

There's more to IT than technology!

Golden Rules for better IT Management

© 2006 - Jan De Sutter


Who am I?

- European Administration – consultative body (EESC)
- Over 3000 meetings per year, with up to 400 participants and simultaneous interpretation
- 20 Official languages, non-Latin character sets (UNICODE)
- 500K pages per year, legally binding, published and searchable
- 800 Staff, of which 50 IT
- Budget: 120M€ (150M\$), IT: 4M€ (5M\$)
- 30K payments per year

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"In 1880, about nine out of 10 workers made and moved things; today, that is down to one out of five. The other four are knowledge people or service workers."

(Peter Drucker)



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Introduction - Why IT?

<ul style="list-style-type: none"> • Reduce Costs <ul style="list-style-type: none"> - Printing, email, VoIP,... • Improve Productivity <ul style="list-style-type: none"> - Collaboration, ERP, CRM, ... • Improve Effectiveness <ul style="list-style-type: none"> - Business Intelligence • Manage Data & Information <ul style="list-style-type: none"> - Knowledge Management • Innovate <ul style="list-style-type: none"> - New products & services 	<ul style="list-style-type: none"> Wasted Resources Failed projects Reporting nightmare Overinformation Marketing failures
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"A fool with a tool is still a fool!"

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Who am I?



- Belgian
- MSEE
- Master's degree in IT
- 18 years military
- 7 years social profit
- 6 years EU administration
- Currently CFO
- IT Manager 2000
- Author & freelance consultant

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Introduction – Are you a hamster?



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Introduction – The Dark Side of IT

- Introduction of new inefficiencies
- Bad Business-IT alignment
- Bad Communication
- Increasing Complexity
- Rules and Regulations
- Constant Technological Innovation
- Increasing dependence on IT
- Difficult to define ROI
- Huge Investments, Large Risks
- Dependency on others
- ...



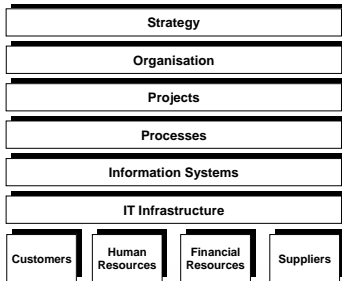
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Customers – Who are they?

- **External**
 - The customers of the organisation (e-commerce)
 - Direct customers of IT services (SLA, MOU)
- **Internal**
 - The other departments of the organisation (SLA, projects)
 - Public at large (websites)
 - The other departments of your IT organisation (internal SLA)

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Customers - Golden Rules



- Any good (IT) strategy should deliver benefits to the customers
- Consider both internal and external customers
- Make a choice - you cannot deliver services successfully to completely different customer segments.

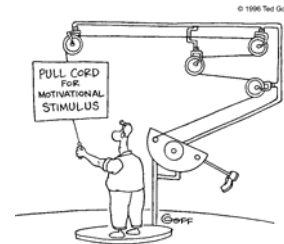
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Customers



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Human Resources



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Human Resources – Some Facts

- On average 10% of staff are in crisis
- Over 10% of staff are on the move
- Some are bright, young, fanatic but unexperienced
- Some have a lot of experience but burnt-out
- 50% are below average...

... and all this could apply to yourself as well!

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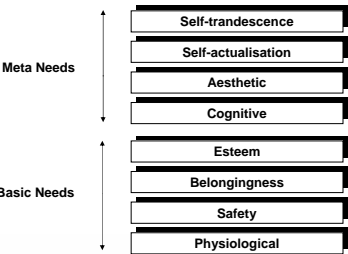
Human Resources – Golden Rules



- Permanently evaluate the composition of your team
- Foster diversity, don't only recruit your clones
- You are responsible for the motivation of your staff
- Invest in your own management and communication skills


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Human Resources – Maslov's hierarchy of needs



