Konsep Tata Kelola IT

Minggu 1

Sumber Daya Informasi

INFORMASI :

- **data yang telah diolah menjadi suatu bentuk yang penting bagi si penerima dan mempunyai nilai yang nyata yang dapat dirasakan dalam keputusan-keputusan saat ini atau keputusan-keputusan yang akan datang**

Definisi

Sumber : Gordon B. Davis – 1999 . The Blackwell Encyclopedia Dictionary of Management Information Systems

Sumber Daya Informasi

SISTEM INFORMASI :

- sistem yang mempunyai fungsi mengumpulkan, memproses, menyimpan, menganalisis, dan menyebarkan informasi untuk tujuan yang spesifik

Definisi

Sumber Daya Informasi

Komponen Sumber Daya SI

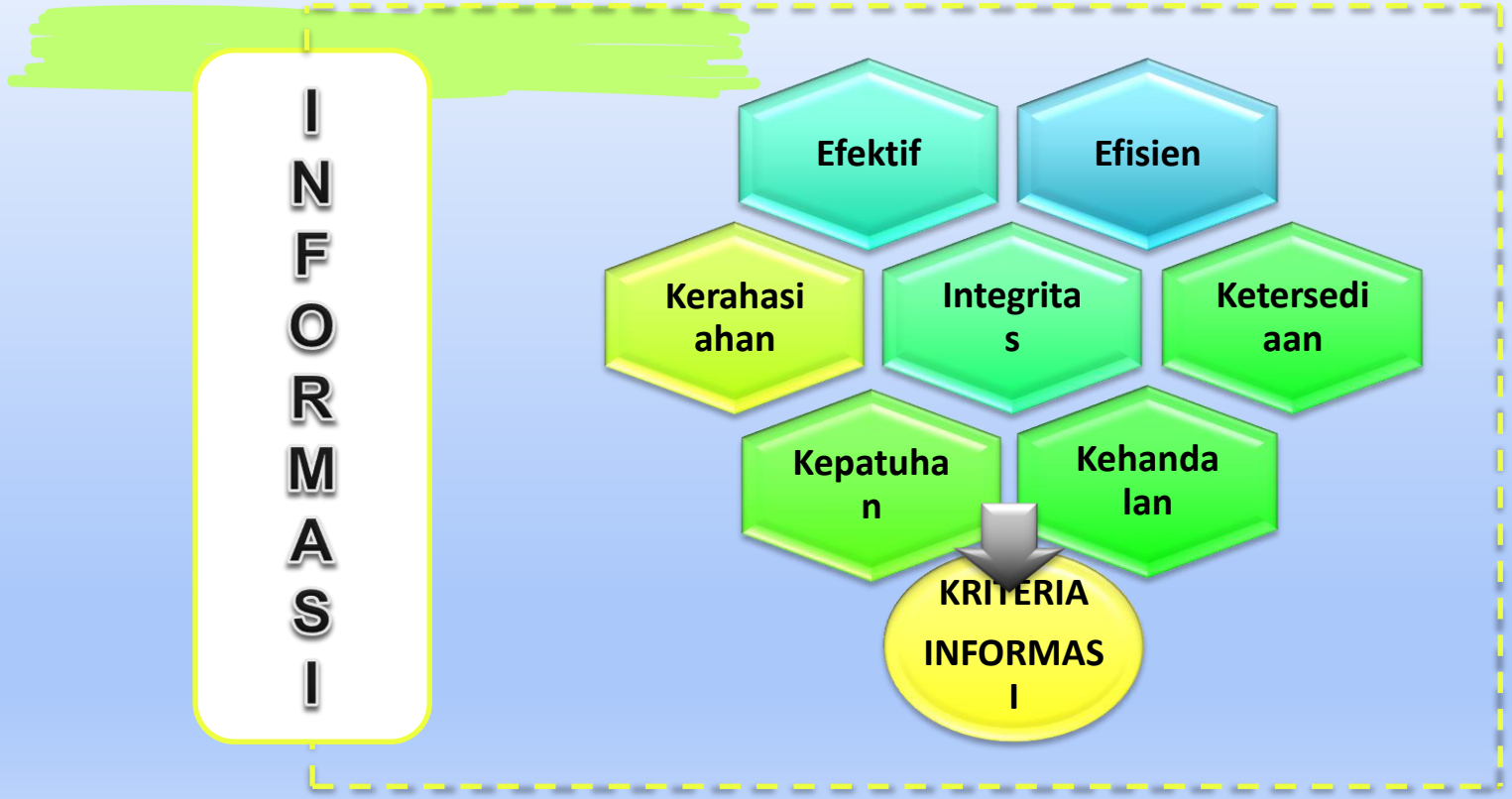
SDM & Organisasi

Mengumpulkan
Memproses
Menyimpan
Menggunakan
Menyebarkan

Teknologi

Sumber : Dion Hinchcliffe - 2010. A New Vision for SOA Governance: A Focus on the Social Aspect

Kriteria Informasi



Sumber : CobiT, V. 4.1

Sumber Daya Teknologi Informasi

TEKNOLOGI INFORMASI :

- Menggambarkan koleksi dari sistem informasi pada suatu organisasi dan para penggunanya, dimana pengelolaannya dilakukan oleh pihak manajemen organisasi

