What is IT Val?

Val IT provides the means to unambiguously measure, monitor and optimise the realisation of business value from investment in IT.

Val IT complements COBIT from a business and financial perspective and will help all those with an interest in value delivery from IT.
Focus Area of IT Governance
Life Cycle
To help management ensure that organisations realise optimal value from IT-enabled business investments at an affordable cost with a known and acceptable level of risk.
Focus Area of IT Val

Specifically, Val IT focuses on:

1. the investment decision (are we doing the right things?) and
2. the realisation of benefits (are we getting the benefits?),

while COBIT focuses on the execution (are we doing them the right way, and are we getting them done well?).
How to realize benefit?

- Increasing the understanding and transparency of costs, risks and benefits
- Increasing the probability of selecting those investments with the highest potential return
- Increasing the likelihood of success of executing selected investments such that they realise or exceed the expected return
- Reduce costs by not doing things they should not be doing and taking early corrective action on or terminating investments that are not delivering to their expected potential
- Reduce the risk of failure, especially high-impact failure
- Reduce the surprises relative to IT cost and delivery, and in so doing increase business value, reduce unnecessary costs and increase the overall level of confidence in IT
Why IT Val?

According to a 2002 Gartner publication, 20 percent of all expenditure on IT is wasted, representing, on a global basis, annual value destruction of US $600 billion.

A 2004 IBM survey of Fortune 1000 CIOs, in which CIOs reported that, on average, 40 percent of all IT spending brought no return to their organisations.

A 2004 Standish report, which found that only 29 percent of all IT projects succeeded while the remainder were either challenged or failed.

IT-enabled business investments can bring huge rewards, but only with the right governance and management processes and full commitment and engagement from all management.
The strategic question. Is the investment:
- In line with our vision
- Consistent with our business principles
- Contributing to our strategic objectives
- Providing optimal value, at affordable cost, at an acceptable level of risk

The value question. Do we have:
- A clear and shared understanding of the expected benefits
- Clear accountability for realising the benefits
- Relevant metrics
- An effective benefits realisation process

The architecture question. Is the investment:
- In line with our architecture
- Consistent with our architectural principles
- Contributing to the population of our architecture
- In line with other initiatives

The delivery question. Do we have:
- Effective and disciplined management, delivery and change management processes
- Competent and available technical and business resources to deliver:
  - The required capabilities
  - The organisational changes required to leverage the capabilities
The perceived low return from high-cost IT investments, and an inadequate view of IT’s performance are two of the four top problems they face.

More than 30 percent claim a negative return from IT investments targeting efficiency gains.

40% do not have good alignment between IT plans and business strategy.

The number of enterprises that consider active management of the return on IT investments a good practice, or that have actually implemented the practice, has doubled in two years, from 28 percent to 58 percent.
Val IT Principles

- IT-enabled investments will be managed as a **portfolio of investments**.
- IT-enabled investments will include the **full scope of activities** that are required to achieve business value.
- IT-enabled investments will be managed through their **full economic life cycle**.
- Value delivery practices will recognise that there are **different categories of investments** that will be evaluated and managed differently.
- Value delivery practices will define and monitor **key metrics** and will respond quickly to any changes or deviations.
- Value delivery practices will engage all stakeholders and assign **appropriate accountability** for the delivery of capabilities and the realisation of business benefits.
- Value delivery practices will be **continually monitored, evaluated and improved**.
Tiga proses IT Val:

- Value governance
- Portfolio management
- Investment management
Value Governance (VG)

The goal of value governance is to optimise the value of an organisation’s IT-enabled investments by:

1. Establishing the governance, monitoring and control framework
2. Providing strategic direction for the investments
3. Defining the investment portfolio characteristics
Portfolio Management (PM)

- The goal of portfolio management is to ensure that an organisation’s overall portfolio of IT-enabled investments is aligned with and contributing optimal value to the organisation’s strategic objectives by:
  1. Establishing and managing resource profiles
  2. Defining investment thresholds
  3. Evaluating, prioritising and selecting, deferring, or rejecting new investments
  4. Managing the overall portfolio
  5. Monitoring and reporting on portfolio performance
Investment Management (IM)

The goal of investment management is to ensure that an organisation’s individual IT-enabled investment programmes deliver optimal value at an affordable cost with a known and acceptable level of risk by:
1. Identifying business requirements
2. Developing a clear understanding of candidate investment programmes
3. Analysing the alternatives
4. Defining the programme and documenting a detailed business case, including the benefits details
5. Assigning clear accountability and ownership
6. Managing the programme through its full economic life cycle
7. Monitoring and reporting on programme performance
Understanding “Business Case”

The basic content of the business case consists of the major input resources and three activity streams leading to delivering:

– technical capabilities,
– operational capabilities and
– business capabilities resulting in financial return or other non-financial outcomes.

