

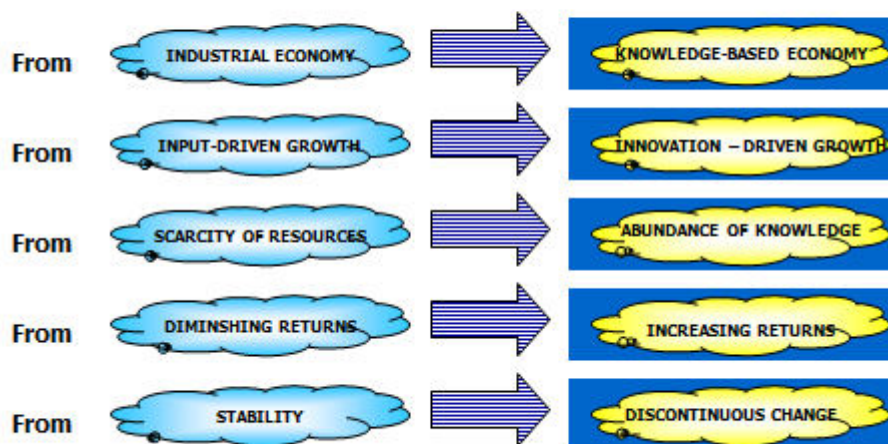


MANAJEMEN PERUBAHAN DAN INOVASI: PERAN TEKNOLOGI DALAM PENGELOLAAN SUMBERDAYA ALAM INDONESIA



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NEW PARADIGMS SHIFT



EVOLUSI PENGELOLAAN SDA



Model Manajemen Perubahan





ELEMEN KUNCI PERUBAHAN DAN INOVASI

- PEOPLE
- PROCESS
- TECHNOLOGY
-
- ENVIRONMENT

Manajemen perubahan yang efektif



INOVASI

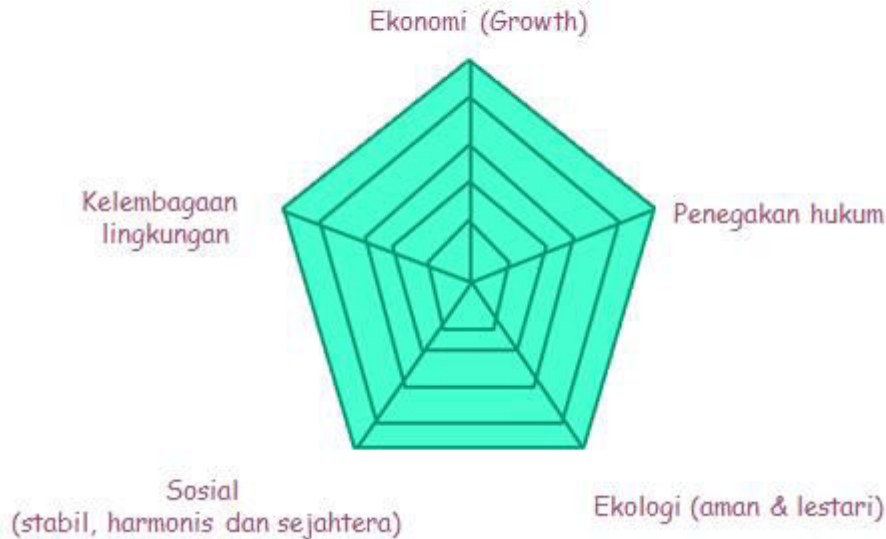
- Layak secara teknis
- Layak secara ekonomis
- Sesuai dengan kebutuhan masyarakat