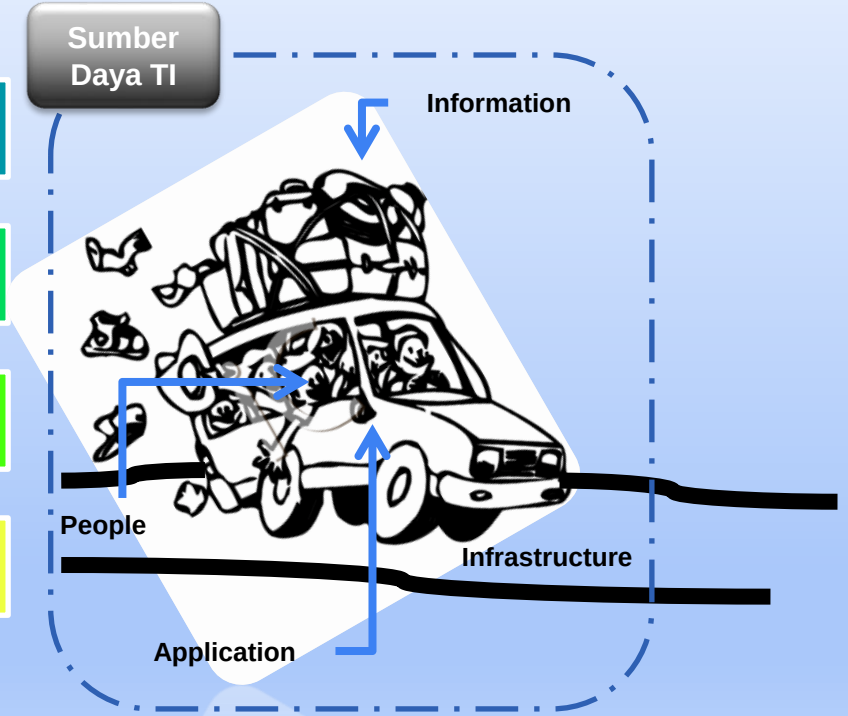
TI terdiri dari perangkat keras, perangkat lunak, basis data, jaringan dan perangkat-perangkat elektronik lainnya, termasuk perangkat komunikasi (data, suara, video)

Definisi

Sumber Daya Teknologi Informasi

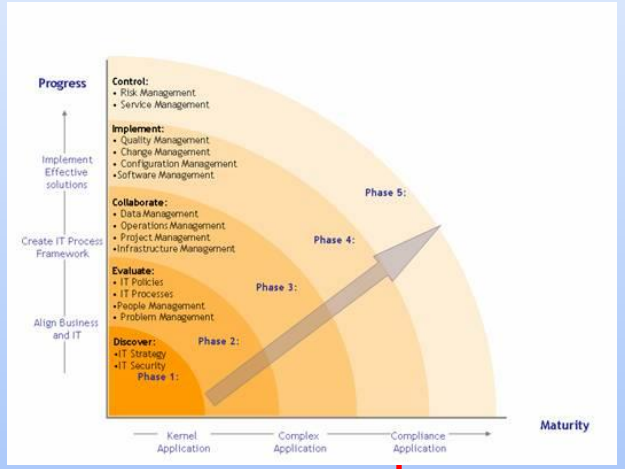
SUMBER DAYA TI

- Informasi
- Aplikasi
- Infrastruktur
- Personil/SDM



Sumber : CobiT, V. 4.1

Tata Kelola Teknologi Informasi



TATA KELOLA TEKNOLOGI INFORMASI :

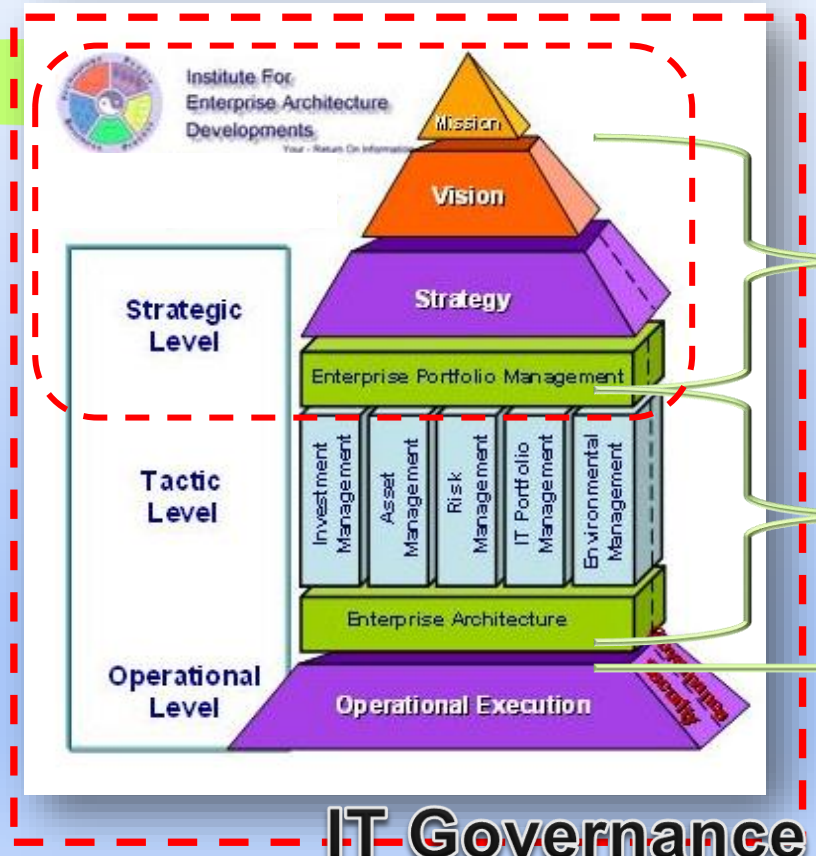
- Bagaimana organisasi dapat menyelaraskan strategi TI dengan strategi bisnis, memastikan bahwa organisasi tetap pada jalurnya dalam mencapai strategi dan tujuan, serta menerapkan cara yang terbaik untuk mengukur kinerja TI

Hal ini memastikan bahwa kepentingan semua pemangku kepentingan telah diperhitungkan dan proses dilakukan dapat memberikan hasil yang dapat terukur.