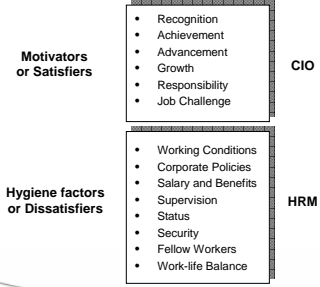
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Financial Resources



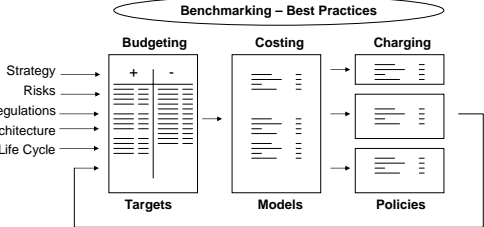
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Human Resources – Herzberg



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Financial Resources - Overview



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Financial Resources – Things to consider

Money is the lifeblood of an IT organisation, but if the CIO doesn't care, nobody else will.

ROI of IT is difficult to measure, yet the organisation has to believe that IT is making an important contribution. One way of achieving this is the installation of pre- and post implementation metrics.

IT should add value, not cost...

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Suppliers – Definition of Outsourcing

«Outsourcing is an arrangement in which one company provides services for another company that could also be, or usually have been, provided in-house.»

(SearchCIO)

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Financial Resources – Golden Rules



- Spend less – it is easier to put your business at cost disadvantage than to achieve competitive advantage through IT
- Follow, don't lead – Moore's law guarantees that the longer you wait the more you will get for your money
- Focus on vulnerabilities, not opportunities - even a brief disruption in the availability of the technology ca be devastating.

(from Nicholas Carr – IT doesn't Matter)

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Suppliers – Reasons for Outsourcing

- 35% Reduce Costs
- 32% Focus on Core Business
- 13% Create Variable Cost Structure
- 5% Increase Speed to Market
- 5% Improve Quality
- 5% Conserve Capital
- 2% Foster Innovation
- 2% Grow Revenue

Not only about money!

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Suppliers



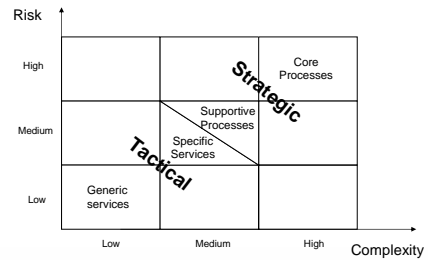
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"We've outsourced all our repair work to Taiwan. You'll have to take your car there now."

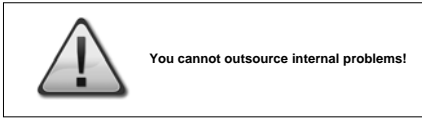
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Suppliers – Types of Outsourcing



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Suppliers - Warning

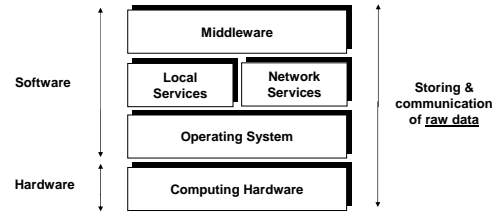


Example:

Software development outsourced to India. These companies usually have a very high CMM ranking, if the customer is at a lower level the arrangement is bound to fail...

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IT infrastructure - Overview



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Suppliers - Golden Rules



- Outsourcing is not only about costs - the very survival of your organisation is at stake
- Avoid Strategic Outsourcing especially for core business processes; it's too complex and too risky
- Tactical Outsourcing is a workable option, provided it is managed effectively
- Don't use outsourcing for solving your internal problems

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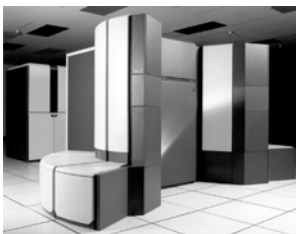
IT infrastructure - Trends

- Business UNWARE, yet increasingly business critical
- Standardisation, interoperability, compatibility
- Sharing of resources, no longer dedicated platform
 - Blade servers, grid computing
 - NAS/SAN
 - TCP/IP networks
 - Application Servers
 - Common client (browser)
- Capacity virtually unlimited, yet never enough
- Moore's Law still holds...

