



**APICTA • ASOCIO • 2009**  
Asia Pacific Digital Innovation Summit  
Melbourne Australia 14 - 17 December 2009  
Innovation, collaboration & trade for a digital future

MELBOURNE

**Abdullah H Kafi**  
**ASOCIO / JAN Associates**  
(Bangladesh)





# Convergence

*growth and technological  
sophistication of markets*

Abdullah H. Kafi  
Vice President  
jan@bangla.net





# Perspectives

- Global
- Asian-Oceanian Region
- Bangladesh



# Global Perspective

## **“The World Is Flat” – Thomas Friedman, New York Times columnist**

The world is connected to do instant business without the constraints of geographical or political barriers. Individuals can have a huge impact on the global economy.

## **“Who Moved My Cheese” – Dr. Spencer Johnson**

You don't have to cling to doing things the way they've always been done. Change can be a good thing



# Global Perspective

- Change in the nature of competition
- Competition dependent on technological research breakthroughs
- Leading IT companies pursuing a grand convergence design which entails business communication
- e-mail, instant messaging, mobile and VoIP, audio-video- and web-conferencing are all parts



# Asian-Oceanian Perspective

- With 40% of world population China and India are emerging financial giants
- The convergence of technology and market together increases Asia's market potential
- Education, health and commerce all based on technology
- 3G, 4G, internet, WiFi, Wimax, E-commerce, E-governance, data sharing technologies attribute to the Asian economic growth



# Bangladesh perspective

- National ICT Policy 2009 approved
- By Y2012 Wimax to be introduced all over the country
- Leading industries textile, health, export oriented industries automated
- Ministries and government agencies computerised
- By 2011 around 9000 post offices will have e-services
- Regional schools facilitated with computers
- Integration of mobile telecommunication and internet in business



# Bangladesh perspective

- **National ICT Policy 2009**
  - Convergence
- **Broadband Policy 2007**
  - License neutrality
  - Class licensing
  - Convergence
- **Various Regulators**
  - **Telecommunication:** BD Telecommunication Act 2001
  - **Radio:** Betar Katripakkha Act, 2001
  - **Television:** BB Television Katrypakha Act, 2001
  - **E-communication:** ICT Act 2006
  - **Competition:** Draft Competition Act
  - **Mobile Banking:** Bangladesh Bank Order 1972  
Banking Companies Act 1991





## 3G Technology

- Global 3G & 4G market at 11% in 2007-2008
- Global market to grow by 30% with 5 years – CNET News
- 175m subscribers globally – Voice & Data estimates
- More than 30m subscribers are added every quarter
- China leading with the technology
- Bangladesh to introduce 3G by July next year



# E-governance

- Central database for voter registration
- Ministries available on websites
- Gazettes, bills, notices uploaded online
- Bids called on websites –e.g. offshore exploration bid called on Petrobangla web



# Digital Bangladesh

- Government envisions Digital Bangladesh by 2021
- FY '09-'10 ICT and Telecommunication budget doubled from Yo8-09
- 2012-2014 target time for introducing e-commerce and e-governance
- By 2013 every household will get free internet connection
- By Y2012 Tele density will be over 70%.



# E-commerce

- Commercial banks introduce internet banking and utility payment systems
- Youth comprising 35% of the total population are targets –Financial Express
- New employment opportunities on the line
- Grameen phone (Telenor) cell bazar opens platform for grassroots acquaintance with internet and mobile communication



Thank You



**APICTA • ASOCIO • 2009**  
Asia Pacific Digital Innovation Summit  
Melbourne Australia 14 - 17 December 2009  
Innovation, collaboration & trade for a digital future

MELBOURNE

**Chuan Beng Wei**  
Association of the  
Computer and Multimedia  
Industry of Malaysia  
(PIKOM) / Redtone  
International  
(Malaysia)





# **CONVERGENCE OF TECHNOLOGY**

**ASOCIO SUMMIT MELBOURNE**

**Dec 2009**

by

**WEI CHUAN BENG**

**Chairman, Association of the Computer and Multimedia Industry of  
Malaysia (PIKOM)**

**Managing Director, REDtone International Berhad**

# **CONVERGENCE** is a **MEGA TREND!**



**It is opportunity**



# con-ver-gence \kən-ˈvər-jən(t)s\

1. The act, condition, quality or fact of converging. (The American Heritage® Dictionary of the English Language)
2. the act of [converging](#) and especially moving towards union or uniformity (Merriam-Webster Online)
3. the approach towards a definite value, a definite point, a common view or opinion or towards a fixed or equilibrium state (Wikipedia)
4. a coming together from different directions, especially a uniting or merging of groups or tendencies that were originally opposed or very different (Encarta® World English Dictionary © & (P)2009 )
5. a situation in which people or things gradually become the same or very similar (Macmillan Dictionary)

# ICT indeed is a **Convergence**



# Various dimensions of **Convergence** in ICT infrastructure

**Convergence** of Telco (voice & data),  
broadcasting (TV), internet (Internet),  
infrastructure services via broadband

- **3G /4G LTE**
- **Fibre**
- **High bandwidth broadband**

# CONTENT & APPLICATIONS SERVICE PROVIDERS

- Web - based

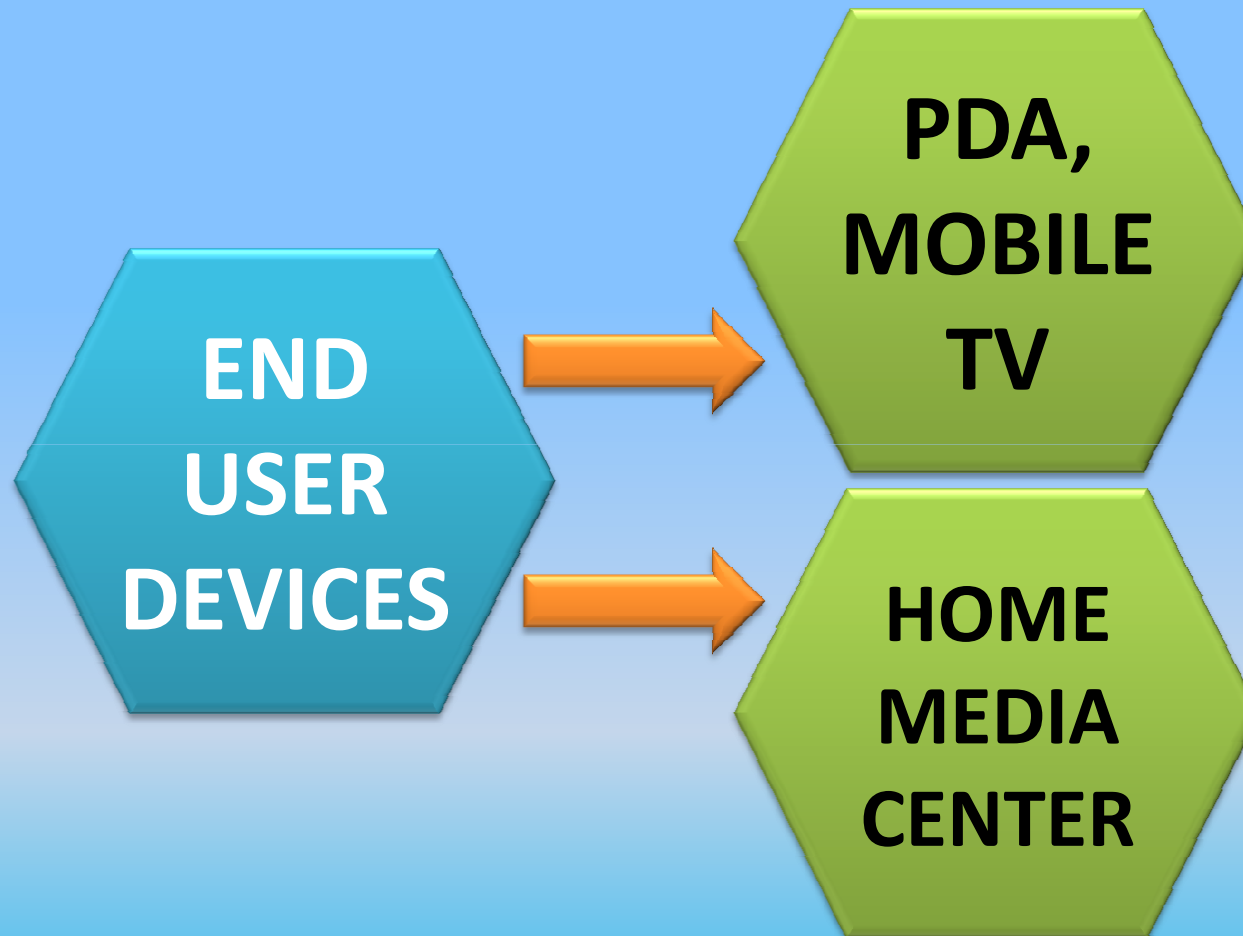


- Riding on cloud computing

- Utility, software as service model

- Broadcasting /IPTV

# CONVERGENT DEVICES



# CONVERGENCE

INFRASTRUCTURE

REGULATION

CONTENT & APPLICATIONS

TECHNOLOGY

- Computer-Based
- Communication-Based

END USER DEVICES

- Appliances
- Personal
- Home Appliances

# THANK YOU

## PIKOM

NATIONAL ICT ASSOCIATION OF MALAYSIA  
Unit 1106-1107, Block B Phileo Damansara II  
No. 15, Jalan 16/11, 46350 Petaling Jaya,  
Selangor Darul Ehsan,  
Malaysia.

Tel : (603) 7955 2922

Fax : (603) 7955 2933

General Email: [info@pikom.org.my](mailto:info@pikom.org.my)

[www.pikom.org.my](http://www.pikom.org.my)



**APICTA • ASOCIO • 2009**  
Asia Pacific Digital Innovation Summit  
Melbourne Australia 14 - 17 December 2009  
Innovation, collaboration & trade for a digital future

MELBOURNE

# Long-Fon Shieh

## Ministry of Economic Affairs

(Taiwan)







# Smart Living Applications Promotion Program

**Dr. L. F. Sheih**  
**Chief, R.O.C(Taiwan)**  
**Dec. 17, 2009**



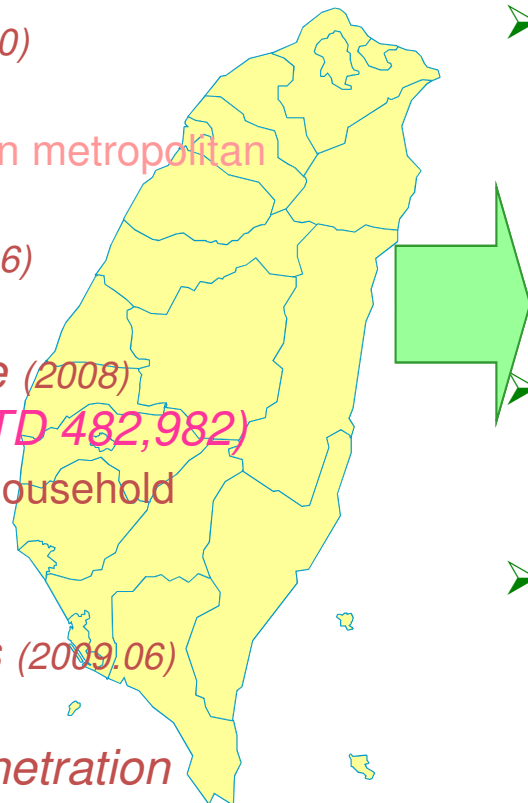
- ❖ Introduction
- ❖ Areas of Application To Be Promoted
- ❖ Vision and Objectives
- ❖ Development Strategy
- ❖ Expected Benefits



- ❖ Introduction
- ❖ Areas of Application To Be Promoted
- ❖ Vision and Objectives
- ❖ Development Strategy
- ❖ Expected Benefits





- *Land Area*  
36,191 KM<sup>2</sup>
- *Population (2009.10)*  
23.1 million  
(69.94% resided in metropolitan areas)
- *Household (2009.06)*  
7.72 million
- *per capita income (2008)*  
US\$ 15,313 (NTD 482,982)
- *PC penetration (household basis) (2009.08)*  
85.7%
- *CATV home pass (2009.06)*  
63.85%
- *Mobile phone penetration (2009.09)*  
115.2%



- A major procurement center for global IT companies
- World's fourth-largest IT hardware producer
  - Ranked first in market share for >14 products
  - Dominates IT production in mainland China
- 2nd largest LCD industry and 3rd largest semiconductor industry in the world
- Largest big-size(>10.4") TFT-LCD panel industry in the world



Taiwan ICT Products with No. 1 Worldwide Market Share

Products 	2008 Worldwide Market Share	Products 	2008 Worldwide Market Share
Server	86.9%	Cable Modem	76.0%
Motherboard	92.4%	WLAN	92.0%
Notebook PC	92.4%	xDSL CPE	77.8%
LCD Monitor	69.6%	PND	89.0%
CDT Monitor	53.1%	Ethernet LAN Switch	69.1%

Note:Market Share is ranked by production yield



- Every 0.21 seconds: One Motherboard
- Every 0.68 seconds: One Desktop Computer
- Every 0.35 seconds: One Notebook Computer
- Every 0.36 seconds: One Optical Storage Drive
- Every 0.28 seconds: One Mobile Phone
- Every 0.63 seconds: One Digital Camera



Taiwan is one of the most important partners for the world's biggest IT companies by OEM/ODM business model; worldwide, 85% of PCs installed with Windows® OSs were produced by Taiwan IT Companies. That's why "Taiwan Inside®" is the best description of Taiwan's IT industry: "Taiwan, Inc." partners with the world.

