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# How does the alignment of IT to business strategy affect the organisation of the IT function?



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## Abstract

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Purpose	The primary goal of this research is to describe the IT function and examine how its alignment to an organisations strategy affects the way it is organised.
Method	The chosen method was a purely theoretical examination with the use of the case study of Windham International as primary resource and secondary resources such as book and literature review used for the thesis.
Research Questions	How does the alignment of IT to business strategy affect the organisation of the IT function?
Conclusion	One of the findings was that a few researchers seem to suggest that the centralized mode of organising IT was symbolic of the past, while outsourcing and decentralization are the modern approach to organising IT. Wyndham International shows the opposite, after the introduction of the CIO in 2002, centralization was the chosen mode of organisation because that was what would best fit the new strategic approach of the organisation. Insourcing rather than outsourcing proved to be a winning formula.

Key Words IT Function, IT strategy, IT Centralization, IT Decentralization

#### TABLE OF CONTENT

1. INTRODUCTION	5
1.1 Problem Statement	6
1.2 PURPOSE	6
1.3 Delimitation	6
1.4 TARGET GROUP	7
1.5 DEFINITIONS	7
2. METHODOLOGY	
2.1 Choosing the topic	
2.2 Research Model	8
2.2.1 Chosen approach	8
2.2.1.1 Literature Review	9
2.3 Criticism of Method	10
3. THE IT FUNCTION	11
3.1 The. History of. Organizing the. IT functions	11
3.2 ROLE OF IT FUNCTION IN AN ORGANIZATION	13
3.2.1 Size of IT function	14
3.2.2 IT function key stakeholders	14
3.3 ALIGNING IT FUNCTION TO BUSINESS	15
3.3.1 The Strategic Grid	17
3.3.2 IT & Business Capability	19
3.4 ORGANIZING THE IT FUNCTION (CENTRALIZATION VS. DECENTRALIZATION)	20
3.4.1 Hybrid System/Shared services	20
3.4.2 organising IT for Innovation	21
4. WYNDHAM INTERNATIONAL	22
4.1 IT AT WYNDHAM	23
5. ANALYSIS	25
5.1 How.does.the alignment of IT to business strategy affect the organisation of the IT function	25
6. CONCLUSION	27
6.1 Recommendation	28
REFERENCES	29

### List of Tables

Table 1 How changes in Wyndham strategy affects the organization of IT resources.......27

### **1. Introduction**

Information technology (IT) is a very important part of an organisation's daily operations and its strategic capabilities. IT has been long viewed as a technological resource that would help organisations do better things (Hedman & Kalling, 2002).Over the past three decade there has been rapid change in technology, more so in the area of information technology. (Manzoni, and Angehrn, 1998, pp. 109) These changes are filled with "startling innovations and drastic unpredictable shifts in technology's direction". (Benemati and Lederer, 2000) They have enhanced the way business is done, providing competitive advantage for those who adopt them. This has necessitated the need for businesses to adapt and change continuously to stay ahead of the competition (Jaska and Hogan, 2006).

The role of the information technology (IT) function and its relationship to other business functions is under constant and growing examination. As IT has become a necessary part of organisations, the interaction between the organization's IT unit and other units is a key determinant of organizational success (Gordon & Gordon, 2000; Ramakrishna and Lin 2000). Information technologies such as data communication systems, database management systems, decision support systems and expert systems, enterprise resource planning systems, the internet etc have been and will continue to cause monumental changes in the conduct of business activities (Tavakolian, 1991). This underscores the need for IT to be effectively and efficiently organized so that businesses can reap the full benefits from its IT investment.

In the past, when IT was still in its infancy it was not considered a strategic asset. It was usually centralized and locked away in a basement (Brown William, 2002). IT was seen as a tool for operational efficiency and was run as a support function in organisations (Kordel Luc 2004), separate and distinct from the business while being managed and centrally controlled by the IT department. However in recent years, with changes in technology bringing about integration, improved performance, and global connectivity, and with corporate culture more aware and accepting, IT has come to play a more strategic role in providing organizations with competitive edge and has necessitated changes in the way it is organized to cope with the changes. IT has become crucial in the support, sustainability and growth of businesses and its use has created a critical dependency on IT (Gordon & Gordon 2002).