IT Infrastructure has become a commodity

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IT infrastructure



(CRAY Y 190 A Supercomputer - NASA)

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IT infrastructure - Business Continuity



- 80% of businesses affected by a serious incident close within a month
- 90% of business that lose their data are forced to shut within 2 years
- 58% of UK organisations were disrupted by September 11th
- Nearly 1 in 5 businesses suffer a major disruption every year

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IT infrastructure – Not only major disasters

The 2003 blackouts in Cleveland, Detroit, New York City and other locations in the east affected 76 percent of US companies. This may be due, in part, to poor planning as 60 percent of IT departments said they had no formal plans and procedures in place to deal with the blackout...

(Source: Info-Tech Research Group)

Also your own actions can be disastrous!

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Information Systems



(NYSE)

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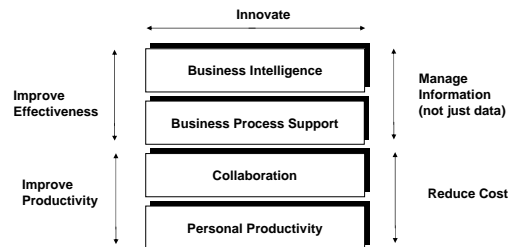
IT infrastructure - Golden Rules



- IT infrastructure has become a commodity, therefore it should no longer be on the agenda of Senior Management (they are not interested anyway)
- IT infrastructure is a corporate and business-critical asset, not a playground for technicians
- As commoditization continues to increase, outsourcing of infrastructure related services is becoming more and more an option

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Information Systems - Overview



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Coffee Break



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Information Systems – Personal Productivity

- Wordprocessing, spreadsheet, presentation, drawing, viewing,...
- Designed to enhance productivity of individual worker
- Standalone operation, no network needed
- Little impact on organisation
- « de facto » standards
- Rather high TCO but well under control

No longer an issue

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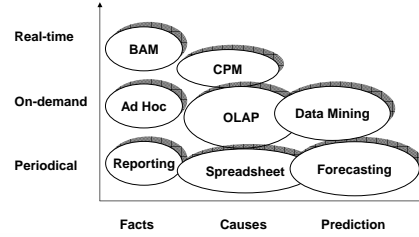
Information Systems – Collaboration

- email, workflow, portals, conferencing, content management,...
- Enables groups of people to work together
- Network access needed
- Important impact on organisation
- More competitive market

To be watched closely

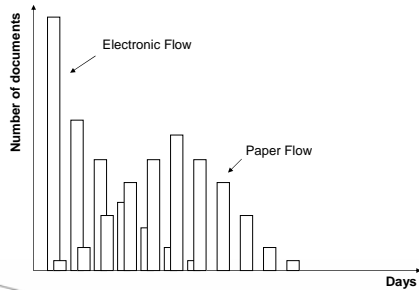
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Information Systems – Business Intelligence



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Information Systems – Collaboration



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Information Systems – Business Intelligence

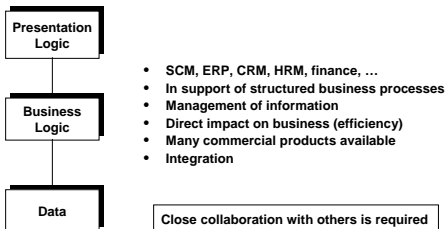
- Improve effectiveness
- Business Alignment
- Business Strategy
- Closed loop (feedback)
- Far beyond IT



Often problematic

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Information Systems – Business Process Support



Close collaboration with others is required

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Information Systems – Common Characteristics

- Business AWARE, deals with information (knowledge), not just data
- Direct support of business processes
- Business enablers, sometimes even drivers
- Should be « owned » by the business units, not IT
- High need for customisation
- Need for integration of business workflows
- Part of corporate strategy