Each of these streams needs to be documented with data to support the investment decision and portfolio management processes: initiatives, costs, risks, assumptions and outcomes.
Tahapan membuat business case

1. Fact Sheet
2. Alignment
3. Financial Benefits
4. Non-financial Benefits
5. Risks
6. Optimising Risk and Return
7. Documentation
8. Maintenance
<table>
<thead>
<tr>
<th>Fact Sheet Item</th>
<th>Building</th>
<th>Implementation</th>
<th>Operation</th>
<th>Retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best Case</td>
<td>Worst Case</td>
<td>Best Case</td>
<td>Worst Case</td>
</tr>
<tr>
<td><strong>Technical capability</strong></td>
<td></td>
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<tr>
<td>Outcomes (intermediate and end)</td>
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<tr>
<td>Alignment</td>
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<td>Financial benefits</td>
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<tr>
<td>Non-financial benefits</td>
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<tr>
<td>Resources</td>
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<tr>
<td>Expenditure</td>
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<tr>
<td><strong>Risk drivers</strong></td>
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<tr>
<td>Assumptions and constraints</td>
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<tr>
<td><strong>Operational capability</strong></td>
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<td>Outcomes (intermediate and end)</td>
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<td>Financial benefits</td>
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<td>Non-financial benefits</td>
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<td>Resources</td>
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<td><strong>Risk drivers</strong></td>
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<td>Assumptions and constraints</td>
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<tr>
<td><strong>Business capability</strong></td>
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<tr>
<td>Outcomes (intermediate and end)</td>
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</tbody>
</table>
Val IT
Domain & Process

Value Governance (VG)
- Establish informed and committed leadership.
- Align and integrate value management with enterprise financial planning.
- Define and implement processes.
- Establish effective governance monitoring.
- Define portfolio characteristics.
- Continuously improve value management practices.

Portfolio Management (PM)
- Establish strategic direction and target investment mix.
- Determine the availability and sources of funds.
- Manage the availability of human resources.
- Evaluate and select programmes to fund.
- Monitor and report on investment portfolio performance.
- Optimize investment portfolio performance.

Investment Management (IM)
- Develop and evaluate the initial programme business case.
- Understand the candidate programme and implementation options.
- Develop the programme plan.
- Develop full life-cycle costs and benefits.
- Launch and manage the programme.
- Update operational IT portfolios.
- Update the business case.
- Monitor and report on the programme.
- Retire the programme.
Relationship Amongst Val IT Domain & Process

Value Governance (VG)
- Establishes the overall governance framework, including defining the portfolios required to manage investments and resulting IT services, assets and resources.
- Monitors the effectiveness of the overall governance framework and supporting processes, and recommends improvements as appropriate.

Portfolio Management (PM)
- Establishes the strategic direction for investments, the desired characteristics of the investment portfolio, and the resources and funding constraints within which portfolio decisions must be made.
- Evaluates and prioritises programmes within resource and funding constraints, based on their alignment with strategic objectives, business worth and risk, and moves selected programmes into the active portfolio for execution.
- Monitors the performance of the overall portfolio, adjusting the portfolio as necessary in response to programme performance or changing business priorities.

Investment Management (IM)
- Defines potential programmes based on business requirements, determines whether they are worthy of further consideration, and develops and passes business cases for candidate investment programmes to portfolio management for evaluation.
- Launches and manages the execution of active programmes, and reports on performance to portfolio management.
- Retires programmes when there is agreement that desired business value has been realised, or when retirement is deemed appropriate for any other reason.
- Monitors the performance of IT services, assets and resources to determine whether additional investments are required to maintain, enhance or retire the service, asset or resource to sustain or increase their contribution to business value.

Moves resulting IT services, assets and resources to the appropriate operational IT portfolio(s), and continues to monitor their contribution to business value.
Bagaimana alur kerja Val IT?

1. Value governance establishes the overall governance framework, strategic direction, the desired characteristics of the portfolio, and the resource and funding constraints within which portfolio decisions must be made.

