



## **The Holy Grail of Information Management** A Treasure Hunt for Value

February 2019

## The Quest (ion)

**I**nformation and Technology, usually known as Information Technology (or IT) – where would our world be without it, and where would we be going? From traffic lights that tell us when to go, to the miracle of technology that makes it possible that we

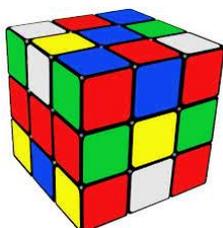
“Where did we go wrong?”

have lights in our offices and running water from our taps, to the sophisticated Enterprise Resource Planning systems prevalent in virtually every single business these days, technology has become an integral part of our lives. Even more important is the information these systems are gathering, processing and storing, information on whose accuracy, timeliness and availability business decisions impacting the wealth of every company and individual are made. Hard to imagine that computer technology was first invented in the 1940s – a mere seventy years ago. Even fifty years ago, the idea of widespread computer use for business purposes seemed preposterous to most – too expensive, too time-consuming, too difficult to program and too much trouble to understand.

Nowadays, the war stories of information technology (IT, for short), are far different. In recent times, the quest for ‘using technology’ efficiently yet effectively has transformed into a quest for ‘staying current’. Never in history has the rate of change in technology been this fast, and, yet it seems that this same exponential growth never will be this *slow* ever again either.

Executives are facing a conundrum - *adopt, adapt and transform or become irrelevant*. The digital transformation of business has become a focal point with supporting technology trends, including Internet of Things, Big Data, Machine Learning and Artificial Intelligence, thereby inadvertently shifting business models.

These struggles are by no means abstract and can be summarised in the below studies. Let’s take a moment to explore some of them by joining two executives in their day to day duties, as they negotiate fraught conversations with peers and board members.



## The CEO who struggles with failed projects and managing information security

Jane Lee stared at the row of stone-faced – and very angry- Board members. It was just over a year since she’d decided to take on the role as CEO of Amalgamated Holdings, a conglomerate on the up and up at the time, a decision she certainly was questioning now. Her carefully prepared management responses in explaining the root causes of many IT problems seemed glib and insincere.

“The system crash caused delays in plane take-offs for almost 48 hours. Do you have any idea how much money we lost?”

Jane knew. “The halt in operations puts **losses in the millions of dollars**<sup>i</sup>, not to speak of the fallout from **loss of consumer confidence** that will require investment into marketing campaigns and smoothing over ruffled corporate feathers, and then of course there is the cost to fix the system and prevent a future mishap.”

“Didn’t we **sink millions into this project** to begin with? Who was so smart to decide on Unknown Company Inc. for the implementation of this?”

Jane repressed a weary sigh. “Unknown Company Inc. was the **lowest bidder that could prove compliance**<sup>ii</sup> with our terms of reference. They had good credentials - “ Before she was finished, another executive interrupted.

“How could this have happened?”

“To speak plainly, a lot of things factored into this. From the beginning, we didn’t know what we were getting ourselves into; we **completely underestimated the effort** that this would take. We **didn’t include the correct people** in the project from the get-go. In fact, we didn’t even know who they were until it was too late. We were already way over budget when the due date for

“How could this have happened?”

implementation came and we **never should have gone live** then. We couldn’t stress-test the system in a live environment, which eventually led to the hardware burning out when the system got overloaded. Add to that that **our project manager left** in the middle of the project and we **didn’t have the skills or the resources** to replace him and he **didn’t document the process**<sup>iii</sup> in a manner that allowed the outside consultant – who by the way, had no clue about our business anyways- to pick up where he left off.”

“So who’s to blame?”

Jane unlocked her car and slumped into the driver’s seat. That probably could’ve gone

"Why are our costs so high?"

"Could we have prevented this?"

better. Before she could muster the energy to start the car, her phone rang. It was the IT manager.