# The ideas and beyond

## Enhancing Taiwan's Soft Power

### Maintaining Positive Forward Movement

#### Supply Side

##### Adjust industrial structure

- Expand manufacturing leading edge & enrich development for applications & services
- Have a critical core technology & develop system integration solution
- Embrace emerging applications & establish completed industry ecosystem
- Strengthen branding capacity & enhance the industry value

#### Demand Side

##### Create best quality life

- Set up nourishing circumstances & create convenient learning environment for knowledge sharing
- Build up intelligent society & initiate entertainment, health tools and better home security
- Create better living environment for all

#### Environment

##### Provide Incentive & Overcome obstacles

- Human Resource Development
- Research on laws & regulations
- Encourage investment
- Financing

Industry Technology Leaders

Lifestyle Pilot

Global Resource Integrator

Soft Economic Creator

Promotional Project

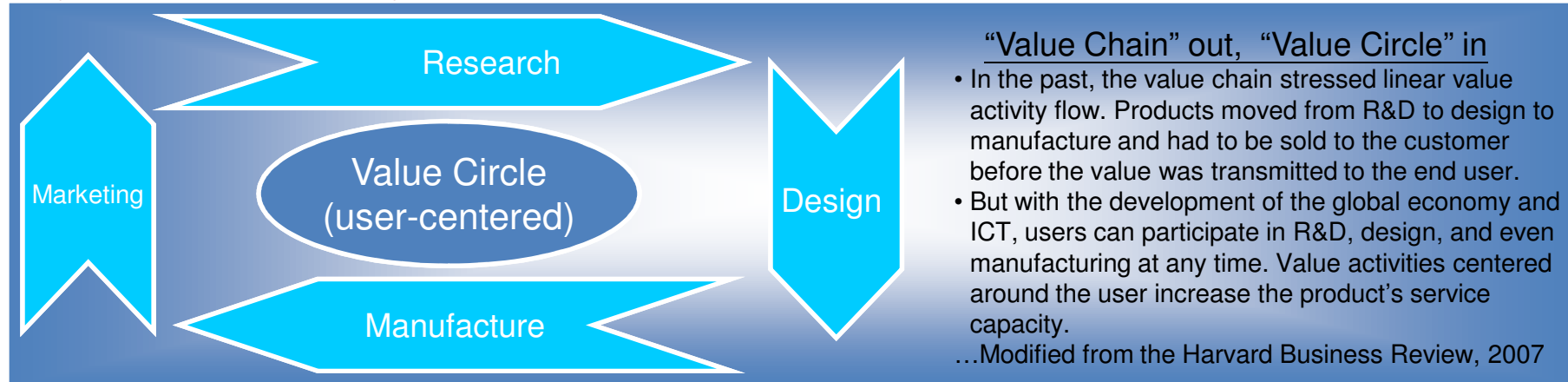
Gestation · Impetus · Catalyzer

Note : Soft power is the ability to obtain what you want through co-option and attraction such as culture, values, social system, developing model of global influences

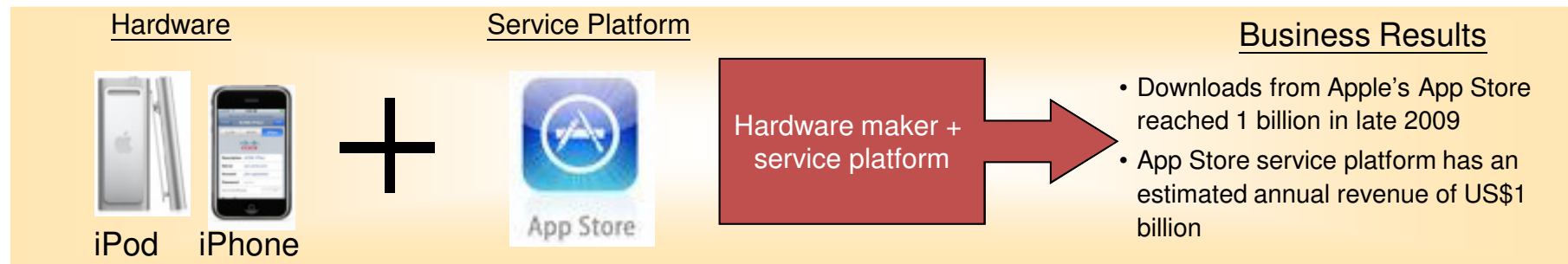


# Introduction

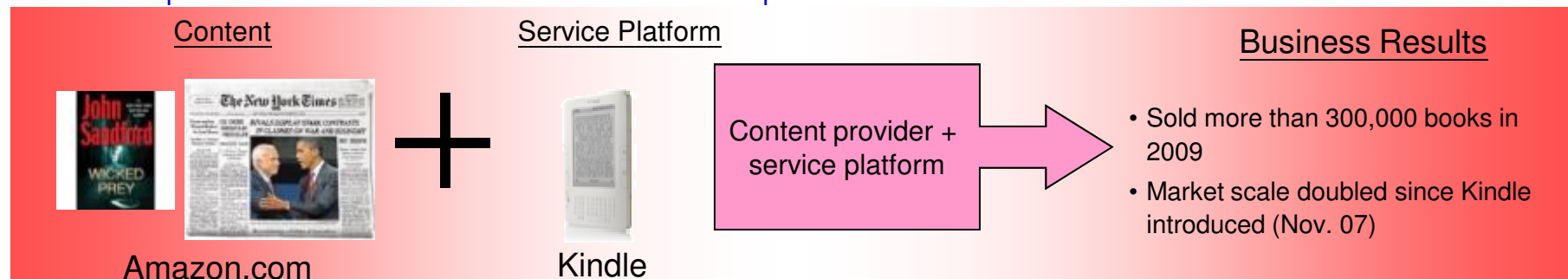
The ICT industry is moving toward “hardware + service + content” system development to enhance service capacity in a user-centered way



Apple expanded its hardware value with a service platform



Amazon expanded its content service market with a service platform







# Strategy Logic of Value Innovation for Taiwan's ICT Industry development

## Service-Oriented Strategic Thinking

By enriching "Software" to support "Hardware"  
By driving "Virtual" to assist "Physical"

- ✓ Associate emerging applications and services
- ✓ Establish complete industry ecosystem

Content/  
Service

By promoting "Hardware" to lead "Software"  
By pushing "Big" to pilot "Small"

- ✓ Create convenience for sales channels
- ✓ Platform is equal to point of sales

Platform

Productivity

- ✓ Establish a critical core technology in hand
- ✓ Keep initiating innovative product

Scale

- ✓ Expand manufacture leading edge
- ✓ Cultivate IT Infrastructure for pursuing sustainable development

Branding

- ✓ Strengthen the presence of branding image
- ✓ Overcome low-margin difficulty and micro-profits dilemma



- ❖ Introduction
- ❖ **Areas of Application To Be Promoted**
- ❖ Vision and Objectives
- ❖ Development Strategy
- ❖ Expected Benefits



2 Themes



## Smart Town

Testing living applications based on a town or neighborhood

## i – Park

Testing reading applications based on a campus or industrial park

3 Fields



Reading (Campus)  
(mainly in the form of e-books)



Transport (City)  
(mainly in the form of lifestyle-oriented computers)



Entertainment (Home)  
(mainly in the form of Internet TV)

Areas of Application

Leisure reading  
Continuing education  
Learning of the future

Mobile apps  
Instant messages  
Traffic guidance  
Convenient living

Home entertainment  
Lifestyle information  
Residential safety

Textbook study  
Self study  
Business reading

Mobile study  
Instant messages  
Park guidance

Digital classroom  
Remote apps  
Employee entertainment

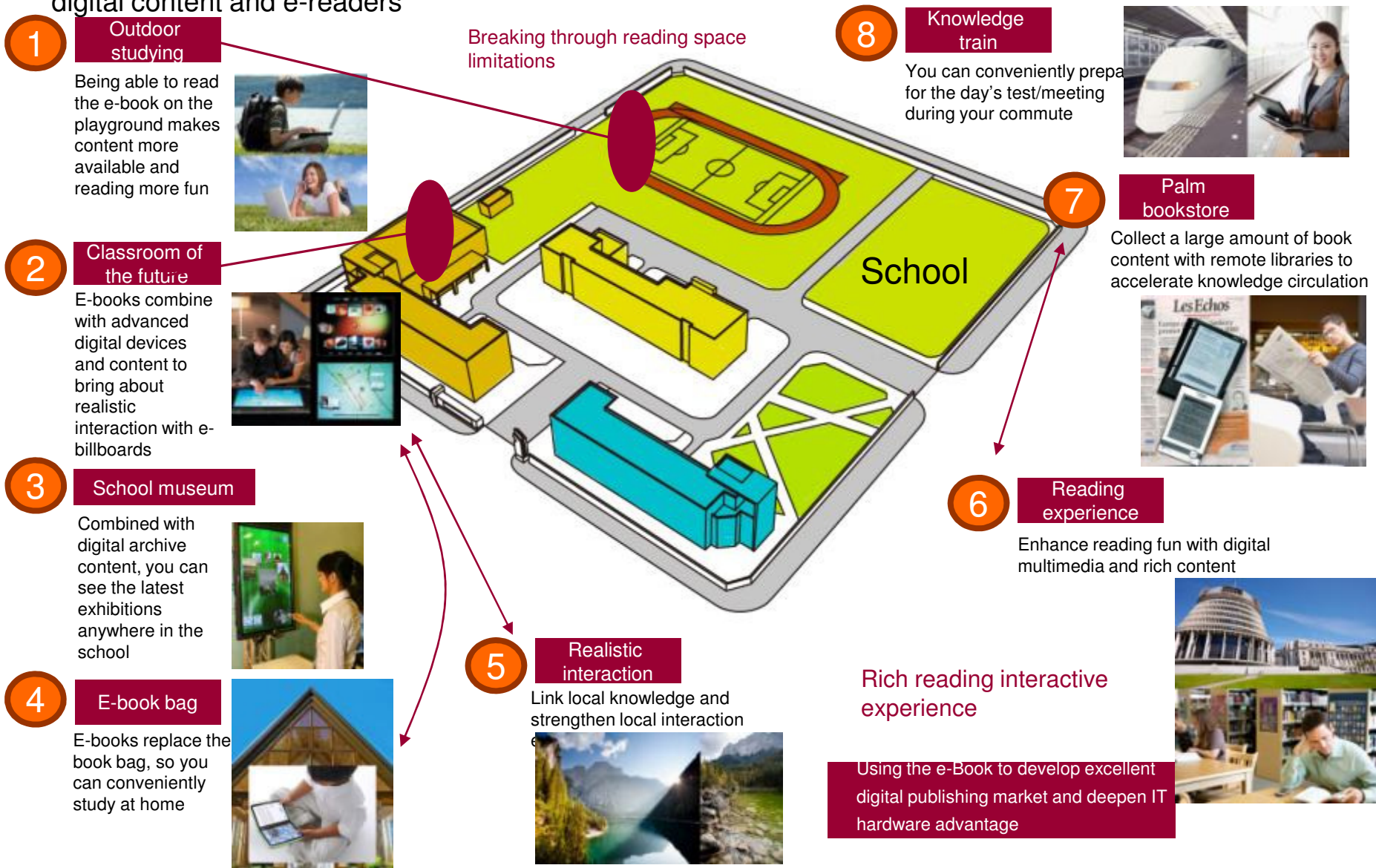
Note: A Smart Town is defined as a knowledge-intensive city that also maintains the development course, natural environment, and cultural flavor of a small town.

An i-Park is defined as an area with a special function such as a campus, industrial park, or science park.

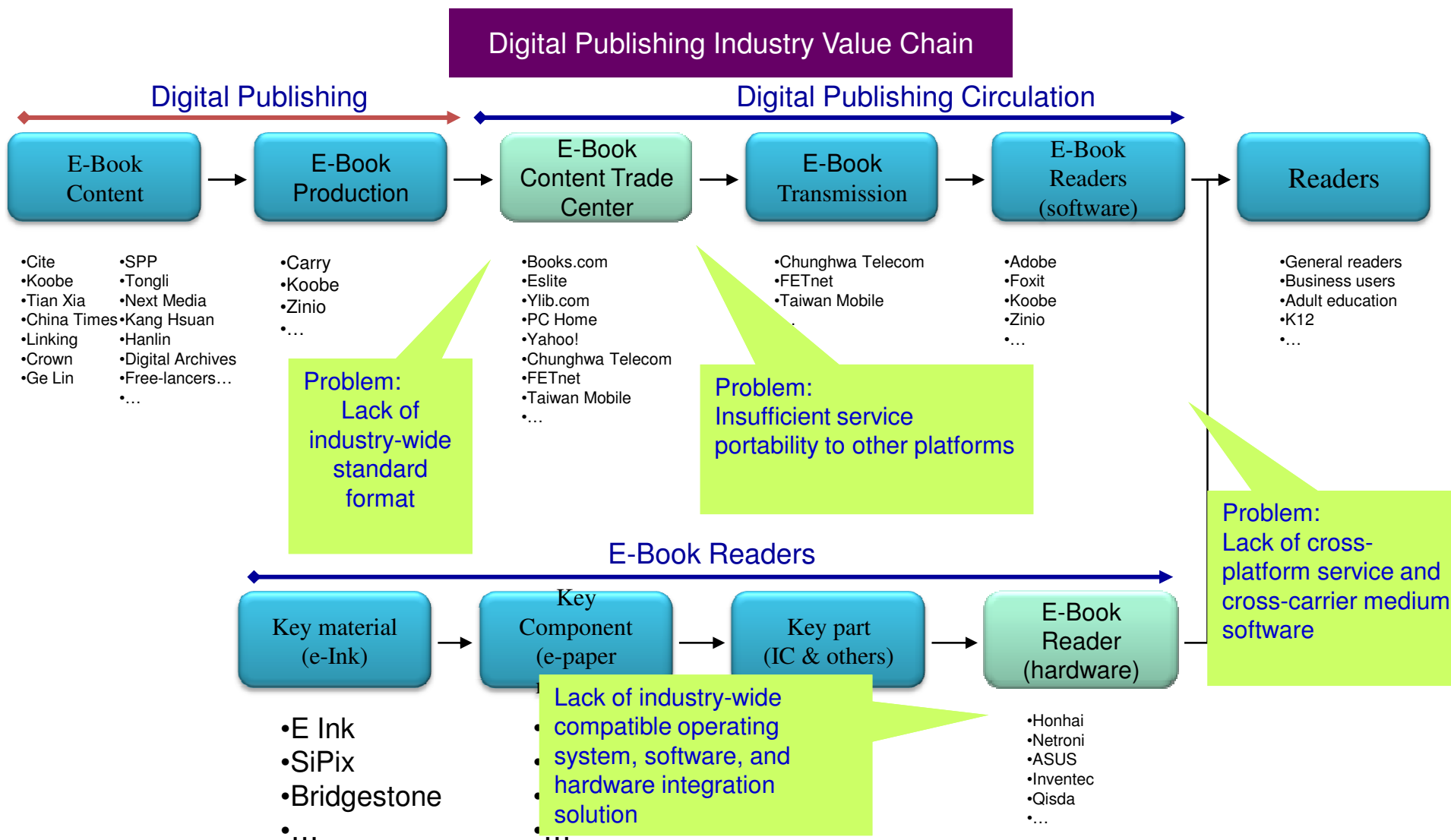


# For example: e-Book Scenarios

▶ The goal: Limitless reading opportunities, convenient knowledge transmission, and lighter bookbags through digital content and e-readers