**Bagian dari sistem masyarakat
(benefit)**



Di Indonesia seharusnya diterapkan 5 pilar Pembangunan Berkelanjutan



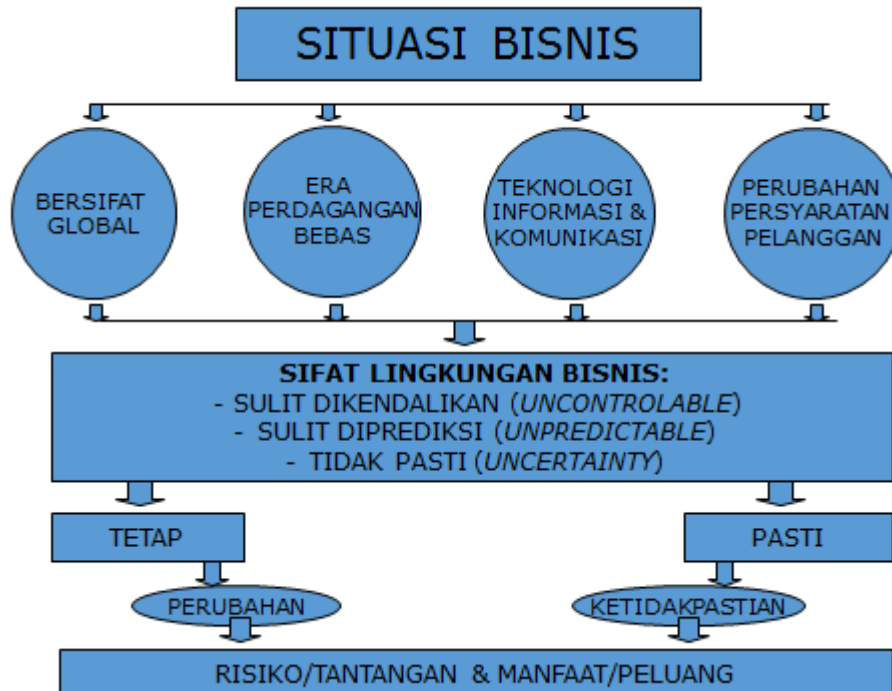
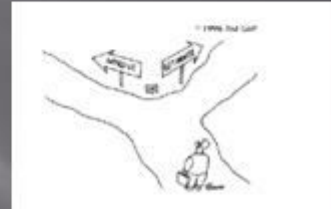
Prinsip Pembangunan Berkelanjutan

Pada konsep pembangunan berkelanjutan (*sustainable development*) terdapat beberapa prinsip penting, yaitu :

- Pembangunan harus memenuhi kebutuhan masa kini tanpa mengorbankan hak pemenuhan kebutuhan generasi yang akan datang.
- Pembangunan harus tetap memperhatikan ekosistem yang ada, sesuai dengan kemampuan daya dukungnya, sehingga tetap terjaga dan kualitas lingkungan tidak mengalami penurunan (lestari).
- Setiap kegiatan pembangunan harus selalu mewujudkan kepentingan kelompok atau masyarakat lain dimanapun berada, serta mengindahkan keberadaan kehidupan sekarang maupun kehidupan masa datang.
- Pembangunan berkelanjutan bertujuan untuk meningkatkan kualitas hidup manusia dalam segala aspek baik fisik, rohani, sosial dan budaya dalam jangka panjang, dengan tidak memboroskan dan tidak merusak sumberdaya alam yang ada, serta tidak melampaui kapasitas daya dukungnya.

"Innovation is a risky process....but also a mandatory one". Success depends of a variety of:

- Internal factors
 - Good management
 - Core competencies
 - Clear innovation strategy
 - Right technology
- External factors
 - Links with market and suppliers
 - Learning from competitors
 - Institutional support: financing, human capital, etc



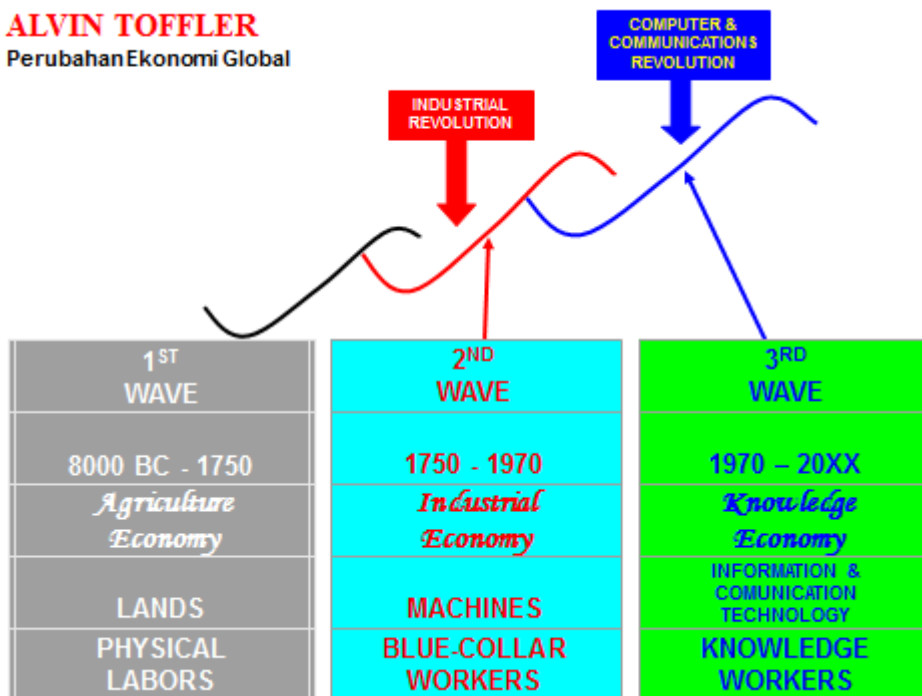
Alvin Toffler (1976)