This research will describe the IT function and how aligning IT to strategy effects the way it is organised. An analysis of Wyndham International as a case study was done, examining how the changes in company strategy and alignment of the IT function to the new strategy affected the way IT was organised. There are different schools of thought with regards to how best IT function should be organized, while some favour the centralization of IT resources, there are also those who favour a decentralized form of organizing IT resources and responsibilities. As technology has advanced and IT capability increased, alternate modes of organizing have become prevalent, most prominent of these is outsourcing of the IT function and some organizations are beginning to question the need for a Chief Information Office (CIO) or a central systems department (Rockart J et el, 1996). This thesis will be useful for IT managers who will have the task of organizing IT and help them examine if they are reaping the full benefit from their investment in IT.

#### **1.1** Problem Statement

Over time, Information technology has rapidly advanced in capability and has changed the way organisations do business. In changing the organisations strategy to meet with changing business environment, research suggests it is equally important for the IT function to be aligned with business to reap its full benefits (Kordel Luc 2004). The rapid changes in IT has propelled it into an increasing strategic role in organizations and as such also affect the way IT function is organized. The following research question will be the focus of this thesis;

How does the alignment of IT to business strategy affect the organisation of the IT function?

#### 1.2 Purpose

The primary goal of this research is to describe the IT function and examine how its alignment it to an organisations strategy affects the way it is organised.

#### 1.3 Delimitation

This Thesis will only involve the changes related to the IT function and not other changes within the company such as structures within operations or business development.

#### 1.4 Target Group

The main target group for this thesis is the students and teachers participating in the IT Management program and by extension, future and current IT Managers in organisations as this it will encourage them to take a closer look at how IT is organised and examine if they are reaping the full benefit from their investment in IT.

#### **1.5 Definitions**

- IT Information technology refers to the use of computer, communications and software technology to the management, processing and distribution of information
- IT function the organization or department for handling IT issues within a company
- **Outsourcing** Handing over parts of an organization's IT services to one or more external service providers, who afterwards delivers these services to the company based on a contract
- **REIT** A corporate structure and tradable security backed by ownership of real estate (Applegate et al, 2007)

### 2. Methodology

This chapter presents the practical procedure used in this research. An evaluation is made of the different choices used.

#### 2.1 Choosing the topic

The researcher's choice of topic is one that is of interest to the researcher, of interest to external audience and of relevance to the program of study. From personal experience the researcher has witnessed IT departments act in isolation and distanced for the core of business activities and this inspired the interest in examining the concept of the organisation of the IT function within the organisation

#### 2.2 Research Model

Research can be carried out either on a qualitative or a quantitative basis. Studies are qualitative when the type of data that is collected cannot be translated into numbers; the data has to be analyzed with non-mathematical methods. Studies are quantitative when the collected material is expressed in numbers and the analysis is conducted with some kind of mathematical-statistical method. It is common to combine cross section study with the quantitative approach whereas the case study analysis largely uses qualitative data and analysis methods. (Fisher 2004). The next step involves choosing a method to collect the data that will be used and analyzed in the research, as well as the type of data: secondary data (data that already has been collected during a previous project) or primary data (where information is collected directly from the original source).

#### 2.2.1 Chosen approach

This thesis is purely a theoretical study, with the use of the case study of Windham International as primary resource and secondary resources such as book and research papers.

Due to time constraints, an in-depth empirical study and empirical data could not be done. A case study was used and secondary data from research papers were used for the entire thesis. This is used to get an overall perspective of the problem area.

#### 2.2.1.1 Research Process

This was the first stage in the thesis process. It involved carrying out research for literature and research papers after choosing a topic. This phase involves searching for books, academic papers, and other materials that are relevant to the thesis. This was done mostly by searching electronic sources through the virtual library. The researcher used the Mälardalen University Library's online databases such as ProQuest (ABI/INFORM), Elin@Mälardalen and Emerald. These sources contained articles, scholarly journals, and reference/reports dissertations. The researcher also used the World Wide Web search engines like Goggle scholar. The main keywords using for search material were ``IT function, IT structures, IT organization and Information Technology, It & business alignment''. Information was also gathered from websites of organisations that are connected to IT such as tech republic. The main information coming from the study of the literature and latest research papers about IT function and organisation is described in the next chapter. Some literature to review includes:

#### Books

- Namchul shin: - Creating business value with information technology: challenges and solutions. Idea group publishing, 2003

Applegate et al: - Corporate Information, strategy and Management text and cases McGraw Hill 2007

#### Research Papers:-

Benemati John et al: - 'Rapid Change: Nine Information Technology Management Challenges' 2000

Steven R Gordon: - Organisational Option for resolving the tension between IT departments and business units in the delivery of IT service Information Technology and People Volume: 15 issue 4, 2002

### 2.3 Criticism of Method

The researcher is aware of the fact that this thesis does not cover all aspects of IT functions but just an overview. Concerning the research method, the researcher is also aware that qualitative research (documentary research method) and secondary data might not provide enough information, do justice to the topic and provide a clear and definite answer to the research questions.

