THE PHILIPPINE ICT
THE GREEN IT

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A SNAPSHOT:
THE PHILIPPINE ICT

1. THE ELECTRONICS INDUSTRY

2. THE IT/BPO INDUSTRY
THE PHILIPPINE ELECTRONICS INDUSTRY
- THE DRIVER OF PHILIPPINE ECONOMY
CHANGING FACE OF PHILIPPINE EXPORTS

1970

ELECTRONICS - 3%
Mineral Products - 18%
Garments - 7%
Other Manufactured Products - 10%
Other - 2%
Forest Products - 10%
Agro-Based - 49%

2010

ELECTRONICS - 58%
Mineral Products - 2.1%
Giftwares - 0.45%
Organic Products - 0.18%
Wearables - 0.16%
Food - 2.9%
Marine Products - 1%
Machinery and Transport - 4.4%
Garments and Textiles - 6%
Construction Materials - 0.49%
Home Furnishings - 1%
Motor Vehicles and Parts - 1.74%
Others - 13%

Sources: DTI/NSO

FROM COCONUT CHIPS TO MICROCHIPS
8 OUT OF THE WORLD’S TOP 20 CHIPMAKERS ARE OPERATING IN THE PHILIPPINES

TIPI, Philips, Fairchild, Samsung, Analog, Sanyo, On Semi, Rohm

Source: SEIPI
THE WORLD’S TOP ELECTRONICS FIRMS

- **FOUR OF THE LARGEST HDD PRODUCERS ARE IN THE PHILIPPINES**

  - Hitachi
  - Toshiba
  - Fujitsu
  - NEC

- **CEBU MITSUMI** – employs >20K, biggest employer in the Philippines; manufactures computer peripherals and components such as CD-R, CD-RW, optical pick up

Source: SEIPI
THE WORLD’S TOP ELECTRONICS FIRMS

- **AMKOR** – employs 8,000 people for its IC packaging with 400 formats, from leadframe to BGA solutions
- **EPSON** – employs 5,000, one of the top 3 terminal printer production base of global Epson group, producing its 10 millionth printer
- **LEXMARK** – produces 40 million printheads/year
- **SUNPOWER** – produces solar panels

Source: SEIPI
... and a cluster of homegrown ODMs time recorder, avr, power supplies, alarm systems, electronic ballasts, testers, GPS tracking, automated toll collection, others
A CRITICAL MASS OF GLOBAL PLAYERS

Source: SEIPI
THE COMPANIES IN THE ELECTRONICS INDUSTRY

NO. OF FIRMS:
959 COMPANIES

NATIONALITY:
- 72% Foreign
- 28% Filipino

Sources: BOI/PEZA
For every one direct job, 7 indirect jobs are created.
INVESTMENTS
HISTORICAL: 1992-2010

US$ BILLIONS


1992: 0.04
1993: 0.22
1994: 2.16
1995: 1.29
1996: 1.08
1997: 1.47
1998: 0.79
1999: 1.24
2000: 0.72
2001: 0.27
2002: 0.23
2003: 0.44
2004: 0.78
2005: 0.75
2006: 1.40
2007: 0.42
2008: 0.47
2009: 2.27
2010: 0.75
ELECTRONICS EXPORTS
1992 - 2010

US$ BILLIONS

Sources: National Statistics Office
Bureau of Export Trade Promotion, DTI
THE IT/BPO INDUSTRY - THE PHILIPPINES' FASTEST GROWING INDUSTRY
Contact Center
- Major contact centers in the Philippines: Around 300
- Total full-time employees: 344,000
- Revenue 2009: US$6.1 Billion
- Revenue growth from 2008: 21%

Back-office and KPO:
- No. of service providers: 96
- Total full-time employees: 101,000
- Revenues 2009: US$1.6 Billion
- Revenue Growth: 35% vs. year ago

Sources: Business Process Association of the Philippines
A PICTURE OF THE PHILIPPINE IT/BPO INDUSTRY

Software Development
- Number of development companies: **135 (export only)**
- Total IT professionals: **44,000**
- Revenues in 2009: **US$ 725 million**
- Capabilities in applications development and maintenance; IT operations and infrastructure; business analysis, project management, education

Animation & Game Development
- 20-year wealth of experience in the field
- Capabilities in 2D, 3D, Maya, 3D Max, Medical/Educ Graphics & Animation
- 2010 projected global market demand of US$142 million

Engineering Design
- Over 75,000 licensed professionals
- 40,000 graduates of engineering courses annually (CAD-enabled)
- Internationally-accepted engineering standards
A CRITICAL MASS OF GLOBAL PLAYERS

Engineering Services Outsourcing
Creative Services Outsourcing

HR Outsourcing
Medical Services Outsourcing
Legal Process Outsourcing
A CRITICAL MASS OF GLOBAL PLAYERS

