

# GOVERNANCE OF INFORMATION TECHNOLOGY (IT)

## Chapter 11

***“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change”. Charles Darwin***

# Summary

1. Introduction. Governing IT.
2. Management vs. Governance.
3. Decision-making and ...
4. ... structures of governance of IT.
5. Starting a framework for IT governance in their company without standards.
6. Business strategy, performance and governance of IT.
7. Align IT: indicators of progress.
8. The role of the CIO: IT leadership.
9. The value of IT.
10. ISO 38500, a conceptual model: the six principles of the standard.
11. Adapting the conceptual model of governance to the reality of the company.
12. Example Apps to aid decision-making for CIOs
13. Example Application Portfolio Management
14. To govern public enterprises, The 4 "E's"

# Basic Reference

- M. Toomey:  
Waltzing with the  
Elephant.  
Infonomics, 2009

## Waltzing with the Elephant:

A comprehensive guide to directing  
and controlling information technology.



Mark Toomey

Information technology is the Elephant in the Room - especially the boardroom. Organizations depend on it for routine operations and future performance, and IT problems can have serious consequences. Yet many organizations lack effective oversight of IT, and are at risk of surprises. This book aims to help build shared understanding that leads to a well-integrated system for governance of IT from the boardroom to the coalface, framed around the guidance in ISO/IEC 38500.



Infonomics,  
Melbourne,  
Australia

# Basic Reference

- L. Mueller, M. Magee, P. Marounek, A. Phillipson. IBM IT Governance Approach. IBM Redbooks, 2008

Rational software



## IBM IT Governance Approach Business Performance through IT Execution

Optimizing business performance through  
IT strategy, goals, and objectives

Enabling and empowering people to  
deliver strategic business value

Automating IT governance  
with IBM Rational software



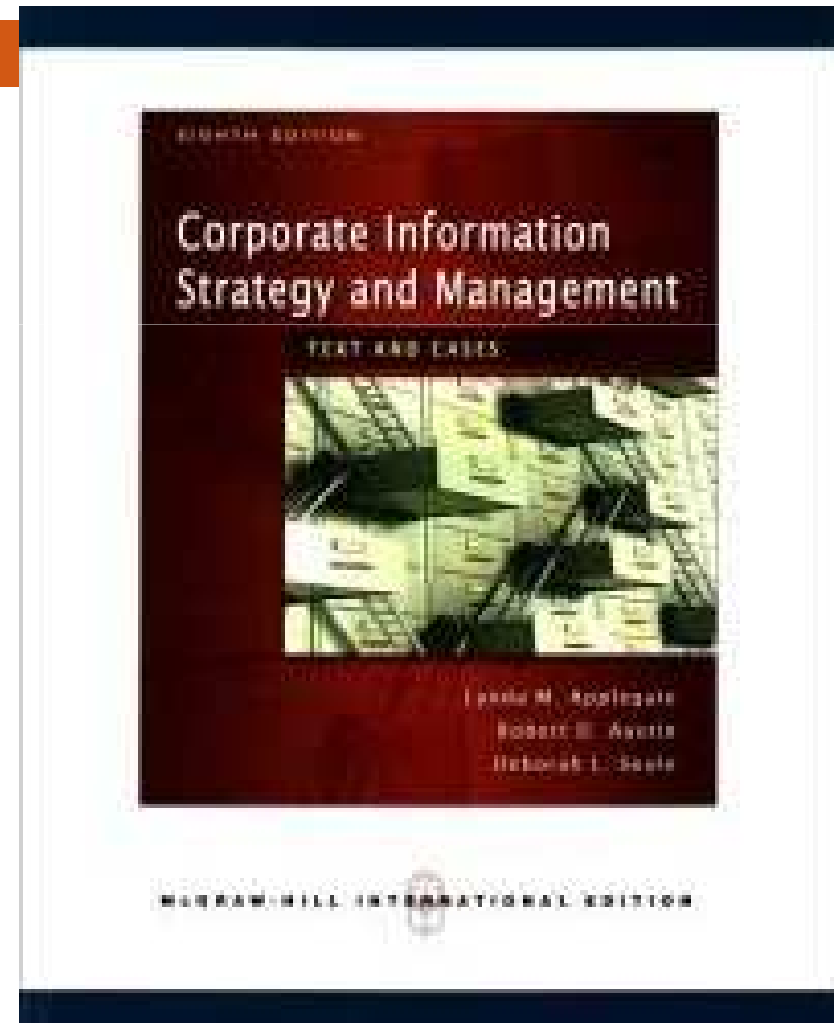
Lynn Mueller  
Matthew Magee  
Petr Marounek  
Andrew Phillipson

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**Redbooks**

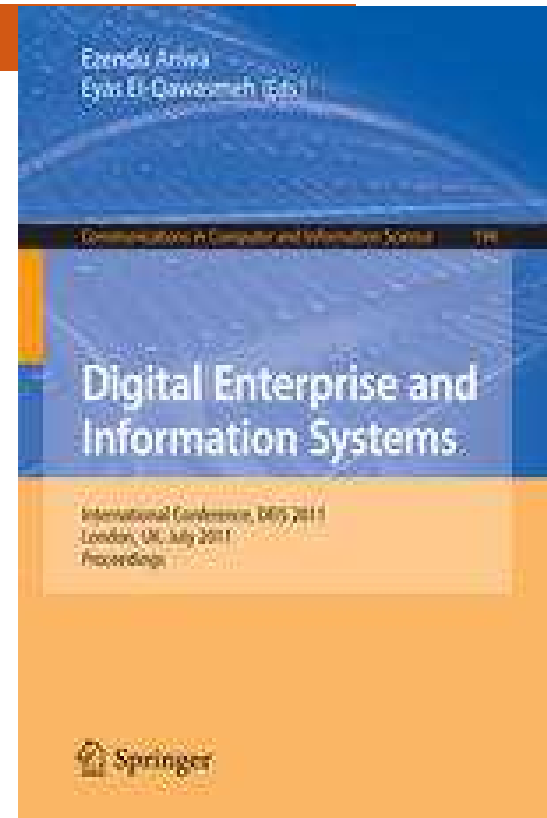
# Basic Reference

- Lynda Applegate, Robert D. Austin and Deborah L. Soule, *“Corporate Information Strategy and Management”*, McGraw-Hill, 2009.