"So... how did it go?" he asked cautiously. "As you may expect," Jane replied. "You're not going to like this one bit then," the IT manager said, "We **suffered a cyber-attack**<sup>iv</sup> last night. They hijacked our Oracle servers through a **known vulnerability** that should have been patched three months ago already." "What did they do?" Jane could hear her voice wavering. "Apart from using our server capacity to mine Bitcoin? The entire database for InterMed is gone. All the patient medical records, billing information, doctors' practice details and their account information." Suddenly, it was icy in the car, despite the summer heat. "Gone?" Jane repeated hollowly. "Gone. Who knows whether they made a copy to sell before they destroyed it, but I'd bet it." "Do we have backups?"

"Usually, yes, but the **latest full backup is on re-used tapes that lost integrity** over time. I've already escalated to Legal and asked that they look into our options with the third party service provider, but we **never updated the SLA**<sup>v</sup> since we entered into the contract in 1987 and it's unclear what their responsibilities really are. I've got my administrators all working on trying to recover the data, but frankly, it's a lost cause. It would help if we knew exactly where the data is generated and see whether we can reconstruct it like that, but we **never bothered to document** any of that."

Jane sighed. "Any good news in all of that?" "Well the public doesn't know yet. And we don't think we had any European citizen's data stored. Else we **may be liable under the General Data Protection Regulation**. Remember I asked at the last update meeting that we look into that?"

"Why is our competition so far ahead?"

Jane remembered. At the time, the likelihood of a fine had seemed remote. She'd had other issues. "Just do what you can, okay?" She hung up, already certain that at least two of the companies under her direction were doomed, and they could easily drag the rest of them down with them.

## The CFO who battles with IT costs and investments

John Smith, CFO of Finances Incorporated, stared at the latest IT report that the IT manager had emailed. They'd spent no less than 15% of profits on various licences and maintenance fees for **software that was hardly used** and an **expensive upgrade** to the hardware over the past quarter. How was he going to explain this to the Board? The figures weren't going to help much, here. He dialled the IT manager's extension.

"Hey. I got your figures, thanks. Any suggestions on what to tell the Board?"

"John, what do you expect me to tell you? The **server was overdue for replacement** by six months already; another month and you could've kissed your data goodbye; and I wasn't the one who insisted on implementing a big name ERP that needed to be customised extensively for your business. Those are the costs and I'm really doing the best I can with what I've got."

The frustration and annoyance in his manager's voice was tangible.

"Why are users dissatisfied with the service they are receiving?"

"I know, I know," John soothed, "but you know the Board is on a **cost-cutting mission**<sup>vi</sup> and they just don't see that our expenses are in line with benefits."

"I'll agree with that any day. Look here, employees talk, you know. Whenever I have one of your people in my office for a minor IT fix, I get the 'our profits are down and costs are rising' line, closely followed by their perspective of why that's so. Why don't you ask your staff some questions, see where that gets you?"

As soon as the IT manager had put down the phone, John called the financial manager into his office.

"Let me guess," Joe Soap said as he closed the door, "you're trying to figure out how to make our operating expenses palatable to the Board? I'd be more concerned about our market share." He dropped this morning's paper on John's desk. "The **competition has launched a new all-in-one app** that'll allow clients to download their statements onto their phones right there and then."

"So? We've had that for years."

"Yeah, and it never really worked. This one does. And it includes a smart little budgeting tool, will provide alerts for changes in stock prices on up to twenty tracked stocks, and sends three sentence digests of all major news articles from the three main newspapers in your preferred language. The way the

journalist made it sound, the only thing this app can't do is brew your coffee."

"Nobody's going to use it," John said dismissively.

"I wouldn't be too sure about that. The market analyst and COO already came past the office this morning before you came in. They seem to expect mass closure of accounts following this."

"Please don't tell me you're suggesting that we throw money into IT development now and follow suit?"

Joe shook his head. "That boat has sailed. We should've seen this coming from a mile away and been there to head it off. The fact is, **we're just not innovative enough**<sup>vii</sup>. **We spend money in all the wrong places.**"

"I can't tell that to the Board."

"Someone's going to need to figure out something, though, and fast. We'll be obsolete if we don't."

## Triggering the Traps

To some, these business-predicaments may seem far-fetched and extreme. However, on closer reflection these scenarios have a familiar ring to them, but they share some commonalities beyond two executives being under pressure and IT not performing according to expectations.