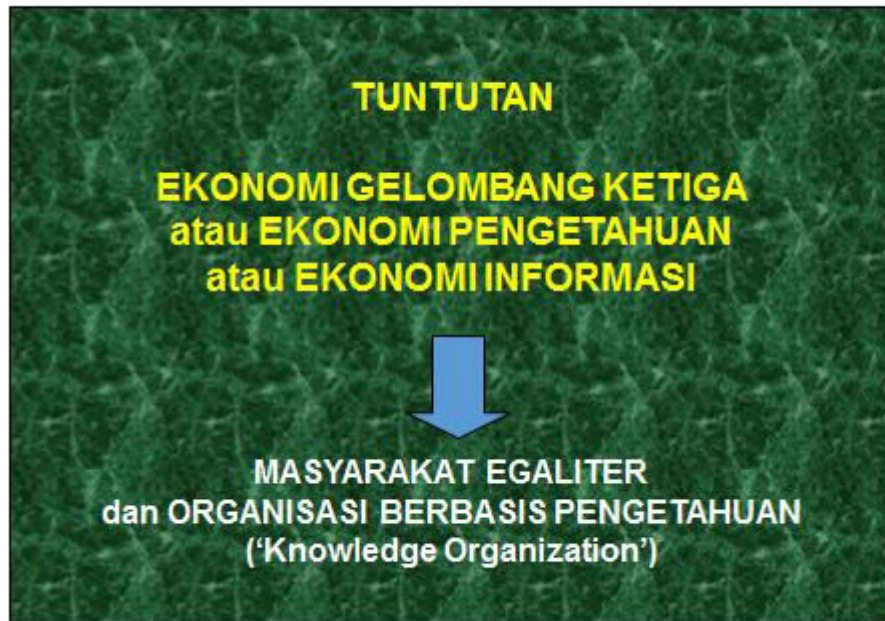
- "The certain one now is uncertainty and the constant one now is a rapid changing."
- "The relative stability and predictability of business are being replace by uncertainty, complexity, and rapid changing.

Intents global competition, rapidly changing in technology, economic fluctuation, shifting demography, and other dynamic conditions require companies to **adaptive and swift.**"