# Basic Reference

- *Carlos Juiz: New Engagement Model of IT Governance and IT Management for the Communication of the IT Value at Enterprises. DEIS 2011: 129-143*





# Business vs. IT

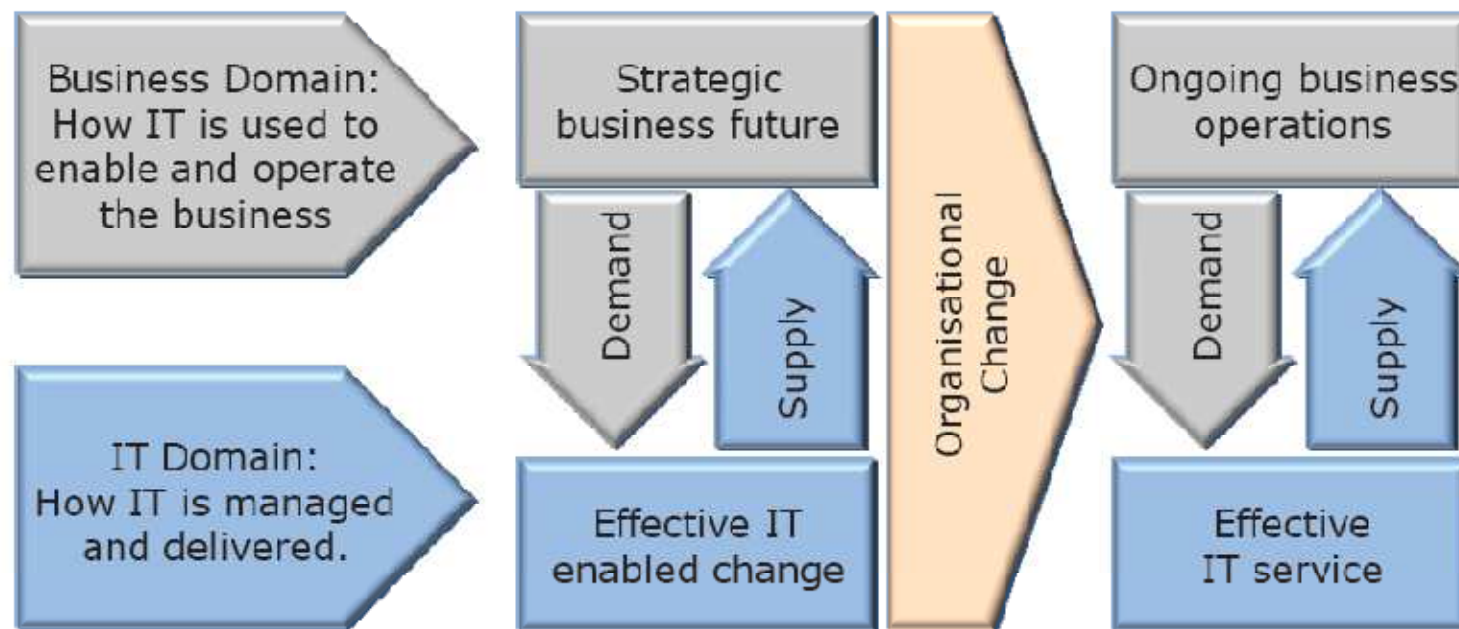
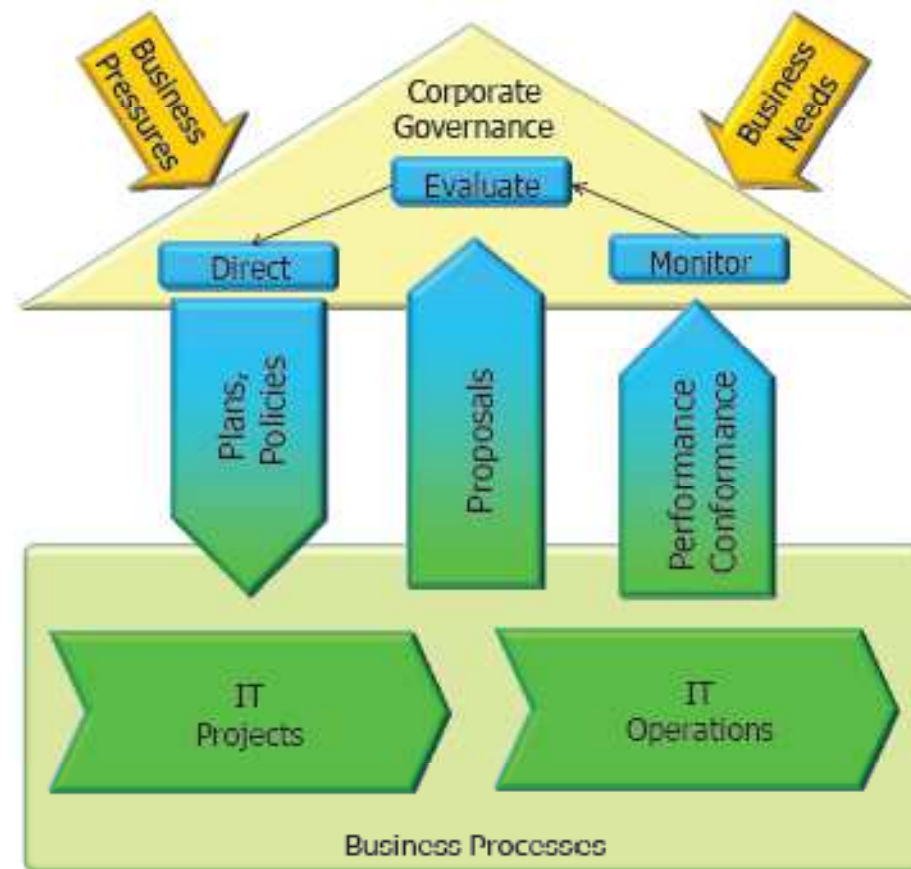


