

# GOVERNANCE OF INFORMATION TECHNOLOGY (IT)

## Chapter 9

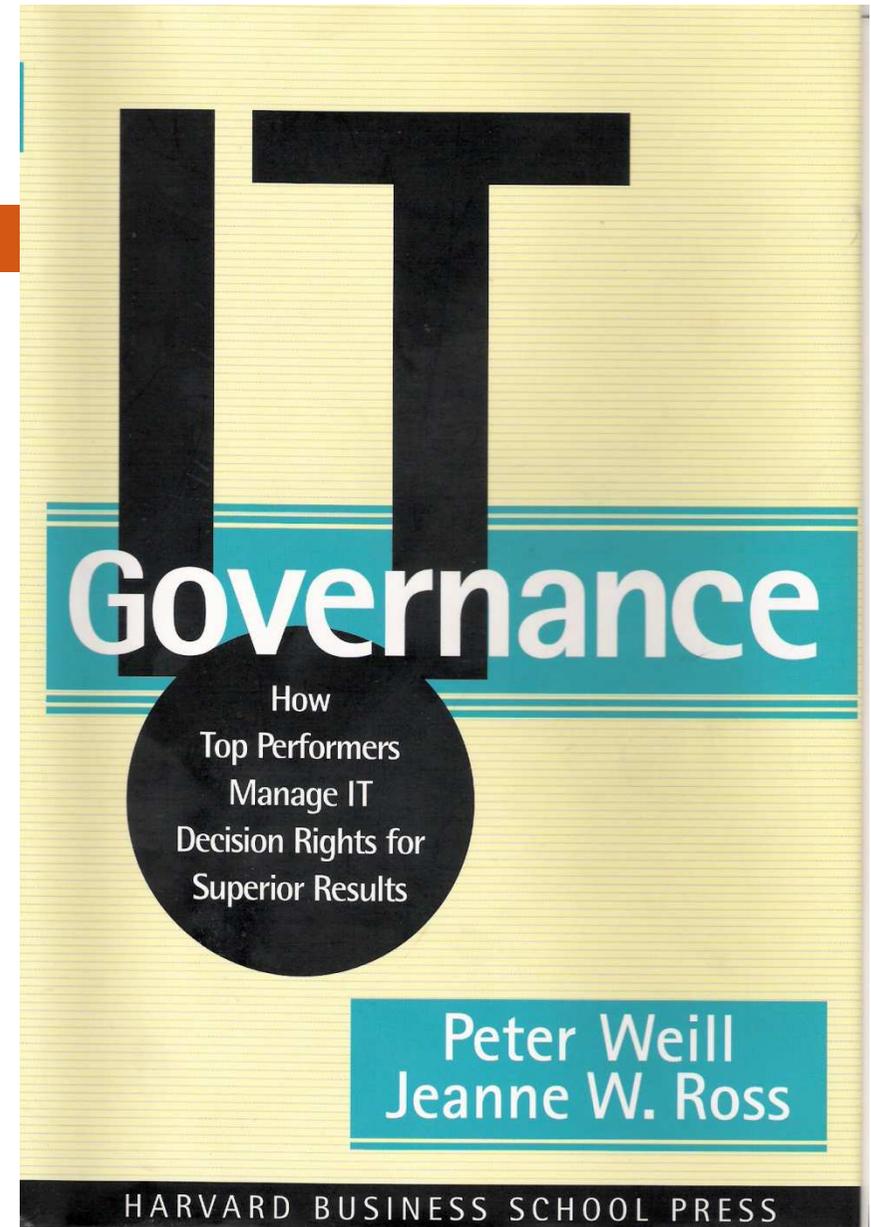
***“An investment in knowledge always gives the best interest”. B. Franklin***