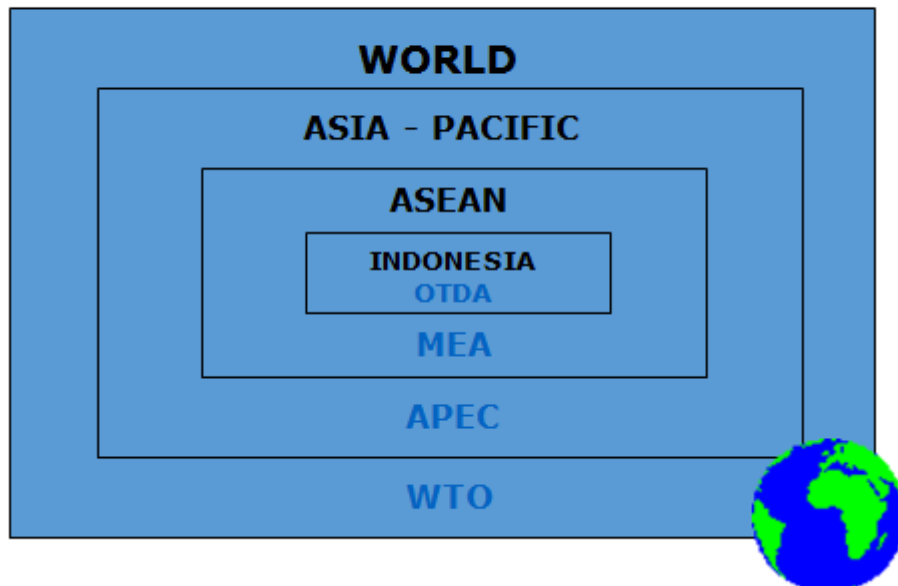
ALVIN TOFFLER

Perubahan Ekonomi Global





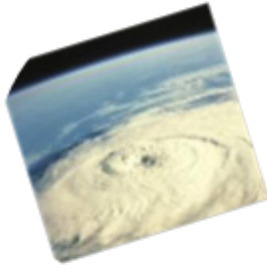
**COMPETING IN ERA OF TRANSITION:
Indonesia vs World (The First Premise)**





ISU DAN TANTANGAN ORGANISASI YANG MENUNTUT PERUBAHAN

Turbulence:



- Connectivity
- Globalization
- New entrants
- Customer power
- Regulatory shifts
- Geo-political shocks
- Market fragmentation
- Disruptive technologies
- Real-time supply chains
- Accelerating capital flows
- Shrinking product life cycles



**All is flux, Nothing Endures
(Heraclitos)**



Fenomena Katak Rebus ("The Boil Frog")

= Peter M. Senge dalam "The Fifth Disciplines" =

Copy Frog Effect



BILA KATAK TSB DIMASUKAN KEDALAM AIR DINGIN YANG SECARA PERLAHAN PANASNYA DINAIKAN MAKA KATAK TERSEBUT AKAN DIAM SAJA MENERIMA PERUBAHAN SUHU TERSEBUT, HINGGA AKHIRNYA KETIKA DIAMENYADARI PERUBAHAN INI KONDISINYA SUDAH TERLAMBAT UNTUK MELONCAT DAN KATAK TERSEBUT MENJADI KATAK REBUS



Albert Einstein (1930''):

*"The measure of intelligence is
the ability to change"*

Ekonomi Industrial

- Skala Ekonomi sebagai justifikasi
- Produksi massal – orientasi produksi
- Operasi Vertikal dan Fungsional
- Prosedur Berbelit
- Pengendalian (Kontrol)
- Kaku (tidak luwes)
- Aset Fisik dan Tangible

- Fokus pada Produk
- Harga = faktor penting

- Mengandalkan discount berdasarkan volume

Ekonomi Pengetahuan

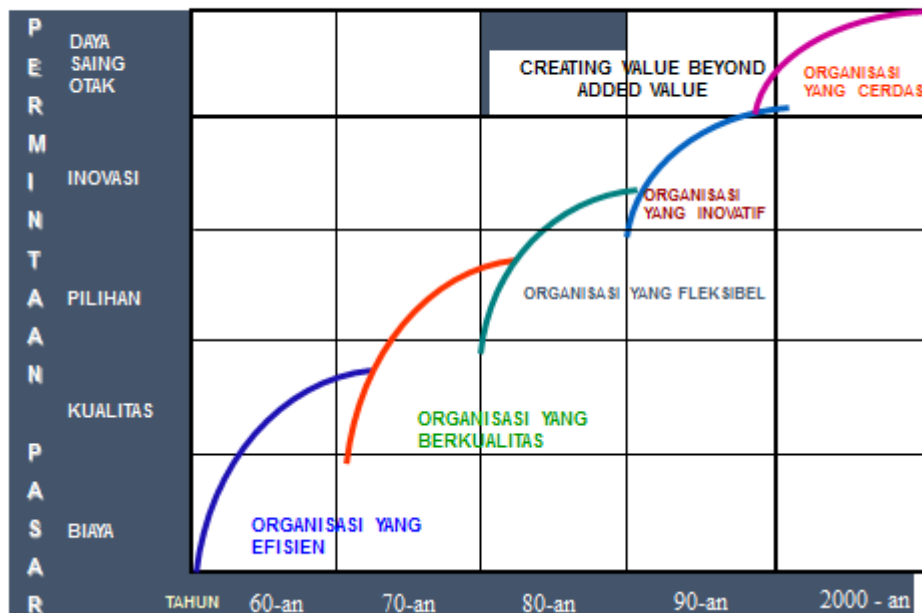
- Orientasi kepada pelanggan
- Pesanan yang dirancang khusus
- Operasi Horizontal memanfaatkan Proses Bisnis
- Cepat dan Sederhana
- Pemberdayaan
- Luwes (tidak kaku)
- Aset Intelektual dan Intangible
- Fokus pada Service (Layanan)
- Persaingan berdasarkan Nilai yang ditawarkan
- Mengandalkan Inovasi dan kreativitas