Not a commodity yet, but soon to come

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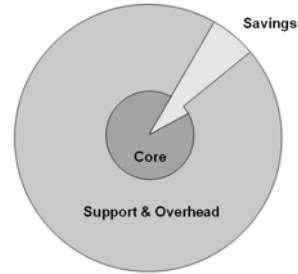
Information Systems - Golden Rules



- Consider IS as the core of your business – IS are in direct support of the business processes, the other IT processes are not
- Business Alignment is the main focus – this can be obtained by building an architecture that fosters availability, agility and technical integration (interfacing)
- In most cases « Good enough is best » - don't look for perfection but be pragmatic

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Processes – What's your Core Business?



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Processes



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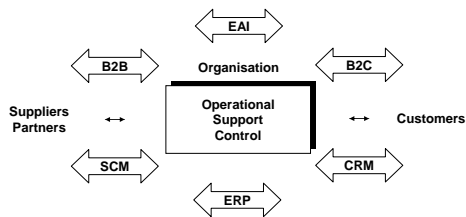
Processes – Packaged Solutions

Ideally, as all the processes influence each other, the supporting systems are integrated, thus avoiding double encoding, desynchronisation and transcription errors and gaining overall efficiency.

The marketplace is dominated by a small group of vendors with similar offerings, covering more or less the complete range of business processes, as well horizontally (generic) as vertically (niche). These products are all based on generally accepted « Best Practices » so it is very difficult for an individual organisation to compete with home-made solutions or too much customisation.

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Processes – Typology



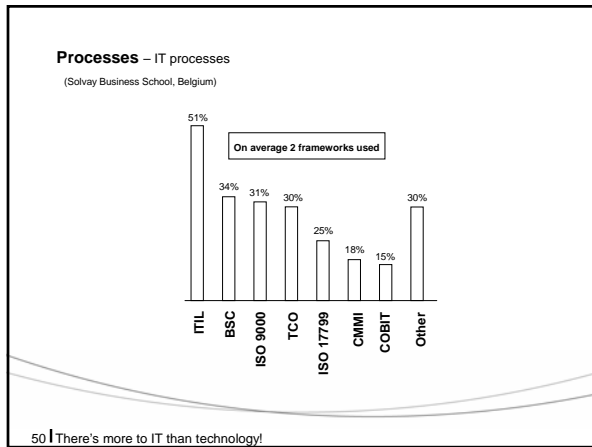
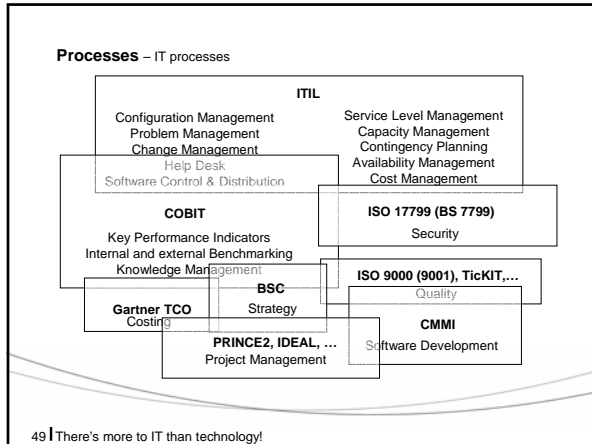
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Processes – Golden Rules (Business Processes)



- Concentrate on the core business processes – ignore or outsource the rest
- Apply packaged, standard solutions wherever possible – but making a choice is like a marriage, it is probably the most important decision an IT manager/CIO has to make
- Integration does not mean one, big monolithic system – loosely coupled « best of breed » solutions may be better and easier to maintain

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Projects - Definition

"Any undertaking with a defined starting point and defined objectives by which completion is identified. In practice most projects depend on finite or limited resources by which the objectives are to be accomplished."