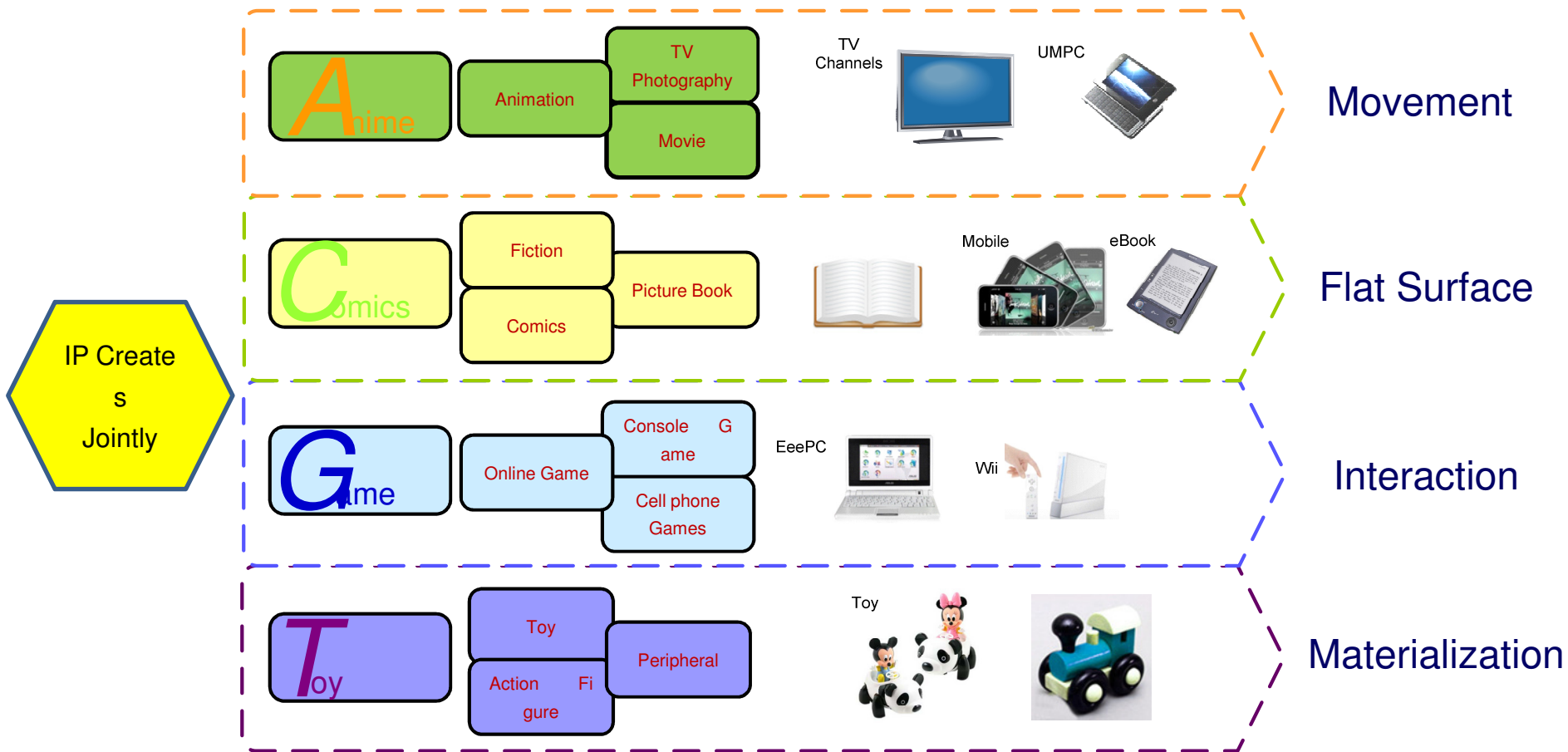
# Analysis of Digital Publishing Industry's Broken Links



•In 2008, digital publishing and archive output value was NT\$6 billion and e-book reader product value was NT\$6.3 billion

Source: MIC, 2009.5

The content is the water that can be placed in different containers: platforms, media, and devices



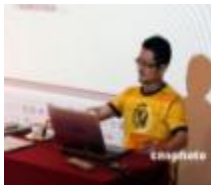




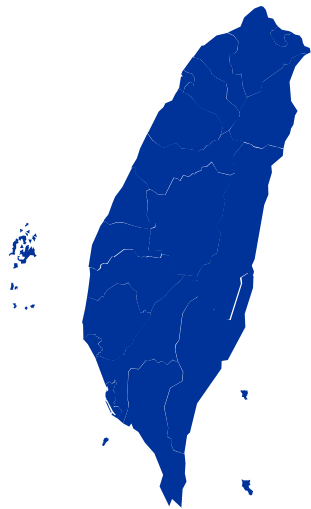
# Incubating New Profitable Industries

2013 Promotion Vision

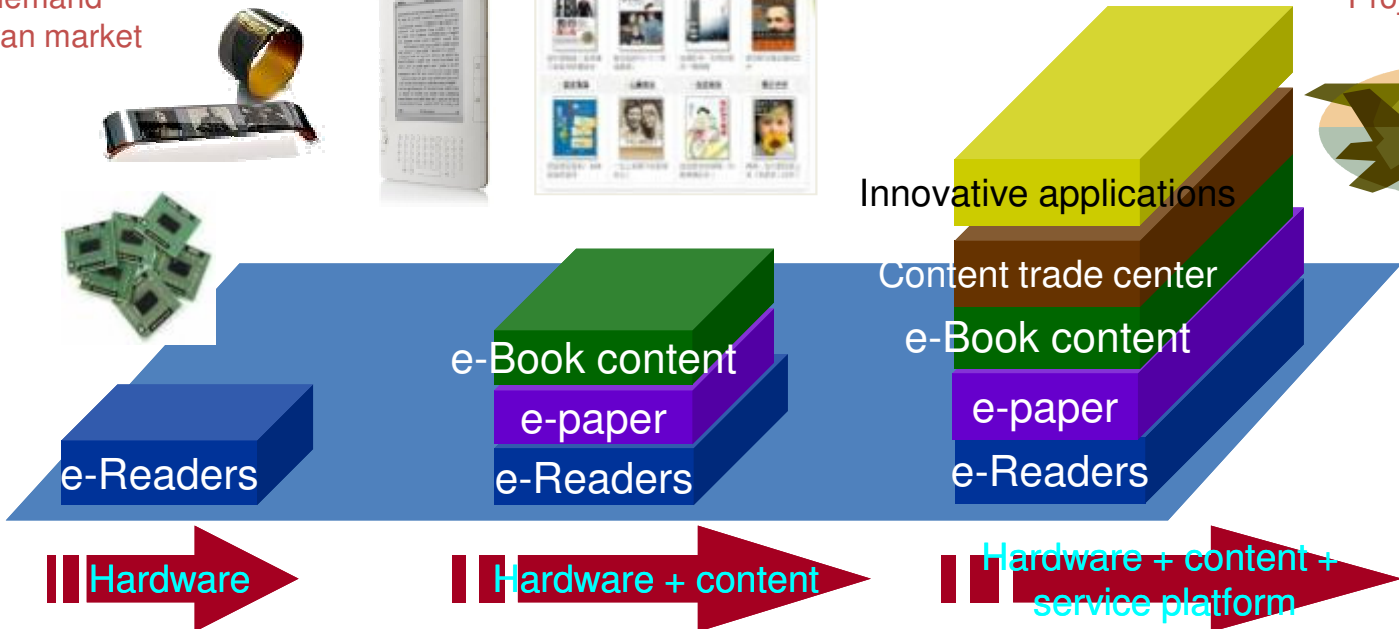
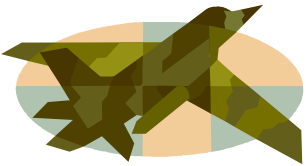
Creating complete industry value to become a global industry center, and building a high-quality reading society to boost popularity of Chinese publishing



Meeting user demand  
Testing in Taiwan market



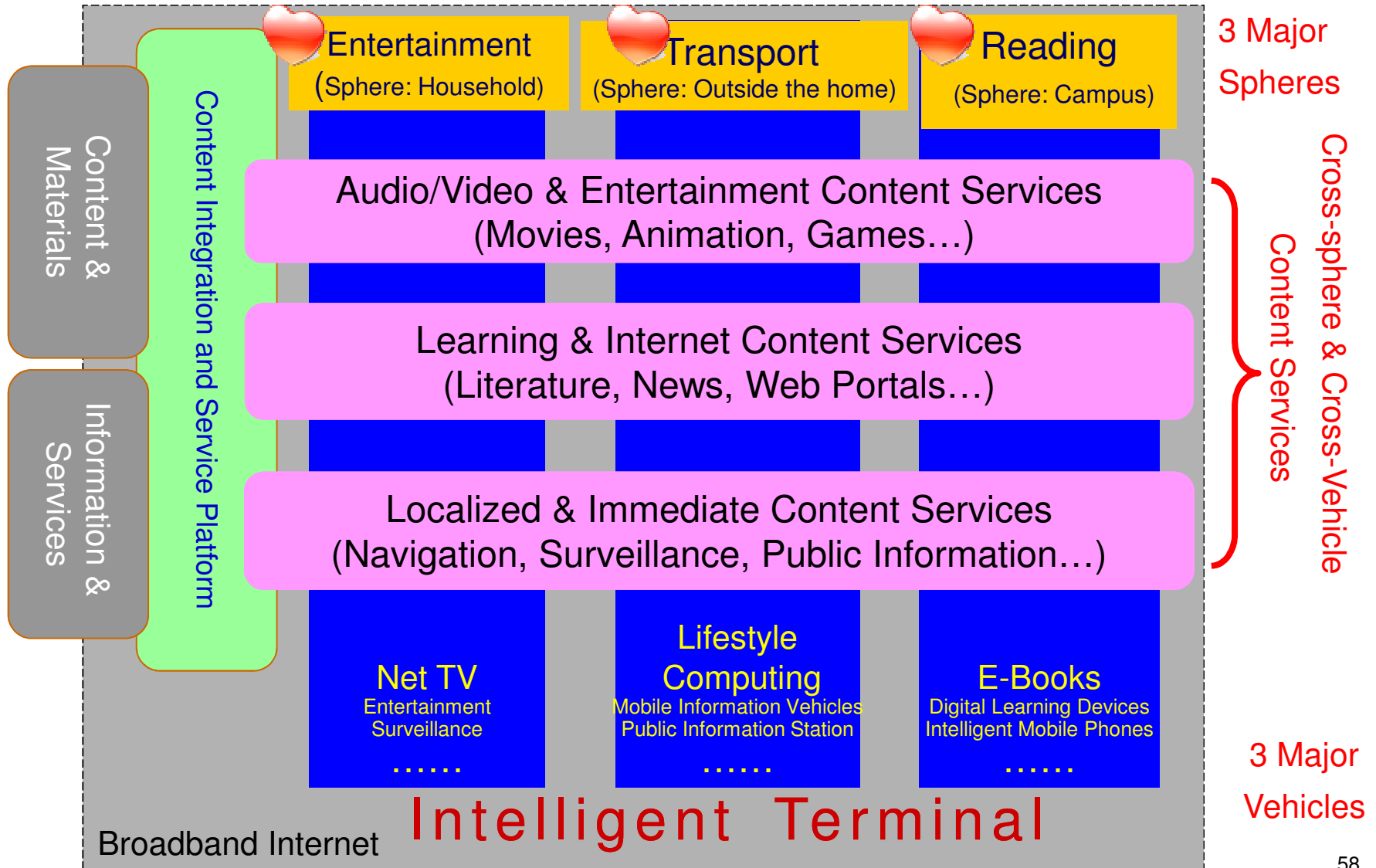
Project Output



Incubating new industries (solution providers & service operators)



# Content and Services of Integrated Infrastructure







- ❖ Foreword
- ❖ Use of Promotional Categories
- ❖ **Vision & Objectives**
- ❖ Development Strategy
- ❖ Anticipated Benefits



## Developmental Vision

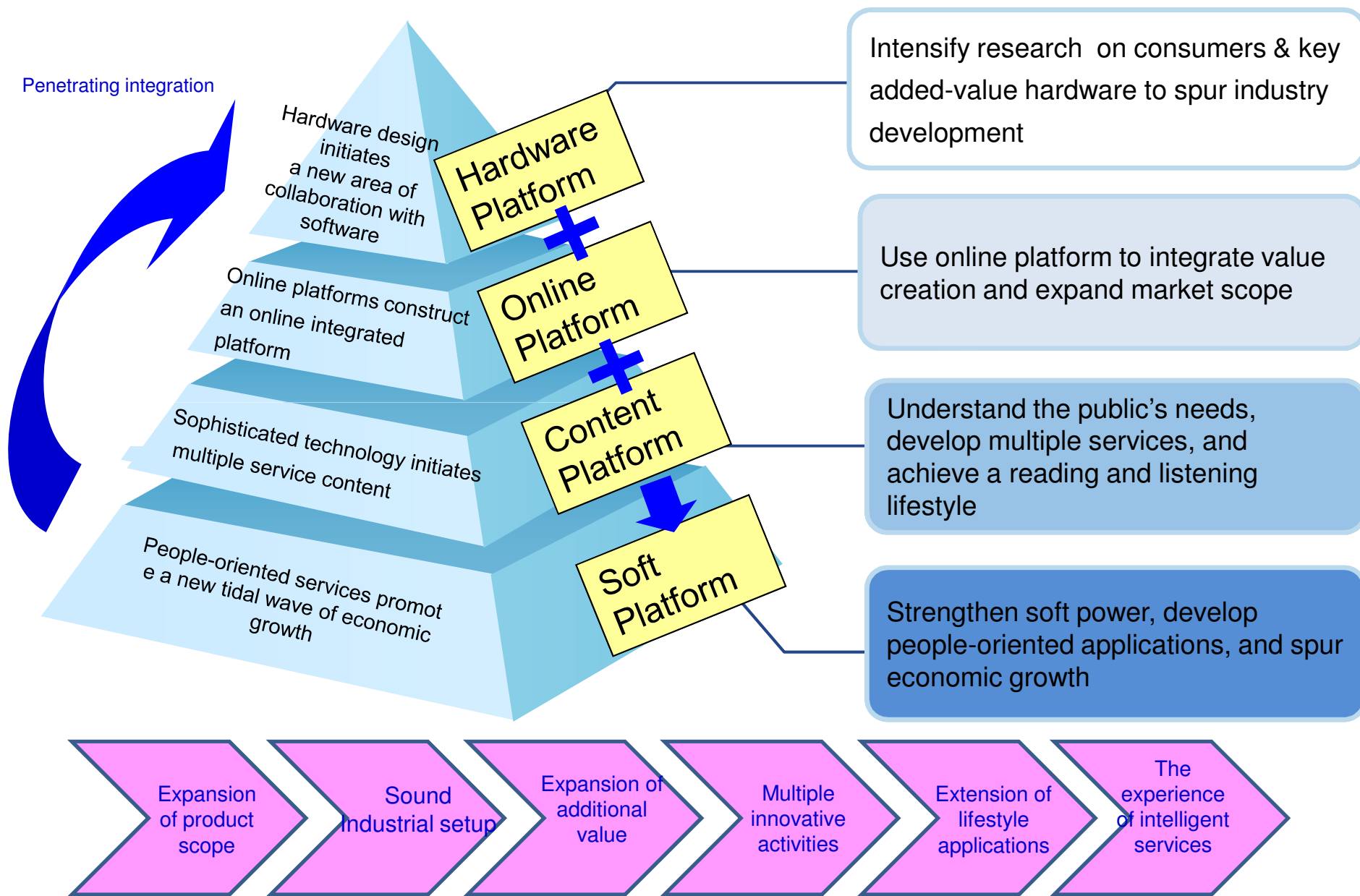
Use information technology to add value to the reading and listening lifestyle experience, spur the development of the soft power of the information and communication industries, create new energy through the creation of innovative industry, and meet people's needs through core conveniences, safety, and sustainable intelligent reading and listening lifestyles