### **3.** The IT Function

#### 3.1 The History of Organizing the IT functions

For over 30 years the IT industry has been the ultimate growth business producing a series of breakthroughs that have created new jobs, spawned new companies and changed the way the world did business. In the 50's, 60 and 70's, i.e. the early days of IT, it was used primary as a tactical tool locked away in a server room located in one place and control by a centrally organized IT unit(Brown, 2002). Prior to the 90's IT had evolved from the mainframe era to the introduction of stand alone computers and client server networks came out in the 80's. During this period researchers had a debate about the best form of organising IT (infrastructure and human resources). Two main schools of thoughts emerged i.e. centralization and decentralization schools. (Karake, 1994).

Up until the late 70's there seemed to be an overwhelming favour for centralization of IT function and its resources even though stand alone personal computers had been introduced in the 70's for the main reason that centralization was cost effective and referred to as 'efficient'. Centralization refers to the to the organization of the IT function in one particular business unit that provides IT services to the whole firm (Gordon & Gordon, 2000). The main characteristics of a centralized approach include control, efficiency and economy. The main advantages of centralized systems are that they provide centralized control using established technology and vendors. This researcher would suggest that underlying this position is the fact that the primary technology at the time was the mainframe, which was a central processing system; it would be very costly to have several mainframes in branch offices of an organization. With a centralized system, there would be no confusion over responsibilities and duplication of effort, resources and expertise is reduced, saving cost and time. On the down side, the system is slower.

The era of client-server based computing in the 80's ushered in the championing of the decentralization perspective as its proponents citing improved computing service and user satisfaction as a reason for it and this was referred to as 'effectiveness' (Karake, 1994). This is understandable because decentralization involves giving individual business units autonomy over their own IT resources without any major considerations over other units, unless it is

essential to the overall organization policy (Gordon & Gordon, 2000). With IT staffs attached to departments' individual needs were being met. Taking an example of a bank, with the new technological capability of the client server based network in each of their branch having their own servers to which their individual client systems were attached. IT staffs would now be able to be attached to the branch office, have the daily processing done at the location and attend to the needs of that branch location in a short time. For example printing of account balances could be done at the branch rather than having a paper based system or waiting for the head office to post a daily report.

The 90's onwards ushered in the era of internet-worked based environment, wide area network, the internet and real time technologies. This internetworking era, observed Dr Eric Schmidt, Google's chief executive officer (CEO) has made computers have the capability to interact with other distant computers as if they were only inches away (Applegate et al, 2007, pg 296). Transactions are communicated quickly and activities that were once sequential now happen simultaneously. Enterprise resource integration and enterprise software changed the way businesses performed yet again.

Concerning the organisation of the IT function, another form was becoming salient; outsourcing i.e., handing over parts of an organization's IT services to one or more external service providers, who deliver these services to the company based on a contract . By 1995, more than half of midsized to large firms had outsourced or were considering outsourcing significant IT activities (Applegate et al, 2007, pg 440). Outsourcing is a step, which may be taken by an organization as it searches for an answer to unresponsive centralized IT or to cut costs. During the 1990's many companies redirected focus to their core capabilities believing that competitive advantage came when ones does what he can do best. In the wake of this thinking, the IT function was regarded as a commodity and a subject for outsourcing (Willcocks, 1998). It is interesting to note that the internetworking age has created and brought to prominence the CIO function, more so outsourcing has highlighted the need for a strong and active CIO function as managing an alliance is the single most important aspect of successful outsourcing (Applegate et al, 2007, pg 450).

The CIO job involves planning, ensuring that the IT function left in-house as well as the other IT resources are properly distributed. Applegate explains that even if , the IT function is fully outsourced and in house CIO must be retained to oversee critical functions such as;

partnership/contract management, architecture planning, staying ahead of emerging technologies and enhancing learning among the users. One of the major arguments against outsourcing is IT control, a strategic asset, is moved to a vendor who may not be responsive to the organization purchasing the service. Outsourcing itself can be seen as a form of decentralization. The centralization and decentralization debate still goes on with some researchers suggesting there is a trend going back to centralization such as, Dow Jones & Co., McGraw-Hill, and Knight Ridder, to get to a consolidated view of information.

