



13<sup>th</sup> & 15<sup>th</sup> November 2012

# Connected Customer Forum

A Snapshot of Australia's Digital Future to 2050

Phil Ruthven, Chairman

**IBISWorld**

WHERE KNOWLEDGE IS POWER

# Topics

- 1. The New Age: new industries; a new utility**
- 2. Digital Era Impact on Industries**
- 3. Some Industries Changing Fast**
- 4. The Changing Enterprise Scene**

1.

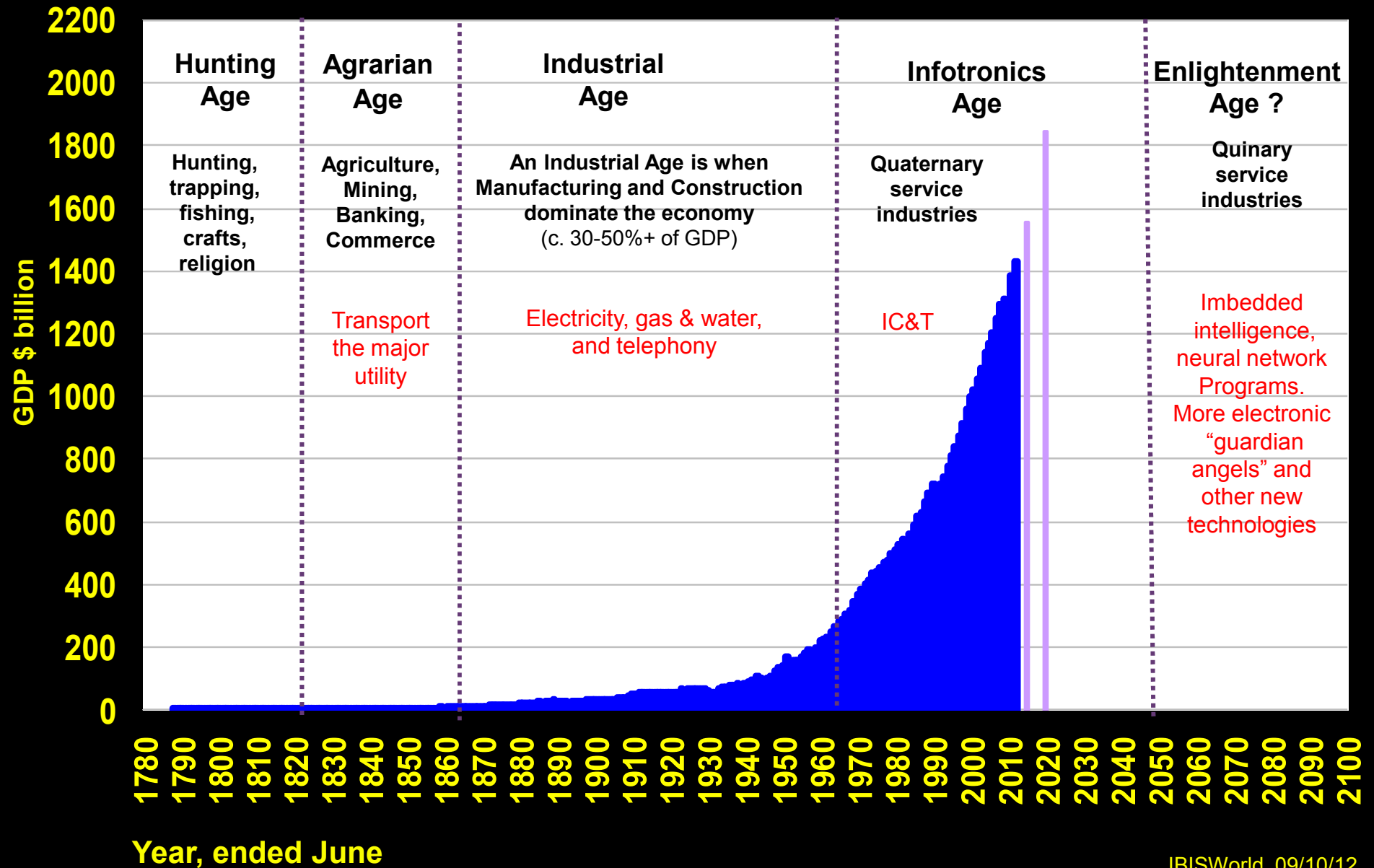
# The New Age

New Industries

A New Utility

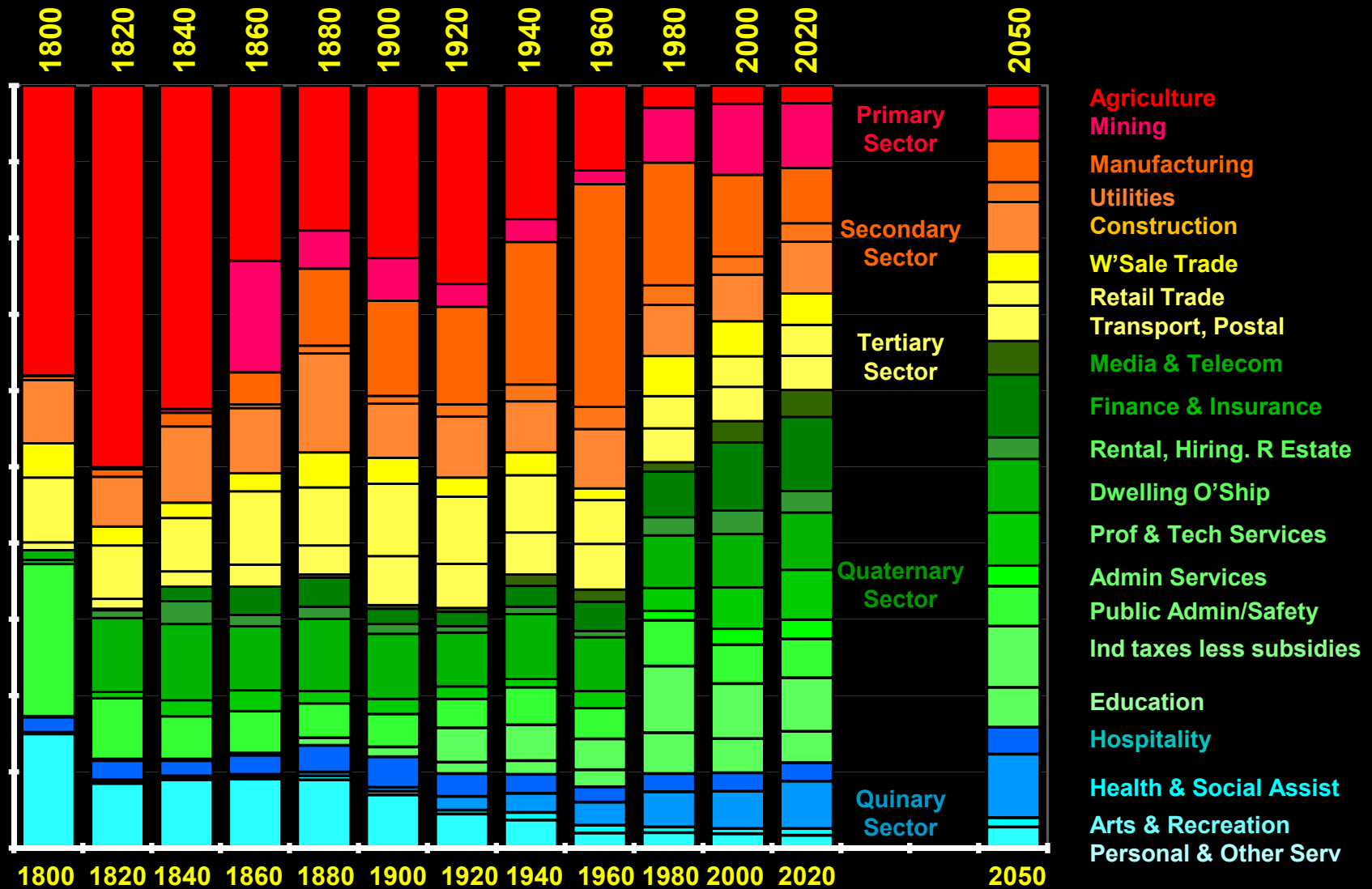
# Ages Of Economic Progress

GDP @ Constant F2011 Prices Australia 1788-2012 and onwards



# Importance of Industries

Shares of GDP by Industry Division, 1800-2050



Note: At market prices to 1940, at factor cost thereafter

Source: N.G Butlin, ABS & IBISWorld

# Fastest Growing Industry Themes

New Age 1965-2040s

- ❖ **ICT & Fast Broadband** - the New Age all-pervasive utility.
- ❖ **Knowledge Industries** - databases & multi-media services.
- ❖ **Business Services** - outsourcing non-core functions.
- ❖ **Financial Services** - outsourcing of transactions/investment.
- ❖ **Property Services** - outsourcing ownership, facilities mgt.
- ❖ **Health** - outsourcing home doctoring.
- ❖ **Education** - outsourcing pre-school, plus universities.
- ❖ **Personal & Household Services** - outsourcing chores.
- ❖ **Hospitality & Tourism** - outsourcing the kitchen and travel
- ❖ **Recreation & Cultural Services** - outsourcing leisure.
- ❖ **Mining** - energy minerals (oil, gas, coal, uranium)
- ❖ **Construction** - cyclical, but growing importance of civil work
- ❖ **Transport** – cyclical, but growth in road, air and pipeline and F/F
- ❖ **Biotechnology & Nanotechnology** - New Age technologies
- ❖ **Environmental Services** - testing, assessment, amelioration

# Enabling Utilities Through The Ages

## Hunting Age ( - 1820)

No pervasive utility (even the wheel was not a pervasive utility)

## Agrarian Age (1821-1864)

Transport (including the wheel and carts, roads, water transport etc.)