Definisi

www.cio.com

Tata Kelola TI & Produknya



1. IT Governance Policy & Rule
2. IT Strategic Plan
3. IT Tactical Plan

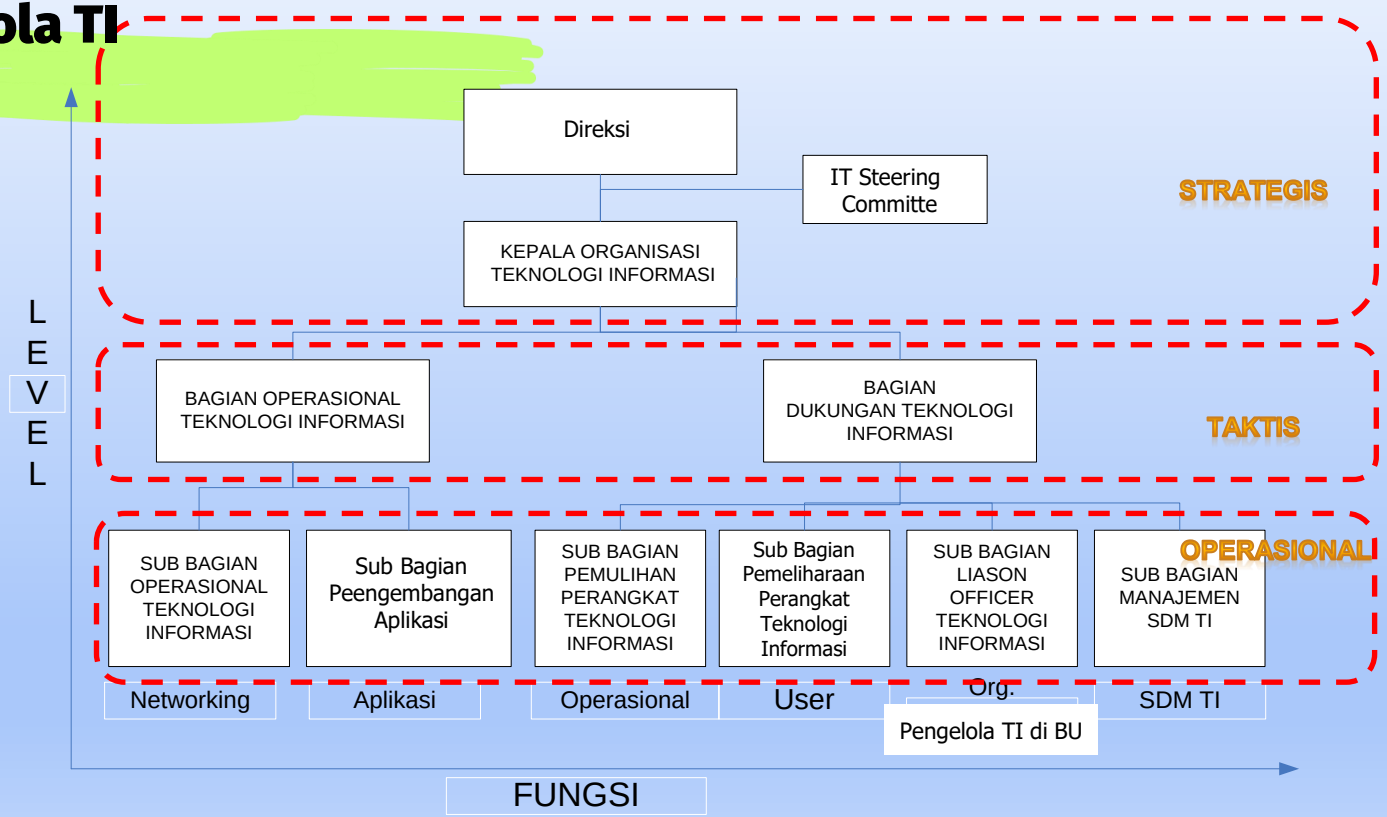
IT PROCES

1. IT Portfolio
2. Enterprise Architecture
3. Business Continuity Planning (BCP)

1. IT Master Plan (ITMP)
2. IT Detail Plan (ITDP)
3. IT Technical Guides line (refer to IT Resources : Information, Aplication, Infrastructure & People/Organization)
4. IT Standard Operation Procedure (SOP refer to IT Services Operation)

J. Schekkerman http://www.enterprise-architecture.info/Images/Services%20Oriented%20Enterprise/EA_Service-Oriented-Architecture1.htm