# 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"

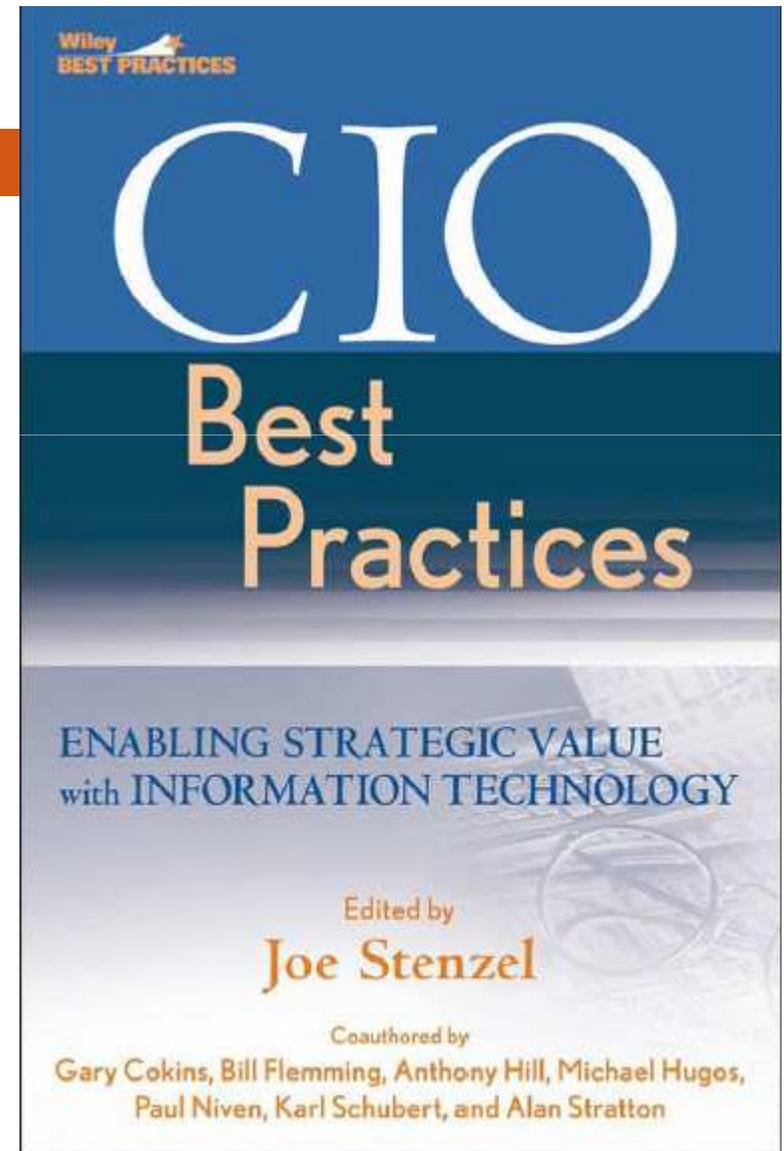
## Basic Reference

- **IT Governance:  
How Top Performers  
Manage IT Decision  
Rights for Superior  
Results  
Peter Weill & Jeanne  
Ross (2004)**



# Basic Reference

- **CIO Best Practices. Enabling Strategic Value with Information Technology. Joe Stenzel (2007)**



# Common Strategic Initiatives

- The practical part of the strategic planning are the initiatives that lead to strategic projects and those should be addressed to achieve the objectives of the plan.

# Common Strategic Initiatives

- **Rapid Reaction**

- Proactivity and reactivity on the market
- Business at the Speed of Thought / knowledge

- **Digital marketing**

- Use IT to interact with consumers
- Continuous research markets
- Build and test scenarios

# Common Strategic Initiatives

- **Influence on the external environment**
  - Indicators / Sensors
- **Innovation**
  - Identify and develop niche markets and products
  - Create new products and add value to existing
  - Process reengineering
  - Communication with partners

# Common Strategic Initiatives

- **Promote growth**

- Geographic expansion
- Operational expansion to profit from economies of scale
- Develop networks and partners
- Promote integration

- **Partnerships**

- Development of virtual organizations
- Concentration on core business
- Flexible networks of partners

# Common Strategic Initiatives

- **Outsourcing**
- **Efficiency**
- **Quality**
  - Standardization
  - continuous service
- **Architecture and Infrastructure**
  - Information Asset Development
  - Process Integration

# Common Strategic Initiatives

- **Loyalty and fidelity**

- Incentives
- Added value through interaction
- Customized marketing

- **Competition**

- Elimination of barriers to entry in markets
- Building market barriers
- Cost reduction
- Building relationships with suppliers
- Access to distribution channels



