INSEAD

Unisys Corporation:
IT Governance and
Prioritization

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"I remember walking out of Larry's (Unisys' CEO) office thinking that this is a no-win situation. But in hindsight it was a very good judgment because it made us focus on the business value."

Janet Haugen**,** CFO and Senior VP, Unisys, 2004

It was the first key meeting of a long journey that started in 1997. Janet Haugen**,** then Unisys' Controller and today Senior Vice President and CFO, John Carrow, Unisys' new CIO, and Larry Weinbach, Unisys' new Chairman and CEO, had just agreed on a new goal: to radically transform Unisys' IT to support the business and enable growth. An expert in the services industry who had formerly been chief executive at Andersen Worldwide, Larry had been brought in a few months earlier to consolidate the shift in Unisys' strategic direction from manufacturing to services and steer the corporation from a cost-cutting to a growth strategy while focusing on a debt reduction of over a billion dollars.[1] This transformation of Unisys was to be enabled by a parallel transformation of its IT, which was at the time rather outdated, supporting a manufacturing-oriented organization.

This ambitious challenge for Janet and John was further complicated by an additional constraint that Larry had imposed: as the corporation was heavily leveraged and needed to repay its debt, there would be no fresh funds available to invest for Unisys' IT transformation. Janet and John would have to find almost $100 million from existing IT funds for this purpose. Speed was also of the essence to fuel the corporation's urgent need for growth, with a target payback period of no more than18 months for the first major changes.

Janet and John left the meeting pondering their 'mission impossible'. "I remember walking out of Larry's office thinking that this is a no-win situation," Janet said. Both knew that they had to transform Unisys' IT to enable retrieval of reliable, timely and accessible information internally, rendering an integrated view of clients, suppliers or employees, and tapping into new technologies and business applications that would support Unisys' growth and new service-oriented business model. How should they start their endeavor? What IT should they invest in? And how could they stay within the payback period and attain the desired ROI? Since there were no fresh funds available, they knew they had to make cuts to current IT initiatives worth $100 million, almost the size of the total annual IT budget and nearly 2% of Unisys' annual revenues. What decision-making process should they follow to identify these cuts? And, finally, how could they leverage IT to foster Unisys' growth?

Unisys: A Legend of the Information Economy

Unisys Corporation is one of the legends of the information economy. The original company, Remington Rand, was founded in 1927 as the result of a merger between Remington Typewriter and Rand Kardex. Another merger followed in 1950 with Eckert-Mauchly Computers. In 1955, the company merged with Sperry, forming the Sperry Corporation, focusing primarily on computer hardware. Unisys was established in 1986 as the result of a merger between Burroughs and Sperry. This merger made its mark not only because at the time it was the largest in the history of the computer industry, but also because it proved to be a highly complex endeavor with mixed results.

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1   Financial Times: 16 March 2004, p.30, "Weinbach completes U-turn at Unisys".

In the 90s the corporation changed direction towards providing IT services, thus focusing less on product development (see Exhibit 2). Today, Unisys' services mix comprises five lines of businesses: systems integration, outsourcing (applications, data center and network management), infrastructure, server technology, and consulting. Unisys' solutions center primarily on six industry verticals, including financial services, public sector and government, transportation, communications, and media. These solutions are prevalent in everyday life, ranging from the automation of services offered by government (such as passport control), to financial information processing (half of the world's checks and billions of stock trades are processed by Unisys technology), mobile telephony, and airline boarding pass management systems. Unisys is also one of the industry leaders in the outsourcing services industry, managing the IT infrastructure of such global players as Merrill Lynch and Royal & Sun Alliance. In 2003, Unisys acquired the operations of KPMG Belgium, further strengthening its services portfolio. Meanwhile it continues to design and sell some of the most powerful enterprise servers available in the market today.

Based in Blue Bell near Philadelphia, PA, and listed on the NYSE (see Exhibit 1 for some key 2003 financial data) Unisys is today a true multi-national Fortune 300 company with a presence in over 100 countries around the globe. With over $5.6 billion in revenue in 2002 and over 36,000 employees worldwide, Unisys Corporation is one of the major players in the industry.[2] Its main competitors include, among others, IBM Global Services and EDS. In 2002, 76% of the company's revenues came from services, and 56% of its revenue was generated outside of the United States (see Exhibit 2).

The IT Challenge

"In 1997, the state of IT was a reflection of the company to some extent."

John Carrow, Unisys Corporation CIO, 2004

When John Carrow came to Unisys as CIO in 1997, the state of IT was largely a reflection of the company as a whole: the previous chairman had decentralized the operations of the company to three business units (server technology, services, and desktop technology) and had also decentralized IT within those units. Leadership was itself de-centralized. The IT strategy revolved around building applications for a manufacturing organization as needed by its different business units. At any one moment the company would have a number of IT projects underway many of which had gone over budget, over time, or had failed. Unisys had an IT staff of 1,200 people, duplicate legacy systems, many of them not talking to each other while requiring major management overhead to keep them running, and complex, non-standardized infrastructure. The IT organization was using technology from many different vendors, as well as some proprietary solutions – although at the time Unisys had no strategy for using the technology it sold. John recollected his challenges at the time:

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2   Datamonitor Business Information Center: Unisys Corporation; Unisys Corporation 2003 Annual Report; Hoover's On-line: Unisys Corporation Company Overview.

"I had been here for almost 6 months, and it was clear from my perspective that we had an IT organization that was very expensive; it was very fragmented primarily because of the way the company was operating, with the number of systems that it was taking to run the company (some 750 applications), a lot of them redundant, and many of these were custom applications."

