. Results of this study illustrate that IST strategic development is a complex, iterative process to undertake and incorporates a degree of uncertainty created by new technologies for the organisations involved (Brown and Robinson, 2001a; and Brown and Robinson, 2001b). The research presented in this paper forms the second phase of an ongoing research program and focuses on the perspectives of IT Directors towards meeting IST strategic intent, within a number of large organisations by considering IST strategy development and enactment from a processual perspective. The perspectives of the IT Directors are seen as a crucial element of understanding IST strategy development and enactment and this paper highlights some of the key aspects that IT Directors feel are critical to successfully enact strategic intent.

The structure of this paper is as follows. An overview of the main issues will be discussed to place the research in context. This will provide the basis for discussing the intellectual framework used to interpret the empirical research. Each case organisation will then be presented. The main discussion will focus on the utilisation of the intellectual framework to analyse the case organisations. Bringing together the key thoughts of the research will conclude the paper.

Context

The role of IT within organisations is becoming more crucial, as IT becomes more deeply embedded within business processes. In recent years, IT has transcended further within the organisation by enacting IT dependent business initiatives such as e-business. Even though the dot.com bubble may have burst, traditional bricks and mortar organisations are still embracing the internet as a new business channel. For IT executives and strategists this increased dependence on IT, within traditional processes and new IT dependent business models, creates a complex situation of having to sustain existing systems and develop new IST approaches. These complexities faced by executives are therefore formidable.

Investments in IST at the strategic level are generally of a large sum – ones that affect the future of the organisation (Easterby-Smith, 1996). The importance of ensuring correct investments are made are highlighted when we consider the problems of enacting IST strategies. Failures, due to technology, poor systems development or both can have major implications for organisations. In the U.K. the list of organisations that have suffered major IST disasters is a long one – The Stock Exchange, The Department of Vehicle Licensing, The Aviation Authority and The London Ambulance Service – are just a few high-level profile examples from recent years. But the U.K. is not alone in this; other countries have their own list of major IST failures.

Insightful contributions have been made to the IST strategy domain by authors such as Galliers (1991, 1998 and 1999), Earl (1993), Ciborra (1994) and Doherty (1999). However, strategists still face problems when developing IST strategies in organisations. In short, the concepts underpinning the strategic development and enactment of IST strategies are ill-matched to the complexities experienced in organisations. If we consider the main aspect of this challenge, which is the seamless integration of IST within business processes in order to deliver value – IST strategies play a fundamental role. And yet, as we have noted above, the strategic development and enactment of IST is still problematic.

Intellectual Framework

Strategic development of any kind must be examined comprehensively overtime. To achieve this, strategic change/reorientation can be viewed from three inter-related dimensions – process, content and context (Pettigrew, 1988). This processual view of strategy enables the researcher to examine IST strategy as an unfolding process. In the processual view, strategy process is defined as how strategies come about, including decisions and actions taken by the actors involved. Strategy content is then defined as the objectives/outcome of the strategy. Finally, strategy context is defined as the set of circumstances that influence process and content. It must be noted, that these three dimensions are not independent but are highly interwoven and inter-related. This paper will therefore focus on a number of key aspects of a processual view of IST strategy development and enactment. This focus will concentrate on some of the key components required by organisations to ensure the effective development and enactment of IST strategies. Although it is not explicitly stated in the following discussions, each of the components highlighted are all based around the processual view of strategy.

Ability to Navigate Change

The concept of intended versus emergent strategies has been discussed for many years. As Mintzberg (1987) pointed out strategies walk on two feet – one deliberate and one emergent. The deliberate foot can be classified as the strategic intent of the strategy – where are we going? The emergent foot is then the aspect of change and adaptation required by the organisation as they attempt to move towards their strategic intent as the strategy unfolds. If a strategy follows a purely deliberate approach, with no flexibility for change, it is possible that the strategic intent may become dated and does not add value to the organisation. If on the other hand, the strategy is completely emergent, it is possible no direction and cohesion is provided for the organisation. Therefore, it is clear that strategic development – in this case IST strategy development – needs to be both flexible and incorporate an element of strategic intent. It is this process of aiming for strategic intent and adapting to change which creates a need to be able to navigate change effectively prior to and during the unfolding process. When discussing the ability to navigate change, we are concerned with two main aspects – firstly, the trigger for change and secondly, navigating the unfolding process.