(Project Management Institute)

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Processes – Golden Rules (IT Processes)

- IT processes ought to be « business as usual » - the performance of the IT department does not belong on the agenda of senior management
- Don't be afraid of picking out the most suitable elements from the different frameworks because they all have a specific focus
- Remember that frameworks are just guidelines, not religions.
- This is an important market for tools and consultants, so beware...

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Projects – Project vs Process

Process	Project
<ul style="list-style-type: none"> • Short cycles • Well-documented • Easy metrics • Replaceable resources • Search for stability • Repeatable 	<ul style="list-style-type: none"> • Long cycles • Hard to document • Difficult metrics • Unique resources • Search for change • Unique
ITIL, COBIT, ISO 17799, ...	PMBOK, CMM, OPM3, ISO 9001, ...

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Projects - Typology

- Unavoidable (imposed from outside - e.g. Y2K, € SOX, M&A...)
- Maintenance (often not considered as projects)
- Political (low ROI, often driven by territorial motivations)
- Business (potentially high ROI but complex and high risk)

In a typical organisation a mix of all the above is present, however, budget, resources, time and preparedness for change are limited, so choices have to be made.

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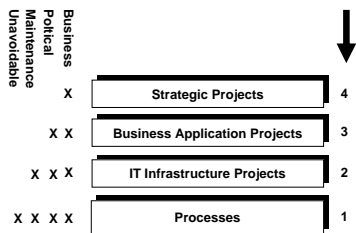
Projects - Golden Rules



- Create a solid foundation first – taking on « strategic » projects without a stable foundation is a recipe for disaster
- Restrict the number of simultaneous projects – absorption capacity for change is limited
- Match the number of projects you accept to the available resources (people, time, money) and not the other way around
- Don't be afraid to say « No »

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Projects - Prioritisation



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Projects - Golden Rules



- Have a Plan!
- A methodology is just a guideline, not a religion. Tailoring (especially cutting out) may be needed. Don't use a canon to kill a mosquito – you'll miss it.
- This is a huge market for tools and consultants, so beware...

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Projects – Project Management

"The art of directing and coordinating human and material resources throughout the life of a project by using modern management techniques to achieve predetermined objectives of scope, cost, time, quality and participant satisfaction."

(Project Management Institute)

"Nil sapientiae odiosius acumine nimio."

"Nothing is more detestable to wisdom than too much subtlety"

(Seneca – E.A. Poe)

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Organisation



(scene from Star Wars)

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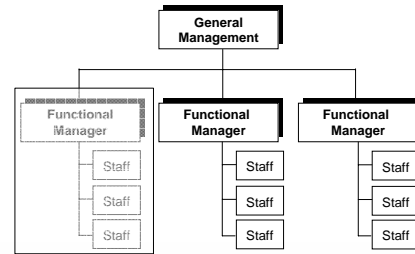
Organisation

"No institution can possibly survive if it needs geniuses or supermen to manage it. It must be organized in such a way as to be able to get along under a leadership composed of average human beings."

(Peter Drucker)

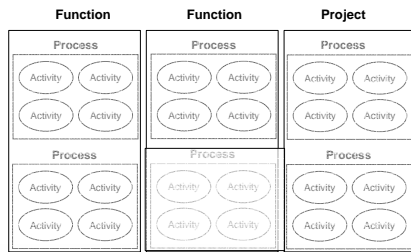
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Organisation – Projects



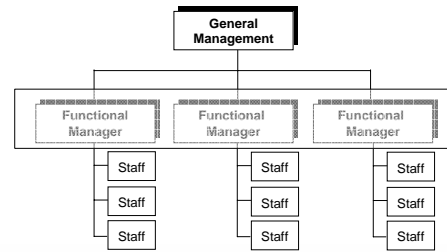
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Organisation - Artifacts