The resulting "spaghetti chart" entailed significant maintenance and administrative costs, and spawned operational inefficiencies. For example, in 1997 Unisys had 14 instances of Oracle Financials around the world and rationalizing the information was a very time-consuming process: it was taking between 10 and 12 days for the company to close the books. For procurement there were 47 different ways to buy the same thing. The effects of the "spaghetti chart" IT were felt across all ranks, all the way to the chairman's office. Everyone still remembers the day when Larry, as new CEO, in a quest to better understand the fundamentals of the company's operations, asked Janet for some seemingly simple information: the list of the company's 100 largest customers. What he expected to be a routine request proved to elude Janet for two and a half weeks. And even when the information was finally compiled, the No.1 customer of Unisys turned out to be "unknown". "Legacy" stories like this were what led to that key meeting between Larry, Janet and John in 1997.

Deciding upon Unisys' Cornerstone...

"This initiative has an extremely important goal: assuring that all of us can confidently and consistently access the information we need to better serve our customers, shorten our sales and marketing cycles, and more effectively control our costs...This project will give us that competitive advantage and allow us to concentrate on the value we each add to help Unisys grow profitably."

Larry Weinbach, Unisys CEO, June 1997

Janet and John responded to the challenge after that meeting with Larry in 1997 by launching a major turnaround IT initiative whose goal was to transform the corporation from within. Dubbed 'Cornerstone', to emphasize the fact that this was the cornerstone of the emerging IT strategy of Unisys, it was an enterprise-wide initiative to simplify and standardize business processes and build the information architecture to support them. As such, Cornerstone constituted a unique opportunity to drive change in the company's business processes and align its IT accordingly. The end goal was aptly summarized by the motto "One Unisys, One Process, One System". For example, Larry wanted a common time reporting system that everyone would use and that would be implemented up-front in order to reap the change management benefits – it also led to gains being reported of up to $25 million in just four months.

Cornerstone was to comprise three main components (see Exhibit 7 for its key milestones).

- An ERP system to provide the necessary standardization of business practices and simplification of the IT systems design,

- A Customer Relationship Management (CRM) system to enable the development of a global, customer-focused organization,

- A Knowledge Management (KM) system to leverage and share the knowledge and experience of the organization's human resources.

Significant hardware investments were also to be made – an average of $3-4 million a year for the technology to support the Cornerstone project.

The details, however, were far from clear. As David Gardiner, VP Architecture and Technology, emphasized, "The end in mind was not available in 1998." The Cornerstone initiative grew from a large-scale IT implementation of ERP into an IT transformation initiative that dramatically changed the way IT was run at Unisys.

...and Transforming the IT

Things started changing when Larry Weinbach joined Unisys as the new Chairman and CEO. Larry had a totally different vision of the direction of the company. It was now clearly stated that the direction of the company would be towards services. He planned to swing from 80% hardware and 20% services to the reverse ratio. He also wanted to run the company in a highly centralized way, with strong corporate governance from the top and the fundamental direction and strategy set by the center.

Larry's approach to centralization gave the CIO the capacity to make changes to the IT organization. In late 1997 Unisys centralized IT across the corporation (see Exhibit 4 for the organizational chart of IT at Unisys). This consisted of all of the applications used to run the company, the staff, and all infrastructure (networking, desktop support, email systems – nine of them at the time, etc). One of the basic principles was that IT would be simple, quick in terms of its operation, and standardized. For example, today there is one supplier of personal computers and server hardware where six years ago there were three. Today, the entire infrastructure, with very few exceptions, runs on Microsoft Windows – six years ago that was not the case. "There is a long list of this kind of project at the infrastructure level," David explained.

Unisys also abandoned its former practice of developing proprietary applications and opted instead for state-of-the-art, out-of-the-box solutions from what was then available in the market. For example, the three main components of Cornerstone (ERP, CRM, and KM) were purchased. Thus, the challenge became how to manage risk and relations with vendors. For example, the "buy it" approach for KM did not work smoothly: the first vendor soon went out of business, and in the case of the second vendor, the business users complained that the software solution did not adequately support their needs. Even though Unisys was six months in the implementation of the KM portal, it swiftly decided to replace that technology, despite the funds already invested. The third solution finally proved to be a better option and was quickly deployed.

For the ERP, Unisys chose an existing vendor from whom it already had a number of ERP modules across the organization. Despite the fact that the technology was missing certain modules or functionalities, Unisys collaborated closely with the vendor and its partners to get a solution that met its requirements. Central to Unisys new IT strategy was the principle that Unisys would minimize any "bolt-ons" potentially needed from the vendor's partners. "You watch those bolt-ons like a hawk," David explained. "You try to minimize these… because all of a sudden you purchase one more piece of IT from one more vendor." For example, Unisys talks to its ERP vendor every year, in depth, about the evolutionary strategy of its product and maps that against the bolt-ons and the business functions Unisys wants to standardize in the future. "We make a plan and have a managed applications turn off process," Janet explained.

Unisys also opted to rely heavily on the server technology that it was developing, despite its early development stage and issues with scalability and stability. "When you can, you try to use what you sell," David explained. This is today a key principle of Unisys IT strategy.