Representasi Struktur Organisasi TI pada Tata Kelola TI



Prinsip Tata Kelola TI

Kebutuhan Tata Kelola TI

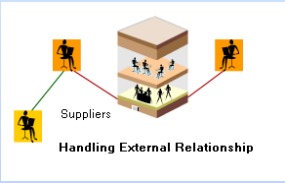
Aligning IT with Business

Security

Keeping IT Running

Managing Complexity

Regulatory Compliance

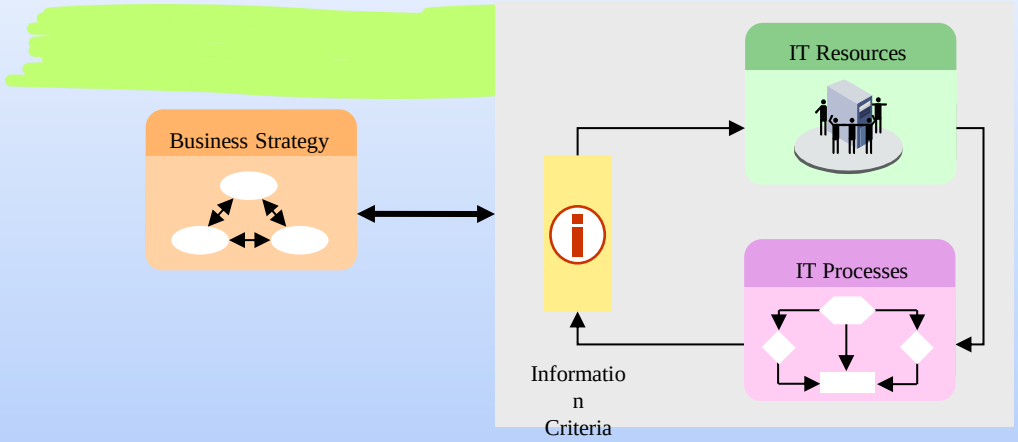


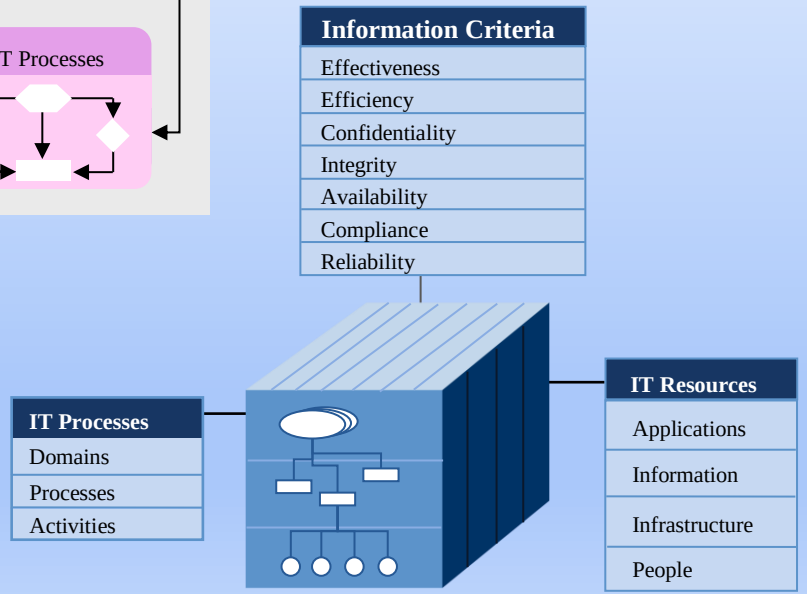
Value/Cost

Fokus Strategi

Menilai dampak kompetitif dari TI
Memastikan keselarasan antara strategi TI & investasi TI
berdasarkan sumber daya yang dimiliki

Best Practice IT Governance





ITG.id PROXSIS IT GOVERNANCE INDONESIA

Benefits of IT Governance

	IT Governance Discipline	Typical Benefits and Impacts
1	**IT Strategy Governance:** Ensure alignment of IT investments with business priorities, and tracking, monitoring and improvement of business-IT engagement.	* Strategic Alignment: 10% to 15% improvement based on enhanced perception of value from IT. * Value Delivery: Enhancement in overall value from IT throughbetter management of IT investments.
2	**Architecture Governance:** Promote standardization in the application and technology portfolio and drive alignment of solution architecture to overall technology and reference architecture.	* Performance Management and Resource Management: 15% to 20% increase in level of architecture reuse. *Risk Management: 5% to 10% fewer risks through reuse of timetested architectural components.
3	**Project & Portfolio Governance:** Govern sequencing of the project portfolio to maximize operating efficiency, and enable identification and mitigation of project portfolio risks.	* Strategic Alignment: 10% to 15% improvement based on enhanced value from the project portfolio. Performance Management and Resource Management: » 10% to 15% improvement in project quality through peer reviews, phase reviews and project review board governance. » 15% to 20% improvement in on-budget delivery of projects.
4	**Application Lifecycle Governance:** Control key facets of introduction, management and sunsetting of applications.	* Performance Management and Resource Management: 10% to 15% cost avoidance through maintenance of an optimal application portfolio.
5	**Infrastructure and Data Governance:** Optimize technology infrastructure costs and establish controls over organizational information assets.	* Performance Management and Resource Management: Reduction in overall infrastructure costs and data/information security costs through improved controls. *Risk Management: 5% to 10% fewer risks through leverage of standardized infrastructure components.
6	**Vendor and Sourcing Governance:** Ensure services provided by vendors deliver adequate business value, and reduce the business risk associated with nonperforming vendors.	* Performance Management: Improvement in quality of vendor services through better measurement, tracking and driving uplift of vendor performance. * Resource Management: 20% to 25% reduction in average vendor onboarding time and effort. * Risk Management: 10% to 20% reduction in vendor-related risks.
7	**Service Lifecycle Governance:** Minimize or eliminate unauthorized changes into production environments, and maintain service and operational levels that promote business-IT alignment.	*Performance Management: 20% to 35% reduction in number of unauthorized changes in the production environment.
8	**New Age Technology Governance:** Improve IT operating efficiency by adopting new age technologies, and minimize any risks associated with the same.	*Performance Management and Resource Management: 20% to 25% improvement in operating efficiency post steady state.