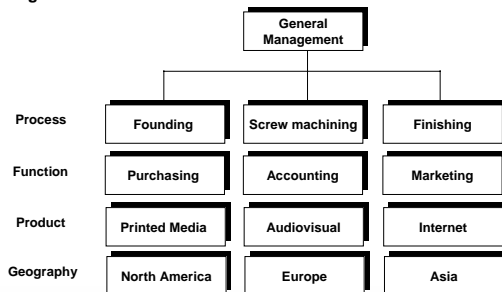
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Organisation – Projects



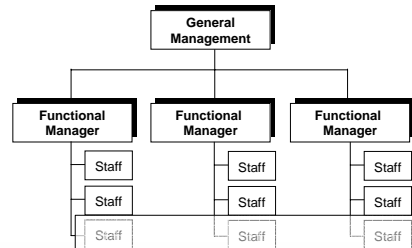
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Organisation - Processes



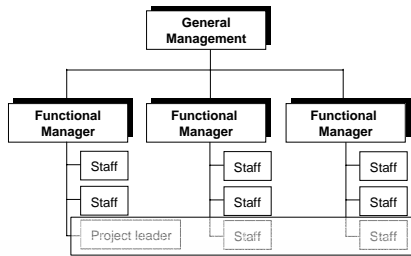
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Organisation – Weak matrix



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Organisation – Balanced matrix



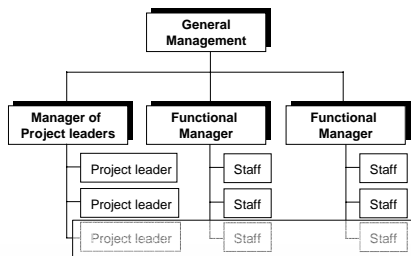
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Organisation – An example



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Organisation – Strong matrix



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Organisation – Golden Rules



- Separate process work and project work in the organisation of the IT department – when mixed, they tend to disrupt each other
- Look for the right balance between centralisation, favoring standardisation, reduction of complexity and scale effects – and decentralisation favouring proximity to the users and good business alignment.

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Organisation – Position of IT?

- **Too much dominance of IT (centralisation)**
 - IT specializes in technology, not customer needs
 - Customers have no control over projects
 - Standardisation/Architecture/Datastructures dominate
 - Too much emphasis on maintenance
 - Heavy projects, build more often than buy
 - No financial considerations (TCO, ROI, ...)
 - Senior Management not involved in IT decision making
- **Excess of Customer dominance (decentralisation)**
 - Lack of standardisation & Control
 - Duplication of technical staff and effort
 - Micromanagement, lack of vision

Need a good balance!

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Strategy



"Well, what e-blunder did we make today?"

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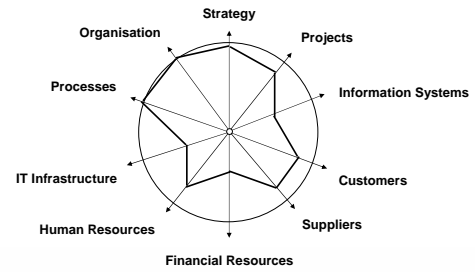
Strategy – Does IT Matter?

Only 8% of « Fortune 500 » companies has a CIO/CTO on the Board, however, on average these are 9.2% more profitable than the others.

(Source: Burson-Marsteller)

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Where do you want to go today?



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Strategy – Where are you in the food chain?



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Conclusion

The IT Manager/CIO's job has become multidimensional and complex, requiring a multidisciplinary approach.

Rather than concentrating on the technical issues, a CIO should foremost address the business aspects of IT, acting as an internal consultant and business partner towards the rest of corporate management.

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Strategy – Golden Rules



- Be aware of the corporate strategy and adapt your IT strategy accordingly, not the other way around
- It is very difficult to get a sustainable competitive advantage through IT, whatever you do, the other will soon do it as well
- Try to be included in the strategic decision making processes at the earliest possible moment but pull, don't push

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Reference



ISBN 1-59457-867-2
508 pages
Paperback & ebook

www.the-power-of-it.com

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