The transformation of the IT organization required itself certain investments, managed by John with little interaction with, or even visibility to, Unisys outside the IT department. Unisys moved from a 1,200-people IT organization that was building software to an 800-people organization that was not going to build but to buy. This also meant that it had to get new skills and train the IT people to handle software packages like Oracle, Siebel, etc. It also standardized the IT infrastructure and transformed its network – a major cost element of business – from a multiple vendor environment to a more standard network with fewer vendors. All with the sole goal of reducing the cost of IT operations.

Collaborative Leadership

> *"We sat together (with Janet) and we walked through the entire information systems flows for the US and international financial systems, and it was clear to see on day one the complexity that existed in this company."*

> John Carrow, Unisys Corporation CIO, 2004

To ensure alignment of IT with the business strategy, throughout this transformation Unisys adopted a model of collaborative leadership between the CFO and the CIO. At a high level, the collaborative leadership happens as the CFO and CIO build together the overall IT framework – i.e. the goals and challenges for the next two to three years. John, who reports directly to Janet, is then responsible for the execution of the IT strategy, focusing on technology implementation, methodology identification, and managing the IT group. Janet explained the depth of this collaboration:

> *"I had to learn a lot about John's environment, and John had to learn a lot about my environment. (…). I also had to learn things like what 'latency in a network' meant."*

Collaborative leadership between business and IT has been further enabled by Program Management Offices (PMOs) that are central to the management of technology at Unisys. Designed in late 1997 to support the IT transformation, they were formed at two levels: a corporate PMO (CPMO), and business unit level PMO. They foster the standardization of the practices across the organization and provide the necessary project management expertise both centrally and locally. The CPMO belongs to the IT organization and as such is independent from the PMOs which belong to the business units. The CPMO is a key component of the orchestration of the collaborative leadership, as John explained.

"The Corporate PMO reported directly to Janet, not *to me, and we took the IT organization and aligned it with the CPMO and made it report to me. So this enforced the collaboration between Janet and myself. In some cases Janet would propose functional people for a role that I would raise an issue for; in other cases I would propose IT people Janet would have an issue for. So we had to collaborate and agree and build teams that were working together."*

Despite their different organizational locations, the CPMO and PMOs share – as a cross-functional practice – the same tools and methodology. The CPMO manages the portfolio of all the initiatives the IT organization is working on. It also provides the necessary assistance at corporate level to help align IT proposals and projects with the business strategy. A key task of the PMOs, that is also central in the collaboration of Janet and John, is their involvement in the prioritization of new IT projects. Unisys has formalized the IT prioritization process over the years since 1997. As a result, 2004 is the first year that all new IT projects have been approved via this process.

IT Investments at Unisys

Fundamental to the transformation of IT and the business was Unisys' focus on formalizing and improving the decision-making process for investment priorities and resource allocation. After all, Janet and John had to make educated decisions about cuts in existing IT systems in order to find the $100 million needed for the IT transformation. Before 1997, Unisys used to take investment decisions function-by-function, focusing primarily on the operational needs of business units. For IT investments in particular, Finance would define the available budget for each area of operations, and decisions would be taken at a regional and business unit level by the IT departments, to support the local operational system requirements.

Since then, Unisys has moved towards a new governance system with a more centralized and transparent decision-making process. The supporting structure ensures that ideas and requirements from across the organization are evaluated on the same basis. Furthermore, potential projects compete for resource allocation across functions. A marketing initiative may thus be competing against an IT one, as Janet explained:

"Any budget that we do is a matter of resource allocation… The challenge for a decision maker is to find where is that optimal point, not just for the IT organization, but how it fits in with the investments that need to be made across the organization."

The annual budgeting process starts in August and is done at a global level. Every project that requires more than 80 hours every year (decision-making for smaller scale projects is handled by the IT function directly) is gathered from across the organization. Projects are categorized by three types:

a) "Run the business": investments that keep the business operational (i.e. maintenance) or improve current operations (i.e. reduce cost);

b) "Grow the business": investments that expand the organization's scope of products and services or facilitate financial growth;

c) "Transform" the business: investments that fundamentally redesign or introduce new business processes, operations, products or services.

Common templates are used to gather the necessary data for each initiative and build a proposal. Each proposal or request for funding captures, among others, the scope of the requirements, the impact on the business, the technology and resource requirements, the business sponsor, and the risks involved (see Exhibit 6 for some common risks considered). Ownership of the project is important. As Janet stated, "No IT project is going to be successful without strong functional collaborative leadership of both organizations."

The business unit PMOs assist the originators of the requests to build the proposals. They check for duplicate requests (that nobody else in the business unit is trying to do the same thing) and filter the proposals for regulatory and internal policy compliance, ensuring that no proposal that fails in such aspects advances to final decision-making for investment. Then a steering group, consisting of representatives of the different functional areas and business units, takes all the successful proposals for analysis, filtering and rating against one another to generate a list of prioritized requests for investment. The final decision on fund allocation lies with the executive committee, consisting of the chairman, the CFO and the presidents of the business units among others. They meet once a year to take the investment decisions, considering all funding requests at the same time to identify the highest business return. As such, an IT proposal with a higher payback may be preferred to a proposal for a new program, or a marketing initiative. They will all be judged on an equal basis, on the same criteria. This approach enhances transparency and better understanding of the decision-making process, ensuring that the result better supports the business strategy. Therefore, whereas one year the executive committee may focus primarily on IT investments to build competitive advantage, the next year it may opt for more marketing initiatives. The final decision is then made public. "We share with everyone the results. This way everyone is accountable not only to the executive committee, but also to their peers whose IT proposals did not get approved," Janet explained. Finally, ownership is assigned to the proposals that get funded, and Unisys then monitors the execution of the selected projects particularly with respect to time-to-market (delivery) and payback.

