

An Executive's Guide

# Turning I.T.

Information Technology

# into GOLD

Great Opportunities to Leverage Decisions

The purpose of an executive is to take decisions when the answers are not obvious.

*... but that doesn't mean that there aren't tools that can help executives make better decisions.*

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# **GOLD**

## **G**reat **O**pportunities to **L**everage **D**ecisions

To help us keep focus on what is important, we will refer to our objective as Great Opportunities to Leverage Decisions (**GOLD**).

We believe that decision making is the most important process in any organisation, and that the purpose of information technology is to support the decision making process by providing timely access to good information.

- ★ **Great** because good decisions make great organisations.
- ★ **Opportunities** to make good decisions occur in real time, and information has to be readily available to support them.
- ★ **Leverage** because better decisions require information that is relevant, accurate, and presented in a useful format.
- ★ **Decisions** are what it's all about!

This goal provides an anchor around which we can clarify our intentions, and keep our efforts focused on delivering the greatest value from our investments in technology and information.

# Sorting Out Competing Priorities

One of the most difficult things for any organisation, particularly for-profit businesses which must always keep a eye on cost, is to discern the appropriate priority in a swirling sea of possible priorities. This is especially true in information technology (IT), where it can seem that security, efficiency and functionality are locked in a never ending game of rock-paper-scissors.

Here we offer a method that will help to clarify these priorities for your organisation by separating out major functions, and assigning appropriate priorities to each one.

So that when you determine the purpose of an IT process, you will have a guide for applying priorities.



## Priorities

The competing priorities for IT are:

- ▶ Security
- ▶ Efficiency
- ▶ Functionality

Each of these priorities can be competitive with the others, and your job as an executive manager is set the appropriate order, and provide clarity when there is confusion.

## Categorising Activity

The key to setting appropriate priorities is to determine the nature of the process in question.

Every organisation can sort it's activities into three categories:

- ▶ Administrative
- ▶ Operational
- ▶ Proprietary

Once you have determined which of those categories the process in question falls into, you can set the appropriate priority when there are competing demands.

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### The Priority Grid

Activity	P1	P2	P3
<b>Administration</b>	Efficiency	Security	Function
<b>Operations</b>	Function	Efficiency	Security
<b>Proprietary</b>	Security	Function	Efficiency

Of course, all three priorities still have a place in the order, and placing them in an order does not negate something that falls below the top priority.

Administrative: **Efficiency, Security, Functionality**

Administration is always a cost, a necessary and vital cost, but a cost nevertheless. The appropriate priority for an administrative process is to promote efficiency first. The output of an administrative process, its function, will always be a baseline driver of the process, but how it is delivered will also be determined by the quality standard you set for the output. The output of an administrative process needs only to be as good as is necessary to administrate, and too many organisations waste resources on increasing the quality of administrative processes beyond the point at which they can inform a good decision.

Focus on efficiency first.

Activity	P1	P2	P3
Administration	Efficiency	Security	Function
Operations	Function	Efficiency	Security
Proprietary	Security	Function	Efficiency

Operational: **Functionality, Efficiency, Security**

The essential purpose of effort is output. The operational aspects of any organisation must focus on the delivery of its intended output, which means that there is little or no leeway in the functionality of an operational process.

Cost must be managed around function, which means that efficiency is the secondary priority.

Proprietary: **Security, Functionality, Efficiency**

Where the viability of the organisation is at stake, either in a competitive market or in its duty to its stakeholders, security must be the first priority. For businesses this can mean information about proprietary processes, customers, and vendor relationships,

incorporating aspects of sales, marketing and business management. For any organisation this will also include private information about stakeholders.

It is important to distinguish between what is proprietary financial activity and administration, as these different activities are commonly lumped into a single department. You need to avoid adding unnecessary cost to what is purely administrative on the one hand, or allowing insecure handling of what is critical financial data on the other hand.

As there will inevitably be decisions that need to be made at an executive level to keep IT focused on delivering GOLD, this grid of priorities can guide you to make the appropriate calls in tight situations.



Activity	P1	P2	P3
<b>Administration</b>	Efficiency	Security	Function
<b>Operations</b>	Function	Efficiency	Security
<b>Proprietary</b>	Security	Function	Efficiency



## IT = Process + Systems

Too often we lose sight of our objective, especially when dealing with shiny new toys! This is an particularly acute problem with IT.

IT is more about **process** than it is about systems, even if the systems are very cool and shiny. IT systems are merely collections of generic pieces; it is how they are arranged and used that delivers the GOLD to the organisation.