It can be said to be near impossible to contain the innovation of new technology and as its diffusion process unfolds, there are effects on all areas of business including the way IT function is organised. IT is transient and constantly changing and we have seen that over time the way IT is organized has changed to cope and be relevant to its business environment, while it may not be the main reason IT function is organized the way it is from organisation to organisation, this researcher is of the opinion that new technology has an impact on the way IT is organized.

#### 3.2 Role of IT Function in an organization

As stated earlier, IT function refers to the department or organization for handling IT issues within a company. According to Hedman & Kalling, the IT function involves the development of long-term plans for the technological architecture such as mainframes, mini-computers, personal computers, networks and software (Hedman & Kalling, 2002, pg 255).

The IT function involves the definition of standards for issues such as telecommunication, security documentation, file-maintenance and database administration. In some organisations the IT function also includes a helpdesk, where users can call and receive remote help via the telephone. Staff training on IT issues as well as updating their skills to provide the best advantage to the organization is part of the IT function. If there are technology changes such as new development methods, evolving technology and availability of outside suppliers, the IT department will have to adapt to these changes and organize themselves to leverage advantage from the changes. According to Applegate et al (2007, pg 429) the following constitute the central core responsibilities of the IT function in an organization. They include;

• The development and management of architectural long term plans of the organization, making sure that all projects fits within this plan which will be

constantly reviewed with all stakeholders concerned to ensure to ensure its in line with set objectives.

- The development of processes that guide telecommunications, client devices, servers, programming and configurations, documentation procedures, backup storage and information security. These standards must be done in a way that they accommodate innovation and experimentation so that learning can be achieved.
- Establishment of outsourcing procedure options that take into consideration the organisational standards and objectives.
- Inventory maintenance of installed and planned system services.
- Identification of career paths & organisation of training for the IT staff.
- Maintenance of relationships with vendors and suppliers

#### 3.2.1 Size of IT function

The very size of the IT function will also affect how it is set up and operates. Taking two extremes, in large IT functions (e.g. more than 800 employees) it is possible to have dedicated resources to strategic functions, e.g. strategic planning, company architecture, technology research and vendor management. In small IT functions (e.g. less than 60 employees) these roles will typically be shared or even not required and the IT function will focus more on day-to-day activities (Forrester, 2005). In the first situation there is risk that the IT function will be forced into complex structures and also become more bureaucratic and isolated from their clients. Realizing expected synergies can then be tough. Although, having dedicated resources means that the IT function can apply more sophisticated management techniques and influence the company's management team to a great extent. In the latter example the advantage is that small IT functions could change direction and respond to customers needs much easier.

#### 3.2.2 IT function key stakeholders

IT involves many stakeholders, which all have different kinds of demands depending on the company's' specific situation. If management is to ensure that the exploitation of IT meets its needs, the stakeholders must be managed. (Earl, 1989; Rau, 2004). From the IT function

perspective, Hedman & Kalling (2002, pg 256) identify their key stakeholders in the organisation as senior management, who have to have good communication with the IT staff in order to ensure that both business and technology perspectives are involved in understanding business opportunities and users, the employees who use the technology and are usually involved when designing systems and changing work routines.

Tensions however are present and can be attributed to differences in knowledge, power, and culture. Managers, often powerful in allocating money, may find themselves lacking knowledge while there are the IT staff who are technically knowledgeable but without financial power in allocating resources as an example. Nowadays, those differences are diminishing mostly due to reduction in the knowledge gaps as users and managers know more about IT and its no longer seen as alien (Hedman & Kalling, 2002, pg 257). A major external stakeholder would be the IT suppliers.

Increasingly as IT is used as a strategic weapon, businesses are linked up with their suppliers by networking. A supplier could in this case also be interpreted as a service provider or a "vendor", executing parts of the organizations value chain and processes. The demands on the IT function have increased a lot during past decades and systems delivery now includes procurement and integration. Firms are increasingly recognizing that they do not have the time, money and expertise to develop large integrated systems. They are instead purchasing software and sub-contracting development to third parties who have access to the latest tools and techniques.

#### 3.3 Aligning IT Function to Business

There is a consensus today among researchers, business and IT managers that IT should align with the company's overall strategy (Namchul shin, 2003; Karake, 1994, Gartner, 2006) and this involves the IT department ensuring its resources (hardware, software, networks and human resources) are organised in a way it meets not only IT objectives but also the overall objectives of the organisation. According to a survey by Computer Science Corp (CSC), the top concern for senior IT executives is the alignment of the IT function with their business operations (Sid, 1994).