Figure 1: The demand ↔ supply equation



# ISO/IEC 38500







# Governance vs. Management

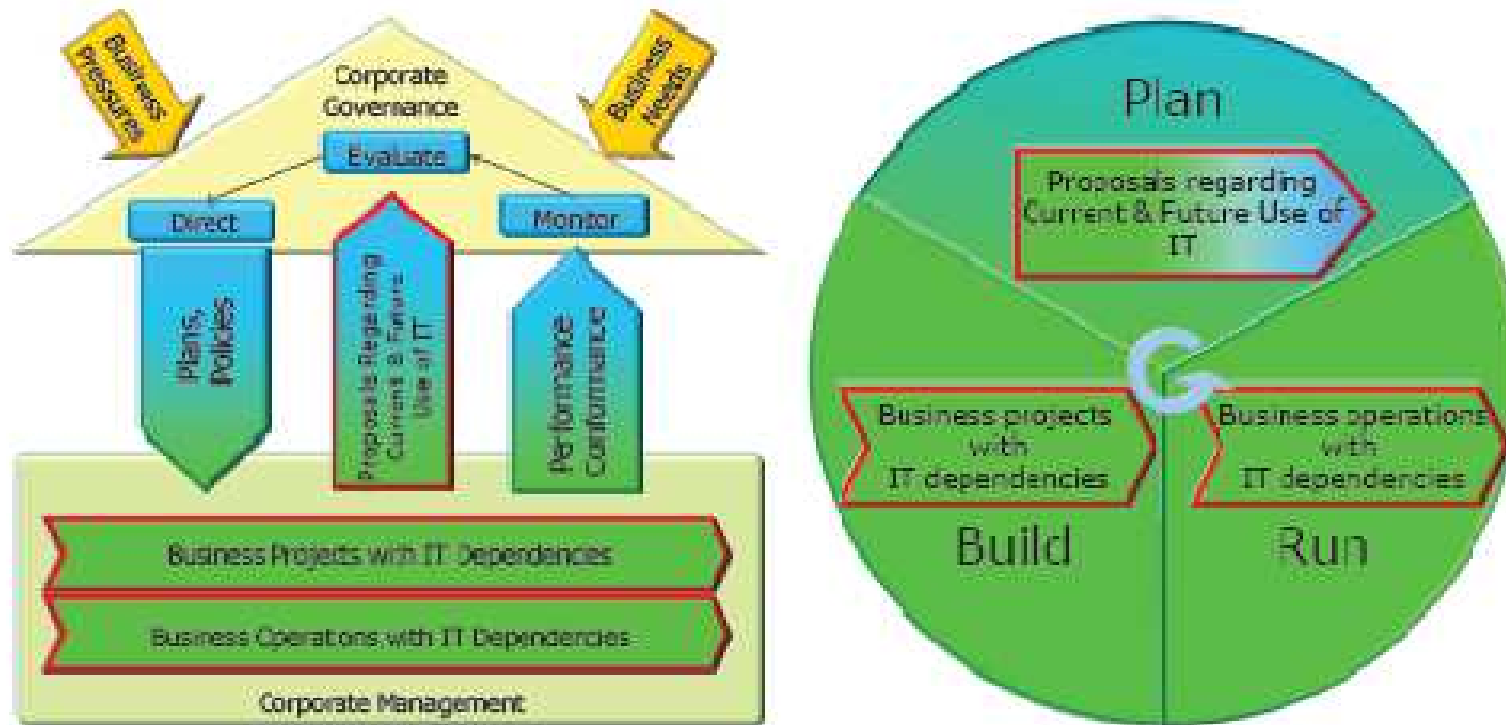
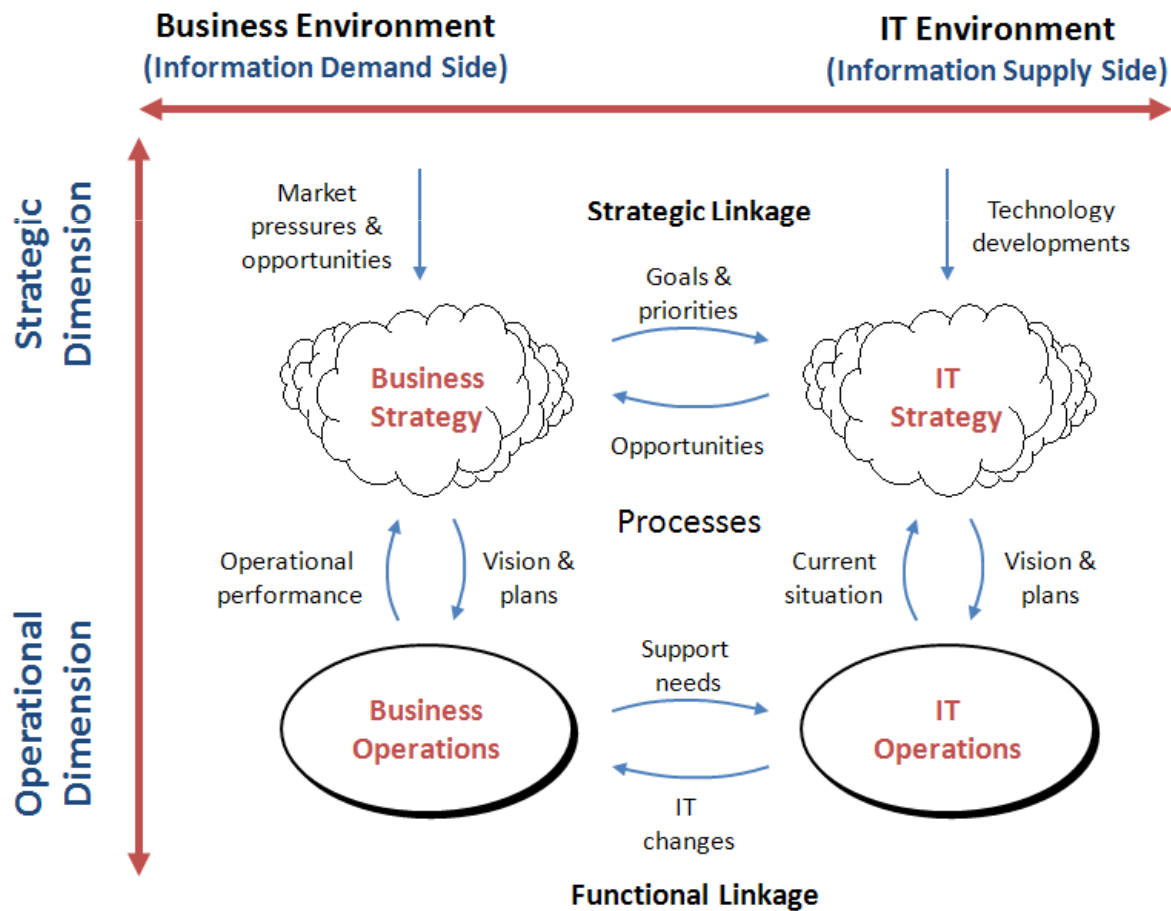