IT Governance Indonesia @itgovernance 0811-1798-325 training@itgid.org www.itgid.org

Framework Tata Kelola TI

- ITIL (IT Infrastructure Library)
- COSO
- ISO 17799
- ISO/IEC 17799:2000
- ISO/IEC TR 13335
- ISO/IEC 15408
- TickIT
- NIST 800-14
- ASL
- SAC
- SAS70
- BS 15000
- SysTrust
- PRINCE2
- SOX
- Six Sigma
- CMM/CMMI
- SASs
- COBIT
- TOGAF
- FISMA

Framework Tata Kelola TI

Framework yang sering dijadikan acuan oleh institusi untuk membangun Tata Kelola TI (hasil survey ITGI) :

1.COBIT
2.IT Infrastructure Library
3.ISO 17799
4.ISO 27000
5.ISO/EIC 38500
6.Australian Standart 8015
* Serta yang bersifat lokal/nasional

MODEL TATAKELOLA TEKNOLOGI INFORMASI (1)

1. The IT Infrastructure Library (ITIL)

ITIL dikembangkan oleh The Office of Government Commerce (OGC) suatu badan dibawah pemerintah Inggris, dengan bekerja sama dengan The IT Service Management Forum (itSMF) dan British Standard Institute (BSI)

ITIL merupakan suatu framework pengelolaan layanan TI (IT Service Management – ITSM) yang sudah diadopsi sebagai standar industri pengembangan industri perangkat lunak di dunia.

MODEL TATAKELOLA TEKNOLOGI INFORMASI (3)

2. ISO/IEC 17799

ISO/IEC 17799 dikembangkan oleh *The International Organization for Standardization (ISO) dan*

***The International Electrotechnical Commission (IEC)* ISO/IEC 17799 bertujuan memperkuat 3 (tiga) element dasar keamanan informasi, yaitu:**

1. ***Confidentiality* – *memastikan bahwa informasi* hanya dapat diakses oleh yang berhak.**
2. ***Integrity* – *menjaga akurasi dan selesainya* informasi dan metode pemrosesan.**
3. ***Availability* – *memastikan bahwa user yang* terotorisasi mendapatkan akses kepada informasi dan aset yang terhubung dengannya ketika memerlukannya**

MODEL TATAKELOLA TEKNOLOGI INFORMASI (5)

3. COSO

COSO framework terdiri dari 3 dimensi yaitu:

COSO mengidentifikasi 5 komponen kontrol yang diintegrasikan dan dijalankan dalam semua unit bisnis, dan akan membantu mencapai sasaran kontrol internal:

a. Monitoring.
b. Information and communications.
c. Control activities.
d. Risk assessment.
e. Control environment.

Framework Design

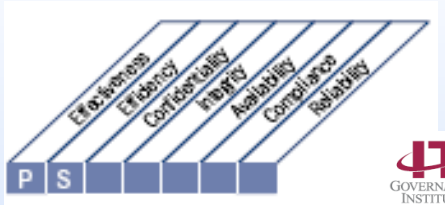
PROSES DESAIN

1. Fokus Pada Bisnis
2. Orientasi Pada Proses
3. Penggunaan Kontrol
4. Pengukuran

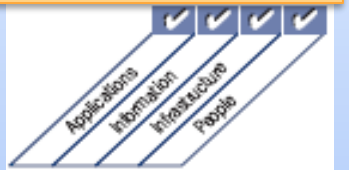
Informasi

Tujuan Bisnis & Tujuan TI

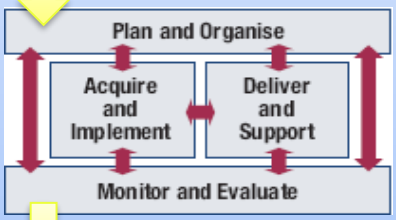
Sumber Daya TI



		Business Goals	IT Goals			
Financial Perspective	1	Provide a good return on investment of IT-enabled business investments.	24			
	2	Manage IT-related business risk.	2	14	17	18
	3	Improve corporate governance and transparency.	2	18		
Customer Perspective	4	Improve customer orientation and service.	3	23		
	5	Offer competitive products and services.	5	24		
	6	Establish service continuity and availability.	10	16	22	23
	7	Create agility in responding to changing business requirements.	1	5	25	
	8	Achieve cost optimisation of service delivery.	7	8	10	24
	9	Obtain reliable and useful information for strategic decision making.	2	4	12	20
Internal Perspective	10	Improve and maintain business process functionality.	6	7	11	
	11	Lower process costs.	7	8	13	15
	12	Provide compliance with external laws, regulations and contracts.	2	19	20	21
	13	Provide compliance with internal policies.	2	13		
	14	Manage business change.	1	5	6	11
	15	Improve and maintain operational and staff productivity.	7	8	11	13
Learning and Growth Perspective	16	Manage product and business innovation.	5	25	28	
	17	Acquire and maintain skilled and motivated people.	9			

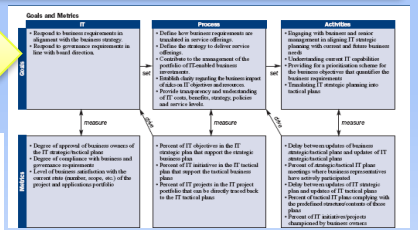


FRAMEWORK COBIT VER 4.1



P01	Define a Strategic IT Plan
P02	Define the Information Architecture
P03	Determine Technological Direction
P04	Define the IT Processes, Organisation and Relationships
P05	Manage the IT Investment
P06	Communicate Management Aims and Direction
P07	Manage IT Human Resources
P08	Manage Quality
P09	Assess and Manage IT Risks
P010	Manage Projects