How do failures happen? Some of the most common root causes can be traced back to one of three areas:

- **Strategic:** IT has an unfortunate tendency to be marginalised in many enterprises. Like Human Resources and Accounting, it's expected to run smoothly and little thought goes into the complex machinery that is required to make it so.
  - There is lack of integration between the business goals and initiatives and how IT fits within that landscape;
  - People at the wrong level making key IT decisions with insufficient or incorrect information or limited understanding of the issue at hand;
  - There is a lack of business participation in key information and technology decisions;
  - IT is generally viewed as a cost centre and not as a

value driver supporting the business processes;

- Collaboration between departments and functions, and business and IT, often is initiated too late in a project lifecycle or is not considered at all; and
- There is insufficient

**"Why did we not see this coming?"**

representation of IT related skills and experience at executive and Board meeting levels, to support meaningful oversight of information and technology decisions.

- Significant lack of enterprise and IT governance mechanisms to support the alignment of I&T governance with Enterprise Governance.
- **Tactical:** Insufficient consideration is made of the business needs when IT solutions are implemented.
  - Software and hardware are chosen without deep consideration of user requirements and strategic direction;
  - IT is not reviewed for continued strategic and operational utility on a regular basis; and
  - Cost is the dominant factor in deciding on a particular system or solution, instead of value and risk considerations.
- **Operational:** IT functions are increasingly faced with balancing the day to day operational requirements against a pressing need to innovate and compete in the market, even while business rarely has a definite understanding of the current capabilities of IT, or the required capabilities to innovate and compete.
  - Available skills within the market often do not reflect the requirements for a particular need, which is not clearly expressed in job descriptions, resulting in a combined role filled with personnel multi-tasking on areas that they are not sufficiently specialised on;

- IT professionals find it hard to find common ground with the remainder of the business in terms of mind-set, language and priorities and the culture and behavioural drivers within the enterprise do not encourage regular exchanges between departments;
  - There is insufficient consideration and inclusion of IT risks within the overarching business risk function, often due to lack of understanding; and
  - Roles and responsibilities overlap, but enterprises do not clearly define which manager or executive must ultimately be held accountable, so critical activities are not performed.
- it should ensure that information assets are managed effectively; and
  - a Risk Committee and Audit Committee should assist the Board in carrying out its IT responsibilities.

The next question that will immediately be asked upon reviewing these principles is: **But what does that mean?** Because the Namcode, like most of the standards, codes and frameworks listed above seeks to be a universally applicable framework, it tends to be open to interpretation. The “how” is not answered except in a high level list of principles for consideration. For many companies, the first reaction is to look for a checklist of structures and policies to implement, which is then promptly forgotten about.

Boards and executives should seek to understand the principles and their intrinsic value, in governing and managing the business. In alignment to these principles, management must seek the best frameworks, standards and process which will support the business in achieving these objectives. Importantly, leaders should always be discouraged in following a one-size-fits-all governance and/or management approach – the successful use of IT resides in detailed understanding the business model and supporting processes.

## The Map

In an interconnected technological age, information on guidance and regulations is broadly available to anyone leading a business and auditors and their experts will make use of a number of standards, guidance and regulation against which entities are assessed. From The Namibian Code of Corporate Governance (“Namcode”) to King IV, to COBIT®5, ITIL, the ISO suite of standards and PRINCE2, the list of possible places to source the perfect structure, the one-stop policy that is going to close all loops, is nearly endless.

The Namcode, for example, provides guidance for activities the Board should perform, or be involved in related to IT. Typically this Code informs the Board that:

- it is responsible for information technology (IT) governance;
- It should ensure alignment of IT with the performance and sustainability objectives of the company;
- it should delegate to management the responsibility for the implementation of an IT governance framework;
- it should monitor and evaluate significant IT investments and expenditure;
- It should ensure that IT forms an integral part of the company’s risk management;



## The Grail

The solution, simply put, lies in determining to seek value for the enterprise and the individual. This has, over the years, taken many names, with the current fashionable name being IT governance. At the core of any activity or proposed activity should be a single question: “Does this add value?” If an employee is instructed to perform a task, typically they will ask themselves: why should I do this? Does this benefit us? Does this make my job easier? Will this result in more profit and/or less risk for the enterprise?” If none of those questions can be answered in the affirmative, the risk of non-completion of a task rises exponentially,

and inefficiency lingers at the door of failed initiatives.