Any IST strategic reorientation will be triggered by an event of some sort. Nutt (1998) argues that ‘activation’ for change is normally prompted by trends and events. Organisations have a tendency to go through periods of stability were little happens. However, every now and then revolution can take place and punctuation of this stability occurs – requiring the need for strategy reorientation (Mintzberg, 1987). The IST strategy alignment framework (developed by Earl, 1989 and Galliers, 1991 & 1999) provides a high-level view of how an organisation should link their business strategy to their IST strategy to ensure cohesive

alignment. The framework illustrates that the IST strategy is essentially a supporting tool for the business strategy by enabling new business initiatives to be developed. In this sense, it is the business strategy that drives the IST strategy. Ensuring that the IST strategy is open to change and innovation is crucial for organisations in order to cater for changes in the business strategy. However, as noted by Henderson and Venkatraman (1993) IT also has the potential to shape/drive the business strategy. IT capabilities (hardware, software and skills) have developed over the years and play a more crucial role both operationally and strategically. In fact, some new business models are not only enabled by IT but are dependent on IT – such as e-business (Timmers, 2000).

Even when the decision has been made to re-orientate, the process of meeting strategic intent must also accommodate change. In IST terms, not only does the technology constantly change, but new applications and hardware are entering the market place at a rapid pace. Therefore decisions made at any one point in time need to allow for flexibility. Without such flexibility future changes may be restricted. As Eriksen and Mikkelsen (1996) note, at any one moment in time organisations make decisions about the future. These decisions affect the future ‘strategy space’ of the organisation and restrict potential future options. The process of making decisions and therefore navigating change is a complex one. As the strategy process unfolds the organisational actors at all levels will continuously appreciate internal and external events in order to make decisions and solve problems. As Vickers (1968) notes, most problems which humans try to solve are set by their own appreciative judgments and cannot be guessed without making assumptions about how reality judgements are formed. Lewis (1991) further notes that any problem that calls for a decision to be made is the result of past events and those ideas that lead to the perception of the problem. No individual(s) can ever know the whole situation but can only interpret the situation through a particular set of ideas/expectations. Both Lewis (1991) and Checkland (1999), building on the work of Vickers (1968 and 1983) describe the process of appreciation – which leads to decisions being made and navigation occurring during the strategy process:

- Previous knowledge and experiences have created implicit standards (frames of reference). These standards lead us to notice only certain features of our situation and help us to determine what facts are relevant.
- Actors collect facts from the internal/external environment and make judgements against the standards already in place.
- Action is taken (decisions made), which influence the environment (navigation occurs).
- This action then provides the basis for new standards to be developed.
- The process starts again and is cyclical.

The process of appreciation provides the basis for how organisational actors understand the contexts and processes of IST strategy reorientation.

IST Philosophy

As noted above, there has been a tendency in the IST strategy literature to view IST strategy as subservient to the business strategy – in that the business strategy will always drive the IST strategy. Additional to this is the influence of the outside-in approach to strategy development on the IST strategy field. Clarke (1994) provides a detailed account of how the outside-in approach has affected IST strategy development within organisations. This IST philosophy, is one of viewing IST from a competitive stance. However, within any IST decision the focus cannot solely be on the competitive role of IST but must also be from an operational angle as well (Lacity, 1996). There is no point having an elaborate IST strategy without useful applications that can be used operationally.