## Objectives

- Use human point of reference (0): people-based engineering and consumer technology
- Maintain Taiwan's No.1 new information status in industry
- Promote US\$100 terminal equipment
- Gross profit margin of 20% for every product category
- Trials in 3 different locations (household, campus, city)
- Lifestyle experiment provided for 5 million users
- Reach NT\$800 billion in output value
- 2013..... ● Follow along the golden trajectory · Achieve industry growth



- ❖ Foreword
- ❖ Use of Promotional Categories
- ❖ Vision & Objectives
- ❖ **Development Strategy**
- ❖ Anticipated Benefits

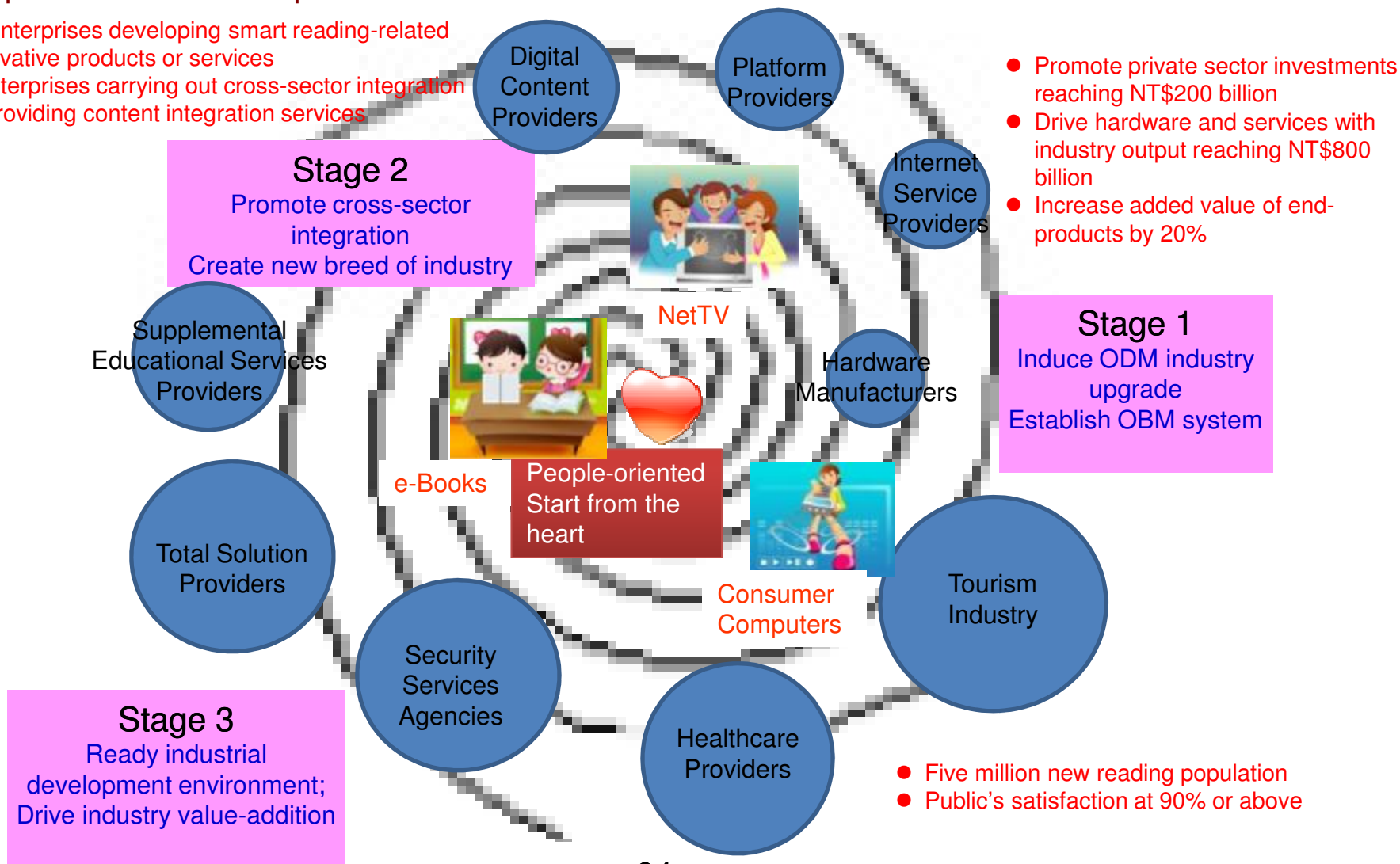




- ❖ Introduction
- ❖ Areas of Application
- ❖ Visions and Goals
- ❖ Development Strategies
- ❖ **Anticipated Benefits**

Starting from the “heart,” we aim to develop new service trial models for family, school and outdoor areas. A new lifestyle experience of “smarting reading” is also introduced, based on a “people-oriented” concept.

- 10 enterprises developing smart reading-related innovative products or services
- 5 enterprises carrying out cross-sector integration or providing content integration services





➤ **National Aspects:**

– **Promoting private investment (investment aspect):**

Strengthening the R&D environment of the IT industry; fostering private sector investments up to NT\$200 billion

➤ **Social Aspects:**

– **Affordable reading experience (price):**

Developing affordable US\$100-smart reading devices

– **Smart reading trend (participation):**

Reaching new reading population of 5 million readers

– **Meet lifestyle applications (acceptability):**

Public satisfaction rate for smart reading applications should be at least 90%

➤ **Industrial Aspects:**

– **Key product development (product):**

At least 10 enterprises are developing innovative smart reading products or services

– **Develop innovative models (integration):**

At least 5 enterprises have been offered guidance in cross-sector integration or in content integration services

– **Enhance terminal value (value addition):**

A 20% increase in end products value addition is achieved through software and hardware integration

– **Drive industrial output (industry)**

Drive smart terminals and service industries worth NT\$800 billion



**Thank you**



**Dr. L. F. Sheih**

**Chief, R.O.C (Taiwan)**

**Information Technology Industries Division**

**[lfshieh@moeaidb.gov.tw](mailto:lfshieh@moeaidb.gov.tw)**





**APICTA • ASOCIO • 2009**  
Asia Pacific Digital Innovation Summit  
Melbourne Australia 14 - 17 December 2009  
Innovation, collaboration & trade for a digital future

MELBOURNE

# Takao Shiino

## Nomura Research Institute

(Japan)



Asia Pacific Digital Innovation Summit 2009

# Promotion of Green IT

17, December 2009

Japan Information Technology Services Industry  
Association (JISA)

Nomura Research Institute  
(NRI)

Takao Shiino, Ph.D.



# Green IT Promotion Council in Japan

- Establishment: 1 February 2008
- Member companies, institutions and groups: 290

【 Initial members:】

JISA :Japan Information Technology Services Industry Association

JEITA: Japan Electronics and Information Technology Industries Association

JEMA: The Japan Electrical Manufacturers' Association

JEMIMA: Japan Electric Measuring Instruments  
Manufacturers' Association

CIAJ: Communications and Information network  
Association of Japan

JBMIA: Japan Business Machine and Information  
System Industries Association

JUAS: Japan Users Association of Information  
Systems





## Activities of Green IT Promotion Council

---

**1. Estimation of “Green of IT” Contribution toward 2025 and 2050**

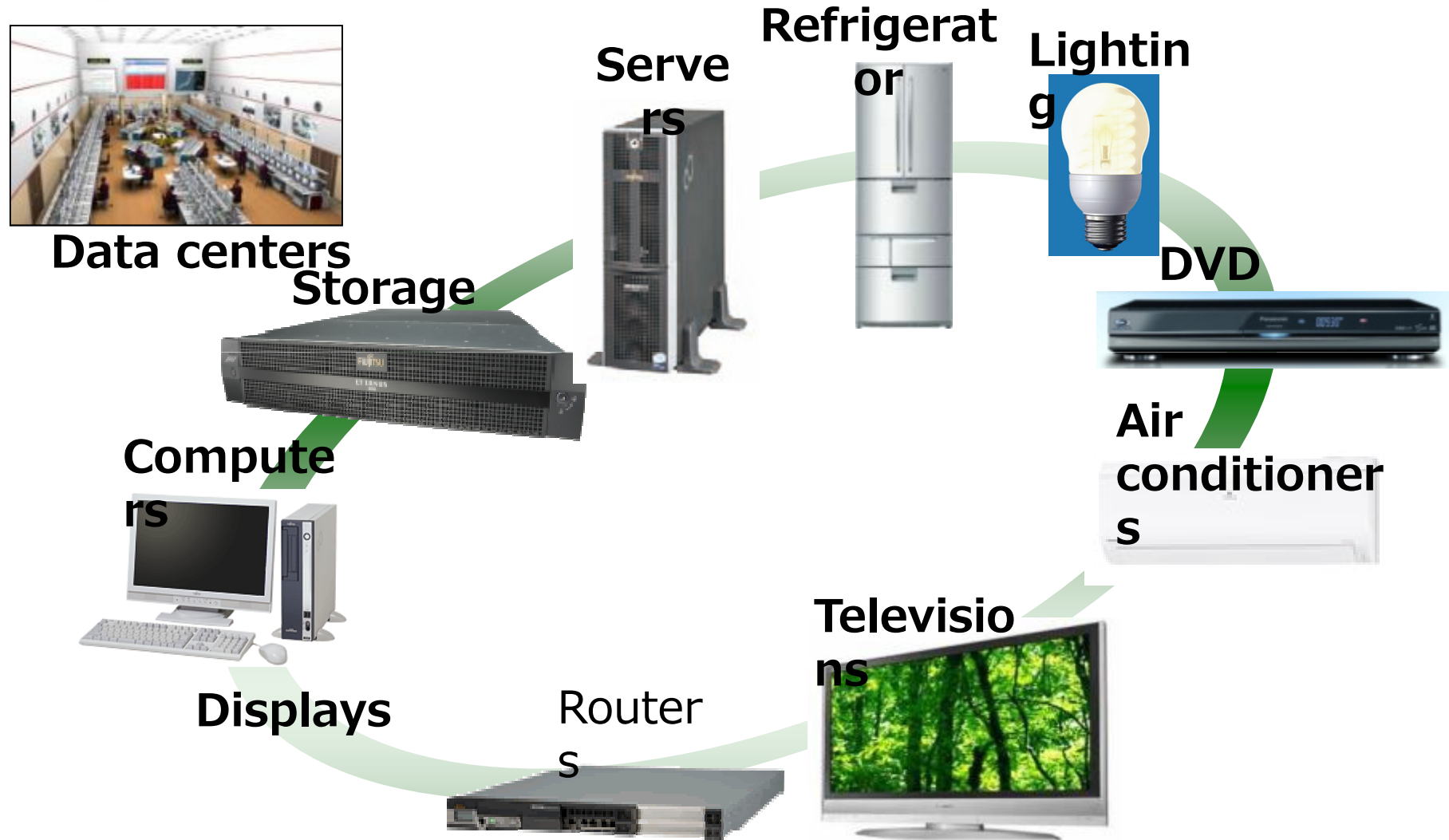
**2. Global Harmonization of DataCenter Energy Efficiency Metrics**

**3. Collection of “Green by IT” Best Practices**

**4. Development of Methodology to calculate “Green by IT” Contribution**



# 1. Estimation of "Green of IT" Contribution

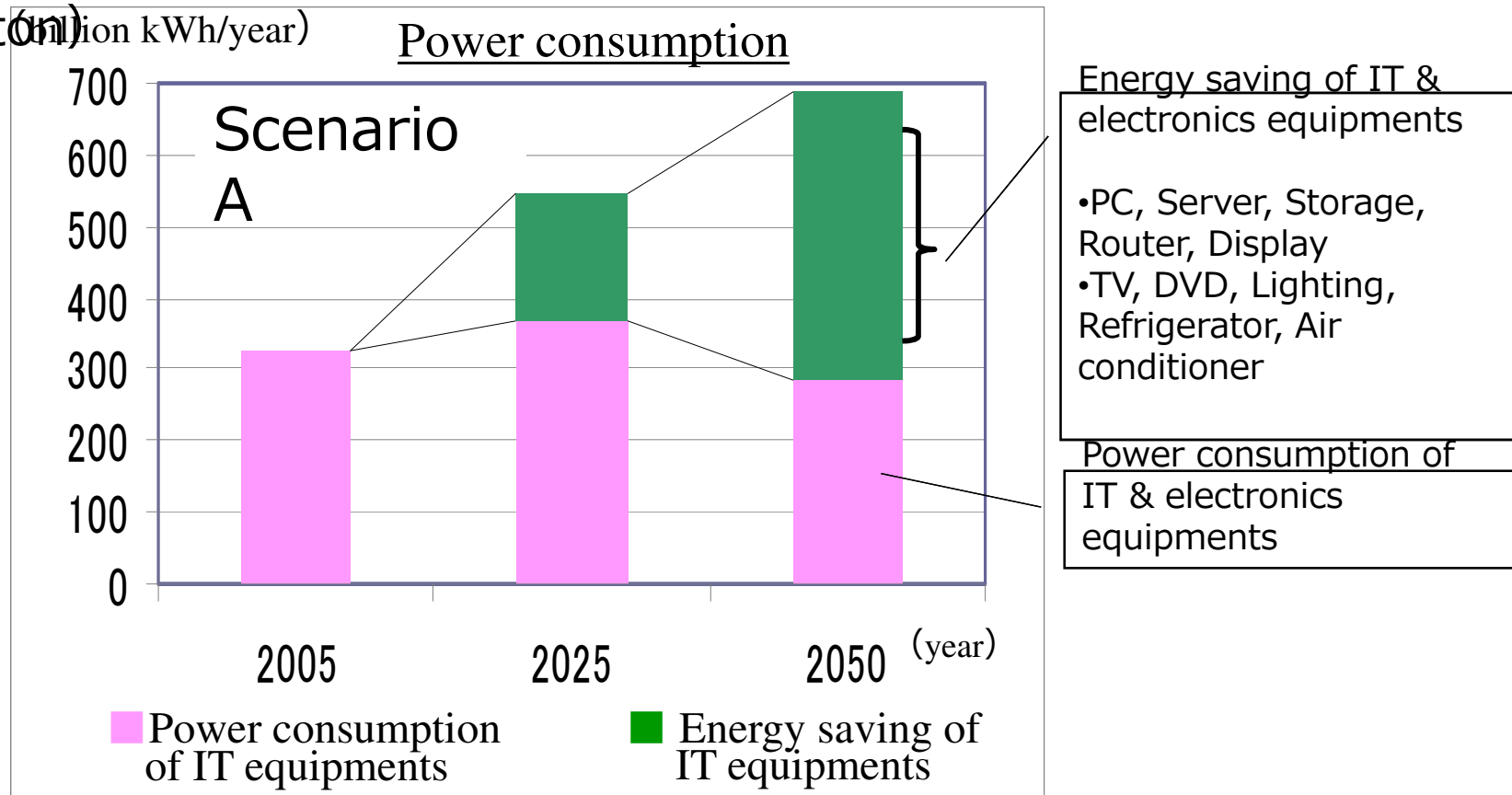




## Energy savings of 10 IT equipments (Japan)

2025 : Japan Reduction of 170 billion kWh (CO2 : 34~68 million ton)

2050 : Japan Reduction of 400 billion kWh (CO2 : 80 million~0.16 billion ton)





## 2. Global Harmonization of DataCenter Energy Efficiency Metrics

### Issue of PUE

$$\text{PUE} \quad (\text{Power Usage Effectiveness}) = \frac{\text{Total energy consumption by data centers}}{\text{Energy Consumption by IT equipment}}$$

PUE is used in many companies

⇒ However, PUE is only related to the **facility efficiency** of data centers

Metrics for DataCenter overall are required!