2. Investment management defines potential programmes based on business requirements, determines if they are worthy of further consideration, and passes candidate investment programmes to portfolio management for evaluation based on their alignment with strategic objectives, business worth, both financial and non-financial, and risk, both delivery risk and benefits risk.

3. Portfolio management evaluates and prioritises programmes, within resource and funding constraints, and moves selected programmes into the active portfolio for execution.
Bagaimana alur kerja Val IT?

4. Investment management launches and manages the execution of active programmes, and reports on performance to portfolio management.

5. Portfolio management monitors the performance of the overall portfolio, adjusting the portfolio as necessary in response to programme performance or changing business priorities.

6. Programme management retires programmes when there is agreement that desired business value has been realised, or when retirement is deemed appropriate for any other reason.
## Process: Value Governance (VG)

<table>
<thead>
<tr>
<th>Process Description</th>
<th>Key Management Practices</th>
<th>CoBiT Cross-references</th>
<th>RACI Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG1 Establish governance, monitoring and control framework.</td>
<td>Ensure informed and committed leadership. The reporting line of the CIO should be commensurate with the importance of IT within the enterprise. All executives should have a sound understanding of strategic IT issues, such as dependence on IT, and technology insights and capabilities, so there is a common and agreed understanding between the business and the IT function regarding the potential impact of IT on the business strategy. The business and IT strategy should be integrated, clearly linking enterprise goals and IT goals, and should be broadly communicated.</td>
<td>Primary: P01.2, P01.4, P04.4, ME4.1, ME4.2</td>
<td>A/R C C</td>
</tr>
<tr>
<td>VG2 Establish strategic direction.</td>
<td>Define and implement processes. Define, implement and consistently follow processes that provide for clear and active linkage amongst the enterprise strategy, the portfolio of IT-enabled investment programmes that execute the strategy, the individual investment programmes, and the business and IT projects that make up the programmes. The processes should include planning and budgeting, prioritisation of planned and current work within the overall budget, resource allocation consistent with the priorities, stage-gating of investment programmes, monitoring and communicating performance, taking appropriate remedial action, and benefits management so there is an optimal return on the portfolio and on all IT assets and services.</td>
<td>Primary: P04.1, ME1.1, ME1.3, ME4.1 Secondary: P05.2, P05.3 P05.4, P05.5, P010.2</td>
<td>A R C</td>
</tr>
<tr>
<td>VG3 Establish portfolio characteristics.</td>
<td></td>
<td>Primary:</td>
<td>A R C</td>
</tr>
</tbody>
</table>
Characteristics of Organisations That Realise IT-Enabled Value

- Programmes are selected based not just on their desirability but also on the organisation’s ability to deliver them.
- Having methodologies in place is less important than whether business managers and specialists use them.
- Robust and realistic business cases are used and, if possible, include benefits for all stakeholders.
- Benefits are managed over the entire investment life cycle through consistently applied practices and processes.
- Integrated planning addresses benefit delivery as well as organisational, process and technology changes.
- Business ownership and accountability are assigned for all benefits and changes targeted.
- Investments and their results—in terms of whether benefits are realised—are systematically monitored and reviewed.
- Lessons learned are consistently gleaned from both successful and unsuccessful programmes—and used to improve the planning and management of new ones.
Val IT Case Study at ING
About ING Group

- Global Financial Services Institution of Dutch origin
- Offering Banking, Insurance and Asset Management
- To 60 Million Private, corporate and institutional clients worldwide
- Multiproduct, multidistribution company approaching customer through his/her channel of choice
ING’s IT Governance Structure

Executive Board
- IT and Procurement Policy Board
  - Information Risk Steering Committee
  - IT Leadership Council
    - IT Standards and Architecture Committee
    - Strategic Infrastructure Committee

Lines of Business
- Retail Banking
- Wholesale Banking
- Insurance Europe
- Insurance Asia/Pacific
- Insurance Americas
- ING Direct

Regional Infrastructure Group
IT and Procurement Policy Board

- IT decision-making body: IT and Procurement Policy Board.
- This board, which meets at least six times each year, is chaired by an executive board director and has amongst its active membership a minimum of three further main board directors together with the general manager Group IT.
- This full and active involvement of such senior directors goes a long way toward ensuring that IT and business matters are properly considered and IT strategy becomes a fully integrated part of business strategy, thus maximising alignment.
- Responsible for policy preparation, provision of IT advice to the businesses, Monitoring the IT activity.
Peran unit usaha & komite-komite

Business CIOs who advise the policy board is member of IT Leadership Council

The IT-related standards-setting process is supported and enabled by subcommittees covering IT standards, IT architecture and strategic infrastructure.