1. Keselarasan Organisasi – TI
2. Manajemen Nilai TI
3. Penilaian Kondisi TI Saat Ini
4. Pendefinisian Renstra TI

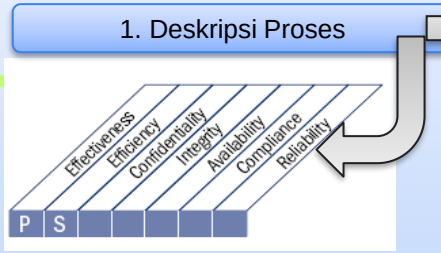


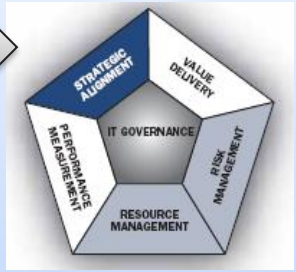
Framework Design

PROSES DESAIN

Dwi Yuni PS, Jaka Sembiring, Edi Triono – 2011 (KK. TI – STEI ITB)

1. Deskripsi Proses



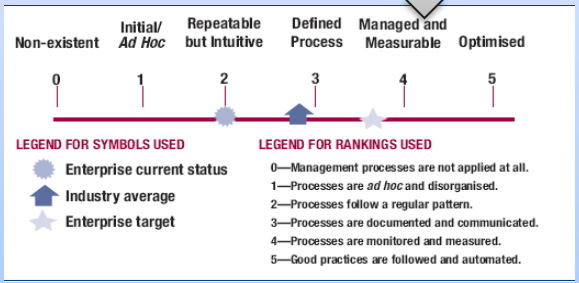


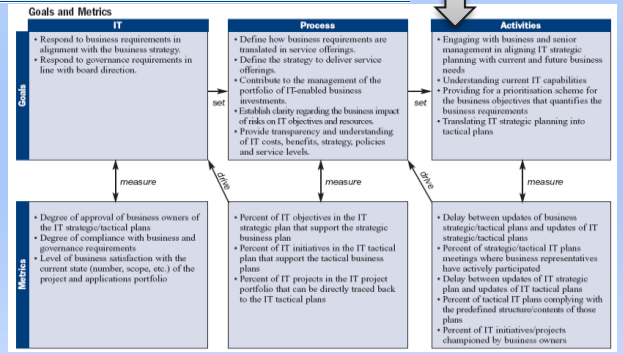
2. Penggunaan Kontrol

1. Keselarasan Organisasi – TI
2. Manajemen Nilai TI
3. Penilaian Kondisi TI Saat Ini
4. Pendefinisian Renstra TI

3. Penggunaan Kontrol

4. Tingkat Kematangan





RACI Chart

Functions

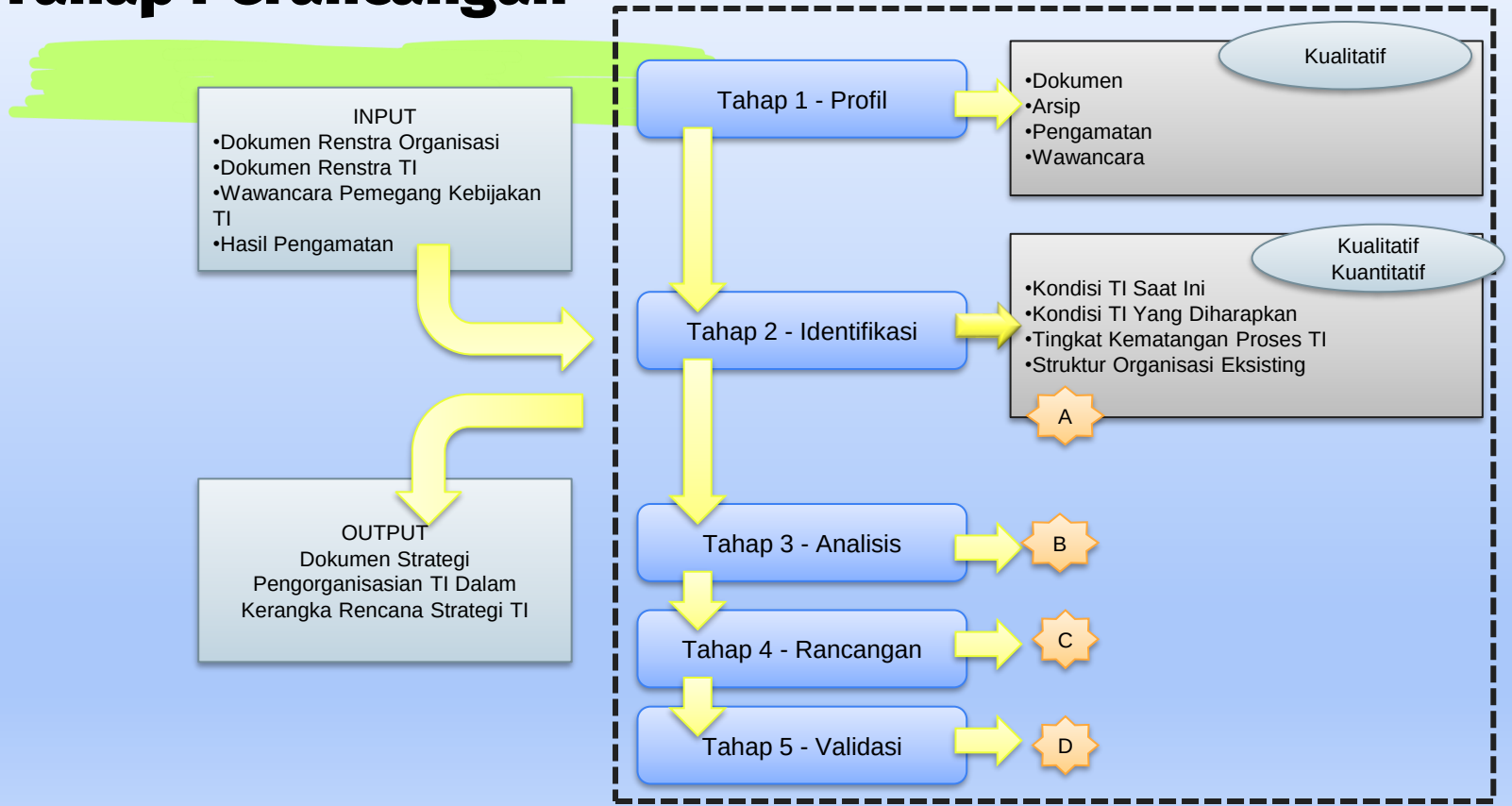
Activities	CEO	CFO	Business Executive	CIO	Business Process Owner	Head Operations	Chief Architect	Head Development	Head IT Administration	PMO	Compliance, Audit, Risk and Security
Link business goals to IT goals.	C	I	A/R	R	C						
Identify critical dependencies and current performance.	C	C	R	A/R	C	C	C	C	C		C
Build an IT strategic plan.	A	C	C	R	I	C	C	C	C	I	C
Build IT tactical plans.	C	I		A	C	C	C	C	C	R	I
Analyse programme portfolios and manage project and service portfolios.	C	I	I	A	R	R	C	R	C	C	I