The prioritization criteria applied throughout this process include the proposal's strategic importance, its payback, and its time to market. Janet notes that "Any IT investment has to be about the business and it has to move the business forward from a strategic standpoint." Savings are broken into hard and soft. Hard savings are visible and measurable, on which the business case for the proposal is based, and include hardware, software, network and personnel savings, cost reductions, etc. Soft savings comprise the benefits beyond the business case and may include such intangibles as business intelligence, change management benefits, better understanding of the business, system availability, etc. In cases where a proposal has mostly soft savings, the group will define a set of measurable business results and relevant targets.

The Knowledge Management initiative, for example, fell largely into the soft benefits category. Indeed, it was very hard to pinpoint hard cost savings. The "go-ahead" was a strategic decision, grounded in the intuition that "in the business we are in, we need KM". Instead of implementing it throughout the whole organization, they started by asking themselves "Where is the biggest business payback for using KM?" This led them to choose pilot groups for the first phase of the implementation. Moreover, they made the decision to implement KM "with specific results for which [they] set specific targets to measure them against in the future (i.e. how many interactions were happening, how many proposal ideas were shared, etc). This exemplifies the general IT principle followed by Unisys, as Janet explained:

"I believe that in order to maximize the investment from an IT standpoint, you have to have a goal in mind as to where you are going; you have to have both the functional and the IT organization focused on the business outcome of the investment that you are trying to achieve, and then quantify it and measure it."

Often the proposals require customizations of off-the-shelf software to fit particular business needs. Conscious of the costs and risks of such customizations, Unisys has developed a strict three-tier filtering process for assessing these requests:

1) "Standard practices": If the request for funds is for a standard item, such as account reconciliation, the group checks whether an existing third-party solution can be used to get full value, even if this implies changing the current business practices internally. This eliminates the need for customization.

2) "Industry specific solutions": If the request for funds is for an item where there are industry-specific solutions, such as project management or accounting, the group verifies the need for compliance, avoiding proprietary practices, and investing only in areas where Unisys does things differently from the competition.

3) "Strategic advantages": These constitute a small percentage of the total requests for funding. Here, the group promotes investment in solutions that give the company a strategic advantage, such as high-end, mission-critical server configuration. For example, in the technology business with high-end servers designed exclusively for the customers, Unisys "configures the box within the box" and has to be able to do so even though most standard software does not allow it.

In the case of IT infrastructure proposals, ownership is shared between business and IT. Even in cases of very IT-centric projects, a member of the executive committee is assigned as a business owner. In such cases, the executive committee also sets up certain parameters for the IT organization – such as "99.9+ availability" – through the definition of Service Level Agreements (SLAs). For some of these investments there is not necessarily a clear business case. For example, all the transactional systems – such as IT from Oracle, Siebel and Peoplesoft – flow through an enterprise datawarehouse that provides common reporting across the Unisys world. As John explained: "We did not put together any business case for that – and for the Business Objects system for which we have around 9,000 users around Unisys. Those are clearly architectural decisions done in IT. We do not take it to the executive committee and explain what a datawarehouse is because it would get lost in the strategic thinking of the organization. You make those decisions because they are the right thing to do – this is a matter of a business judgement."

Emerging technologies are followed in a careful way, taking a "calculated risk". For example, web-streaming technology was followed closely for about three years. These technologies are tested within a conference room environment, and when the economics and technology are right Unisys invests in them if needed. It's a matter of making educated guesses about these technologies, as Janet confessed: "Frankly, you make your best guess as to what that environment will look like in a couple of years because it changes so constantly."

The annual centralized budget allocation process finishes with a complete list of projects to fund for the next year. However, it is neither a static process nor a one-time annual event. Unisys has built a second decision-making process for funding requests that come throughout

the year. This updating mechanism, called the PIP (Process for Internal Projects), aims at engaging people with new ideas. It follows the same structure as the main budgeting process, where a proposal needs to be put together first, using specific templates (see Exhibit 5), and then gets filtered by the business unit PMOs and finally the CPMO.

Reaping the Benefits

The Cornerstone project has been a resounding success over the years, with a 166% return on investment for the three main IT pieces (see Exhibit 8 for some key costs and benefits of Cornerstone), and a better-than-desired payback period of 14 months. Unisys designed and implemented a leaner and more flexible IT infrastructure, reducing its legacy applications from 750 by two thirds. Consequently, the company managed to reduce its annual IT capital expenditure by 20% and significantly lower its total cost of ownership. IT at Unisys is today considered to be a world-class performer, with a system availability of 99.99% on a 24/7 basis globally, and with reliability levels up by 80%.

The business benefits are also becoming visible. The corporation can now close its books within a few days. Its business intelligence capability has been significantly strengthened, easily retrieving information on key business metrics. The client management practices have been transformed, enabling Unisys to win large-size global outsourcing contracts, for example. Knowledge and expertise is shared, with information flowing fast across the organization, supporting corporate best practices with local variations wherever necessary. The improved culture has helped the company put its performance problems behind it. For example, its procurement processes have been standardized and centralized, sharply reducing the number of suppliers the company deals with worldwide and forging closer relationships with them.