There is also a high-level Information Risk Steering Committee that, in recognition of the importance of security to the group, reports directly to the IT and Policy Procurement Board with its joint IT and business representation.
To ensure maximum business alignment and optimise resource sharing and the elimination of unnecessary redundancy or duplication, there are infrastructure groups and application forums within and across each of the six main business entities within ING, including ING Direct, Insurance Europe, Retail and Wholesale Banking, Insurance Americas, and Insurance Asia/Pacific.

This structure enables business and geography-specific issues to be identified, managed and governed whilst maximising communication and optimising costs across the group.
ING’s IT Dashboard

Provide Information necessary to:

- Develop and Compare the most appropriate metrics on IT Spend, performance and value
- Help Identify positive and negative trends and thus enable best practices to be shared and, where appropriate, managerial actions to be taken
- Enable direct comparison with specifically commissioned, peer group information
- Enable Direct comparison of metrics among different business units
- Assist senior business and IT Management to exercise their governance responsibilities over IT Investments.
ING IT Metrics

- IT Cost by category and by activity
- IT Staff members and costs analyzed by activity
- Full-Time vs contract IT Staff
- Outsourcing ratios
- Workstation costs
- IT intensity (IT Cost as a percentage of total operating costs)
- IT related operational risk incidents (number and value)
- IT security incidents (number and value)
Sample of Dashboard

Figure 3—ING Group 2003 IT Cost (€2438m)

- €1775m (73%) Operations and Maintenance
- €663m (27%) Development and Enhancement
- €248m (10%) Staff Cost
- €90m (4%) Hardware Cost
- €401m (16%) Software Cost
- €490m (20%) Outsourcing Cost
- €1209m (50%) Telecom Cost
Membandingkan Investasi TI & Yang Lain

**SeaQuation: Wall Street Approach to Enterprise IT**

<table>
<thead>
<tr>
<th>Financing</th>
<th>General Investments</th>
<th>Return</th>
<th>Risk</th>
<th>Liquidity</th>
<th>Residual Value</th>
<th>Maximum Write Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance Sheet</td>
<td>Cash (money market)</td>
<td>Lo</td>
<td>Lo</td>
<td>Hi</td>
<td>Hi</td>
<td>At market price</td>
</tr>
<tr>
<td></td>
<td>Commodities (e.g., gold)</td>
<td>Med</td>
<td>Lo</td>
<td>Hi</td>
<td>Hi</td>
<td>At market price</td>
</tr>
<tr>
<td></td>
<td>Derivatives (hedging)</td>
<td>Hi</td>
<td>Hi</td>
<td>Hi</td>
<td>Depends</td>
<td>Unlimited/(for put options)</td>
</tr>
<tr>
<td></td>
<td>Private equity (e.g., Google)</td>
<td>Hi</td>
<td>Hi</td>
<td>Lo</td>
<td>Depends</td>
<td>At market price</td>
</tr>
<tr>
<td></td>
<td>Public equity (shares)</td>
<td>Hi</td>
<td>Hi</td>
<td>Hi</td>
<td>Med</td>
<td>At market price</td>
</tr>
<tr>
<td></td>
<td>Fixed income products</td>
<td>Lo</td>
<td>Lo</td>
<td>Hi</td>
<td>Hi</td>
<td>No write down</td>
</tr>
<tr>
<td></td>
<td>Collectibles (e.g., antiques)</td>
<td>Med</td>
<td>Med</td>
<td>Lo</td>
<td>Med</td>
<td>At market price</td>
</tr>
<tr>
<td><strong>Corporate Investments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Real estate (office/factory)</td>
<td>Med</td>
<td>Med</td>
<td>Lo</td>
<td>Med</td>
<td>At market price</td>
</tr>
<tr>
<td></td>
<td>M&amp;A (expansion policy)</td>
<td>Med</td>
<td>Hi</td>
<td>Lo</td>
<td>Depends</td>
<td>At market price</td>
</tr>
<tr>
<td></td>
<td>IT Investments</td>
<td>Med to Hi</td>
<td>Hi</td>
<td>Nil—Sunk Cost</td>
<td>Nil</td>
<td>At cost (TCO) &gt; budget</td>
</tr>
</tbody>
</table>
Managing IT Investment Portfolio

Portfolio management requires constant monitoring to reduce earnings volatility and optimise riskweighted performance. This involves making decisions on increasing or reducing individual investments and, in particular, making disposals of non-performing investments.