# Proposed Energy-Efficiency Metrics for DataCenter

## DPPE

Datacenter Performance Per Energy (DPPE) is a new metric for data center energy efficiency, which satisfies the following requirements:

- (1) To calculate energy efficiency easily,
- (2) To compare different data centers, and
- (3) To track energy saving efforts continuously.

DPPE consists of the following four sub metrics.

$$\text{DPPE} = f(\text{ITEU}, \text{ITEE}, \text{FEE(PUE)}, \text{GEC})$$

**DPPE**                      **ITEU**                      **ITEE**                      **FEE(PUE)**                      **GEC**  
 Datacenter Performance Per Energy = f( IT Equipment Usage , IT Equipment Energy Efficiency , Facility Energy Efficiency , Green Energy Coefficient )

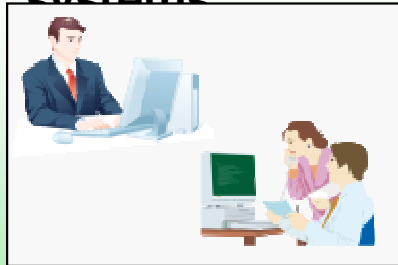
Each sub metric can be used independently.





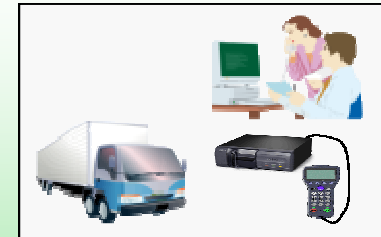
### 3. Collection of “Green by IT” Best Practices

#### E-learning systems



- Internet-based learning
- No travel
- Paperless

#### ITS systems



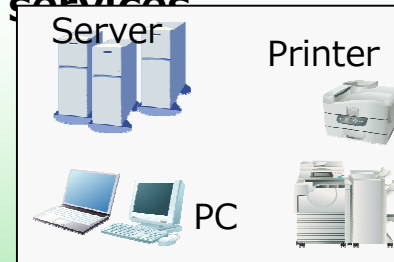
- Reveal transport data
- Eco-driving
- Optimal transport management

#### Bulk store POS systems

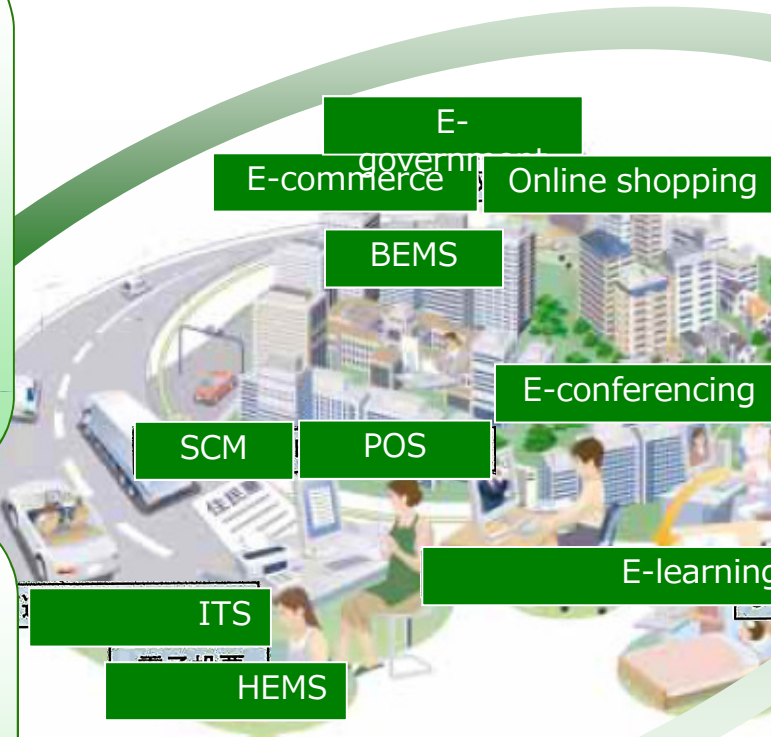


- Concentrate store servers in headquarters
- Shift journals on to an electronic basis
- Boost business efficiency

#### IT resource management services

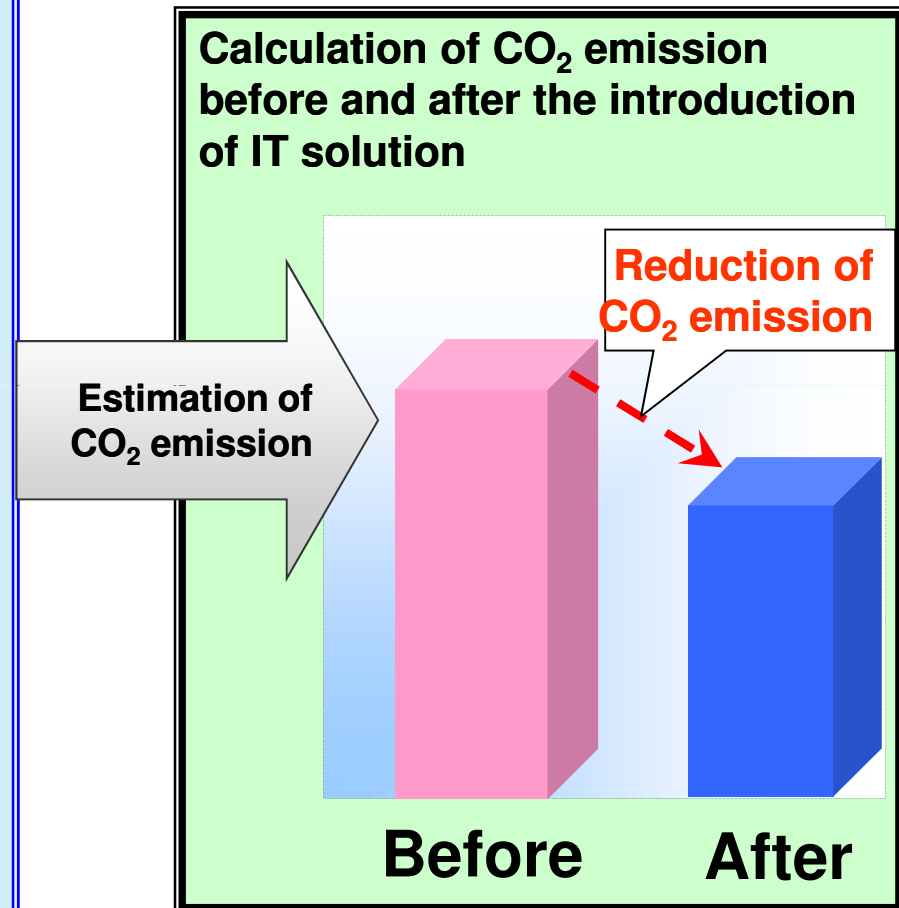
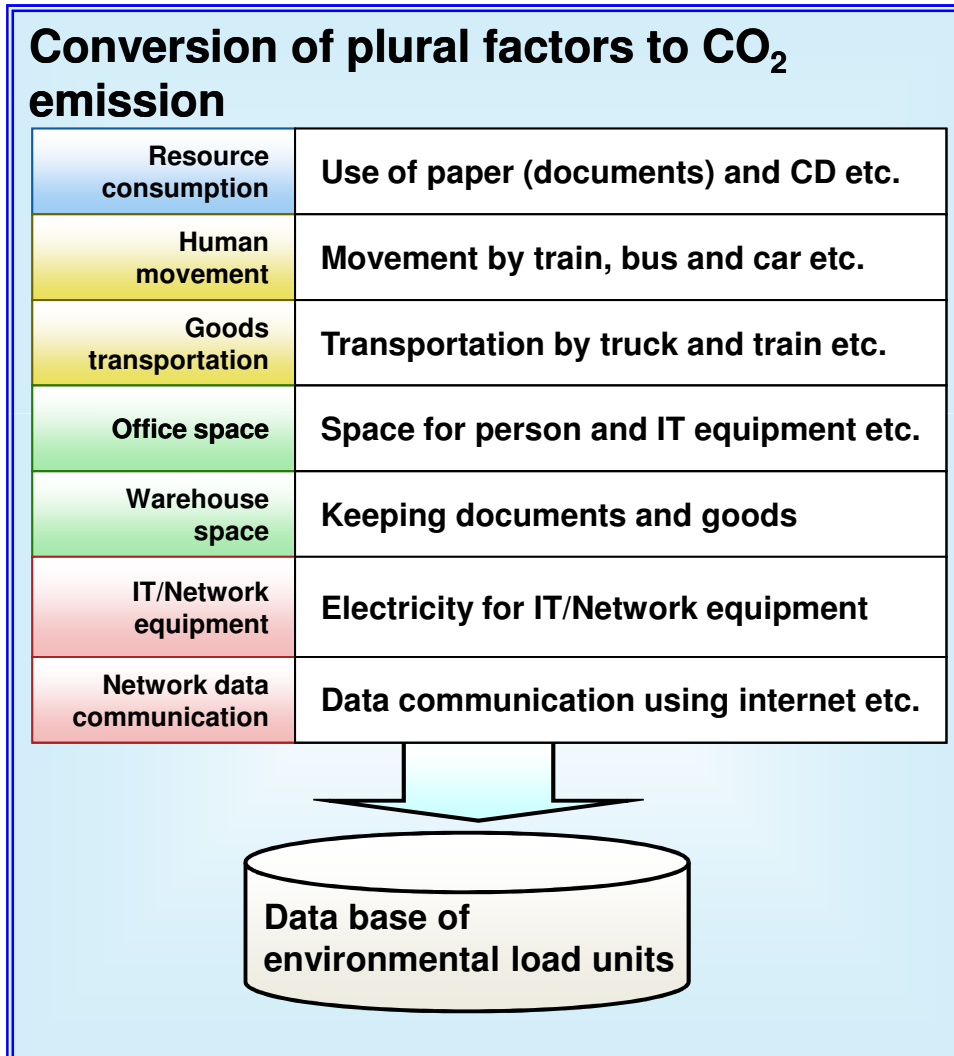


- Integrate functions to save space
- High-performance, low-power CPUs



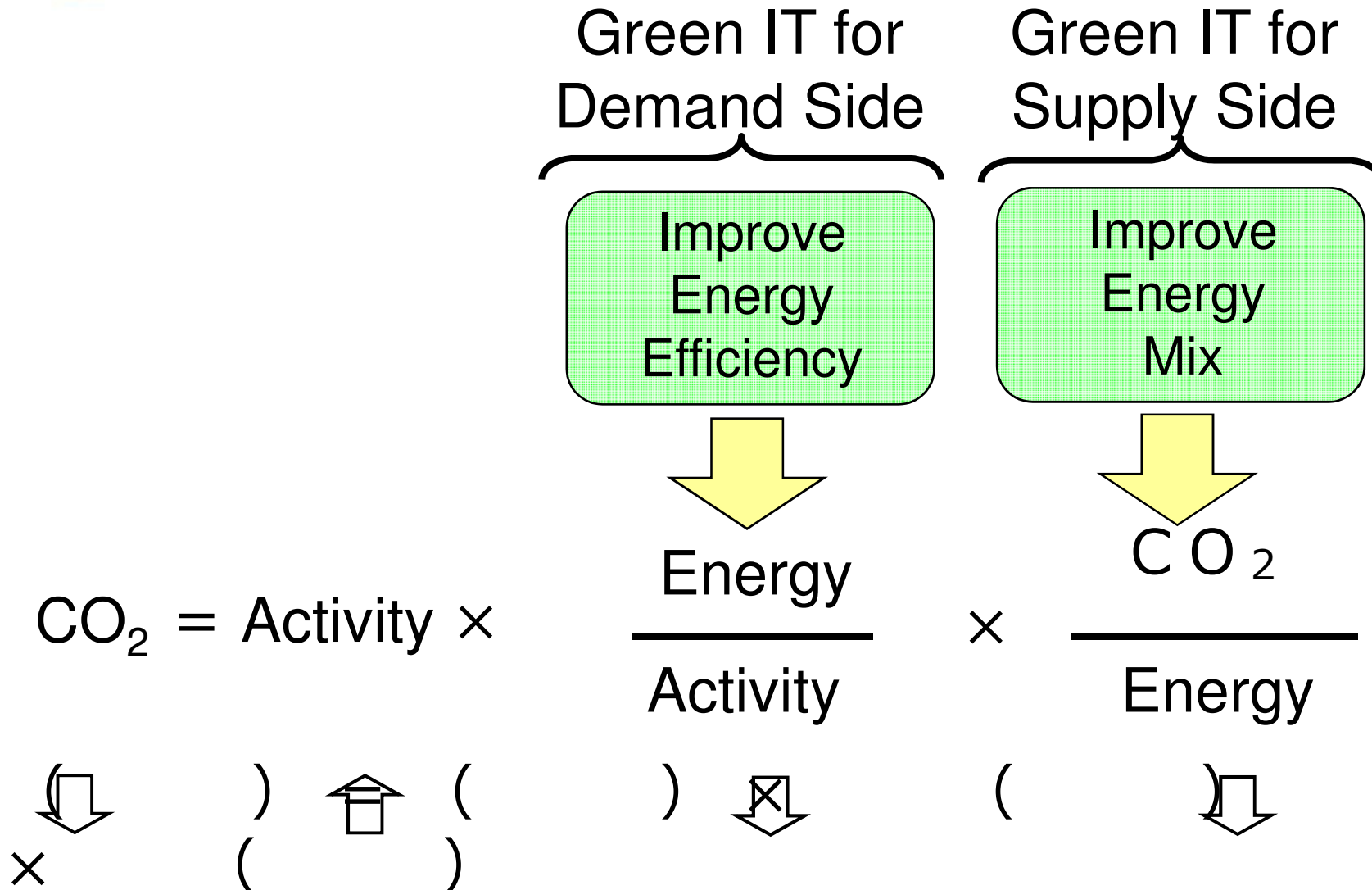


## 4. Evaluation Method of “Green by IT” Contribution





## 5. Green IT for Demand & Supply of Energy





**APICTA • ASOCIO • 2009**  
Asia Pacific Digital Innovation Summit  
Melbourne Australia 14 - 17 December 2009  
Innovation, collaboration & trade for a digital future