The Optimization Road Ahead

Although to a large extent Janet and John feel their efforts in the past five years have paid off, there is still plenty of room for improvement. As David explained, "Once you accomplish your gross level problem correction, then you are looking for some very broad opportunities to *optimize* your business. For example, can we achieve greater levels of business flexibility, speed, adaptability, and lower costs?" In 2003 Unisys decided to audit its IT operations and evaluate the margin of improvement accomplished since 1997. While it validated the belief that the corporation had indeed become a world-class organization in terms of its IT, it also demonstrated, coupled with the need to address the pressures posed by the new Sarbanes-Oaxley regulatory framework,[3] that there was room for improvement in the IT processes used. As David explained, "We standardized our business processes, but we had multiple processes and multiple toolsets internally in IT for doing what we are doing."

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3 The Sarbanes-Oxley Act was signed into law on 30 July 2002, and introduced highly significant legislative changes to financial practice and corporate governance regulation. It introduced stringent new rules with the stated objective "to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws" (from http://www.sarbanes-oxley-forum.com/).

Unisys decided to address this requirement by adopting the CoBit methodology (see Exhibit 9) developed by the IT Governance Institute and used by organizations as one of the tools for auditing and optimizing IT processes. CoBit enabled Unisys to frame how IT should be managed, modeling the underlying processes and capturing the corresponding control mechanisms. This documentation work became, in effect, a blueprint for how the IT organization would function.

Unisys has decided to leverage its experience and accumulated knowledge to build a business proposition to its clients to do the same with their IT operations. It has formalized a new service, 'Blueprint', to provide the necessary tools and methodology for a company to understand its operations. The goal of Blueprint is to build a three dimensional model that maps out the organization across four levels: a) business vision & operations, b) business processes, c) applications & architecture, d) systems infrastructure technology. The resulting model is called the 3-D Visible Enterprise (see Exhibit 10). It provides invaluable insight into the way the corporation works, identifying not only the practices at each level, but the interfaces and linkages across levels as well. The automated model enables analysis of different scenarios through simulation of 'what-if' situations from a process and technical standpoint. It also supports a comprehensive documentation of the company that can support such critical needs as compliance within regulated environments (e.g. the Sarbanes-Oaxley regulations).

Blueprint is becoming a new service offering of Unisys. It is, in simple terms, a package of all the knowledge that Unisys has accumulated from 1997 up until today on how to run IT, combined with some principles from CoBit. Will Unisys be able to sell this to its customers? Is it even possible to provide such a service package to an organization? Of course, the best proof of this would have been if Blueprint had been used by Janet and John in 1997 to transform Unisys' IT, but the knowledge incorporated in Blueprint did not exist at the time. Does it exist now? Did Unisys make good choices throughout almost six years of transformation? Could Janet and John have done things differently or better? For example, was it a good idea to centralize the IT? What did Unisys gain from the transformation it went through, and what did it lose?

Exhibit 1

Key Financial Figures for 2003

UNISYS CORPORATION	2003	2002	2001	2000
Annual Sales ($, mil)	5911.2	5607.4	6018.1	6885
Annual Net Income ($, mil)	258.7	223	(67.1)	225

Stock (close 9-Feb-2004) $13.80

Basic EPS $0.78

P/E Ratio   17.69

Current Ratio   1.04

% Owned by Institutions   68.7%

Source: Hoover's On-line: Unisys Corporation Company Overview.

Worldwide Client Base:

2200 Financial Services Clients

1500 Government Agencies

90 Communications Providers

200 Airlines

200 + Newspapers

Source: Unisys documentation.

Exhibit 2

Unisys Corporation: Lines of Business and Services Mix

Exhibit 3
Unisys Corporation Executive Committee Organizational Chart

Executive Committee

	Chairman and Chief Executive Officer **Larry Weinbach**	
		Vice Chairman **George Gazerwitz**

Operations **Joe McGrath**	Finance **Janet Haugen**	Human Resources **Dave Aker**	Strategic Communications **Dick Badler**	Office of General Counsel **Nancy Sundheim**

Source: Unisys documentation.

Exhibit 4
IT & Finance Organizational Charts

Unisys IT Organization

John Carrow
VP / CIO — **Anita Pietrzykowski**

- **Communications – Steve Horner**
- **Audit – Michael Griffith**
- **Unisys University - Dee Coyle**

- **HR – Jim Lynch / John Nestoriak**
- **Finance / Accounting – Mike Wilde**
- **Contract Management – Stan Griffing**

Theatre Relationship
Graham Manley
Europe

Dixie Herdsman
LACD

Maria Claudia Romero
SPD/AD

Open
North America

Joe Poppel
Global Outsourcing

David Gardiner
Architecture & Technology

Gregg McDonald
IT Process & Controls

Sue Jorfi
Marketing & Sales, Business Intelligence & Reference Systems

John Golisz
Global Financial & Business Systems

Kerry Ruhl
Systems Security

Bob Babas
Service Operations

Chris Brannen
Supply Chain Applications

Ed Shields
InfoHub – Data Center

Source: Unisys documentation.