Figure 11: Juxtaposing of governance and management tasks



# Strategy vs. Operation





# Management & Business Models

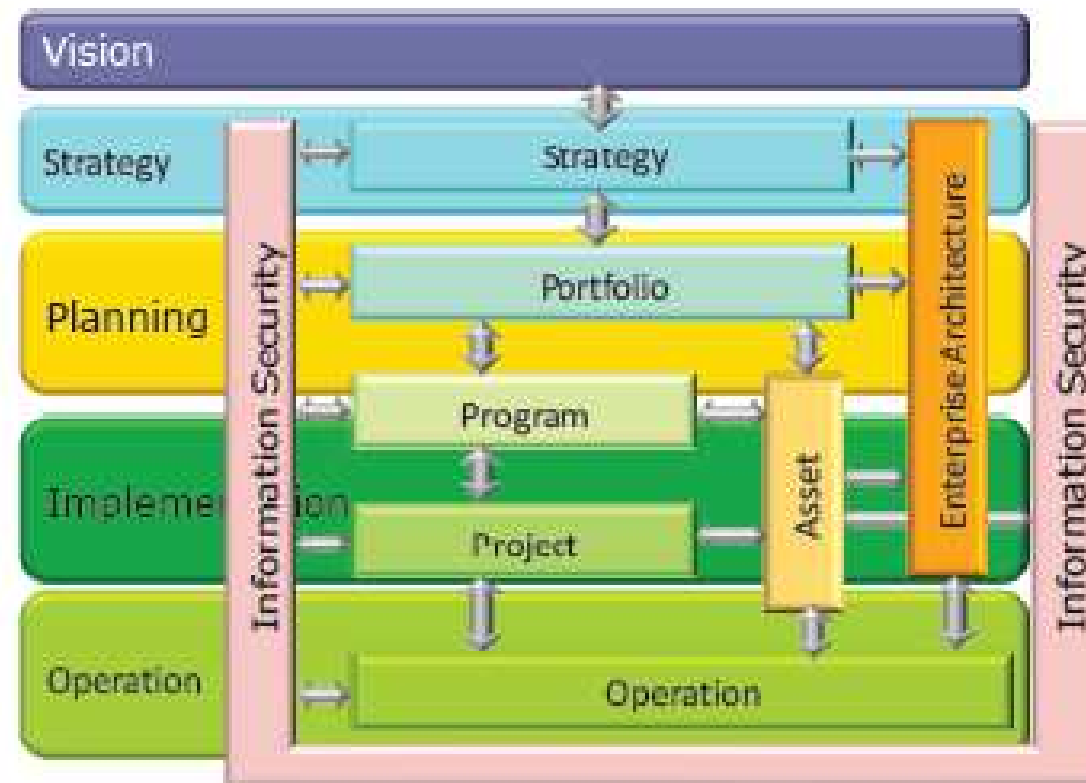


Figure 14: IT management disciplines in business management model



# Governance and Management engagement

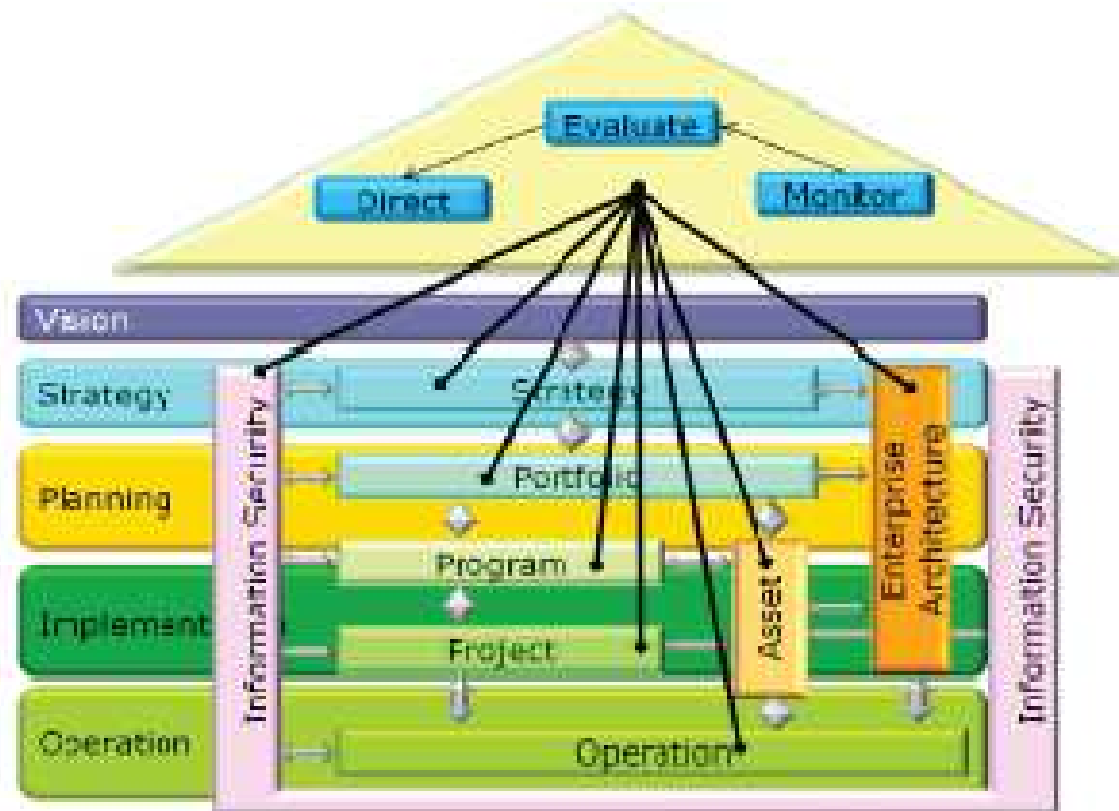
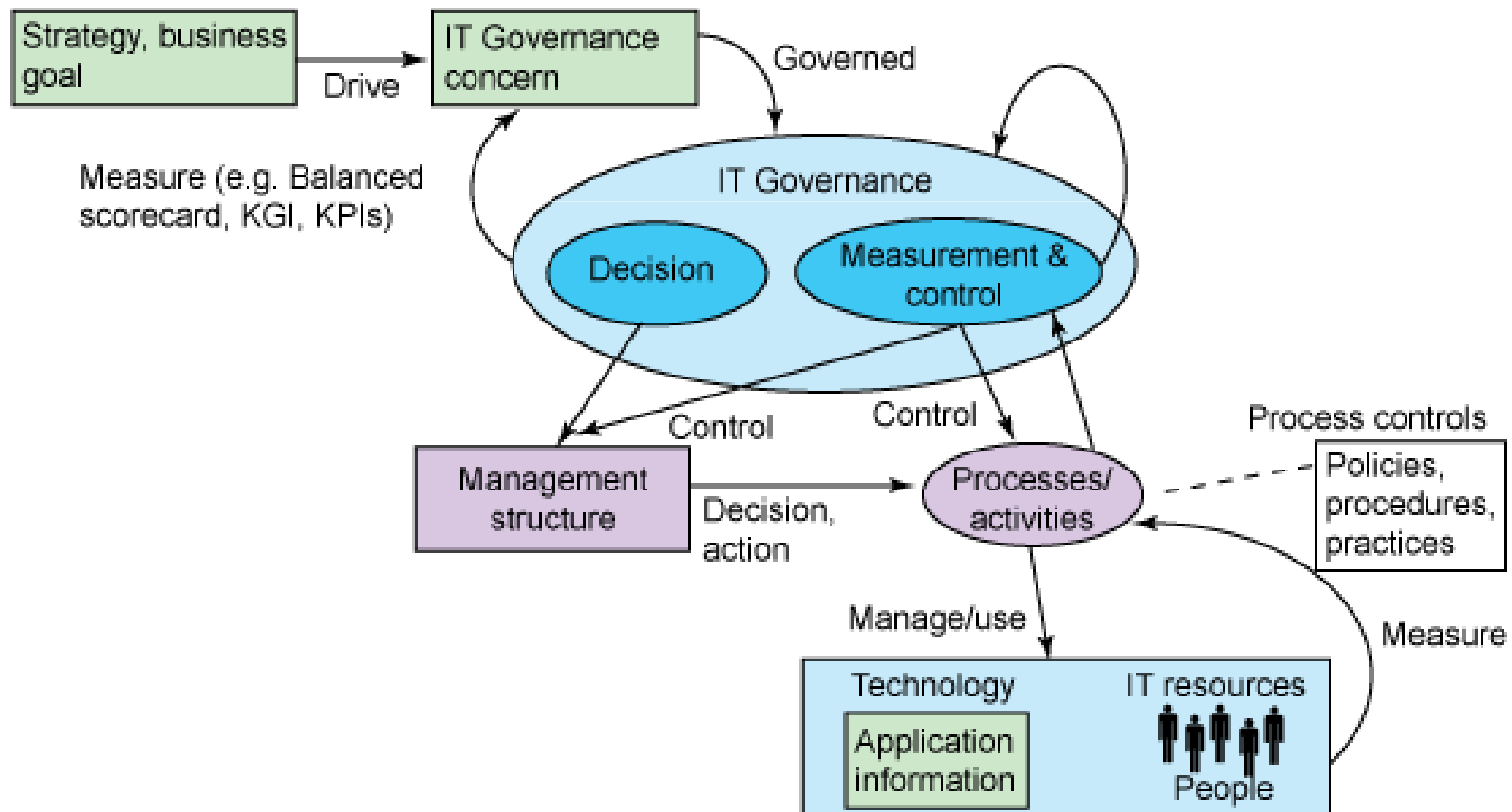