The IST philosophy (also referred to as the frame of reference) is the explicit model of what to do, how to mobilise the organisation and commit resources (Doz, Prahalad and Pettigrew, 1988). In order for strategic reorientation to take place this philosophy may need to be changed. However, how this occurs is less well understood. One area that Doz, Prahalad and Pettigrew focus on is the appointment of new executives who bring with them new visions and ideas for IST that challenge the existing philosophy of the organisation. Developing and enacting a new philosophy ultimately lies in the executives ability to translate his/her idea/vision into the organisation. In this sense, the philosophy, which could be fairly vague and inarticulate at the beginning requires development and legitimisation. Boisot (1995 and 1998), argues that vague concepts and ideas can be made more articulate by reducing their uncertainty; by developing the idea from being un-codified to codified; and making it more abstract and relevant to the whole organisation. The process by which this happens helps to develop and legitimise the idea therefore helping to change the IST philosophy to one that matches the organisations context.

Pettigrew and Whipp (1988) believe that building a climate receptive to change is a key enabler to strategy development. This climate for change exists not only in the IST philosophy but also within the capabilities of the IST organisation, without this

capability strategic reorientation could be extremely difficult to achieve. The positioning and structure of the IST organisation within the host organisation is of paramount importance to create the right philosophy. Planning and implementation of an IST initiative has to embrace a large variety of technical, social, business and economic factors (Mumford and Pettigrew, 1975). Doherty and Mushayt (2001) emphasise that traditionally the main focus of systems development has been very technically based. Less concern has been given to organisational and transitional issues. In this sense, the IST organisation needs to be positioned within the host organisation to ensure the effective level of IST competence, including:

- The Technical Base - This is the traditional focus on applications and infrastructure which must be flexible and responsive (Byrd and Turner, 2000).
- The IST Human Resource – The IST capabilities, skills and knowledge must also be combined to solve organisational and business challenges (Byrd and Turner, 2000 and Ross, 1996).
- The Relationship between IT and business – The need to share risk and responsibility at the same time as prioritising IT within the organisation (Ross, 1996).

Case Organisations

This paper utilises empirical data obtained from six multi-national organisations that have recently engaged in a major IST reorientation/change. Table 1 shows a high-level comparison of the case organisations. The data was obtained from an extensive interview with the IT Directors/Senior IT Personnel within these organisations. What follows is an insight into the case organisations and some key IST issues high-lighted by the interviewees. Table 1 illustrates the company overviews:

Table 1. Company Overviews

| Organisation | Turnover | Employees | Industry |
|--------------|--------------|-----------|----------------------|
| Company A | £2 billion | 41,000 | Specialist Insurance |
| Company B | £2 billion | 25,000 | Specialist retailer |
| Company C | £4 billion | 30,000 | Finance |
| Company D | £7 billion | 50,000 | Retailer |
| Company E | £1.7 billion | 20,000 | Specialist service |
| Company F | £ 5 billion | 60,000 | Manufacturing |

Company A - This Company is a well-established insurance provider with a group turnover of £2 billion with 41,000 employees. This company is information rich, therefore IT innovation is crucial in order to provide new and innovative products with the IT department driving business innovation. The structure of the IST department is centralised with over 600 people based in two main offices. The strategic planning process follows a three-year rolling cycle. The first year is extremely detailed whilst years two and three are less detailed.

Company B - This Company is a specialised retailer based mainly in the UK. With over 25,000 employees and a group turnover of £2 billion. IT initiatives are always grounded in business change projects. The IT Director within this company is a recent appointment. The new IT Director is actively engaging in re-structuring IST within the organisation by creating a more 'mature debate about IT'. Major changes include the cost structure – focusing on operating costs and capital investment; and the links into the business units. Currently IST personnel (coordinators) are located within specific business units. As many of the projects affect more than one business unit the new structure will base these personnel in a position so that each one has links into more than one business unit.

Company C – This Company is a major financial organisation based in the UK that has been trading for more than 150 years. With a group turnover of £4 billion and over 30,000 employees based in a head office and in local branches. IT is a key component of the business strategy and is used to create innovative products. Being a financial organisation IT is a 'mission critical' component of the business. The IT department is centralised in structure and all IST initiatives are based on the local level needs of the business. New IT projects are always 'sold' to the branches in away that creates local level buy-in and support for change.