MELBOURNE

**Ong Kian Yew**  
Association of the  
Computer and Multimedia  
Industry of Malaysia  
(PIKOM)  
(Malaysia)



# PIKOM

## Green IT

ASOCIO SUMMIT, Melbourne

17 December, 2009

Ong Kian Yew

PIKOM

# Green Technology in Malaysia

- **National Green Technology Policy launched in August, 2009**
- **Positioning Green Technology in the national economy announced in National Budget 2010**
- **US\$ 400 mil to fund energy efficient initiatives in private sector**
- **Tax incentive for achieving Green Building Index certification**
- **US\$ 6 million to intensify awareness**
- **Cyberjaya and Putrajaya as pioneer green cities**

# CURRENT REGULATION IN MALAYSIA

1. Laws governing e-waste include Environmental Quality (Scheduled Wastes) Regulations 2005. E-waste is one of the scheduled waste under code SW110
2. Import or export of e-waste should follow procedure under Basel Convention. Currently, it is been Malaysia' Dept of Environment's policy not to allow e-waste to imported for any purpose.
3. Guidelines for the classification of used electrical and electronic equipment in Malaysia published by DOE.  
<http://www.doe.gov.my/en/buangan-berbahayahazardous-substances>

# PIKOM INITIATES PILOT

**PIKOM initiated an E-Waste Recycling Program together with Malaysia Department of Environment in August 2009.**

**Held together with the popular PIKOM PCFair, a consumer ICT event.**

**Raised awareness on the importance of recycling.**

**Total collection for 3 sites over the weekend was above 1,000 kgs.**

**Incentives were provided in the form of vouchers to encourage consumers to recycle.**

**As a maiden effort, the learnings will be useful for future and initiatives.**



# WHAT WE LEARNED?

**Lack of awareness of the impact on the environment.**

**Incentives needed to promote Green IT and Recycling.**

**Legislation would not be effective without enforcement and government funding.**

# THANK YOU

**PIKOM**

**NATIONAL ICT ASSOCIATION OF MALAYSIA  
Unit 1106-1107, Block B Phileo Damansara II  
No. 15, Jalan 16/11, 46350 Petaling Jaya,  
Selangor Darul Ehsan,  
Malaysia.**

**Tel : (603) 7955 2922**

**Fax : (603) 7955 2933**

**General Email: [info@pikom.org.my](mailto:info@pikom.org.my)**

**[www.pikom.org.my](http://www.pikom.org.my)**



**APICTA • ASOCIO • 2009**  
Asia Pacific Digital Innovation Summit  
Melbourne Australia 14 - 17 December 2009  
Innovation, collaboration & trade for a digital future

MELBOURNE

**Josh Millen**  
**AIIA**  
(Australia)





## AIIA - Industry Leadership

# GreenIT – Australian Industry Sustainability and Environment Action

# ASIA Pacific Digital Innovation Summit 2009



Prepared by Josh Millen, Manager

December 2009



# AIIA & Sustainability - APDIS

## Overview

### 1. What is going on in Australia?

- Going Green – sustainability agenda is here to stay!
- Key drivers for change
- The GreenIT agenda

### 2. What is the Association doing?

- Promoting the need to get our own house in order
- Promoting the transformational change

### 3. What are our members doing?

### 4. What are the next steps?



# AIIA & Sustainability - APDIS

## What is going on in Australia?

- Going Green' not just a passing fashion!
  - Environment and economics now interlinked
  - Climate change is very real
- Significant drivers for going green
  - Sustainability agenda
  - Low carbon economy
- Barriers to going green
  - Perception on the costs
  - Legislation or lack thereof
  - Leading a horse to water won't make it drink
- The ICT Industry and Sustainability
  - The problem (challenge)
  - The opportunity (transformational role)
  - The GreenIT agenda is born



# AIIA & Sustainability - APDIS

## **AIIA Strategy on GreenIT**

### **2009 – 2010 Key Focus Areas for AIIA National Board**

1. Industry Growth
2. Workforce
3. Infrastructure
4. Shaping the Business Environment
- 5. Environmental Sustainability**
  - **Challenges**
  - **Opportunities**

**Environmental issues cut across all 5 of these areas**





# AIIA & Sustainability - APDIS

## The GreenIT agenda that AIIA promotes

### Challenges

- There is plenty of work to be done to stop the growth of the environmental impact of IT and start to reduce it.
- Getting our own house in order is important.

### Product Stewardship Focus

- Discussions on Energy Performance Standards with Fed Govt re: computers, monitors, data centres, etc.
- Byteback – national e-waste program (pioneered in VIC) – funding support by major manufacturers and Sustainability VIC
- National framework for e-waste just approved by Federal and State Governments (EPHC)
- Pave the way for IT Industry to run Byteback nationally







# AIAA & Sustainability - APDIS

## The GreenIT agenda that AIAA promotes

### Opportunities – the transformational role of ICT

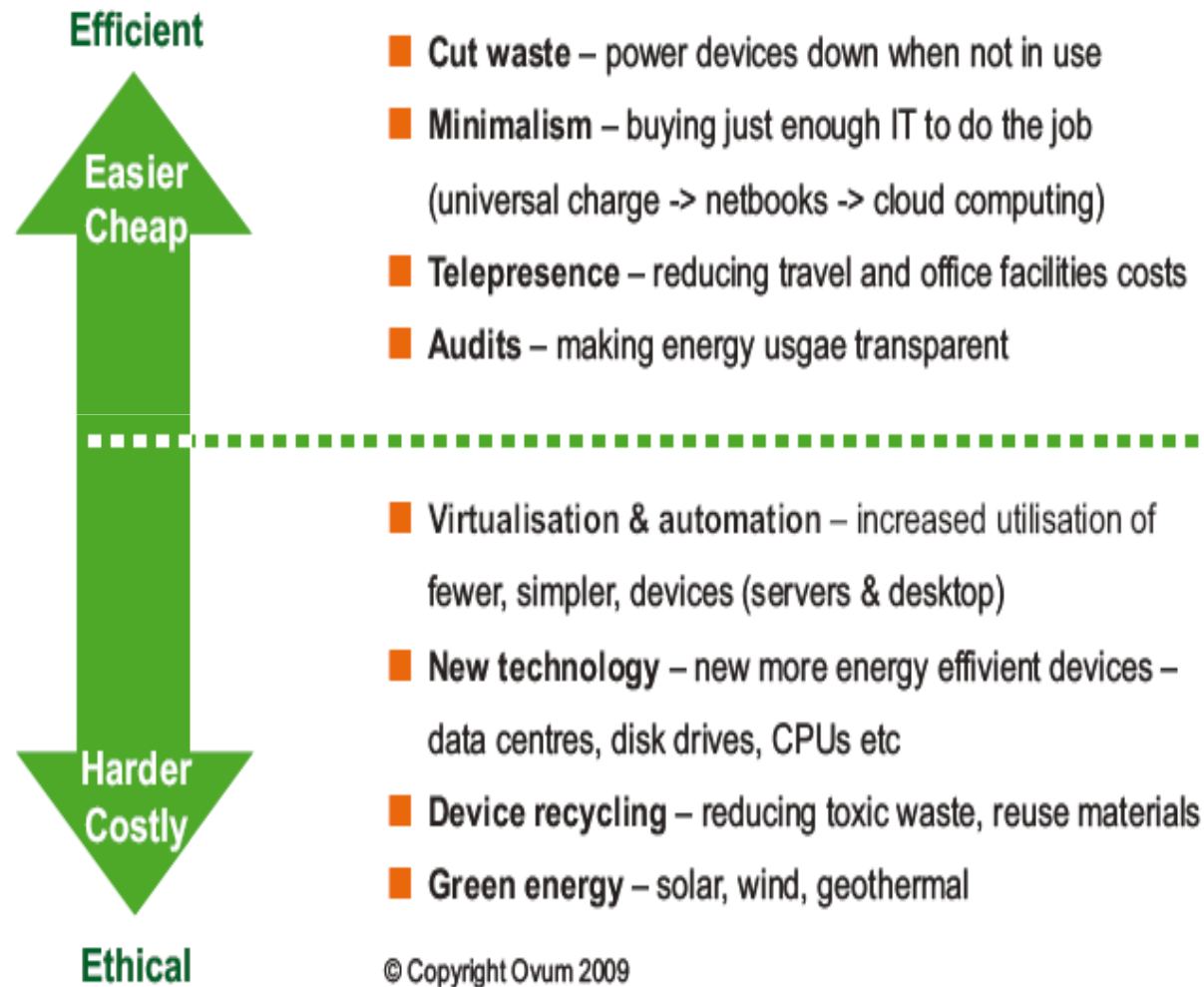
- The opportunity to implement new technologies that help reduce the other 92-94 percent greenhouse gas emissions – through activities such as more optimised fleet management, more intelligent utility grids, electronic bills and payments, video-conferencing and improved building management systems.
- The adoption of GreenIT is vital to organisations if they are to both reduce carbon emissions and build productivity into the future.
- GreenIT can enable organisations to tackle the challenges of climate change by providing opportunities to think differently and find new ways in which to create capacity for innovation, create low-cost platforms for growth and minimise compliance costs and risks.



# AIIA & Sustainability - APDIS

## The GreenIT Agenda

Key drivers for change - Ovum Cookbook © 2009 GreenIT eBook

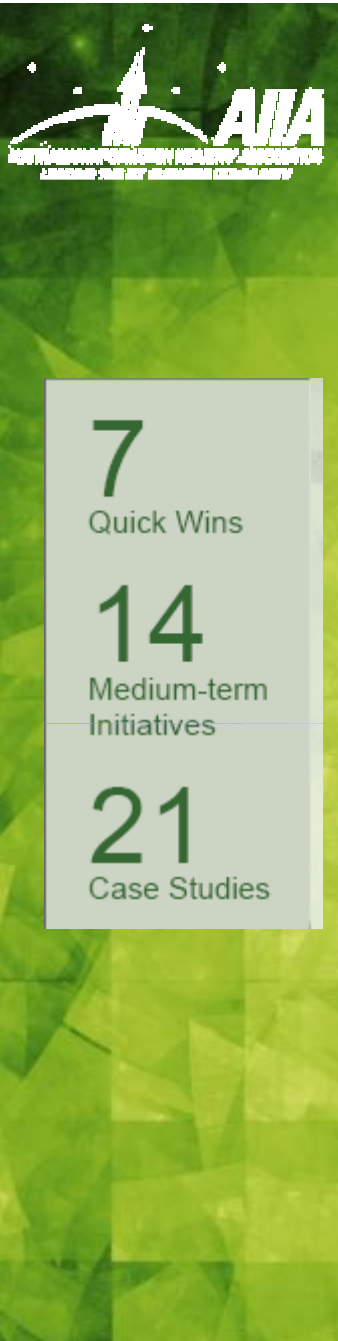




# AIIA & Sustainability - APDIS

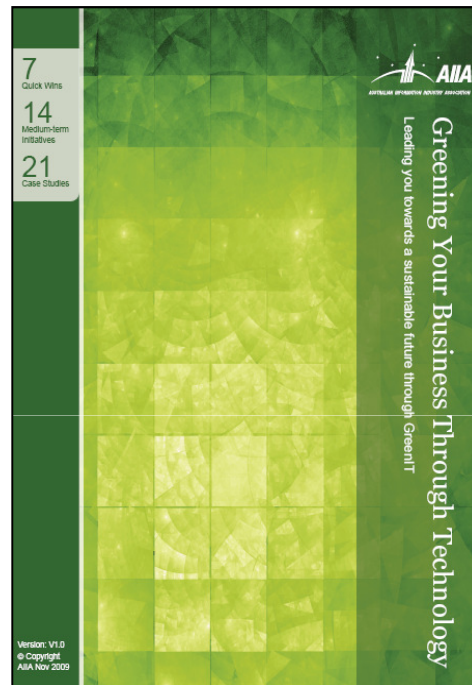
## The Transformational Role of Technology

- AIIA is working with its members and external stakeholders to promote the benefits of the ICT industry – *technology as an enabler in the area of environmental and business sustainability* (via events, lobbying and new project initiatives)
- Helping members understand how to reduce their carbon footprint and the industry's customers
- Promoting responsible procurement of technology equipment
- Government Engagement Teams at AIIA assisting Government with their ICT plans as they relate to GreenIT considerations
- eBook – start of new engagement with industry clients (leadership by our industry) in an area we can make a significant difference.
- New partnerships with innovative companies complimenting our objectives in this space:
  - RMIT G-readiness survey and capability maturity register
  - Computers Off Australia - GreenIT principles commitment to energy reduction - certification
  - GreenBiz check - online GreenITcheck - benchmarking, practical guidelines, and certification



# AIIA GreenIT eBook is now available online

“Leading you towards a sustainable future through GreenIT”



GreenIT eBook



Detailed Case Studies



Appendices

AIIA GreenIT Portal - [www.aiaa.com.au/GreenIT](http://www.aiaa.com.au/GreenIT)



# Best way to use the eBook

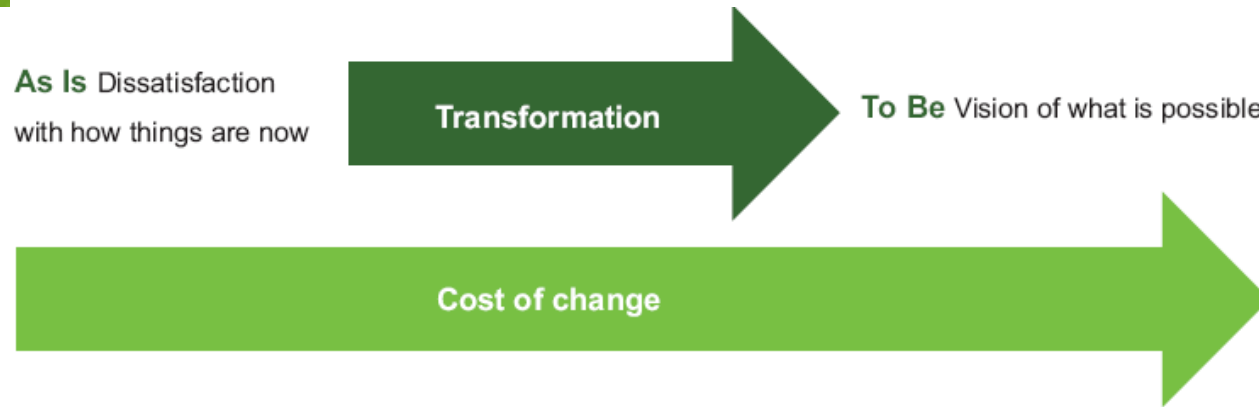


Table 5: Organisational Transformation Initiatives

Stage	Project Type	Duration	Description
1	Quick wins	<12 months	Can be implemented immediately with minimal cost.
2	Short to medium-term projects	1-2 years	Minimal investigation is required to develop the business case.
3	Long-term projects	> 2 years out	Requires business feasibility in order to develop a high-level business case which confirms viability.