A difficult thing to accept about IT is that it is not static. It is almost impossible to capture the full picture of an IT system, especially one that is truly delivering GOLD, because that picture would need to include *how* people are using the systems. And people are constantly developing new ways to use their systems, so the true picture of IT is constantly changing.

When IT becomes orientated around systems, it is trying to avoid the much more important, and difficult, task of orientating around processes.

### Process over Systems

In practical terms, managing IT Process means focusing on service management, because it is in the delivery of IT support that the opportunity arises to capture and update information about its use.

The key is to have an effective tool that can turn the everyday process of supporting your IT systems into a gold mine of information about best practices. Your IT design needs to incorporate service management and knowledge capture, if it is truly going to deliver GOLD for your organisation.

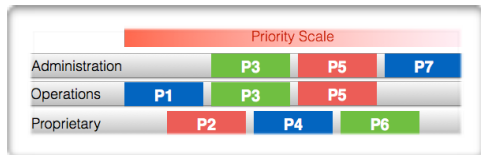
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## Use IT to make IT better!

Good IT design must include service management as an intrinsic element of it architecture.

Responsive support services, that are easy for users to access, are the best way to increase your return on your IT investments. And the best way to make support as responsive as possible is to make sure that you are always focused on the highest priority requests.

You can use the Priority Grid to automatically assign appropriate priorities to requests as they come in.



A grid titled "Priority Scale" showing priority levels for three categories: Administration, Operations, and Proprietary. The grid is a 3x4 matrix of colored boxes with priority labels.

	Priority Scale			
Administration		P3	P5	P7
Operations	P1	P3	P5	
Proprietary		P2	P4	P6

As issues are resolved, a good service management system will allow useful solutions to be added to a searchable knowledge base, that users can consult to find their own solutions in the future. This is your IT GOLD.

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## Owning GOLD

Understanding the importance of process over systems leads to an appreciation that the information about how your IT systems are used is more important than the systems themselves. That means that you have to own the information about your processes.

You should not allow process information to be owned by the IT service provider, whether they are internal or external. IT process information is a business asset, not an IT secret. In fact, it is more important that you own your IT process information, than it is that you own your IT systems - systems can be replaced much more easily than knowledge about processes.

# IT in the 21st century

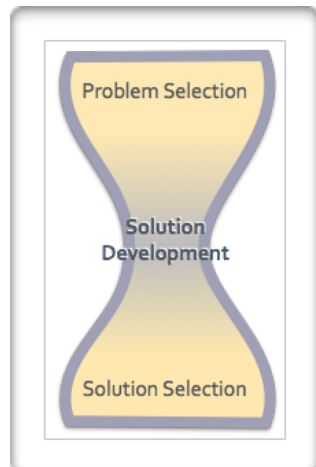
Functionality, efficiency and security are all contextually variable, meaning that they are affected by the nature of the society within which they occur. And today's societies are mobile and ubiquitously connected. Great Opportunities to Leverage Decisions arise with within that same context.

21st century IT must be built on the premise that GOLD will be found **anywhere** and at **any time**.

## Mobility

Mobility begets device proliferation, because of the inevitable trade offs between portability and functionality. This means that IT must deliver GOLD without being device-specific where appropriate. But does this mean that everything has to run on a smartphone? No.

If we look at decision making as an hourglass, we can envisage the collective determination of problems that need solutions (wide top), the specialist development of possible solutions (narrow middle), and finally the collective selection of solutions for implementation (wide bottom). In this model we can recognise that the top and bottom are group decision making points, and need to be device ubiquitous to maintain timeliness. Whereas solution development is more likely to benefit from specialised devices, to maximise function.



Decision making is ubiquitous, but solution development is specific. If your IT design ties decision making to specific devices, you will limit your GOLD. And if your IT design tries to force solution development onto non-optimal devices, you will be limiting your maximum capacity.

## Ubiquity & Security

The proliferation of devices inevitably leads to the matter of maintaining appropriate security - especially where those devices are used for decision making.

For all the talk of viruses, malware and hack attacks, the most vulnerable element of security is user security. The most likely source of a security breach is the compromise of a user's credentials, and this makes securing the devices used by mobile employees critical. All devices, especially mobile ones, should be protected with lock codes, preferably biometric as well as password. And all devices should be managed by a system that can wipe their contents in the event that they are stolen or lost.