Company D – This Company is a major UK based retailer that has been established for over 100 years. A group turnover of approximately £7 billion with over 40,000 employees. With recent major changes over the years for this organisation, IST has started to play a more critical role in operations and process development. IST changes always follow the business model and are process based. Strategic reorientation is generally led by business development heads. The IST department is centrally based and follows a ‘consultant’ approach with individuals fulfilling internal business consultant roles in the main areas of business consultancy, IT systems and technology. Project delivery is a team-based competence that blankets many sections of the organisation.

Company E – This Company is a service provider based in the UK, employing over 20,000 employees with a turnover of over £1.7 billion. Within its industry this organisation is a small player that provides a specialist service to its customers. IST is a crucial component of the organisation. The IT Director is a recent appointment and has direct access/influence to the operations committee – the section of the organisation that sets the business strategy. The IST department is structured in a way that ‘scatters IST employees around the organisation like seeds’. Focus of the IST organisation is in two main areas, IST planning and IST architecture.

Company F – This company is a multi-national manufacturer. Employing over 60,000 people with a group turnover of over £5 billion. Business strategy always drives the IST strategy development process and is always three months behind the business strategy development process. The IT department follows a centralised structure with project controllers providing the link into business units. These controllers canvass the business units on an annual basis to determine their IST requirements. When a project is live, there is constant feedback between the IST controller and the users. However, all systems developed are all driven by the data model and not by specific user requirements. Each system will follow a general set of functions and capabilities.

Discussion

This discussion is segregated into main areas focusing on the ability to navigate strategic reorientation and the IST philosophy within the case organisations.

Ability to Navigate Change

It is evident from the case narratives that there is a mixture of drivers for IST strategic reorientation. In companies B, D, E and F the IST strategy generally follows the business strategy and essentially provides a supporting role to business; with the IST strategy being seen as subservient to the business strategy. However, in company A it is the IST strategy that drives the business strategy by providing new and innovative ideas for the business. In Company C, the IST strategy also drives the business strategy as well as providing a supportive role. In all organisations, the setting of the IST agenda was done from both a long-term (three years plus) and also from a short term (next twelve months) on a rolling cycle. In Company A and B especially, it was emphasised that the long-term view would be fairly vague with just a vision/intent of where the organisation was heading. The focus for the immediate twelve months would be more detailed and focused towards changes in the organisation and its environment. This flexibility as the strategy unfolds allows these organisations with the ability to adapt and change as when required.

It is evident in all organisations that great care is taken to ensure any major decision made with regards IST capabilities does not effect future options. Although not all organisations had formal procedures to accommodate changes in the environment as their IST strategies unfolded (only evidence within Companies A, B and C) all IT Directors highlighted the problems of decisions affecting future options. In fact, in Company D and E the IT Directors were experiencing numerous problems caused by past decisions, which have created a legacy for the present and future.

One of the key aspects observed in the organisations was the depth and breadth of previous IST experience of the Directors and some of their senior management. In some cases the experience stretched for more than 30 years in various IT roles. In fact, all Directors have had extensive experience in the IT industry from both a technical and business perspective. This experience is believed (by the Directors) to provide the level of insight required to make effective IST decisions. However, concern was expressed towards the rapid changes that occur within the IT industry with technology changing on a constant basis. In fact, a number of Directors mentioned that due to the rapidity of technology changes and the great breadth of technology available there was a tendency to focus only on certain aspects of all the available technology. Most Directors emphasised that their previous experience of IT environments – such as distributed or server centric IT environments – influenced which direction they would take in the future.