This alignment means fitting the IT function with the business' goals, needs, programs and operating style. It means that the activities of both the IT and business operations are united in one common business purpose (Sid, 1994). No longer a tool for the back-office, in recent times IT, has become an important tool for defining new strategic opportunities and building the capabilities needed to execute them (Applegate et al, 2007 pg 35).

The importance of the need for IT to be aligned with the organizations overall strategy cannot be overemphasised and this underscores the need to organize the function in order to gain both effective business systems and efficient use of information technology. Two sets of tensions are identified that arise concerning IT activities; innovation and control (Applegate et al 2007). On the one hand innovation; a firm's ability to innovate using IT depends on management's willingness to take risks and its view of the strategic impact of IT on the organisations success. However, if IT is viewed as just being a helpful support function and management is not willing to take risks then there will be less investment in IT innovation.

The second tension is that of control between IT staff and business users, with both groups having different priorities in terms of how resources should be spent on IT. This leads to tensions within the organisation. Business users are usually focused on short term need fulfilments which is directed at solving immediate problems and IT staff focused on more long term objectives such as architectural concerns and need for maintenance. These tensions can be attributed to differences in knowledge, power, and culture (Hedman &Kalling 2002). Managers often powerful in allocating money may find themselves lacking knowledge and IT staff being technically knowledgeable without financial power in allocating resources as an example.

With stakes being so high however, it is imperative that IT is organised in a way that fits the strategy and structure of the organisation and meets business goals. Research has shown that organisations are not generating optimal value from their IT investments (Kordel Luc 2004). In the past, management and corporate boards lacking deep IT expertise simply left many decisions to IT department. However, the importance of management involvement in IT decision making cannot be underestimated. Most IT infrastructure investments and new IT applications span business lines and functions such as Customer Relationship Management (CRM), a multifaceted process that focuses on creating exchanges with customers so that firms have an intimate knowledge of their needs, wants, and buying patterns. In this way,

CRM helps companies understand, as well as anticipate, the needs of current and potential customers. Functions that support this business purpose include sales, marketing, customer service, training, professional development, performance management, human resource development etc.

#### 3.3.1 The Strategic Grid

Developed by Warren McFarlan, the strategic grid is a framework that guides executives with the analysis of the organizations IT portfolio of projects. It focuses management's attention on the IT evaluation question: where does and will IT give us benefit? (Willcocks, 2003, p. 242). Initiatives and projects are the vehicle that can translate strategy to reality and it shows the strategic intent of the organisation. With this in mind, McFarlan suggests that IT can be analyzed along two lines;

The impact of IT on business operations; in some organizations IT is critical to the smooth running of the business as it is the main backbone upon which the business runs. There is a lot of investment in IT to ensure it's reliable because IT failure can be very costly to the business. An example of an organization where IT is vital to its operations is NASDAQ. In the same vain, there are businesses where the impact of IT is less critical. In this scenario IT is mainly used as a support function and there is much less investment, as the business does not rely heavily on IT such as in a law firm for instance

*The impact of IT on strategy;* In some organisations, IT activities are directly linked to the overall strategy of the business such that investment decisions in IT are taken at the board level of the organisations and not just with the IT department. In some other organisations the impact on IT strategy is low and does little to affect the company's position in the competitive environment

This mode of analysis could be useful not only because it enables an assessment of how well IT is aligned and in tune with the business's strategic goals, but it helps to provide different approaches for organizing and managing IT. The strategic grid in Figure 1 is made of four categorises defined by two dimensions, the Support, Factory, Turnaround and Strategic quadrants.



#### Impact on Strategy

Figure 1: McFarlan's Strategic Grid

*Support quadrant:* the IT projects and initiatives that fall in this quadrant have low strategy impact on the organisation. They are usually just incremental or local improvement projects that are carried out and managed by the IT specialists in conjunction with the end users.

*Factory quadrant:* IT projects here are of a cost reducing and performance enhancing nature that is related to the core of the operations of an organization. IT in this instance is very important and of critical importance to daily operations therefore, these projects are designed, implemented and managed by both business unit executives and IT executives.

*Turnaround quadrants:* The aim of projects in this quadrant is designed to exploit emerging strategic technological opportunities and is usually carried out by the business units in conjunction with IT executives and emerging technology group. It could involve also working with external partners.