A RACI chart identifies who is Responsible, Accountable, Consulted and/or Informed.

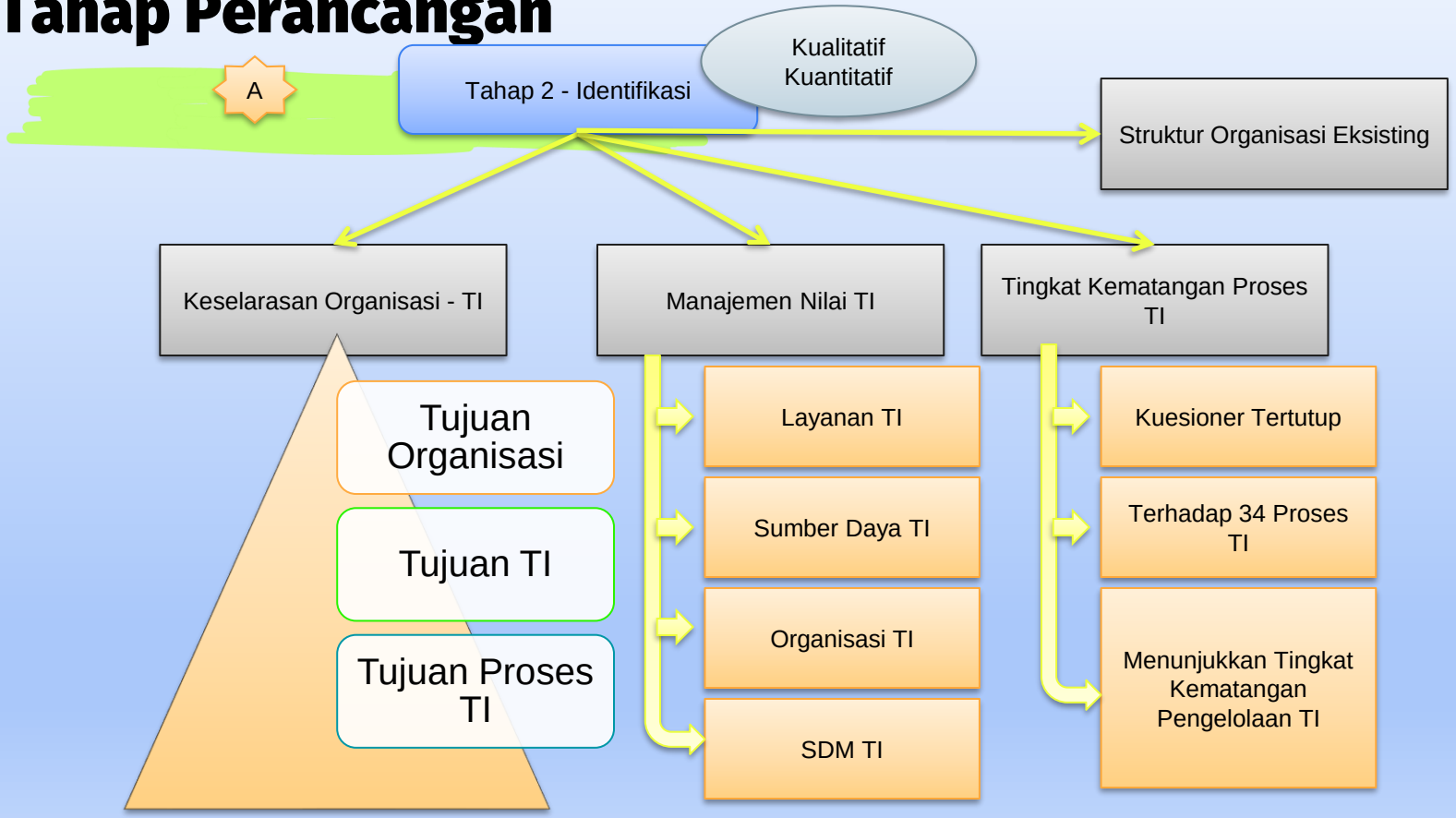
Tahap Perancangan

Step 1 - Profile	• Visi, Misi, Nilai, Tujuan Organisasi • Kebijakan, Layanan, Sasaran TI
Step 2 - Identifikasi	• Kondisi TI Saat Ini & Yang Diharapkan • Tingkat Kematangan Proses TI • Struktur Organisasi Eksisting
Step 3 - Analisis	• Keselarasan Organisasi - TI • Layanan TI, Sumber Daya TI, Kesenjangan
Step 4 - Rancangan	• Strategi Pengorganisasian TI Dalam Kerangka Rencana Strategi TI