IST Philosophy

With regards the general philosophy of the IST organisation within the host organisations there were obvious differences to be observed. Company A clearly takes a competitive view towards IST strategy - all tactical IT issues are pushed towards the business units to resolve. In this organisation, IT is seen as an innovative tool that adds value to the organisation. If IST initiatives (even when they are unfolding within the organisation) are no longer seen to add value they will be stopped within this organisation. This 'chopping' of projects can occur at any stage and is not influenced by how much has been spent on the initiative - an untypical approach to IST projects. Companies D, E and F all have an operational philosophy towards IST. However, the recent appointment of the new Director in Company E means this philosophy may be changing as this new Director is attempting to change how IST is viewed in the organisation. He is eager to move away from a purely operational philosophy to one that is both competitive and operational. Company C has both a strategic and operational philosophy towards IST. Finally, in Company B, the new IT Director is also attempting to change the philosophy of IST from being a cost and 'necessary evil' for the organisation to a business value-adding unit of the host organisation.

It is clear in both Company B and E that the appointment of new Directors has led to the current philosophy being challenged. Both Directors are attempting to change how IST is viewed within their organisations by making it have the view of 'adding value' to the business. Company C is also attempting to change the IST philosophy and has made major changes over the last 20 years. Even though, no new blood has been brought into the organisation there exists a capability to constantly re-invent and re-position themselves within their host organisation. This organisation has won numerous awards from the IT industry that illustrates this capability to constantly add-value and re-invent themselves. Within this organisation and also Company A the translation of new visions and new ideas into the business follows what the Directors call a 'sales' approach. The high-level concept is sold to the business units in a way that ensures buy-in from the business. In Company D, the translation of new visions is achieved from a 'consultant' approach whereby the IST personnel are seen to be internal consultants providing solutions to business problems. Which ever approach is taken great emphasis is placed on ensuring the vision/idea is articulate and can easily be understood by the business audience. Time is spent focusing on business benefits obtained from the idea as the idea is made more codified and abstract to the whole business audience.

In all case organisations, great focus was placed on ensuring that IST organisation had a well-developed and diverse set of IST competencies. Major focus was placed on ensuring a strong IST and business relationship, with Companies B, C, D, E and F having IST personnel located either within the business units or on the periphery of the business unit. Companies E, B, C and F also have a strong focus towards a high-level of infrastructure capability, ensuring the basic usage of IT is achieved within the organisation. And finally, in all organisations, a clear focus was observed towards ensuring a diverse and effective array of IST human capabilities required to develop and implement the IST strategy existed. Within all organisations there was a mix of both internal and external IST personnel being utilised.

Conclusion

To conclude, it is evident from the case insights that IST strategy reorientation is still a complex process to undertake. How strategists achieve reorientation differs between organisations. The above discussion has focused on some of the key aspects required to ensure effective development and enactment of strategies. It is clear that organisational context has an important role to play in determining how strategists and executives develop strategies. The need for change is not just confined to the traditional subservient view of IST strategies but the advances in IT over the years has created a situation whereby IT can now drive certain business strategies within organisations. Key findings highlighted by the IT Directors include:

- The capability of IT to lead business initiatives but IT initiatives require a degree of 'selling' to the business audience.
- The experience of the 'leader' is a key enabler in strategic reorientation. This reinforces and legitimises the appreciative model.
- The need for IST competencies and an IST philosophy that reflects the organisations context, which provides the foundation for allowing reorientation to occur.
- The acknowledgement that past IST decisions can severely affect future options and strategic reorientations.

In the case organisations discussed in this paper we can see an evolving perspective towards IST strategic reorientation, one that is more processual in nature and reflects not only the traditional technical issues but also the organisational complexities faced by strategists. For the IT Directors interviewed within this research major concern was showed towards ensuring the IT department was flexible and capable to meet the changing needs of the business. As IT and business continues to evolve so does the pressure on effectively developing IST strategies.

Acknowledgements

The authors would like to thank the six case organisations for their cooperation and access to the data during the empirical research. An extended thank you is expressed to The Management School, Lancaster University; Lloyds of London and The ESRC for providing the funding for this research.

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