*Strategic quadrant:* projects in the strategic quadrant are usually in firms that are committed to using IT not just for operational purposes but also as part of the organisations core strategy. IT initiatives and projects in this quadrant are defined and implemented at the highest level in the organisation

McFarlan posits that the analysis of the IT portfolio not only enables the assessment of how well IT is aligned to the organisations strategy but it helps to define a proper approach to organizing and managing the IT function as a core enabler of the business model (Applegate et al, 2007 pg 37). The strategic grid is useful for classifying systems then demonstrating, through discussion, where IT investment has been made and where it should be applied. It can help to demonstrate that IT investments are not being made into core systems, or into business growth or competitiveness. It can also help to indicate that there is room for IT investment in more speculative ventures, given the spread of investment risk across different systems. It may also provoke management into spending more, or less, on IT.

#### 3.3.2 IT & Business Capability

While there is no clear definition of capability, a number of researchers have different view of what it constitutes. Teece explains capability as the ability of firms to integrate and change internal and external resources to match the environment., further stating that capabilities are based on learning, accumulated experience and technological opportunity (Hedman & Kalling, 2002, pg 83). In simple terms in involves creating new knowledge about resources, goals, tasks processes etc. Concerning IT capability, Ciborra, explains that new knowledge can be acquired to help create competitive advantage through bricolage i.e. learning by doing, tinkering with existing routines which then leads to increase in competences (Hedman & Kalling, 2002, pg241). Competencies developed this way are usually closer to the operative core competency of the organisation. Understanding what strategic capabilities are core to the organisation is useful in determining how IT can best be organized to produce competitive advantage and profitability for the organisation.

IT capability involves knowing what is needed by the organization, what demands are needed and keeping track of technologies to make sure IT can provide for and be in tune with business needs. IT is used to improve activities, which in turn help to build strategic capabilities and enable a more profitable offering. IT function ensures that it can meet the challenge of delivery services with low cost and high quality and thus sourcing skills has become very important for IT managers. Designing the IT architecture is an important capability for IT, this can be two fold, partly a deep technical knowledge concerning systems, standards and technical trends, but also an understanding of the business and its needs. (Willcocks et al., 1997).

#### 3.4 Organizing the IT function (Centralization Vs. decentralization)

Research concerning how IT should be organized is centres around the question of centralization versus decentralization (karake, 2002; Earl et al, 1996). There seems to be no right or wrong answer whether the IT function should adapt one of these forms. The decision should rather be based on the strategic intent of the IT environment, size and the specific characteristics of the organisation at large (Karake, 2002; Gordon & Gordon, 2000). The IT organization should be more centralized if the organization strives for synergies, economies of scale, common standards, cost control and critical mass of competence.

On the other hand, a decentralized IT function has advantages in closeness to the user/customer, responsiveness, business understanding and that the users can control the IT priority. In practice, combinations of the two models are common (Agran et al, 2007). The idea of hybrid structure seeks to combine the two extremes by decentralizing some decisions and keeping some at a central level. This set-up is usually characterized by differences in reporting structures. For example, infrastructure issues are often reported directly to the CIO while question of local applications is handled at a lower level, reported to the CIO via application groups. Although a hybrid structure will not solve all issues it does provides the potential for greater efficiency and integration while not losing responsiveness. Getting the right distribution of managerial responsibilities is an imperative for the IT organization so that the benefits of IT can be optimized by the organisation.

#### 3.4.1 Hybrid System/Shared services

Another design for IT organizations is a hybrid structure called Shared Services. This provides both central shared services for efficiencies and department IT services for effectiveness. Proponents of this system state that IT services and their management is simultaneously centralized and decentralized. Architecture management and support services are centralized while system development and end user support is decentralized. In this design, a central IT department provides the shared services that include IT architecture and planning; standards and guidelines for user interfaces; data management; consolidated help desk; and technical support (data centre operations, voice/data network support) and systems management). Central IT provides technology services to departments using relationship managers. Relationship managers report into central IT, with dotted line responsibility to department managers. Some IT staff would also be aligned with departments and dedicated to

work on behalf of those areas. This structure provides departments with focused IT resources to assist them in developing their needs and requirements, and provides overall corporate coordination, integration and economies of scale (Bennett P, 2003). The primary advantage of the shared common services model lies in resource optimization (cost reduction and increased efficiency). In addition, it encourages a shift towards a culture of continuous improvement through performance objectives.

#### 3.4.2 Organising the IT function for Innovation

Applegate et al discuss organizing for innovation. As stated earlier there are two sets of tensions that arise concerning IT innovation and control (Applegate et al 2007, pg 419). On the one hand is innovation; a firm's ability to innovate using IT depends on management's willingness to take risks and its view of the strategic impact of IT on the organisations success. However, if IT is viewed as just being a helpful support function and management is not willing to take risks then there will be less investment in IT innovation. The second tension is that of control between IT staff and business users, with both groups having different prioritise in terms of how resources should be spent on IT this leads to tensions within the organisation. Business users are usually focused on short term need fulfilments which is directed at solving immediate problems and IT staff focused on more long term objectives such as architectural concerns and need for maintenance.