Exhibit 5
Annual Budget Process

Collect Requirements	Build Proposal	Evaluate & Filter Proposals	Allocate Funds	Assign Ownership & Monitor
Interviews with Business Units/Function Leaders	Scope Business Impact Technology & Resource Requirements Work & Cost Estimates	Analyze Reqs, ROI, Time to Market, Hard & Soft savings Rate Proposals 3-Stage Filter Pass/ Fail Gate	Compare inv. Proposals across organization Select based on business return, corp. strategy Pass/ Fail Gate	Executive Ownership Monitoring Plan
Business Units	Business Units Unisys IT	Steering Committee	Executive Committee	Executive Committee

Exhibit 5a: PIP Process Template

● Idea/Need

Build Business Case & PIP	3-stage filter	Analyze Proposal	Imple-ment?	Define Requirements	Approve Plan?	Design, Build, Test & Release
Identify Business Requirements Conceptual Solution Prepare PIP document Collaborate with PMO	Apply 3-stage filter for customization Filter out duplicate projects If proposal not compatible, it stops (Go/No-Go decision)	Build Project Plan Risk Management Implementation Plan	Go/No-Go decision to implement proposal Funding Allocation	Define detailed solution Project Management	Attest Feasibility of proposed solution If not complete, return for revision	Build Solution Test Transition Communica-tions Production
Business Unit PMO	PMO	Business Unit PMO (supporting)	CPMO PMO (supporting)	Business Unit PMO (supporting)	CPMO PMO (supporting)	Business Unit PMO (supporting)

Exhibit 6
Common Risks of IT Investments as Identified by Unisys

Executive Commitment

1. Continuous support from key business executives
2. Continuous support from executive sponsors

People

1. Re-training / Re-orientate user
2. Technology learning curve
3. Process re-engineering learning curve
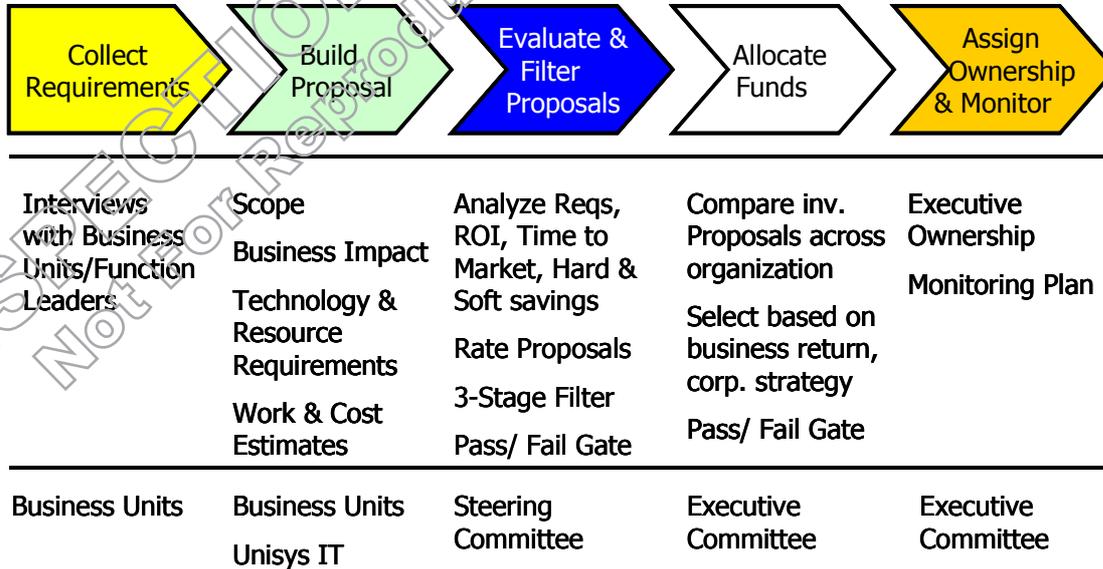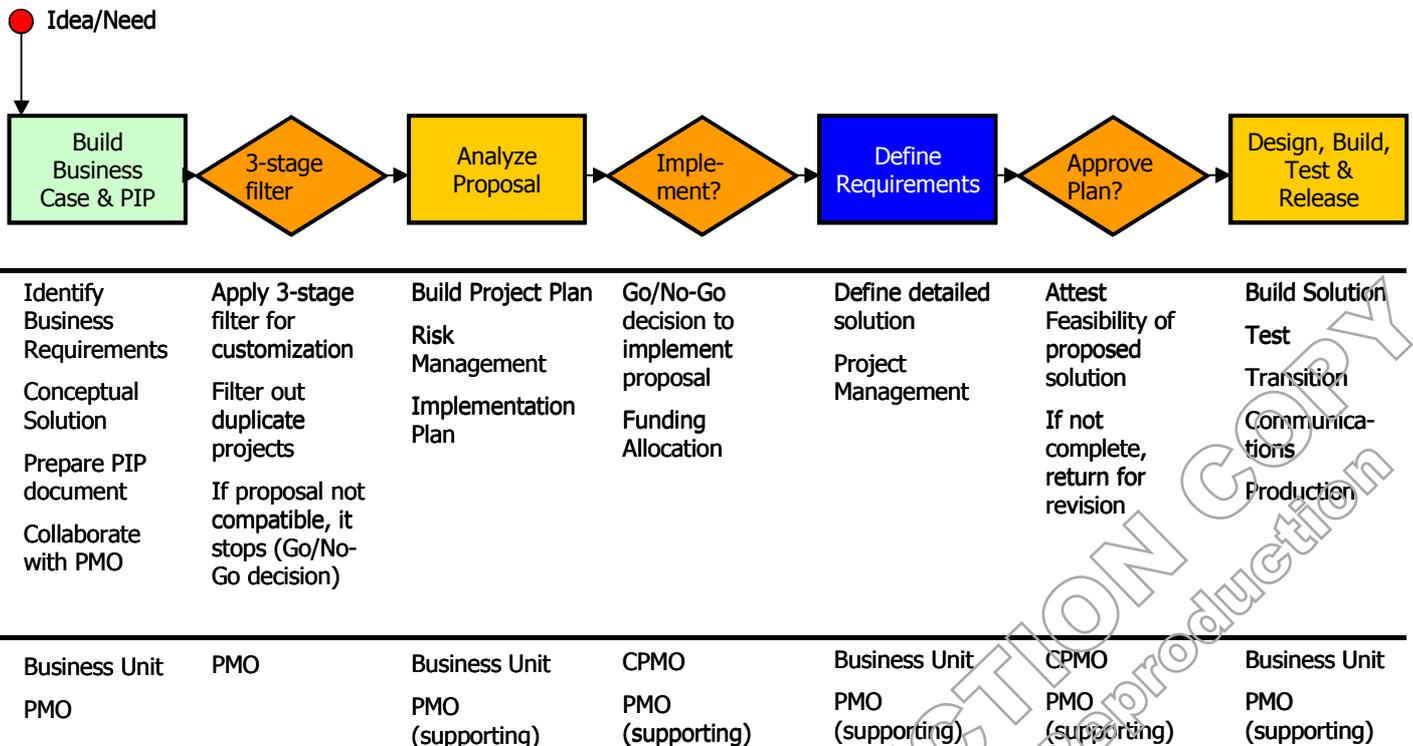4. Retention of key personnel
5. Managing external resources - e.g. external consultants, vendors etc.