Figure 16: Governance – management engagement

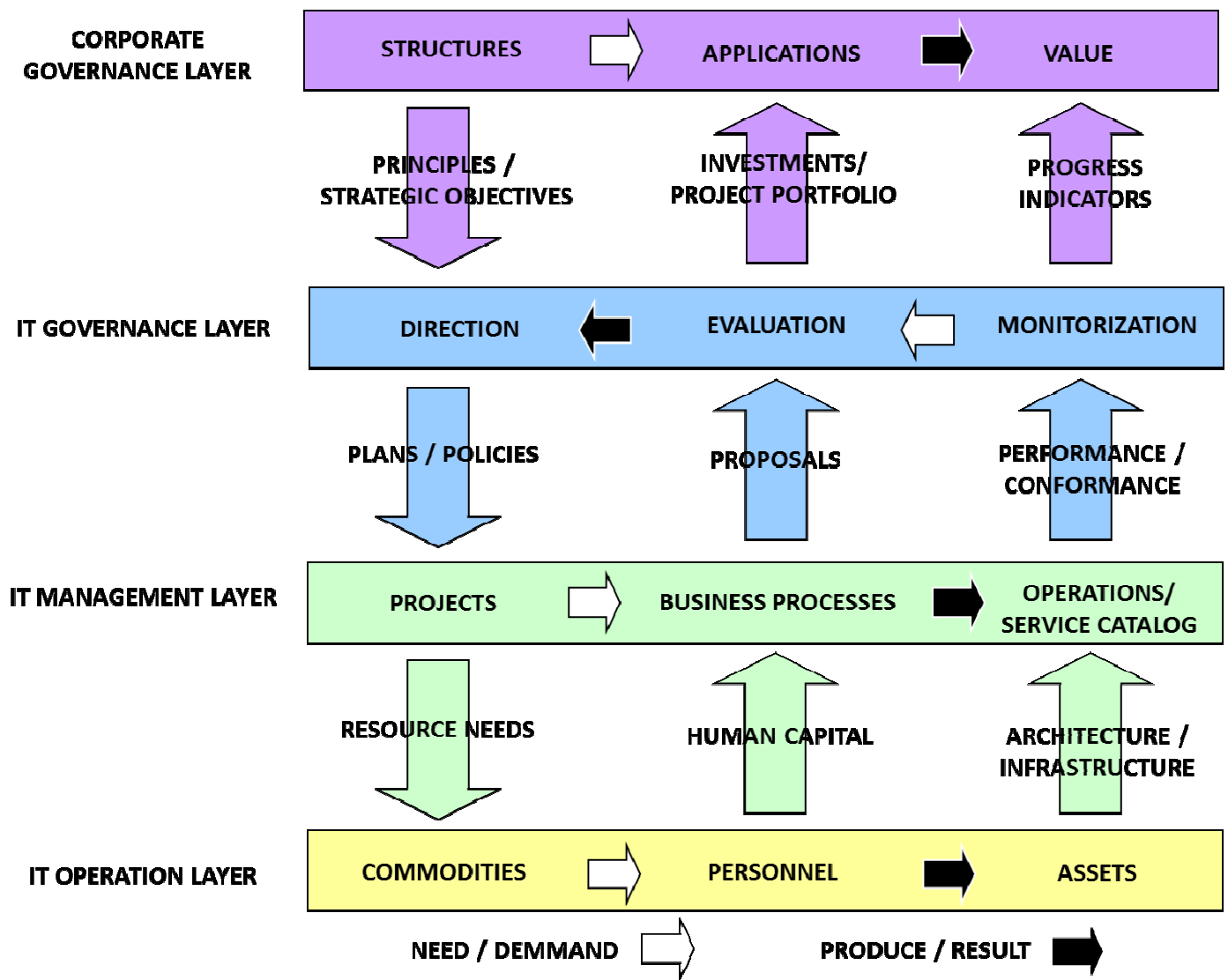


# Governance and Management engagement (IBM, 2008)



# Factors of IT Governance Framework Design

- Intentional but Minimalist Design
- Board-Level Leadership
- Board-Based Executive Involvement
- Clear Ownership but General Participation
- Enforce Execution but Accommodate Exception
- Define Benefits and Target Expectations
- Aim for Evolution Not Revolution in Implementation