An immediate question poses itself: "Where can I find a framework that will ensure value? There is no one-size-fits-all approach to implementing a solution that will guarantee value, but there are some great thought leadership and industry standards that can make it easier to find and apply one holistic and customised framework to fit the unique position each individual entity finds itself in.

Deloitte has successfully used both COBIT®5 and VAL-IT to assess enterprises and design solutions that work for our clients, and the newly revised COBIT®5 (2019) makes some useful changes, including an entire chapter within the main framework devoted to the design of a tailored solution, supplemented with its own detailed guide, along with detailed advice on considerations that will assist with documentation on the business case and proposed solution.

VAL-IT, a framework that references and indeed interlinks with COBIT®5, asks four simple questions, questions each executive should ponder daily:

- Are we getting the benefits?
- Are we doing the right things?
- Are we doing them the right way?
- Are we getting them done well?

This may sound deceptively simple and, with the help of the details contained in COBIT®5 (2019), it can be. The framework groups

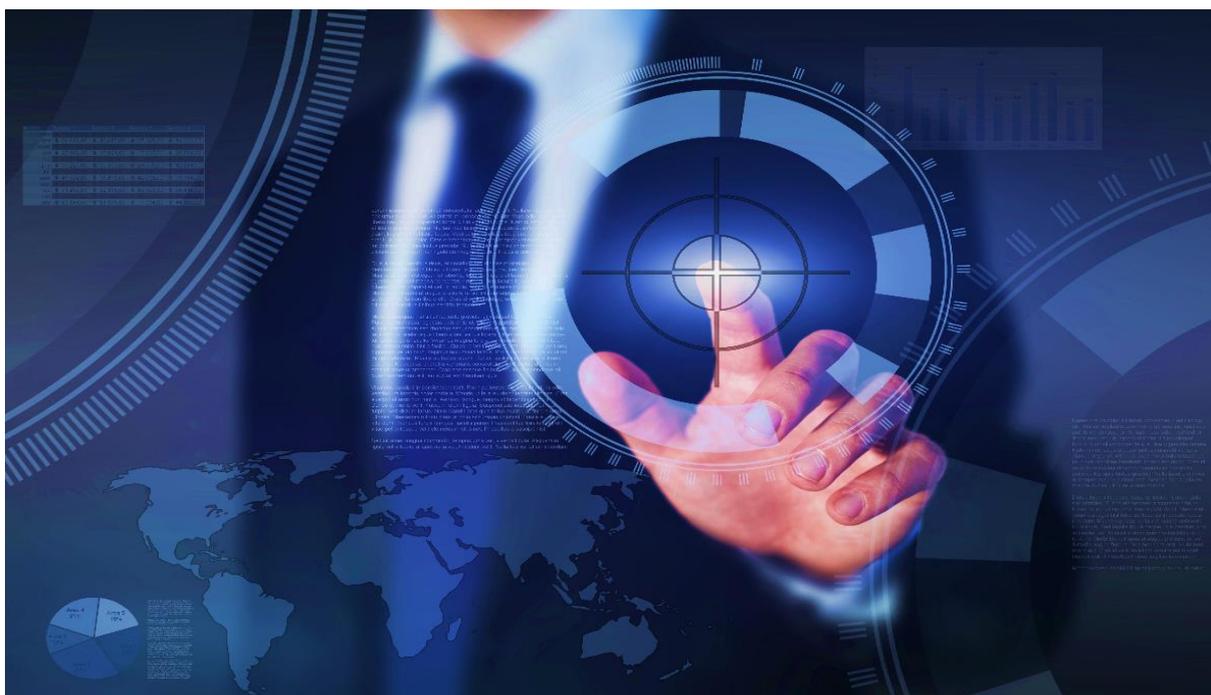
areas for consideration into seven themes or Enablers:

- Principles, policies and procedures;
- Organisational structures;
- Processes;
- Culture, ethics and behaviour
- Information;
- Services, infrastructure and applications; and
- People, skills ad competencies.