Hardware

1. Dependent on technologies that are not available yet
2. Scalability of hardware to meet increasing processing demands
3. Dependency of standardized desktop platform for supportability and compatibility (based on selected enterprise solution software)

Software

1. Selected applications (software) may not meet all the unique business requirements
2. Reliability and financial soundness of the software vendor

Change management

1. Managing changing business needs and ability to adapt solutions in a timely manner
2. Culture change

Source: Unisys documentation and private communication.

Exhibit 7
Cornerstone Timeline

Cornerstone Timeline

RELEASE 3

ERP: 3rd Party Procurement & Order to Invoice, Financials - US

RELEASE 4

ERP: Rollout of Release 3 to Canada, Latin America

RELEASE 2

ERP: Time Reporting - US

RELEASE 5

ERP: Rollout of Release 3 to Europe, Asia-Pacific

RELEASE 1

ERP: Global Purchasing & Product Reporting

RELEASE 6

CRMDeployment [ERP: Product Manufacturing. & Eng deferred]

RELEASE 7

Knowledge Management System

| 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |

Exhibit 8
Key Costs and Benefits of Cornerstone

ROI = (Savings from what can be clearly measured)/(full investment costs)

Hard Savings

- Hardware (areas where you do not want to invest new money in existing systems)
- Software (applications you do not want to invest new money in)
- Network Costs
- Internal Costs (headcount & business divestment)
- Leveraged benefits

Soft Savings

- Business Intelligence
- 24x7 operations
- Comprehensive view of the business
- Change management benefits (including culture)

Exhibit 9
The COBIT framework

(From the IT Governance Institute, http://www.itgi.org/ and www.isaca.org/cobit.htm)