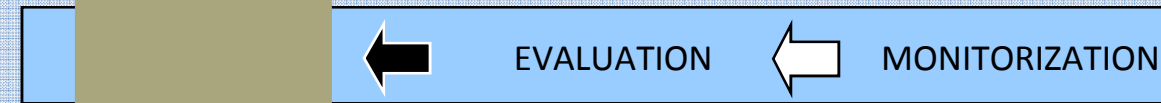
# dFogIT (detailed Framework of governance of IT)



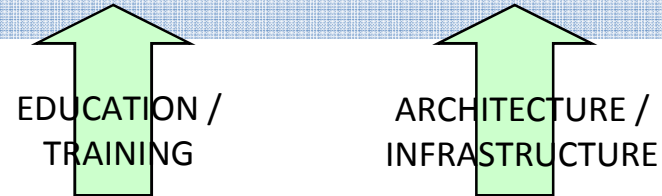
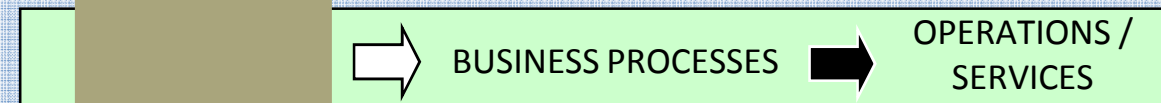
CORPORATE GOVERNANCE



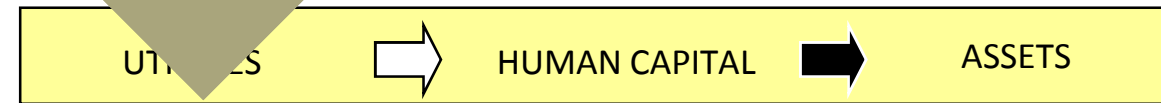
IT GOVERNANCE



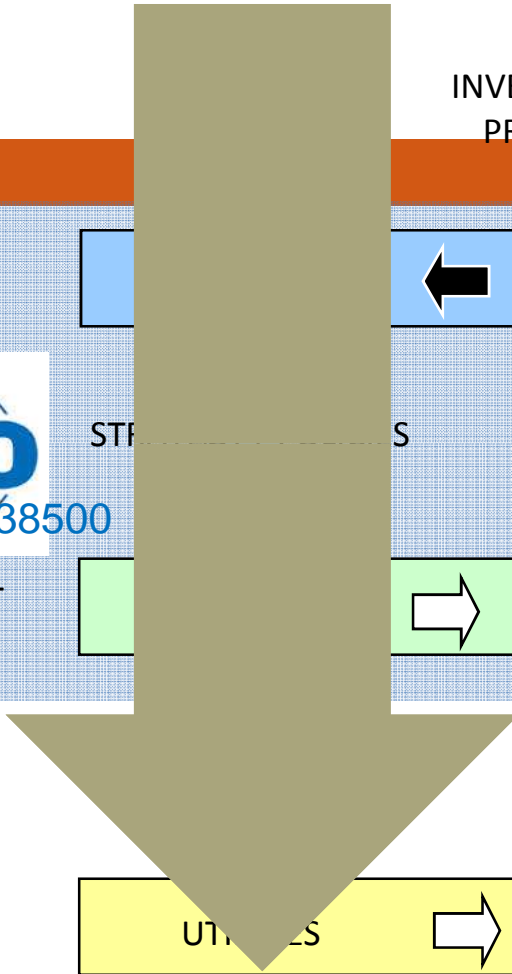
IT MANAGEMENT



IT OPERATION



“direct”





# dFogIT (detailed Framework of governance of IT)



CORPORATE GOVERNANCE



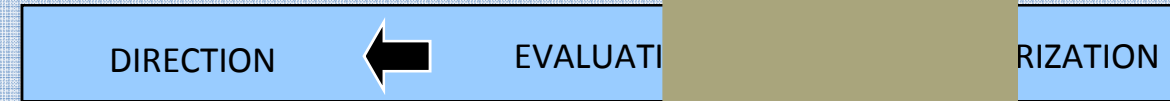
“control”