# Balanced Score Cards

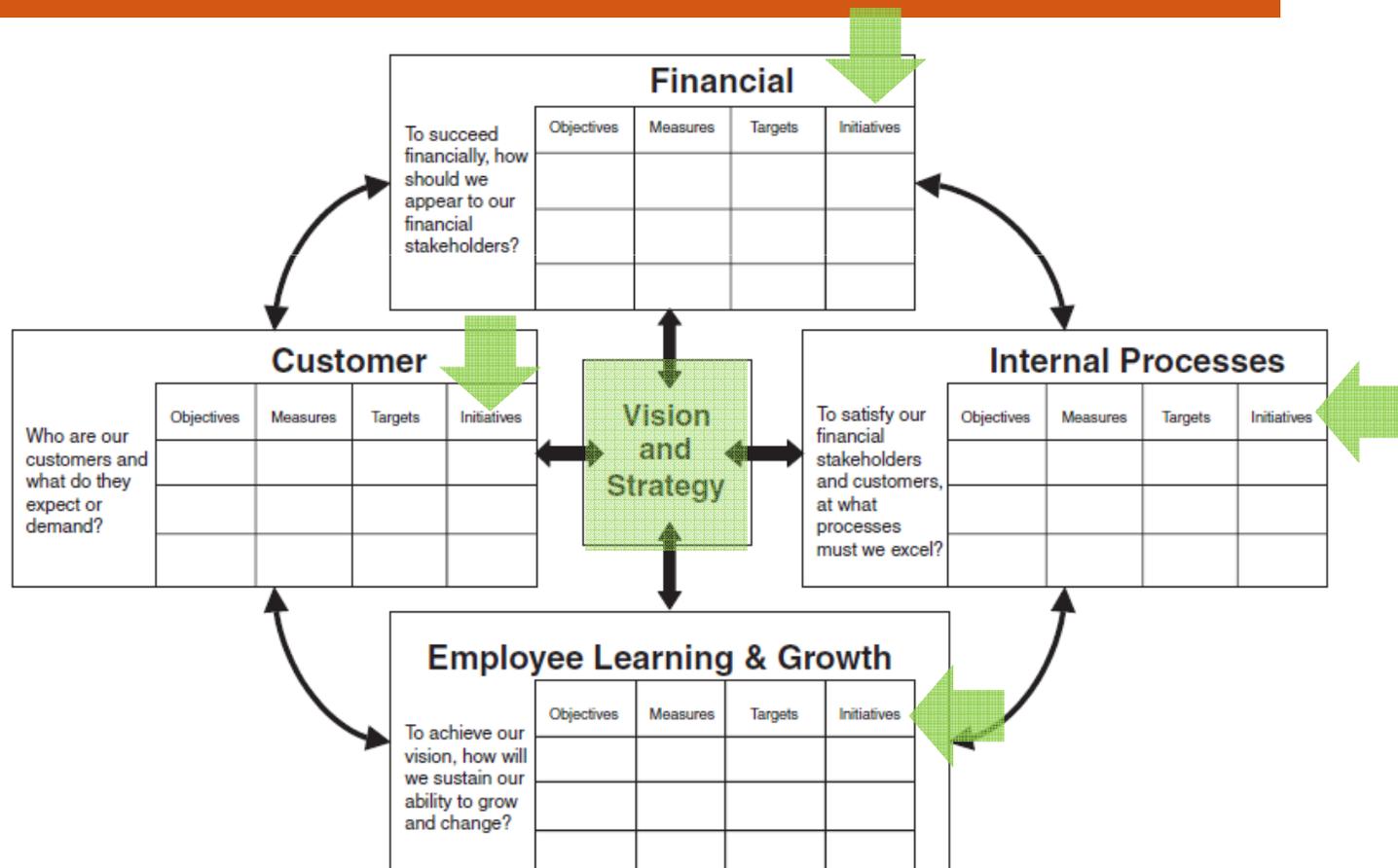


EXHIBIT 5.3 The Balanced Scorecard



# Balanced Score Cards

Executive Scorecard Hierarchy	Actual	Target	Performance	Interpretation
<ul style="list-style-type: none"> <li>[-]  Customer Performance Optimization               <ul style="list-style-type: none"> <li> Communicate Effectively and Efficiently via SPM and Portals</li> <li> Strategic Business Application Communications</li> <li> Drive Business—IT Alignment through Business Cases</li> <li> Negotiate, Monitor, Guarantee, and Report Business SLAs</li> </ul> </li> </ul>	0.95	0.95	100%	
<ul style="list-style-type: none"> <li>[-]  Financial Performance Optimization               <ul style="list-style-type: none"> <li> Measure Business Application Financial Requirements and Results</li> <li> Optimize IT Financial Performance</li> <li> Demonstrate IT Financial Value Legacy Applications</li> </ul> </li> </ul>		0.95	83%	
<ul style="list-style-type: none"> <li>[-]  Learning and Growth               <ul style="list-style-type: none"> <li> Implement ITIL</li> <li> Measure ITIL Results</li> </ul> </li> </ul>	0	0.00	0%	
<ul style="list-style-type: none"> <li>[-]  Resource and Service Optimization               <ul style="list-style-type: none"> <li> Provide IT Business Value Facts</li> <li> Implement Service Level Management Foundation</li> <li> Move From Reactive to Proactive Services</li> <li> Consolidate IT Metrics into ITRM</li> </ul> </li> </ul>	609	554.00	109%	

**EXHIBIT 4.2 An Executive Scorecard Guides Strategy Implementation**

## 9. CIO Strategies



FIGURE 2-2

### 2009 CIO strategies by enterprise effectiveness

*The most effective CIOs put a higher priority on the quality of their people*

Strategy	Relative priority of strategy to CIO			
	Leaders	Challengers	Close followers	Late followers
Delivering projects that enable business growth	1	1	5	9
Linking business & IT strategies and plans	2	3	1	6
Reducing the cost of IT	3	2	2	2
Attracting, developing, and retaining IT personnel	4	7	12	11
Improving the quality of IS services	5	6	7	5
Expanding the use of information	6	11	9	15
Building business skills in the IT organization	7	12	10	13
Leading enterprise change initiatives	8	13	13	7
Implementing IT process improvements	9	4	4	6
Developing or managing a flexible infrastructure	10	8	11	10
Improving IT governance	11	5	3	1
Managing risk and exposure	12	14	14	12
Consolidating IT operations	13	9	8	8
Improving the business and IT relationship	14	10	6	3

Source: Gartner Executive Programs 2009 CIO Agenda Survey.

## 9. Projects and value

- Each project should be treated as a business project and therefore could have different types:
  - Small projects, small scope and financed by the business units budget.
    - Although less formal and identification of less rigorous, it's a business opportunity, and units have motivation and incentive to produce them.



**TAKE  
TOTAL  
CONTROL**

Of your IT Project Portfolio.  
Leverage the data you already collect and never have a late project again!

 **Automated  
Project Office**

## 9. Projects and value

- Each project should be treated as a business project and therefore could have different types:
  - Cost projects are initiatives to support the business as IT infrastructure, financed by the IT budget.
    - They do not contribute directly to the profit and measured in price-per-performance: reasonable cost and limited risk



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## 9. Projects and value

- Each project should be treated as a business project and therefore could have different types:
  - Benefit projects, are expected to improve margins and lower costs. Priority is given to the value of expected benefit or contribution to new business.
    - They usually start in phases to maximize tracking expenses and benefits and minimize the risks, which are high.