## AIAA GreenIT Partner Projects

- Royal Melbourne Institute of Technology (RMIT) – market analysis
- Computers Off Australia – commitment certification
- GreenBiz Check (GreenIT Check) – checklist certification
- Connection Research – market analysis
- Multimedia Victoria – Sustainability Forums
- Sustainability Victoria - Byteback



# AIAA GreenIT Partner Projects

## AUSTRALIA'S ICT INDUSTRY GREEN ICT CAPABILITY ASSESSMENT PROJECT

- A partnership between AIAA and Royal Melbourne Institute of Technology (RMIT)
- The objective of the study is to assess Australian ICT Industry's current readiness and future capability to provide technologies, solutions and services that enable sustainability.
- The outcome will enable AIAA members to benchmark themselves against the industry. It also enables AIAA's work in promoting the role of the ICT industry in enabling sustainability.

<http://www.rmit.edu.au/businessit/gitcap>



# COMPUTERS-OFF - Australia's First Green ICT Certifications and Campaign



Power Management



Virtualisation



Carbon-Neutral Computing

COMPUTERS-OFF certifications can:

- Result in money savings through proven energy-efficient measures in greener computing
- Easily identify businesses and organisations who commit themselves to reducing their impact on the environment

Some certified partners and associates:







# Green IT Check

[www.greenitcheck.com](http://www.greenitcheck.com)



GreenITCheck has a specific focus on an organisation's ICT footprint

**greenbizcheck**

- Home
- Certify Now
- About Us & FAQs
- Products & Services
- Free Mini Assessment New
- Free Savings Calculator New
- Eco Champions New
- Resources & Tips
- Partners & Clients
- Green Jobs
- Contact Us

Logged in as Green Company

- Your Assessments
- Marketing Material
- Manage your Account
- Logout

**Watch Our**

**MARKETING ANGELS**

### OFFICE ASSESSMENT

Percent	Progress Bar
Your Assessment Progress: 5%	<div style="width: 5%;"></div>

**PAPER USAGE AND ONLINE PAYMENTS**  
Every ton of paper recycled saves almost 12 trees, 4,100 kilowatts of electricity and more than 30,000 litres (7,900 gallons) of water.

What percentage of recycled or maximum post consumer fibre, non-bleached (or oxygen bleached) paper, envelopes and business cards does your company currently buy?

0%  100%

What percentage of your organization's outgoing bills, invoices or statements to clients are electronic and not paper based? (e.g. PDF or E-mail).

0%  100%

What percentage of bills or invoices does your organization pay online?

0%

**Carbon Emissions  
Management Software**  
A NEW GLOBAL INDUSTRY



[www.connectionresearch.com.au](http://www.connectionresearch.com.au)  
Phone: +61 2 9467 9800

A Research Report by Connection Research

Companion Report to the CEMS Portal:  
[www.cemsus.com](http://www.cemsus.com)



# Carbon Emissions Management Software

Connection Research Portal  
and Research Report

[www.cemsus.com](http://www.cemsus.com)  
product listings, industry  
information



## What is next?

- Tracking the footprint of the ICT industry in Australia. This hasn't been done for several years and could be as high as 8% according to CSC data.
- Setting an Australian target - a commitment to reduce emissions from the ICT industry by a certain percentage on 2005 levels by 2020.
  - EU Industry associations doing this
  - Some Asian neighbours doing this
- Building the capability of the industry to deliver solutions
- Greater awareness of the helpful role of ICT in the low carbon economy



**APICTA • ASOCIO • 2009**  
Asia Pacific Digital Innovation Summit  
Melbourne Australia 14 - 17 December 2009  
Innovation, collaboration & trade for a digital future

MELBOURNE

**Gary Veale**  
**KPMG**  
(Australia)







# Sustainability & Innovation

## Towards sustainable supply chains

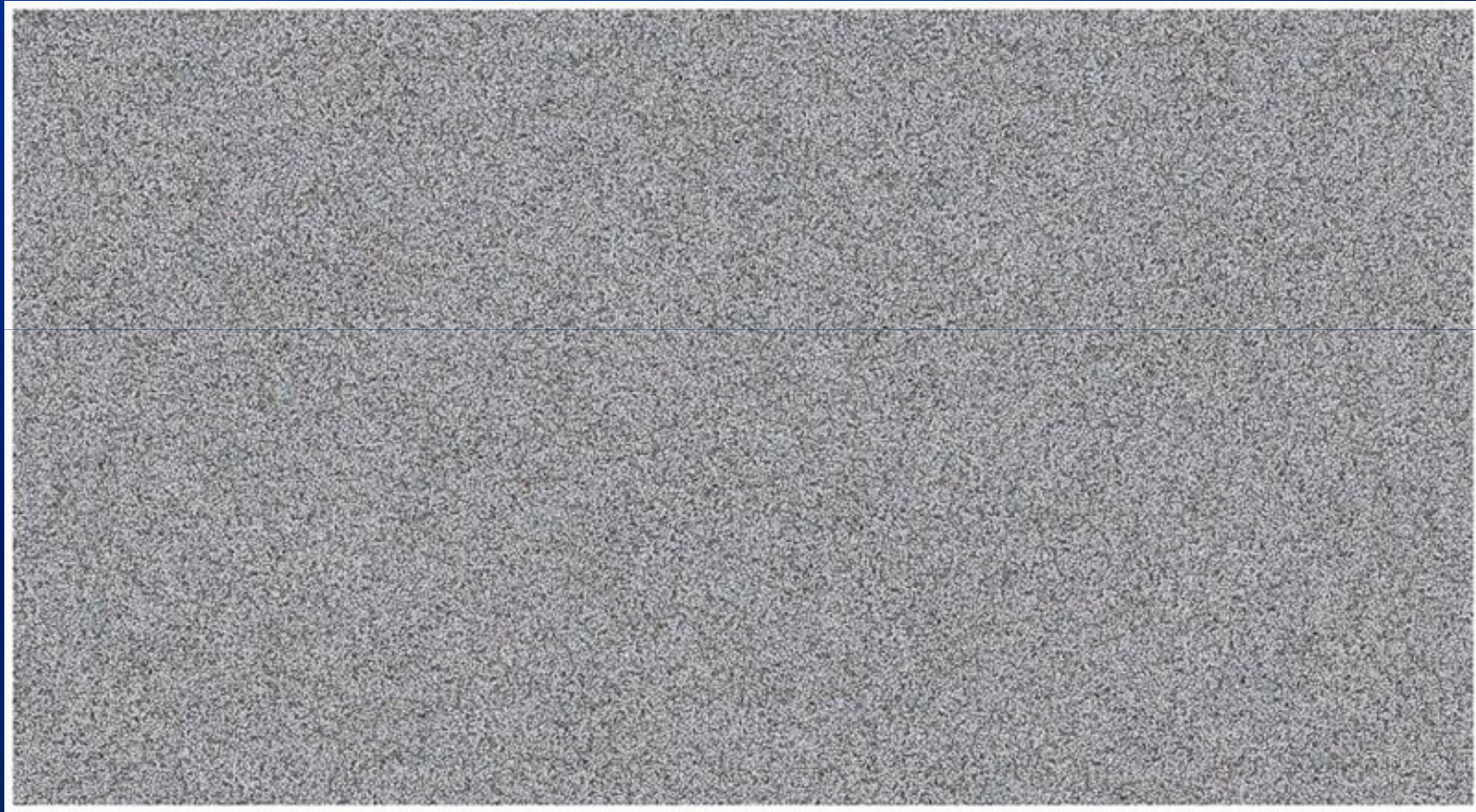
Asia Pacific Digital Innovation Summit - December 2009

ADVISORY

AUDIT ■ TAX ■ ADVISORY



# Modern Art?



*Artist Chris Jordan*





*Artist Chris Jordan*

Cell Phones, 2007

60" x 100"

Depicts 426,000 cell phones, equal to the number of cell phones retired in the U.S. every day.



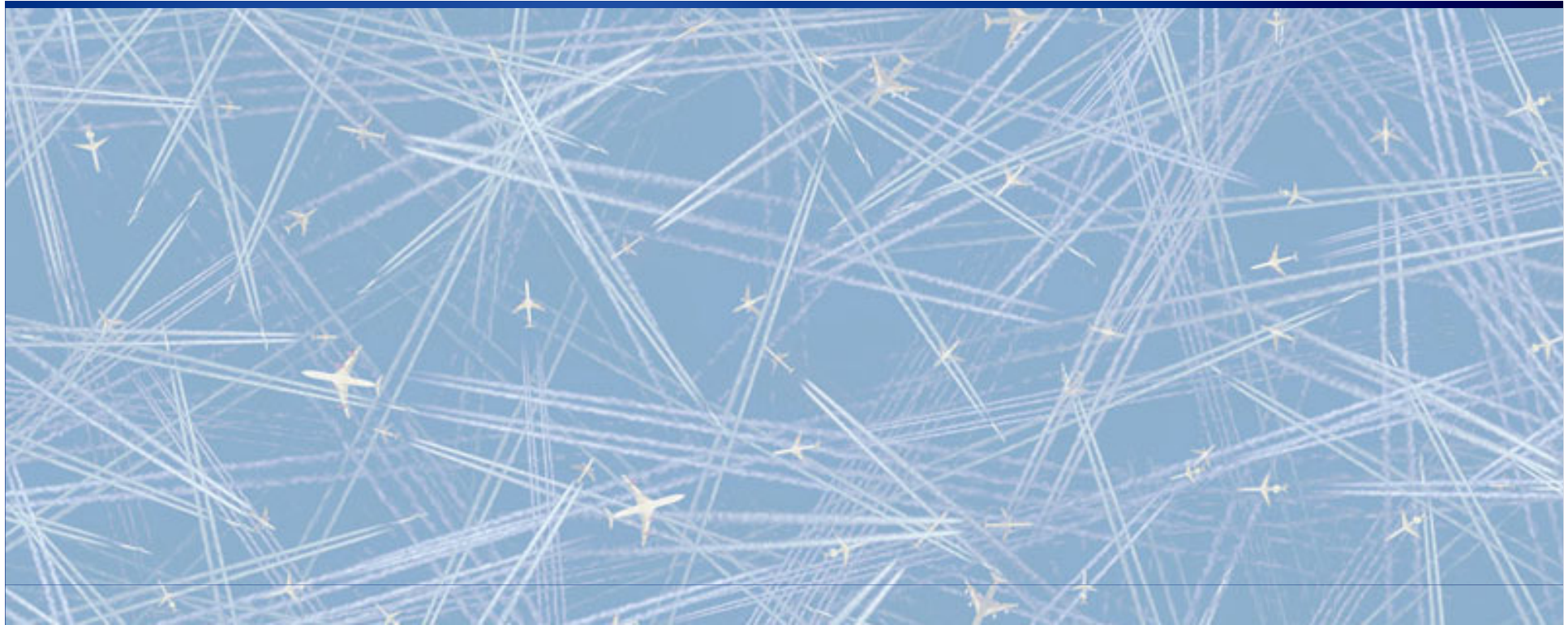


# Modern Art?



*Artist Chris Jordan*





*Artist Chris Jordan*



Depicts 11,000 jet trails, equal to the number of commercial flights in the U.S. every eight hours.

# Consumption with consequences



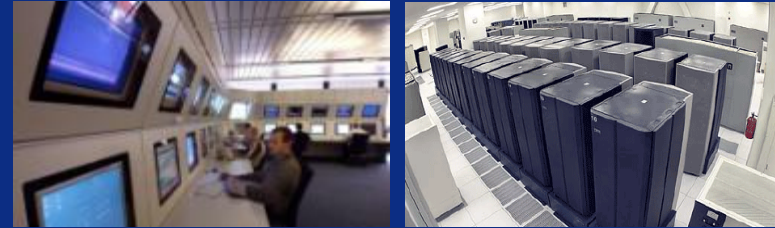
A boy totes copper wires torn from old electronic devices at a market in Ghana. Power plugs in his bundle point to Europe – where laws forbid shipping such waste to poor nations – as a likely origin.

*Photograph by Peter Essick*



# Information, Communication and Technology

... a key enabler and facilitator of economy- wide greenhouse gas mitigation and adaptation to climate change impacts.



1. Reducing **energy consumption** (*data centres, networks, physical distribution centres and networks, televisions, desktops, etc*)
2. Providing **software solutions** for **carbon management** and **climate change adaptation** (*lifecycle analysis, smart metering, irrigation management, etc*)
3. Offering customers '**low carbon**' **products and solutions** (*video conferencing, green phones, 'designed for the environment', low emission products, carbon neutral, etc*)
4. Adopting a '**lifecycle**' **approach** to product design, manufacture, use and disposal – Product Responsibility, '**Designed for the Environment**'.
5. Promoting climate change **mitigation and adaptation** (*online tools, informative media, etc*)

## ... linkages within the Supply Chain World

- Challenges to predictability
  - Security and legislation
  - Sustainability and climate change
  - Critical infrastructure and systems
- Increasing volatility
  - Price and demand volatility
  - Longer and more complex supply chains
  - Cash-to-cash cycles lengthening
  - Politically motivated fiscal changes
  - Supply chain disruptions

# Lessons from the digital revolution

- Rapid pace of change
- Incredible innovations
- New products, services and business models
- Integration with business / the “old economy”
- Demonstrated value propositions/ business value