Each of these themes/enablers is then evaluated against twelve design factors, which are broken into successively more granular increments that allow an entity to focus on the areas that matter most first and develop a roadmap that can act as an entity's tailored plan for improvement. Seeking value can be made from an abstract thought into a strategic advantage.

## Conclusion

While not all of the pitfalls of operating in our complex information and technology world or environment can ever be prevented, a well-defined and phased IT governance framework and roadmap, if constructed intelligently and applied diligently, can help clear the pain-point hurdles and ensure that potentially cataclysmic events become foreseeable and manageable. The implementation of a workable governance solution for IT certainly does not need to be expensive or time-consuming, but the alternative is almost always guaranteed to be just that.



## Glossary of terms

| Acronym                       | Full Term                              | Explanation/Reference (where relevant)  |
|-------------------------------|--|---|
| <b>King IV</b>                | King IV Report on Corporate Governance | The King Report on Corporate Governance is a booklet of guidelines for the governance structures and operation of companies in South Africa. Compliance with the King Reports is a requirement for companies listed on the Johannesburg Stock Exchange.             |
| <b>COBIT®5</b>                | N/A                                    | COBIT 5 is a framework from the Information Systems Audit and Control Association (ISACA) for the management and governance of information technology (IT)  |
| <b>ITIL</b>                   | N/A                                    | Formerly an acronym for Information Technology Infrastructure Library, is a set of detailed practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business.   |
| <b>ISO suite of standards</b> | N/A                                    | The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from various national standards organizations. The organization promotes worldwide proprietary, industrial and commercial standards. |
| <b>PRINCE2</b>                | Projects IN Controlled Environments    | A process-based method for effective project management.  |

## Contacts



**Melanie Harrison**

Risk Advisory Director

Windhoek Office, Namibia

Tel: +264 61 285 5003

Email: [melharrison@deloitte.co.za](mailto:melharrison@deloitte.co.za)



**Nicoline Badenhorst**

Risk Advisory Manager

Windhoek Office, Namibia

Tel: +264 61 285 5056

Email: [nbadenhorst@deloitte.co.za](mailto:nbadenhorst@deloitte.co.za)

## Further Reading

---

- i <https://ibsintelligence.com/ibs-journal/uk-financial-services-firms-admit-losing-millions-on-failed-it-projects/> Accessed 23/01/2019
- ii <https://www.namibian.com.na/183472/archive-read/Telecom-suspends-CEO-Klein-TELECOM-Namibia-chief> Accessed 23/01/2019
- iii <https://www.brudenton.com/news/local/education/article223183180.html> Accessed 23/01/2019
- iv <https://www.vox.com/the-goods/2019/1/11/18178733/marriott-starwood-hack-lawsuit> Accessed 23/01/2019
- v <https://www.telegraph.co.uk/news/2018/07/18/british-airways-reports-delays-cancellations-heathrow-airline/> Accessed 23/01/2019
- vi <https://www.cio.com/article/3309400/budget/8-it-cost-cutting-mistakes-you-need-to-avoid.html> Accessed 23/01/2019
- vii <https://www.forbes.com/sites/biancamillercole/2019/01/10/innovate-or-die-how-a-lack-of-innovation-can-cause-business-failure/#3f2be5122fcb> Accessed 23/01/2019

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), our global network of member firms and our related entities. DTTL (also referred to as "Deloitte Global") and each of our member firms are legally separate and independent entities. DTTL does not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) to learn more.

Deloitte is a leading global provider of audit and assurance, consulting, financial advisory, risk advisory, tax and related services. Our network of member firms in more than 150 countries and territories serves four out of five Fortune Global 500® companies. Learn how Deloitte's approximately 286,000 people make an impact that matters at [www.deloitte.com](http://www.deloitte.com).

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms or their related entities (collectively, the "Deloitte network") is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.

© 2019. For information, contact Deloitte Touche Tohmatsu Limited.