A key factor in active portfolio management is understanding the extent to which each project is likely to contribute to value creation, remembering that circumstances change during the life cycle of a project and those changes may impact certain assumptions in the original business case.

As a result, ING has each business owner report to the portfolio manager on a quarterly basis during the development phase, to update the financial, risk and other relevant components of the business case. This helps ensure that portfolio management and governance are performed on the latest, most up-to-date information.
Inventory of Portfolio

Do we know the size and shape of our IT investment portfolio?

Portfolio
# of projects: 1750
Budget: € 2000 m

Intended but not yet approved
# of projects: 650 (37%)
Budget: € 200 m (10%)

Mandatory
# of projects: 150 (8%)
Budget: € 50 m (3%)

Discretionary
# of projects: 500 (28%)
Budget: € 150 m (8%)

Mandatory
# of projects: 200 (13%)
Budget: € 250 m (7%)

Discretionary
# of projects: 900 (51%)
Budget: € 1550 m (82%)

Approved
# of projects: 1100 (63%)
Budget: € 1800 m (90%)
Payback Period & Value Creation

S-curve indicating cash flow movement over the investment life cycle

- Initiation
- Net Gain (Value)
- Payback Period
- Time to Market (Project Completion)

2006 Q1 2007 Q1 2008
**Project Life Cycle**

1. Project initiation (after approval of the business case and acquiring the right to spend)
2. Time to market starting after delivery of the functionality upon project completion
3. Payback period (cumulative cash outflows in equilibrium with cumulative cash inflows)
4. Value creation (cash inflows outweigh cash outflows on a cumulative basis—production of net gain) until the retirement of the asset
Portofolio Investasi

Risk-NPV Analysis Based on Investment Budgets

Ratings based on bond market classifications:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Rating Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Prime, best quality</td>
</tr>
<tr>
<td>BBB</td>
<td>Higher risk, good quality</td>
</tr>
<tr>
<td>CCC</td>
<td>Speculative</td>
</tr>
<tr>
<td>DDD</td>
<td>High risk, poor quality</td>
</tr>
</tbody>
</table>

Risk Rating:

1: Low risk
2: Fair risk
3: Material risk
4: High risk
Projects develop a momentum of their own once approved and underway. Experience shows that this momentum is not always cost-effective. Accordingly, processes are in place for regular, independent and objective review followed by positive action.

Project cancellations are often seen as undesirable. ING instills a culture in which cancelling or rescoping a project as soon as it becomes apparent that it cannot be delivered satisfactorily is seen as a sign of strong management and good governance.

The profit and loss (P&L) statement impact can be significant if the project under scrutiny is large and previous costs have been capitalised. Cancelling the project then leads to these costs being written off in one P&L account hit. This is not always a preferred measure from a short-term profit maximisation perspective, but it may be necessary for financial prudence and regulatory compliance.
Portfolio Management
ala Pusilkom UI
Teknik Prioritisasi & Penjadwalan Proyek & Program Kerja TI

1. Untuk Strategi Implementasi IT Plan xyz, dalam menentukan urutan kegiatan yang akan dilakukan beberapa tahun kedepan, tim konsultan akan mengawalinya dengan merekomendasikan seluruh kegiatan terkait infrastruktur dan prasyarat yang memungkinkan XYZ memiliki *strategic flexibility* yang harus dibangun terlebih dahulu. (disini akan digunakan *Project Requisite Method*)

2. Sesudah itu, mulai dikerjakan proyek-proyek dengan prioritas tinggi dengan *business milestone* yang telah ditetapkan terutama yang terkait erat dengan isu *deadline compliance*. (disini digunakan *Business Alignment Method*)
Kemudian dilakukan perkerjaan yang high value dengan resiko yang rendah (disini akan digunakan teknik *IT Portfolio Management*, Leliveld, 2005)

Jika diperlukan, dalam menentukan proyek mana yang memiliki *value* paling tinggi, relatif terhadap *Balanced Scorecard* XYZ. (dapat dipergunakan BSC/CSF Alignment Method)