When designing remote access to your IT you should focus on solutions that meet each specific need, rather than opening up gateways that allow broad access to systems. This means veering towards certificate-based security, and away from VPNs. In the real world having lots of different keys for a single lock is not possible - in the digital world it is absolutely the way to go!

If you're going to have a failure, then distributed, slow and graceful failure is always better than centralised catastrophic failure. This is a key design consideration for major infrastructure, like electricity grids. And this same principle applied to IT design yields the most secure architecture possible.

## Cloud services: if you're not paying for it, you are the product

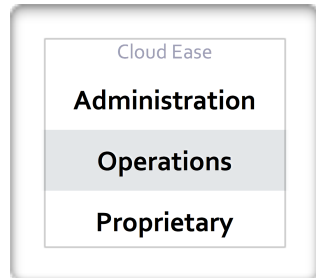
There are many IT functions that are now available as “cloud” services from online service providers. So where should these play in your IT strategy?

A key fact to keep in mind is that there’s no such thing as a free lunch. If you're not paying for the service, then *you* are the product. And if you are the product, that means that information about you, or even the information you store in the service, is used to generate revenues to cover the cost of the service.



First, using the Priority Grid, you can figure out what processes in your business are most amenable to being outsourced, and what the criteria for evaluating a service provider should be. The higher the priority given to security, the tougher your criteria for a cloud service will need to be.

Second, a common reason for considering cloud services is cost, but you should be careful when that is your primary consideration. If the provider isn't making a profit, then they are not successfully leveraging scale to reduce cost, and they will likely be bought by a company that will use the service to create an alternative revenue stream. So while you may feel that the service, as it is currently provided, meets your criteria for security, the company that acquires the service may want to turn you into their revenue stream down the road.



## Legacy: when god invented the world, he did not have an installed base

Unless you are starting a brand new business (lucky you!), you are bound to be confronted with legacy systems designed for a different context and a different time. Replacing these systems with ones designed for now, and the future, is going to be part of your challenge.

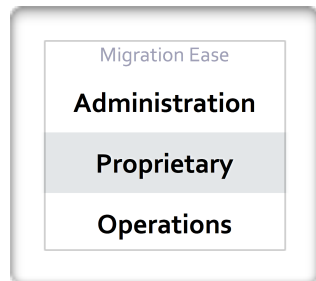
Using the Priority Grid we developed earlier can help drive the replacement process in the most effective and least disruptive way possible. The order in which to tackle these systems is efficiency, security, and then functionality.

Administrative processes offer the easiest targets for early migration, because the functionality can change without too much impact, and security procedures can be reconfigured dependent only on internal resources and processes.

Proprietary processes are next, again because their function can change without affecting the output of the organisation, and because they primarily involve internal resources and processes.

Finally, operations systems. Because the functional output of these systems is key to the output of the organisation, there is little room to move the goalposts on output. Migrating operations requires much closer matching of new to old, and more careful migration of processes and systems.

A vital prerequisite for the migration of operations systems is accurate capture of processes on the old systems before migration -



again highlighting the importance of owning the service management and knowledge base components of IT.

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## Why the “upgrade cycle” is broken

For the last 30 years IT systems have been primarily deployed inside businesses, actually inside their offices. A business would buy a system for their office, use it for as long as practical, and then upgrade it to a new one using then current technology.

Now, because the big opportunities for technology companies are in large-scale cloud systems, options appropriately designed for smaller businesses are rapidly disappearing. For instance, Microsoft no longer offers its Small Business Server that ran on a single server, they would much rather their small business customers migrate to Office 365 online.

For really small businesses, public cloud solutions have always been the better option, but for many business with more than a few users and less than 1,000 users, the old upgrade cycle is broken.

Those businesses are confronted with a choice between deploying systems internally that are designed for much larger organisations (with unnecessary functionality and complexity that drive up their costs), or moving to the use of shared, public cloud systems.

All is not lost. You can still leverage standard components to build affordable and appropriately scaled systems for the best of both on premises and private cloud deployment - you just may not be able to use Microsoft software to do it. (hint: Apple sells servers.)

Many businesses are reaching the end of their last upgrade cycle, and moving forward will require changes to IT that need leadership and clarity. We hope this guide is helpful to you in that transition.

# Conclusion

So how do you turn IT into GOLD?

Make sure you focus on ***process***, and learn to ***segregate systems by function*** so that you can ***assign appropriate priorities***.

Stride forward with new found confidence that you know how to make GOLD out of IT.

No process is perfect, and there are bound to be mistakes to learn from on your journey - that's why they pay you the big bucks!

(And feel free to call us if you need a little help along the way.)