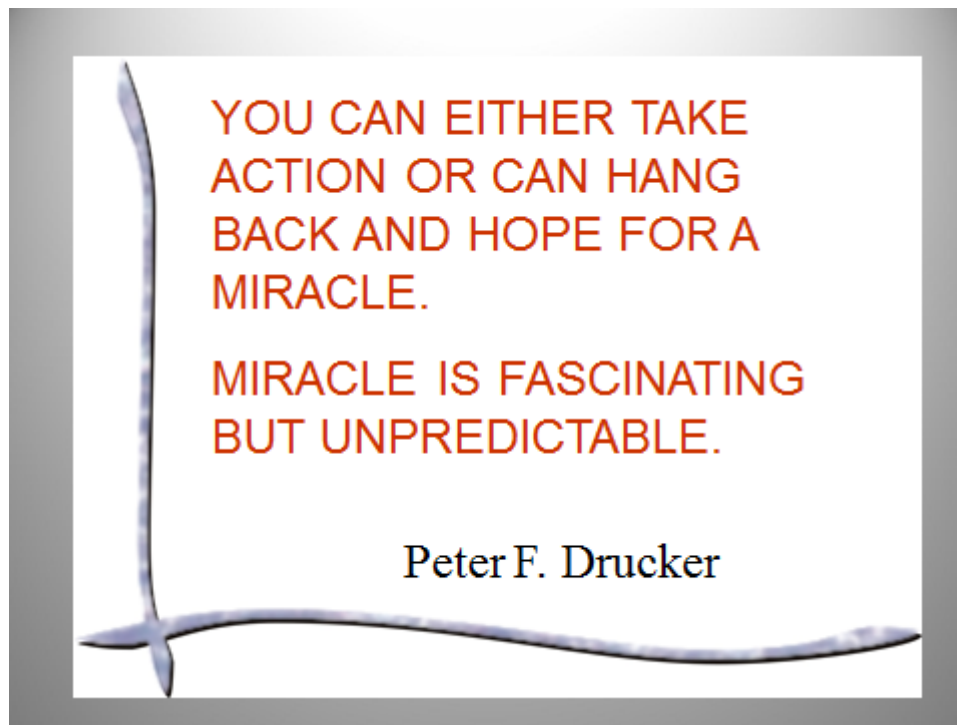


TUNTUTAN EKONOMI PENGETAHUAN BAGI ORGANISASI

- COMPETENCE – BASED
- SERVICE ORGANIZATION
- INFORMATION CONTENT
- INTELLECTUAL CAPITAL
- UNIVERSAL VALUES

Dasar Kompetisi





Organizational Change Management

- Why is Organization-wide Change difficult to accomplish?
 - Organizations go through four stages on the way to achieving their strategic objective:
 - Denial
 - Resistance
 - Exploration
 - Renewal



Perubahan (Change)