Step 5 – Implementasi	• Implementasi • Monitor • Evaluasi

Tahap Perancangan



Tahap Perancangan



Tahap Perancangan

Kualitatif
Kuantitatif

Analisis GAP

Tahap 3 - Analisis

Keselarasan Organisasi - TI

Kunci Permasalahan Layanan TI

Strategi Layanan TI

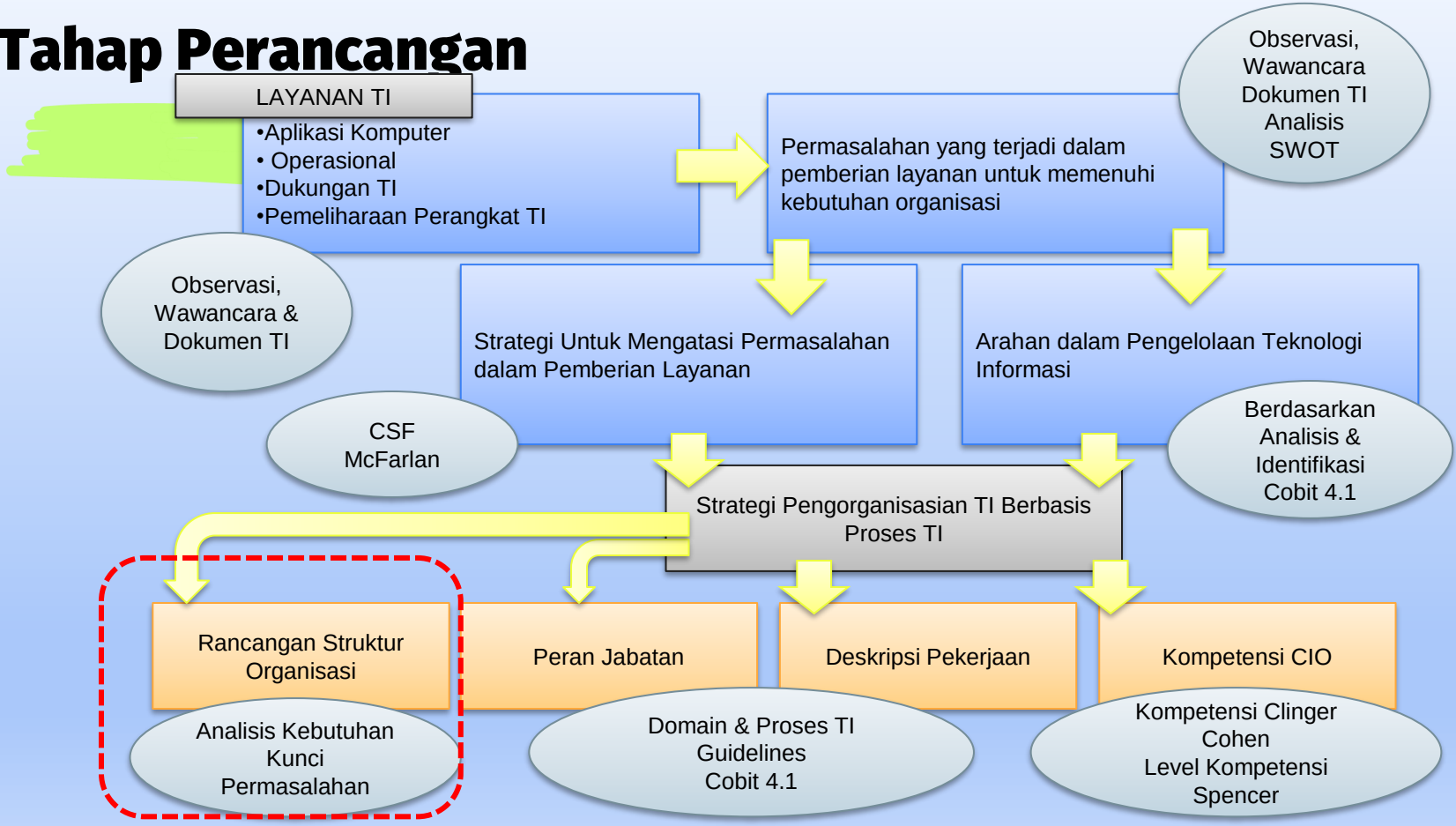
Analisis SWOT	
Kekuatan	Kelemahan
Peluang	Ancaman

Critical Factor Success	
Kunci Permasalahan	Action

Aplikasi McFarlan	
Strategic	High Potential
Key Operation	Support

Balanced Scorecard	
Financial	Learning & Growth
Customer	Internal

Tahap Perancangan



Terima Kasih