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## 9. Set clear investment criteria

- The effective prioritization of IT investments are a source of conflict and discussion with business units.
- IT and capital are the two resources of a company that usually come from a single source.
- Without prioritizing IT investments, it is impossible to consolidate the interests of the units.
- You can only subordinate those interests if there is a transparent process of investing in projects that the company wants to develop through a joint decision-making.



# Project Management Office

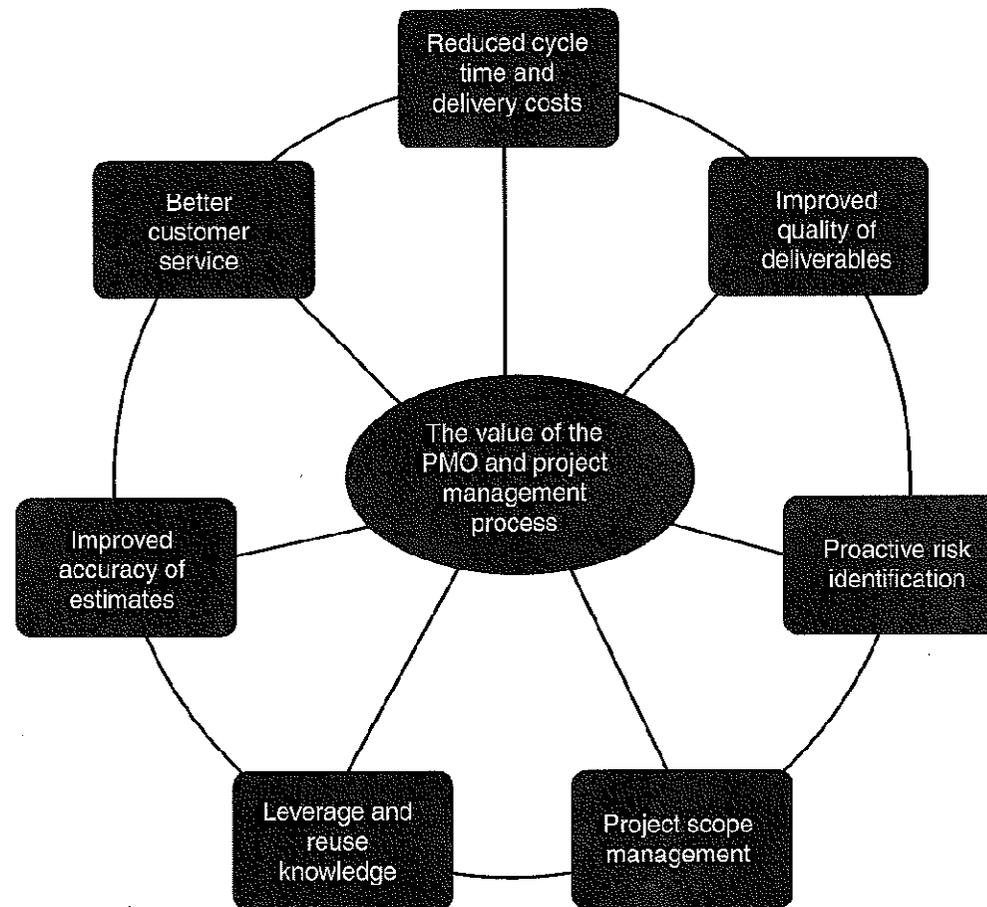


Figure 4.1 The Program Management Office value proposition.

# Project Portfolio Management

- Only one in four software projects end up successfully
- The projects are easy to start and hard to end
- Projects fail for many reasons ...





Jacques-Louis David, 1803 (versión Belvedere)



Paul Delaroche, 1850



# Project Management Failures

## IT PROJECT MANAGEMENT

**TABLE 2** 53 Early Warning Signs Ranked by Mean Importance Score  
(7 = Extremely Important, 1 = Extremely Unimportant)

Rank	Item Description*	Source	Mean Importance Score
1	Lack of top management support or commitment to the project	Schmidt et al., 2001	6.59
2	Functional, performance, and reliability requirements and scope are not documented	Winters, 2002	6.58
3	Project manager(s) cannot effectively lead the team and communicate with clients	Schmidt et al., 2001	6.38
4	No change control process	Schmidt et al., 2001	6.33
5	Project stakeholders have not been interviewed for project requirements	Ward, 2003	6.32
6	No documented milestone deliverables and due dates		6.30
7	Undefined project success criteria		6.22
8	Project team members have weak commitment to the project scope and schedule	Schmidt et al., 2001	6.17
9	Communication breakdown among project stakeholders	May, 1998	6.17
10	Key project stakeholders do not participate in major review meetings		6.16
11	Project team members do not have required knowledge/skills	Barki et al., 2001	6.16
12	Project resources have been assigned to a higher priority project	Havelka et al., 2004	6.12
13	No business case for the project	Ward, 2003	6.11
14	No project status progress process	Havelka et al., 2004	6.11
15	Schedule deadline not reconciled to the project schedule		6.09
16	Early project delays are ignored — no revision to the overall project schedule	McKeeman, 2001	6.04