M1 monitor the processes
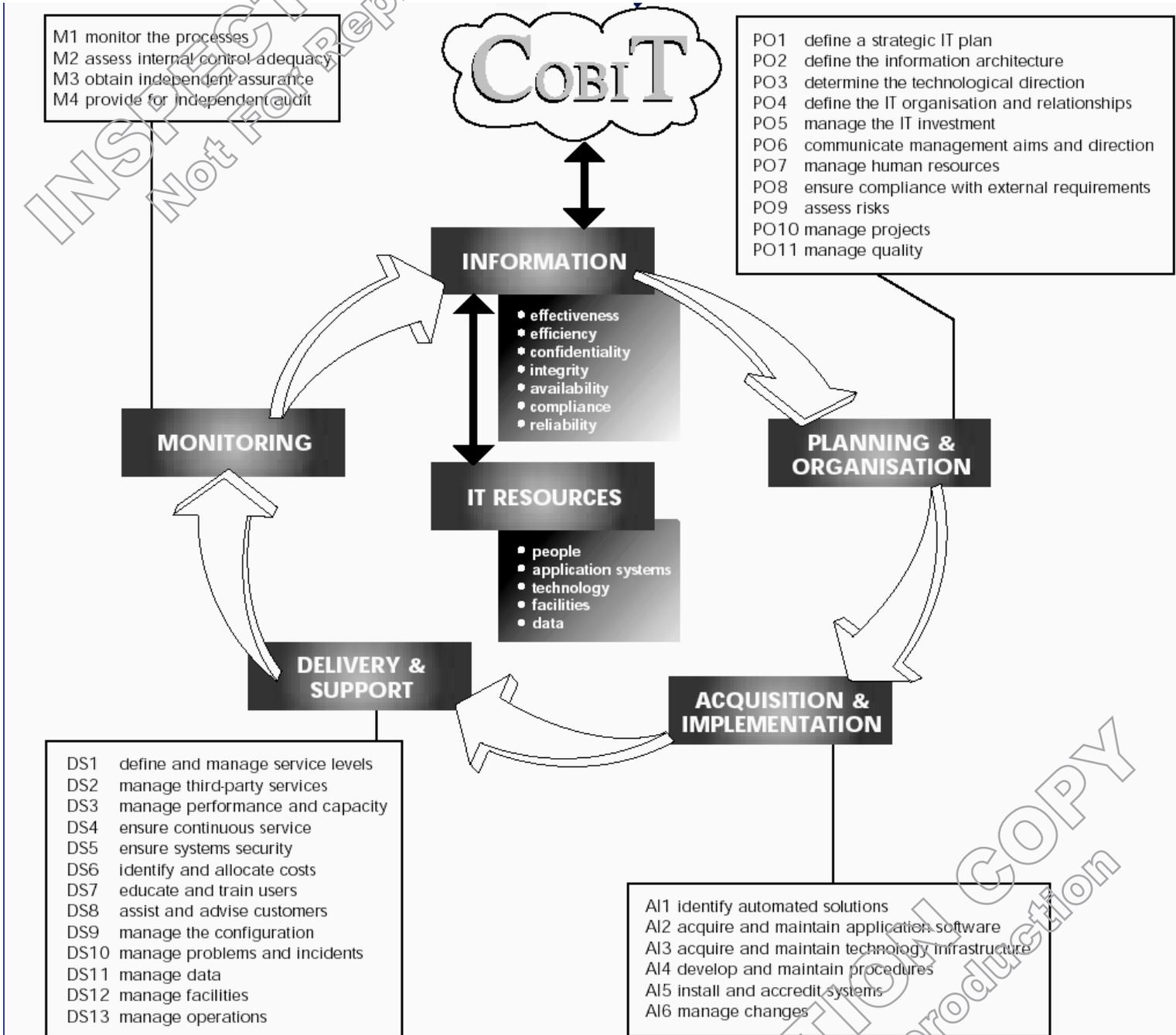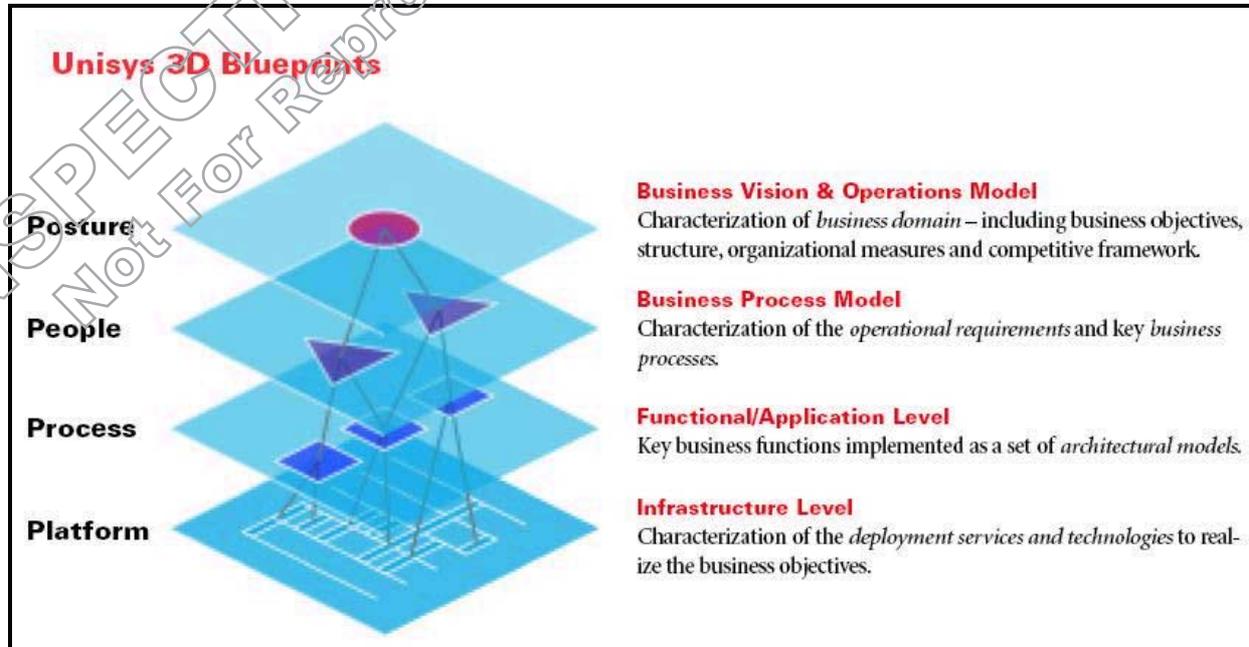M2 assess internal control adequacy
M3 obtain independent assurance
M4 provide for independent audit

PO1 define a strategic IT plan
PO2 define the information architecture
PO3 determine the technological direction
PO4 define the IT organisation and relationships
PO5 manage the IT investment
PO6 communicate management aims and direction
PO7 manage human resources
PO8 ensure compliance with external requirements
PO9 assess risks
PO10 manage projects
PO11 manage quality

INFORMATION

- effectiveness
- efficiency
- confidentiality
- integrity
- availability
- compliance
- reliability

MONITORING

PLANNING & ORGANISATION

IT RESOURCES

- people
- application systems
- technology
- facilities
- data

DELIVERY & SUPPORT

ACQUISITION & IMPLEMENTATION

DS1 define and manage service levels
DS2 manage third-party services
DS3 manage performance and capacity
DS4 ensure continuous service
DS5 ensure systems security
DS6 identify and allocate costs
DS7 educate and train users
DS8 assist and advise customers
DS9 manage the configuration
DS10 manage problems and incidents
DS11 manage data
DS12 manage facilities
DS13 manage operations

AI1 identify automated solutions
AI2 acquire and maintain application software
AI3 acquire and maintain technology infrastructure
AI4 develop and maintain procedures
AI5 install and accredit systems
AI6 manage changes

Exhibit 10
A Snapshot of Blueprint

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