There is no perfect prescription concerning the decisions about the proper balance between innovation and stability and the degree of IT or user control. Four scenarios are highlighted by Applegate 2007, pg 421-422, any of which can be appropriate for the organisation where rapid innovation is required. They are; from centralized IT driven Innovation to Decentralized user driven innovation. This enables departments and divisions to innovate more quickly around individual agendas. User driven innovation over IT department protests, this involves users spearheading IT innovation without the IT departments inclusion. From centralized user driven innovation to centralized IT management, this involves centralized IT control.

### 4. Wyndham International

This is a summary of the case study adapted from Applegate et al, (2007) page 192-219

#### Background

The Wyndham Hotel first opened its doors to guests in 1982 and by 1985 there were 14 upscale properties in their portfolio. It had franchised a total of 66 hotel and resorts and managed about 17398 rooms in 22 states, the District of Columbia and Caribbean Islands by the time they had an Initial Public Offer (IPO) in 1996. Wyndham Hotels entered a definitive partnership agreement to be acquired by Patriot American Hospitality (PAH) Inc, a paired-share real estate investment trust that was actively looking for an operating company with an established brand as a vehicle for further growth. By 1997 when the acquisition was finalized, Wyndham hotels owned or managed about 106 hotels and resorts with 52 properties already owned by PAH and together they created the United States largest hotel REIT.

#### About PAH

PAH was founded by real estate lawyer Paul Nussbaum as a REIT in 1991. By 1996 it went public, started an aggressive acquisition campaign and was at that time one of only four REITs. It acquired Wyndham Hotels Corporation and renamed it to Wyndham International after the acquisition. By 1998 it had achieved a pair-share REIT status with market capitalization of \$7 billion but during this time there was increasing federal regulatory scrutiny on the REIT structure, tax benefits that were enjoyed by PAH were repealed and its stock price began to slide.

At this time a restructuring took place and a new strategy was adopted, firstly PAH dropped its REIT status and converted to a C-corporation under the name Wyndham International Corporation. It accepted a \$4.4 billion restructuring debt, non-strategic assets were sold and resources were focused on running premier-brand full service hotel and resorts. Wyndham increased its focus on operations and converted many existing properties to the Wyndham flag. Executives with experience and knowledge of operations were brought in to rebuild Wyndham's team. Wyndham launched a \$30 million brand advertising campaign themed "What's Your Request?" in February 2001 The advertising campaign features several commercials that drive the Wyndham ByRequest message home by inviting consumers to "Request the Things that Make Your Room Your Room. This was an IT driven initiative that customized and memorized customer choices and requests and was commonly known as the ByRequest program.

#### 4.1 IT at Wyndham

IT was a tool supporting day-to-day operations of the hotel properties. IT purchases were traditionally regarded as physical asset purchases or capital expenditures and as such fell within the realm of the responsibility of the franchise owner. There was a lack of standardization in the IT function (infrastructure and operations). The Property Management System (PMS) was the brain of the hotel operations. This software was used to maintain current room inventory, check guest in and out, and consolidate charges from various systems and to produce a guest folio. There was a lack of standardized computing infrastructure in a complex lodging industry with its high degree of fragmentation and this resulted in conflicting interest of the parties involved in making technology-purchasing decisions. With the organisations change of strategy and focus to operations a new strategy was developed for IT to align with the organisations strategy.

In 2000, a new Chief Information Officer (CIO) Mark Hedley was brought in to head IT. Prior to his arrival, the IT operations had been outsourced to a subsidiary. The main objective was to integrate the PMS to the CRS and with ByRequest to provide a hotel-oriented IT function. The means to achieve this was done by centralizing the IT infrastructure and operations to serve the needs of the three branded systems; PMS, Call-accenting system and Point of Sale (POS) as well as using Application Service Provider (ASP) model to deliver the software application. This standardization brought about consistency as PMS integrated applications, user interfaces and data fields across properties to make the data usable. It consolidate guest-stay information, there was effective application software upgrade since new versions of software could be sent online rather than send somebody to every single site and ultimately decrease cost.

Wyndham received some early results from its ByRequest initiative winning a CIO 100 award for successful fast track development of wireless access to Wyndham ByRequest. They also

received the Hospitality Technology Lodging Award & Information 500 award for IT initiatives in wireless reservations, wireless check-in, and the ByRequest guest-recognition program.