# Project Management Failures

17	Subject matter experts are overscheduled: retain all prior duties yet expected to provide substantial participation to the project	McKeeman, 2001	6.04
18	No planning and estimation documentation	Jones, 2004	5.96
19	Project managers have poor training	Schmidt et al., 2001	5.94
20	Key stakeholders do not review and sign off deliverables on a timely basis		5.93
21	Project stakeholder decision delays have caused due dates to be missed		5.93
22	No due diligence on vendor(s) and team members	McKeeman, 2001	5.91
23	No written commitment for the project outside of the project team		5.88
24	Significant goal, scope, or schedule requirements change immediately after project kickoff	Boehm, 1991	5.85
25	Team members have undefined roles and responsibilities	Jiang et al., 2002	5.83
26	No project communications plan or resources devoted to managing and communicating project expectations		5.80
27	Project team members are overscheduled	Schmidt et al., 2001	5.77
28	Users are not willing to cooperate	Schmidt et al., 2001	5.75
29	No team member experience with the chosen technology	Schmidt et al., 2001	5.73
30	No project management methodology	Schmidt et al., 2001	5.67
31	No project charter document at early stage of project		5.65
32	No risk analysis documentation and process	McKeeman, 2001	5.65
33	Failure to gather requirement via joint application design		5.63
34	No documented analysis of business strategy alignment	Winters, 2002	5.61
35	Major new risks are identified after the project kickoff		5.59
36	No performance and reliability requirements metrics tracking process	Jones, 2004	5.57
37	Approved project budget less than budget estimated by the project team		5.56
38	Budget, schedule, scope, and quality all mandated from outside the project team		5.56
39	Project manager(s) have never managed a project of this scale before	McFarlan, 1982	5.55

# Project Management Failures

40	Deliverable due dates missed during the first 10 percent of the project schedule	McKeeman, 2001	5.54
41	IT operations infrastructure and network infrastructure problems have major impact on project team productivity		5.52
42	Difficulty in determining the input and output of the system		5.51
43	Cultural conflict among organizations involved	Winters, 2002	5.50
44	No contingency budget for known risks and rate of changes		5.50
45	Unstable organization environment (such as changes in senior management or restructuring)	Schmidt et al., 2001	5.49
46	Project team member(s) have low morale	McKeeman, 2001	5.48
47	Key team member turnover after project kickoff	Schmidt et al., 2001	5.45
48	Key stakeholders have not signed the project charter		5.36
49	Large number of interfaces to other system required	Barki et al., 2001	5.30
50	Users cannot get involved because of lack of understanding of new system capabilities	McFarlan, 1982	5.29
51	Project involves implementing a custom or beta version of hardware or software	Schmidt et al., 2001	5.10
52	Users or technical support team feel threatened by a project to replace their legacy system	Jiang et al., 2002	4.80
53	Earned value systems not in place or used to control program		4.56

\* The items for which no source is listed were not identified from earlier studies; they were added based on the authors' experiences and on feedback from a panel of 19 experts.

**TABLE 3** The Dominant Dozen Early Warning Signs of IT Project Failure

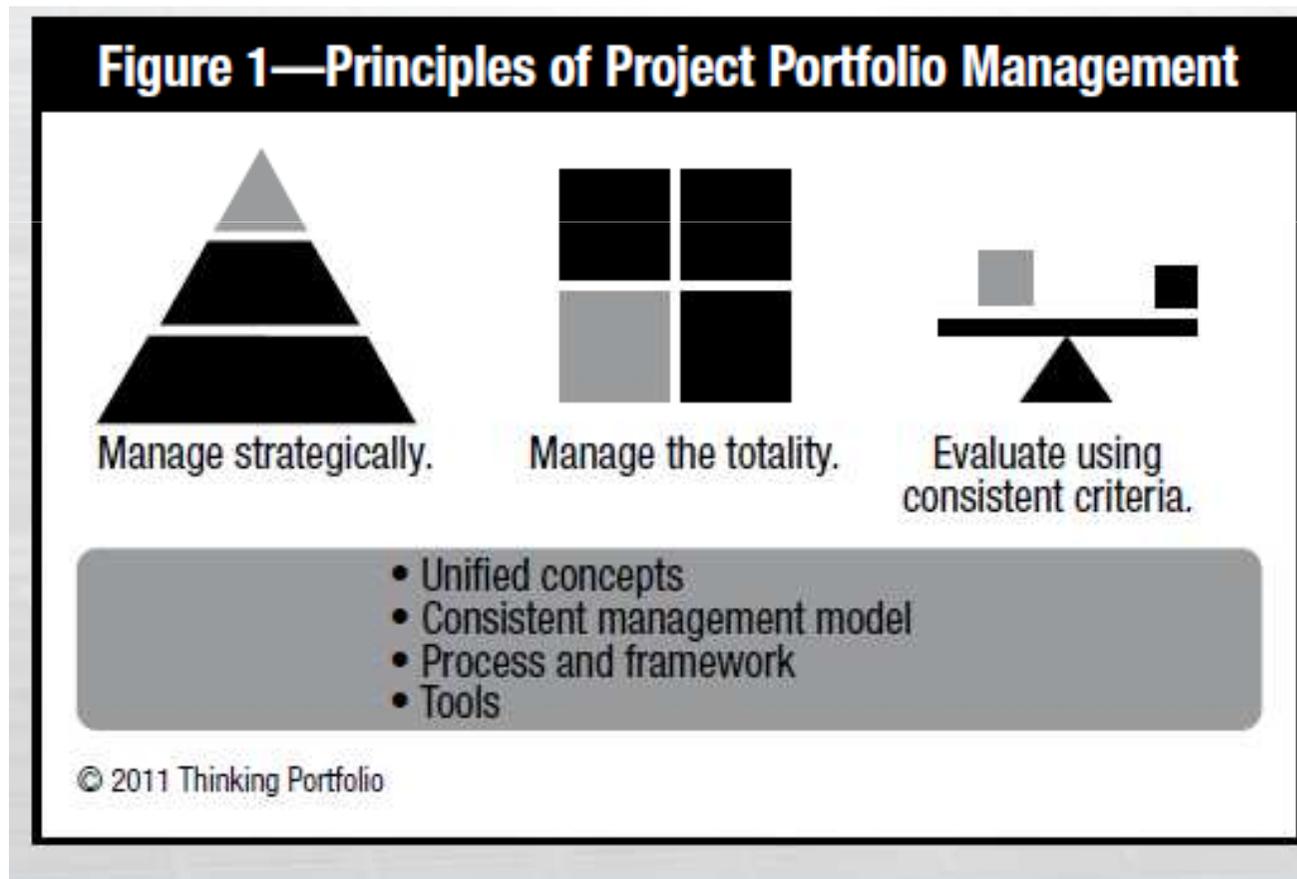
Dominant Dozen Early Warning Signs	Rankings from Table 2
<b>PEOPLE-RELATED RISKS</b>	
Lack of top management support	1
Weak project manager	3
No stakeholder involvement and/or participation	5, 10
Weak commitment of project team	8
Team members lack requisite knowledge and/or skills	11
Subject matter experts are overscheduled	17
<b>PROCESS-RELATED RISKS</b>	
Lack of documented requirements and/or success criteria	2, 7
No change control process (change management)	4
Ineffective schedule planning and/or management	6, 14, 15, 16
Communication breakdown among stakeholders	9
Resources assigned to a higher priority project	12
No business case for the project	13