PRINCIPLES

INVESTMENT PROGRAM

PERFORMANCE

IT GOVERNANCE

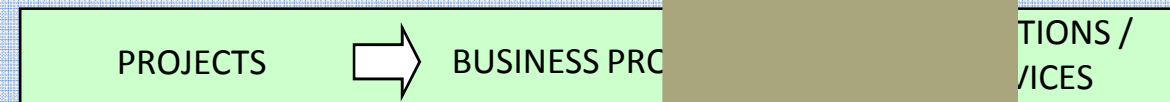


STRATEGY / POLICIES

PROPOSALS / REVISIONS

PERFORMANCE / IMPROVEMENT

IT MANAGEMENT

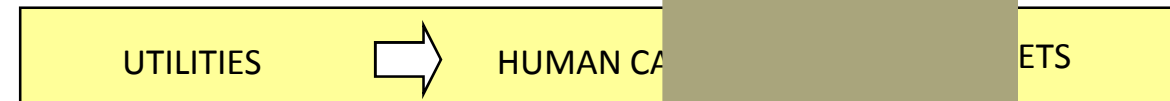


RESOURCE NEEDS

EDUCATION / TRAINING

ORGANIZATION / STRUCTURE

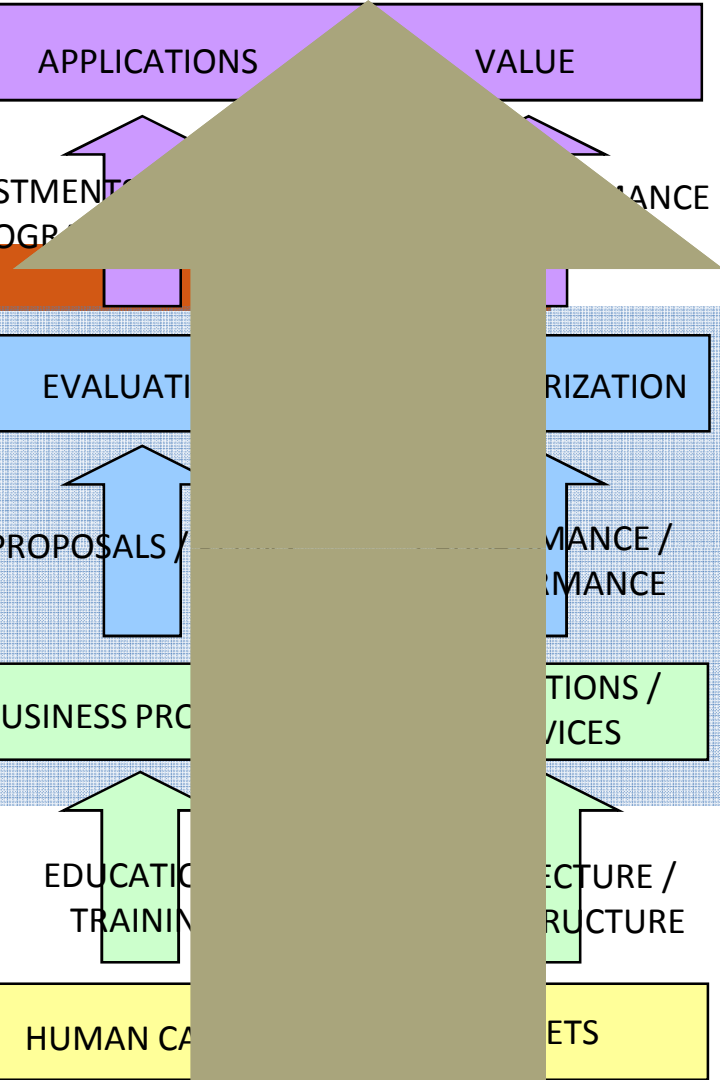
IT OPERATION



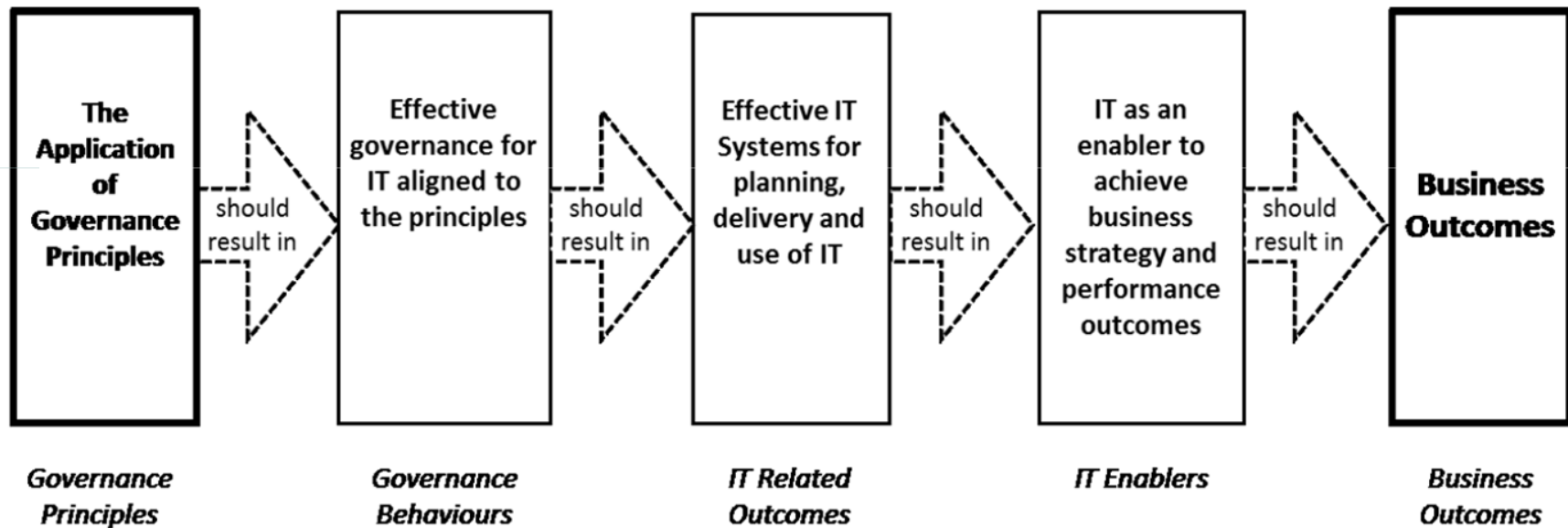
NEED / DEMAND



PRODUCE / RESULT

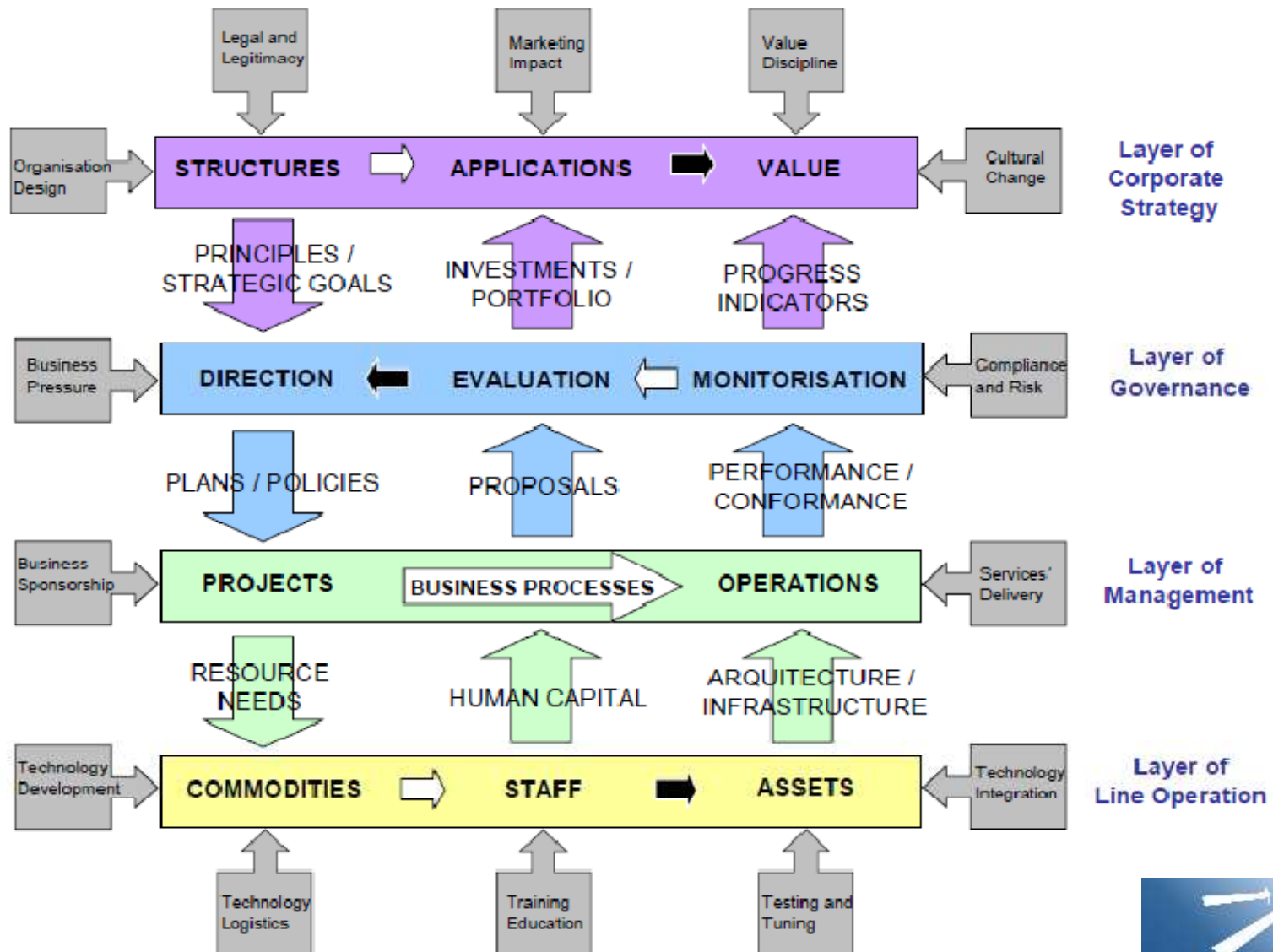


# Behavior-oriented Governance of IT (future ISO/IEC 38504)





# Success/Failure factors using dFogIT (2010)

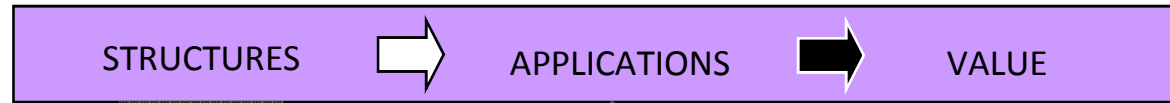


# dFogIT (detailed Framework of governance of IT)



CORPORATE GOVERNANCE

“the product”

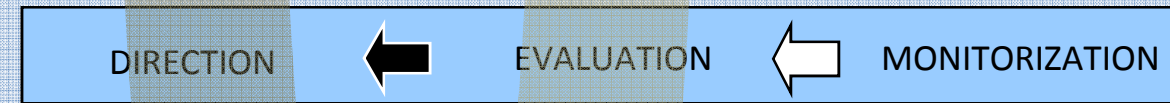


PRINCIPLES

INVESTMENTS / PORTFOLIO PROGRAMS / PROJECTS

KEY PERFORMANCE INDICATORS

IT GOVERNANCE

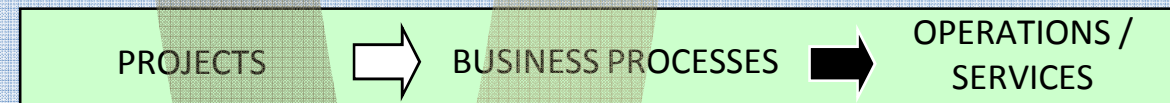


STRATEGY / POLICIES

PROPOSALS / PLANS

PERFORMANCE / CONFORMANCE

IT MANAGEMENT



RESOURCE NEEDS

EDUCATION / TRAINING

ARCHITECTURE / INFRASTRUCTURE

IT OPERATION



NEED / DEMMAND



PRODUCE / RESULT



# dFogIT (detailed Framework of governance of IT)



CORPORATE GOVERNANCE