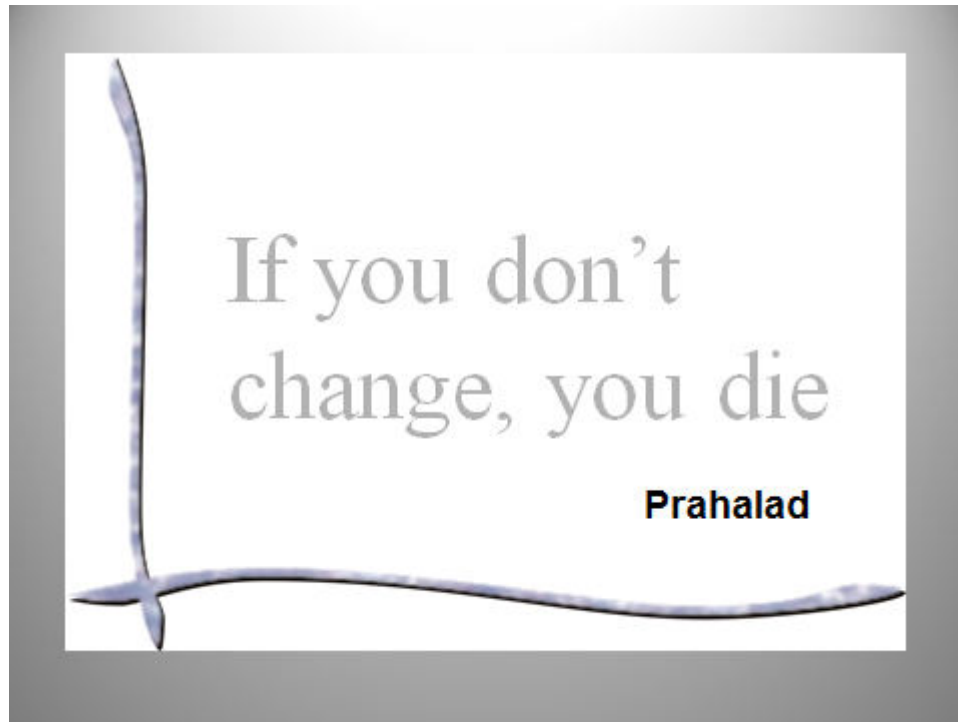


*Our greatest challenge is to transform – not just change
Indonesia – President SBY*



Perjalanan ribuan mil selalu dimulai dengan langkah pertama.

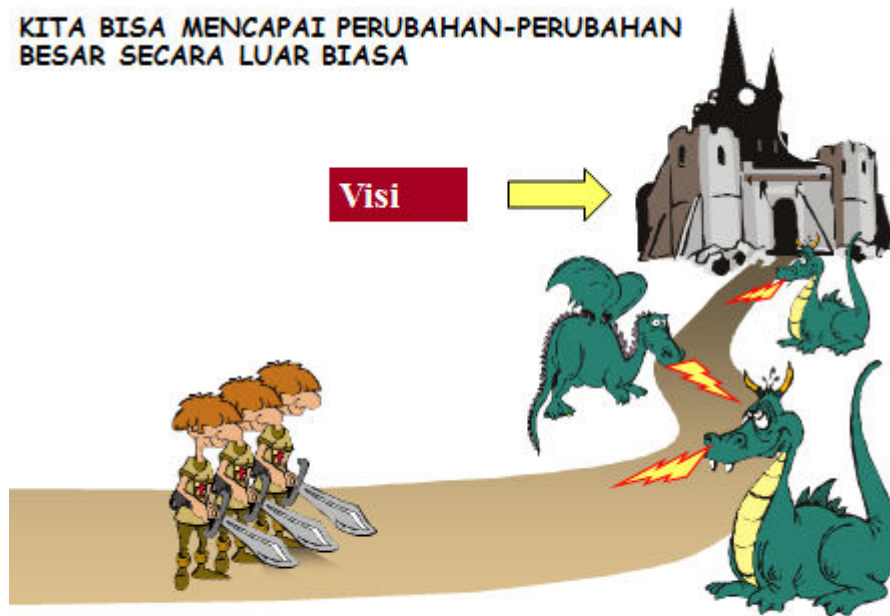
(Pepatah Cina)



If we hold on together...



**KITA BISA MENCAPAI PERUBAHAN-PERUBAHAN
BESAR SECARA LUAR BIASA**



PENUTUP

**PENERAPAN MANAJEMEN PERUBAHAN DAN INOVASI
DALAM PENGEMBANGAN TEKNOLOGI (KIMIA)
AKAN MENDORONG KEBERHASILAN
PENGELOLAAN SUMBERDAYA ALAM INDONESIA
YANG BERKELANJUTAN SEHINGGA MAMPU
MENGHASILKAN INOVASI BERBASIS TEKNOLOGI
(CREATING VALUES BEYOND ADDED VALUE)**



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