# Project Portfolio Management

- Básicamente, los proyectos fallan por:
  - Planificación pobre
  - Falta o difusa propiedad del proyecto
  - Ausencia de caso de negocio
  - No alineamiento con la arquitectura corporativa
  - Preparación inadecuada
- Se deben solventar estos problemas, pero antes se deben **seleccionar qué proyectos hacer.**

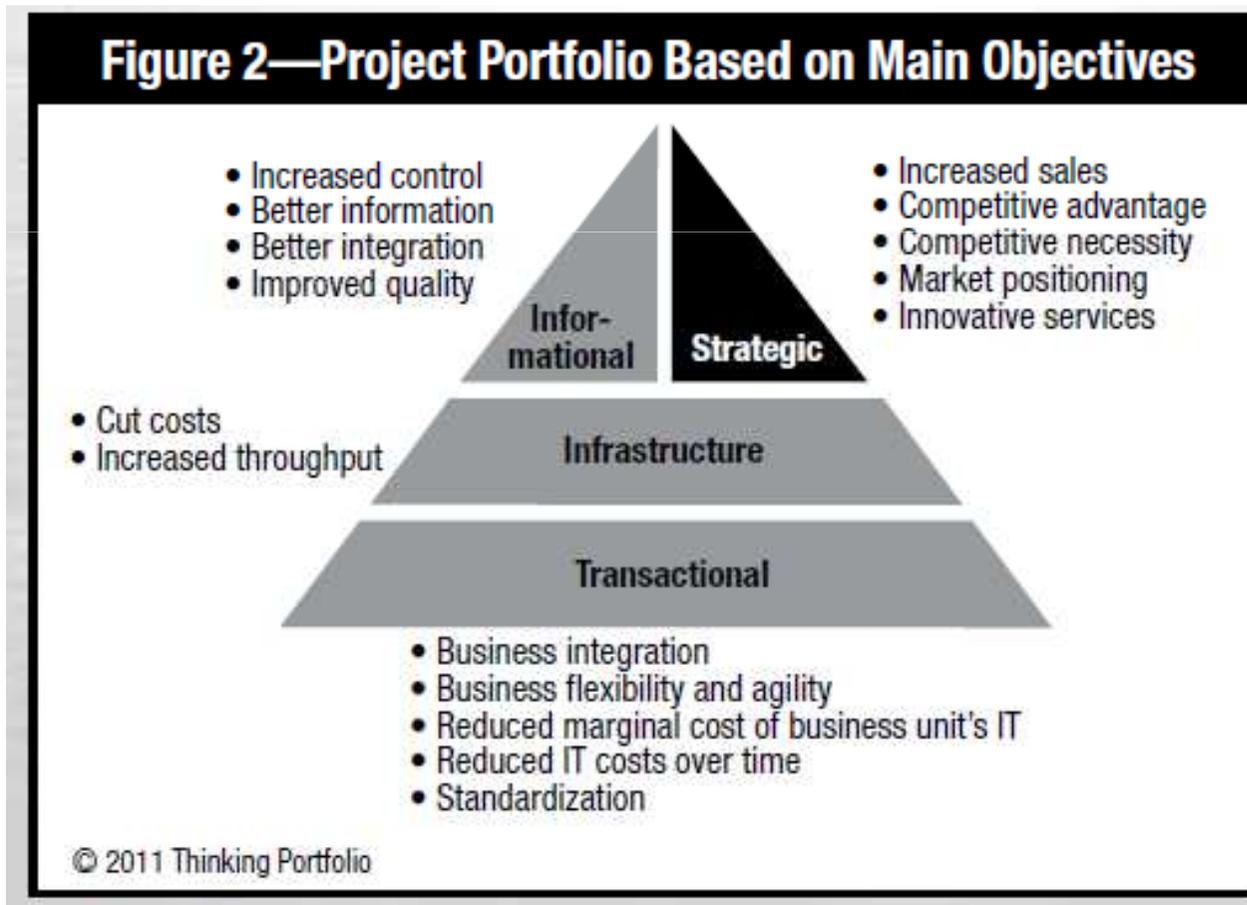