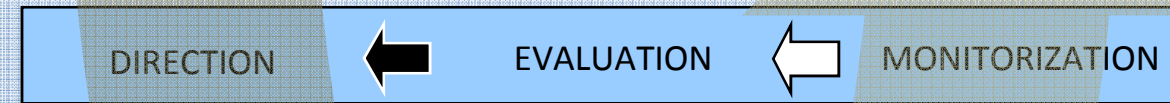


PRINCIPLES

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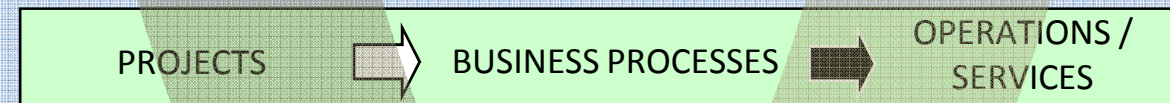


STRATEGY / POLICIES

PROPOSALS / PLANS

PERFORMANCE / CONFORMANCE

IT MANAGEMENT



RESOURCE NEEDS

EDUCATION / TRAINING

ARCHITECTURE / INFRASTRUCTURE

IT OPERATION



NEED / DEMMAND



PRODUCE / RESULT



# dFogIT (detailed Framework of governance of IT) (Juiz, 2011)



<input checked="" type="checkbox"/>	Governance Structures
<input checked="" type="checkbox"/>	Strategy Alignment
<input checked="" type="checkbox"/>	Communication
<input checked="" type="checkbox"/>	Corporate Strategy
<input checked="" type="checkbox"/>	CIO Office
<input checked="" type="checkbox"/>	Relationship Management BU/TI
<input checked="" type="checkbox"/>	5 Governance decisions
<input checked="" type="checkbox"/>	Performance and Conformance
<input checked="" type="checkbox"/>	Personnel and IT Services/Operation
<input checked="" type="checkbox"/>	ISO/IEC 38500
<input checked="" type="checkbox"/>	COBIT 5 and IT Value
<input checked="" type="checkbox"/>	Project tracking/PMO
<input checked="" type="checkbox"/>	IT branding