Clinical Research Outsourcing

Maintenance, Repair, Overhaul Services

Voice – Based Services Suppliers

Homegrown Suppliers
A CRITICAL MASS OF GLOBAL PLAYERS

Banking, Financial Services and Insurance

IT and Software Services

NASSCOM’S Top BPOs

Shared Service Centers/Captives
THE PHILIPPINE IT/BPO INDUSTRY SIZE

Philippine IT-BPO industry size
2006-2010; US$ Billion

CAGR: ~23%

YoY Growth:
- ~50% (2006-2007)
- ~26% (2007-2008)
- ~14% (2008-2009)
- ~20% (2009-2010)

2006: 3.2
2007: 4.8 (~50% YoY Growth)
2008: 6.1 (~26% YoY Growth)
2009: 7.1 (~14% YoY Growth)
2010: 8.9 (~20% YoY Growth)
THE PHILIPPINE GREEN IT
CHALLENGES TO THE WORLD

WORLDWIDE ECONOMIC SLOW DOWN

SURGING OIL PRICE

RAW MATERIAL PRICES

CURRENCY FLUCTUATION

INFLATION

UNCERTAINTY & RISK

MARKET VOLATILITY
CHALLENGES TO THE WORLD

POLLUTION, GLOBAL WARMING...

And more... you name it... it’s there
THE TWO LEADING INDUSTRIES IN THE PHILIPPINES

THE PHILIPPINE ELECTRONICS INDUSTRY
THE PHILIPPINE ICT INDUSTRY

Something has to be done...
Something has to be done...

The ERG Initiative  Dr. K.B. Chan

ERG, in physics, is basic...

It is one unit of energy – to move one gram of mass

Source: SEIPI/HKEIA
Asia Electronics Forum
ENERGY

Oil

Coal

Natural gas

Source: SEIPI/HKEIA
Asia Electronics Forum
RESOURCES

Water
Minerals & commodities
Food
and more...

Source: SEIPI/HKEIA
Asia Electronics Forum
GREEN

Waste treatment

Preserve the environment

Emission control

and more…

Source: SEIPI/HKEIA
Asia Electronics Forum
We, the electronics and ICT industry, do have our social responsibility...
EVERY YEAR, WE MAKE:

> 200 MILLION PCs
> 1 BILLION HAND PHONES
> 60 MILLION TVS
1. High Consumption of ENERGY:
   - Manufacturing process
   - Silicon wafer
   - Soldering
   - 24 hr Air con
   - Products – Stand by
   - Shipment by air
OUR NEGATIVE CONTRIBUTION TO ERG

2. Huge Consumption for RESOURCES:

- Fast and many new products
- Complicated manufacturing process
- Use new materials
- Labor intensive

Source: SEIPI
OUR NEGATIVE CONTRIBUTION TO ERG

3. **NON GREEN** - Generates large amount of Waste & Toxic

- Accelerated product obsolescence
- Use toxic materials
- Indiscriminate dumping

Source: SEIPI
We, the Philippine electronics and ICT industry must take the leadership...
Lean & Green Manufacturing

Eco-Design
Cradle to cradle
THE PHILIPPINE ELECTRONICS & ICT INDUSTRY
ADOPTING “6R” CULTURE!

1. Re-educate:
   - new culture
   - new mind set
   - new life style

2. Re-design:
   - product
   - energy consumption
   - resources usage
   - recycling

Source: SEIPI
3. Reduce:
  - usage
  - waste

4. Recycle
  - to conserve

Source: SEIPI
5. **Reuse:**
- extend service life

6. **Re-invent**
- innovation
- creativity
- out of the box
THE PHILIPPINE ELECTRONICS & ICT INDUSTRY
A GOOD GLOBAL CITIZEN

Comply with all ERP regulations.

WEEE

RoHS compliant

ISO 14000

REACH

Source: SEIPI
OUR TECHNOLOGY CAN HELP TO DEVELOP ALTERNATIVE AND RENEWABLE ENERGY!

- Solar cells
- Wind power
- Bio-fuel

Source: SEIPI
PHILIPPINES: MOVING FORWARD

1. Promotion of Green IT in the Philippines
2. Creation of Philippine Green ICT Alliance
3. Collaboration with Asian Green IT Group on the implementation of Green IT
1. Stage Philippine Green ICT Summit to be held in time with PSECE in June 2012
   1.1 This will be a 2 day Exhibit and Training Seminars
   1.2 Commitment support received from Asian Green IT
   1.3 Japan GIPC to exhibit/JEITA to dispatch experts on:
       - Energy savings in manufacturing plants
       - Data centers
       - Power electronics
       - Building and home energy management systems
2. Creation of Philippine Green ICT Alliance

2.1 DOST:PCIERD/ICTO
2.2 DOE
2.3 DTI/PEZA
2.4 COMSTE
2.5 PHILIPPINE GREEN BUILDING COUNCIL
2.6 ERDT/CECC
2.7 SEIPI and BPAP
3. Collaboration with Asian Green IT

3.1 GIPC/JEITA Expert Sessions
3.2 GICT Survey Study and Analysis
3.3 GICT Case Studies/Solutions in Japan and Asian Countries
3.4 GICT R & D Innovations (University/Industry)
3.5 Green ICT Panel Forum for penetration and promotion
It is our duty to build a better and sustainable world!