# Project Portfolio Management



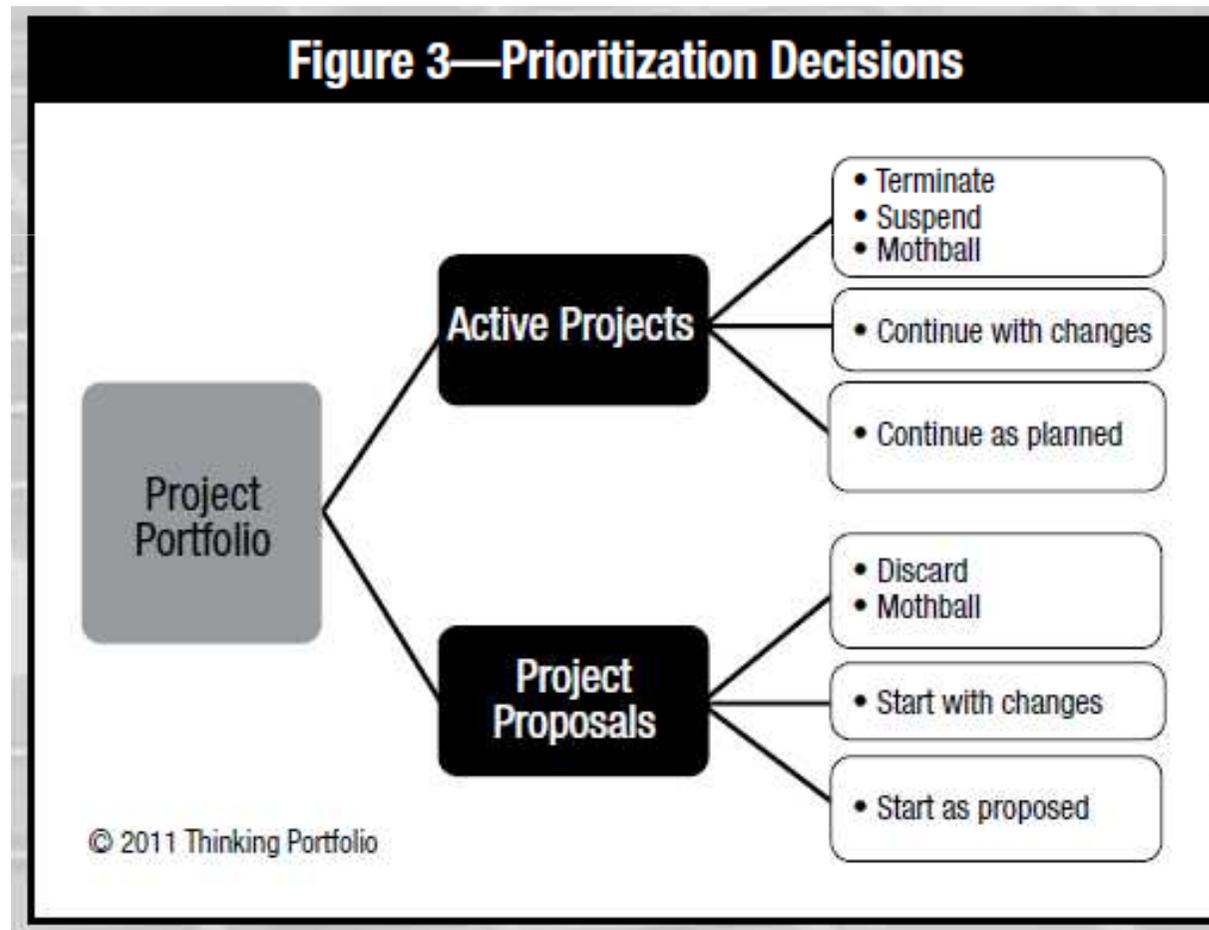


# Project Portfolio Management



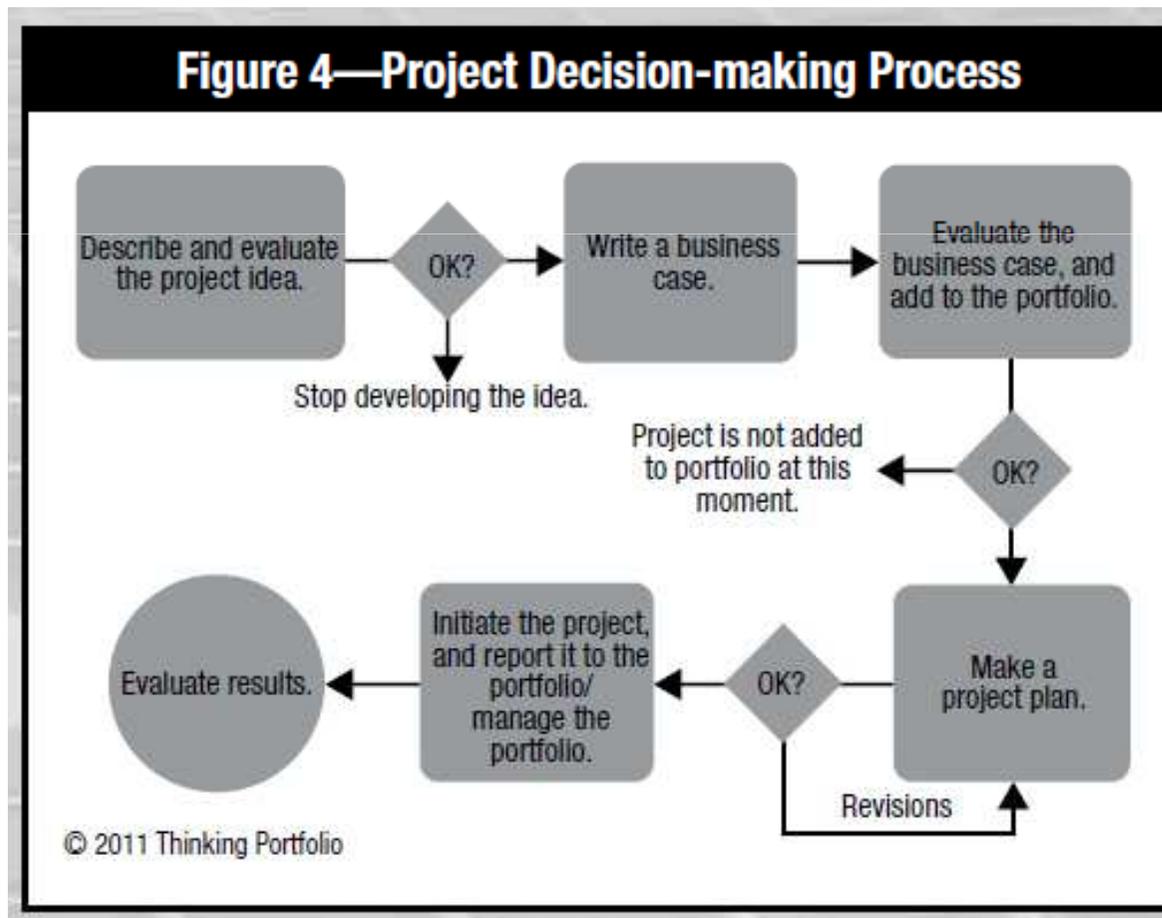


# Project Portfolio Management





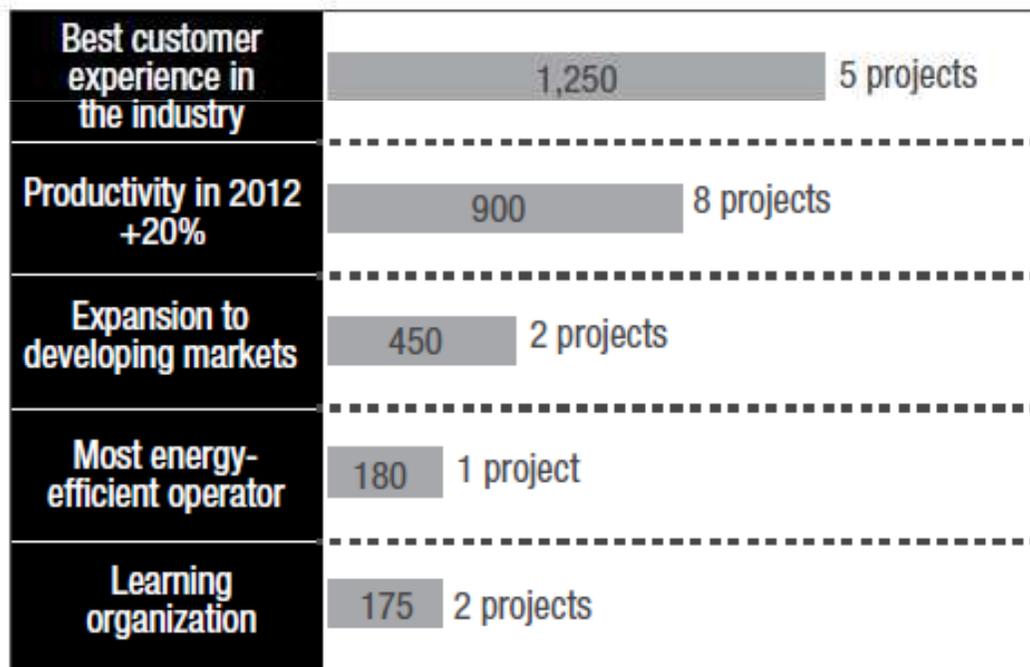
# Project Portfolio Management





# Project Portfolio Governance

**Figure 5—Project Distribution by Strategic Goals**



Project person-days and number of projects by main strategic goal

## 9. Set clear investment criteria

- Whatever the investment process needs do not make everyone happy, it is important that the rules are understood and decisions
- Normally the investment criteria may be varied but all have in mind:
  - Attractive (financially)
  - Business value as a measure of strategic alignment
  - Efficiency of ICT infrastructure and architecture.



# Project Portfolio Governance