### 5. Analysis

This section will focus on answering the research question raised in the introduction. In this research, we have described various aspects of the IT function including its responsibility, its importance to the strategy of the organisation and the various ways it could be aligned to operations depending on its impact in the organisation. There is also a summarized case study on Wyndham International that would be analyzed in this section.

# 5.1 How does the alignment of IT to business strategy affect the organisation of the IT function?

As mentioned earlier, according to a survey by Computer Science Corp (CSC), the top concern for senior IT executives is the alignment of the IT function with their business operations (Sid, 1994). With Wyndham International we see a classic case of were the organisation executes a change in strategy. In the beginning, the hotel had franchise strategy characterized by non-standardization. The IT function was decentralized with multiple versions of the PMS systems on different operating systems for different hotels; IT function was that of a support role and was useful for day-to-day operations.

The research shows that the importance and impact of IT in an organisations daily operation could be a strong indication on how best to organise the IT function. Mcfarlan presents his strategic grid as a framework not only for understanding strategic intent of the organisation but as being useful for IT managers in organizing IT functions and brings it in line with corporate strategy. The grid is really concerned with how companies see their current position and use of IT and IS. They can plot their position on the grid – the 'where we are' position. They can then consider where they should be – the 'where we want to be' position (Will cocks, 2003).Whenever management decides to change or implement a new strategy, the strategic grid can be used, by seeing if the organisation is going to shift from its current place on the grid after the new strategy is launched.

Wyndham dropped the REIT status and changed their strategy from franchise strategy to Ccorporation. Its focus shifted to operations with a view to integrating the PMS to CRS and ByRequest to provide a hotel oriented IT function. IT was thrust to the core of the Hotels strategy and this had an immediate had direct impact on the way IT was organised. It was no longer a support function but became a critical part of the new overall strategy and thus could not remain as it was organised, so IT had to reflect the new position. The first effect there was on the organisation of the IT function was the need for a CIO, prior to the CIO, IT operations were outsourced to a subsidiary. The next thing was to standardize and centralize the entire IT function. Hedley chose to centralize the IT infrastructure and support because that is what could support Wyndham's new strategy. The table below illustrates the changes that had to take place with regards to the organisation of IT function as a direct result of the new strategic positioning of the organisation.

Wyndham	Franchise Strategy	Operations Strategy
Strategies		
IT Organization	-decentralized IT system	-Introduced a CIO
	-non-standardized software	-IT insourced
	&infrastructure	-Centralized IT system
	-outsourced IT staff	-All sofware, hardware infrastructure were
	operations	standardized, networked and centralized.
	-IT function plays a support	- Centralized IT staff
	role	-All software updates centrally done through
	-IT purchases charged to	internet
	individual hotels	

Table 1: How changes in Wyndham strategy affects the organization of IT resources

### 6. Conclusion

While a few researchers seem to suggest that the centralized mode of organising IT was symbolic of the past, while outsourcing and decentralization are the modern approach to organising IT. Wyndham International shows the opposite, after the introduction of the CIO in 2002, centralization was the chosen mode of organisation because that was what would best fit the new strategic approach of the organisation. Insourcing rather than outsourcing proved to be a winning formula.

It was interesting to note the drastic turnaround that needed to occur within IT at Wyndham to align with the organisations strategy. However, organizations choose to organize their IT function depends on their circumstances and the priority or otherwise they assign to factors such as efficiency, effectiveness, and business- IT relationships etc. The role of the information technology (IT) function, and its relationship to other business functions, is very important.

Managing and organizing the IT function is obviously not an easy task for the CIO. It must be organized to balance the overall organizational objective, it seems like the IT function is under pressure, internally questions on contribution especially given the reduction in knowledge gap between users and IT personnel and the quest to deliver good quality service at a low cost.

From the isolated unit over 25 year ago to the becoming a necessary part of the organisation, crucial in the support, sustainability and growth of businesses, changes in technology has thrust IT to the fore of business thinking an this changes in technology have helped to create the options for organizing IT function.

This researcher believes that IT managers who have the task of making sure the IT function remains relevant should be constantly be in touch what happens in other departments as well as policies that take place at the overall management level. Greater awareness of these will help to ensure greater success in designing and organising the IT function.

#### 6.1 Recommendation

This researcher will like to suggest that further research be done on the effect of changes in organisational strategy on IT function with different types of organisation. It would be interesting to note if organisational strategies always impact IT organisation or if it occurs in certain industries only.

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