# What do we really mean?

TRADITIONAL APPROACH

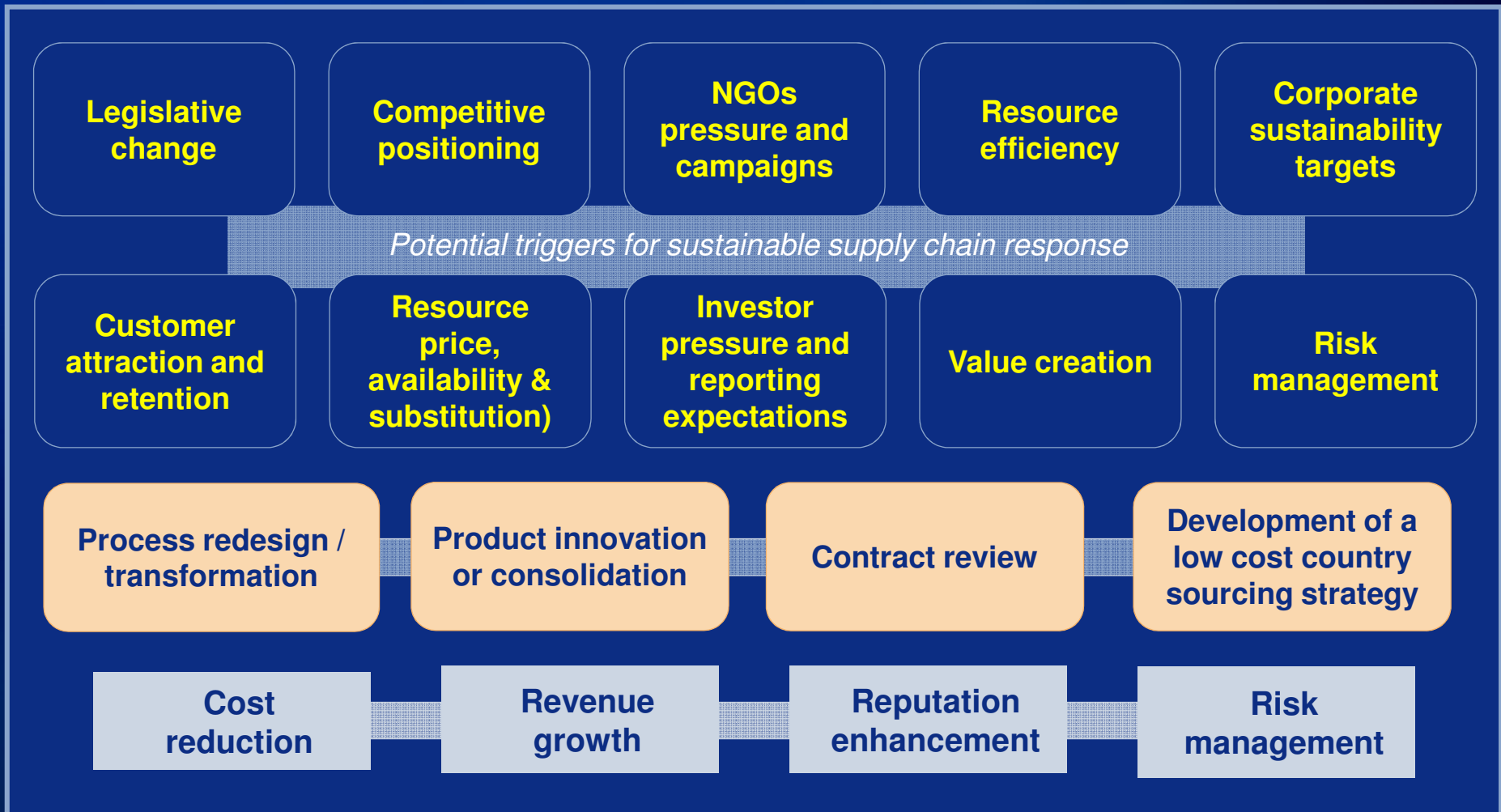
HOLISTIC APPROACH



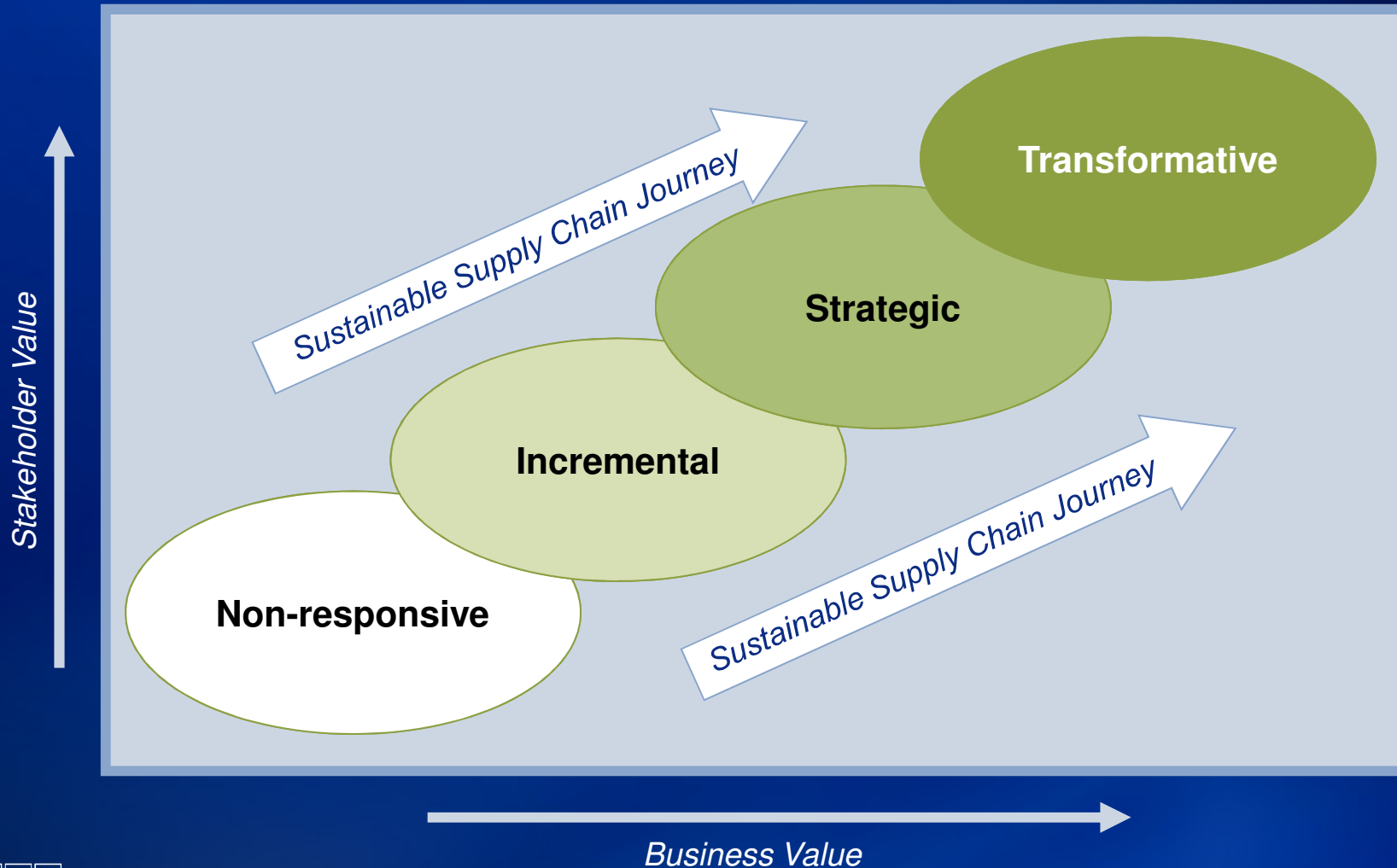
Sustainability Considerations – Management of key risks and opportunities

- Environmental:** Understand the environmental/carbon footprint of your supply chain; Encourage product re-usage and resale; Design for sustainability; Reduce waste;...
- Social:** Understand human rights/community impacts within your supply chain; Manage labor issues within your supply chain; Work against corruption in all its forms; ...
- Economic:** Understand economic contribution of products/services; Understand market potential of differentiated sustainability products; Build disposal into the total life cost model; ...

# Why is this topic important to you?

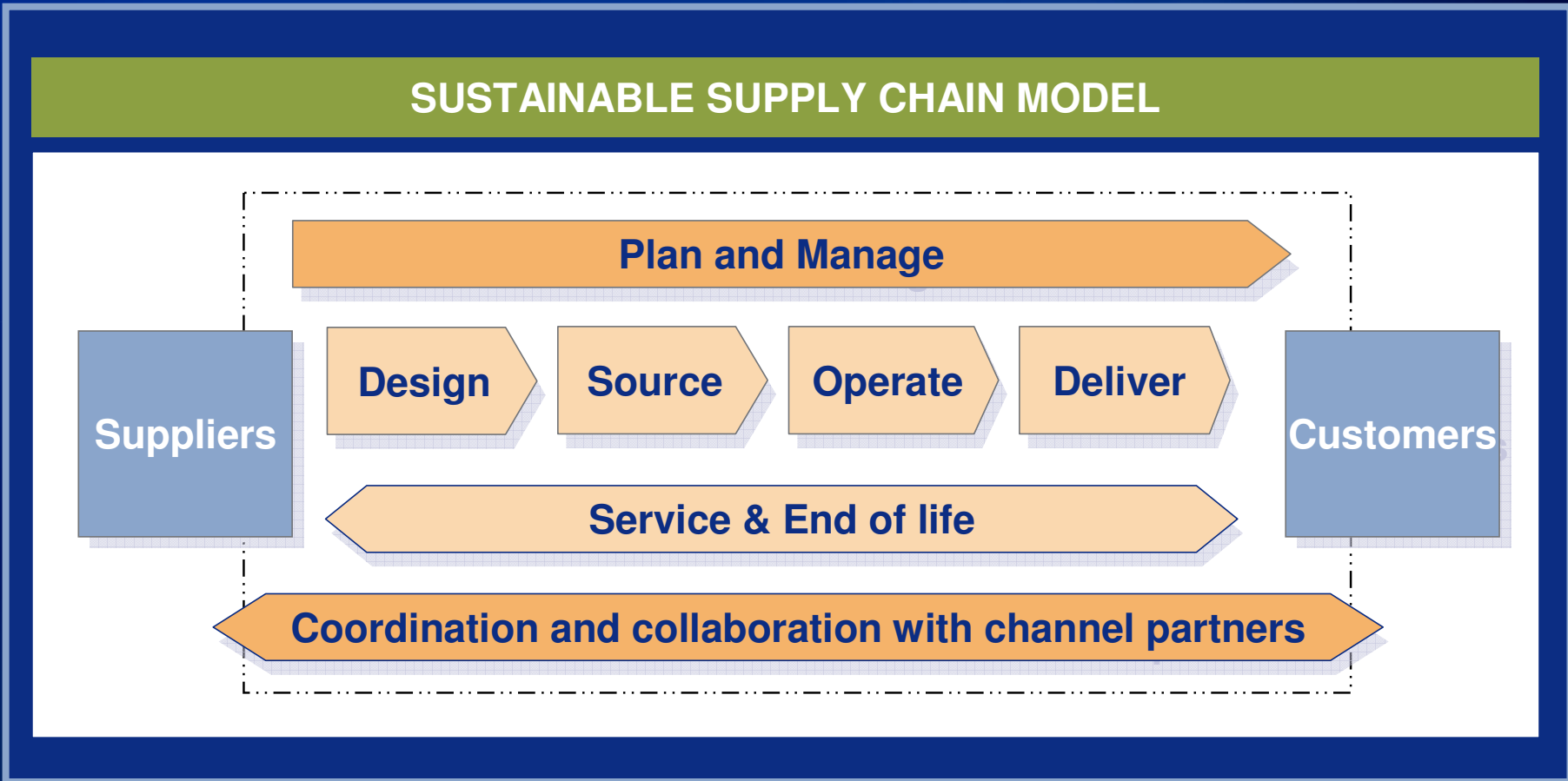


# Overall supply chain response levels (overall)

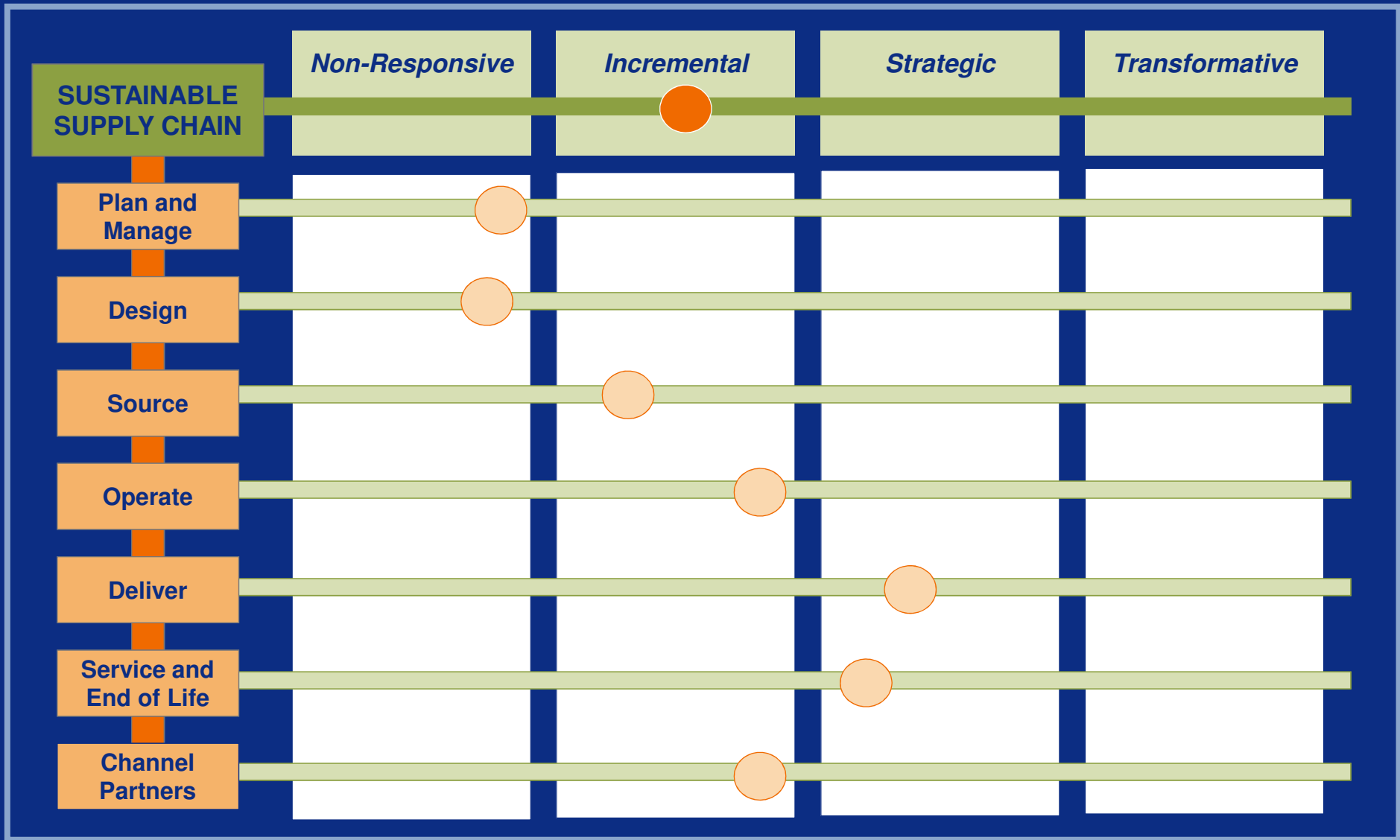




# Sustainable Supply Chain (SSC) model



# Enterprise positioning within model (*today, next year, 5 years?*)



Gary Veale

Associate Director

KPMG

(03) 9288 6125

0417 019 264

[gveale@kpmg.com.au](mailto:gveale@kpmg.com.au)

*The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.*

*The views and opinions contained in the presentation are those of the author and do not necessarily represent the views and opinions of KPMG, an Australian partnership, part of the KPMG International network. The author disclaims all liability to any person or entity in respect to any consequences of anything done, or omitted to be done.*