## Industrial Age (1865-1964)

Mechanical Power (water wheel and steam engines) in **Stage 1**

Electrical Power (electricity & telephony) in **Stage 2**

## Infotronics Age (1965-late 2040s)

ICT (information and communication technologies) in **Stage 1** to 2006.



**Hyper Digital Era from 2007-middle of Century in Stage 2**

ICT enhanced by high speed broadband, cognitive computing, learning systems, analytics and more

# The Hyper-Digital Era

2007-2050

- ❖ **PCs, tablets, smart phones, haptic devices**
- ❖ **Electronic guardian angels**  
(eg. heart pacemakers, Cochlear ear implants, ABS)
- ❖ **Medical & health diagnostics**
- ❖ **Emerging fast broadband**
- ❖ **New software, analytics, storage** (Cloud)
- ❖ **Social media** (eg Facebook, LinkedIn, You Tube)
- ❖ **Tele-presence**
- ❖ **Online commerce**
- ❖ **Teleworking**
- ❖ **Knowledge Age heading for a Wisdom Age?**

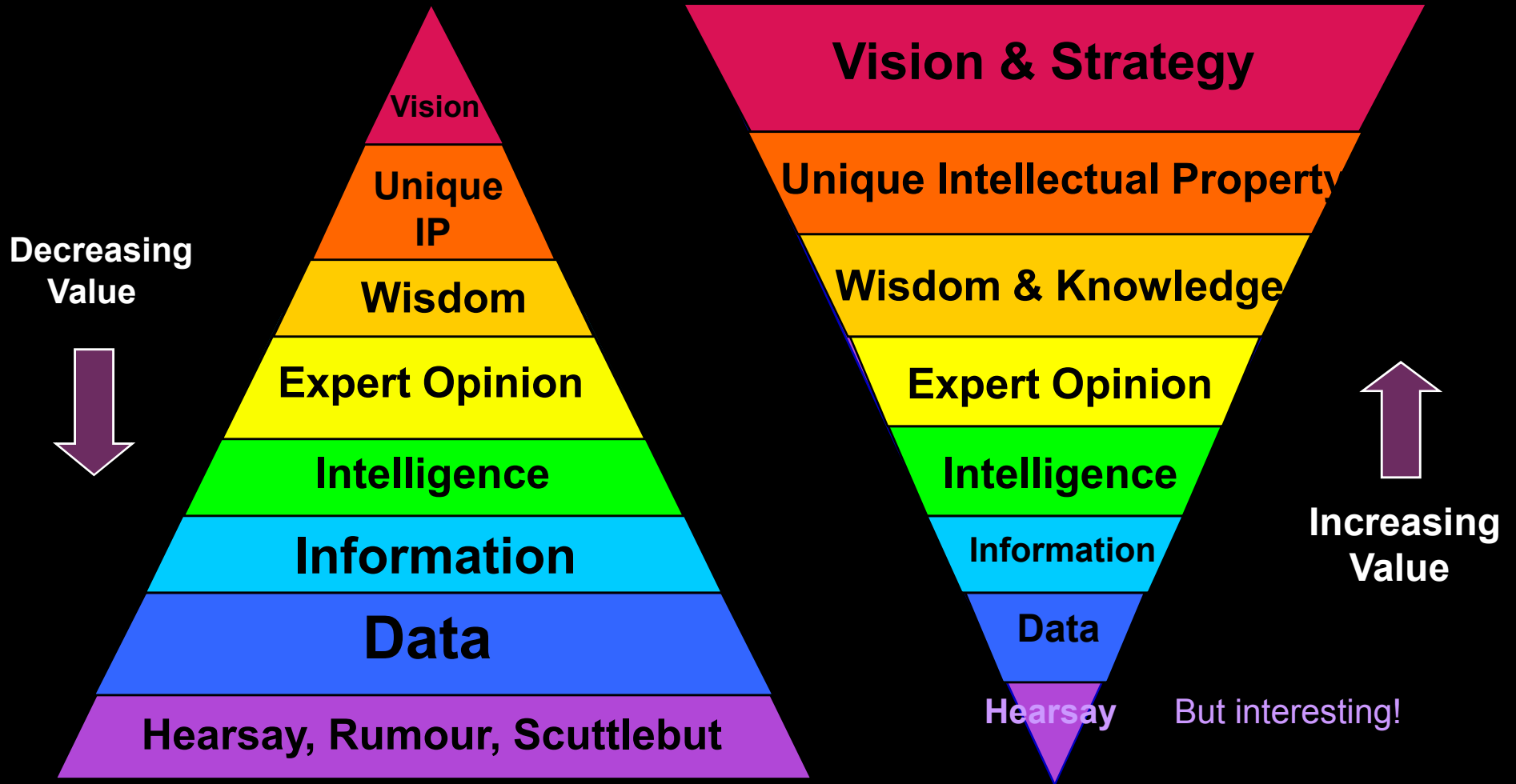
**The best is yet to come**



# The Knowledge Pyramid

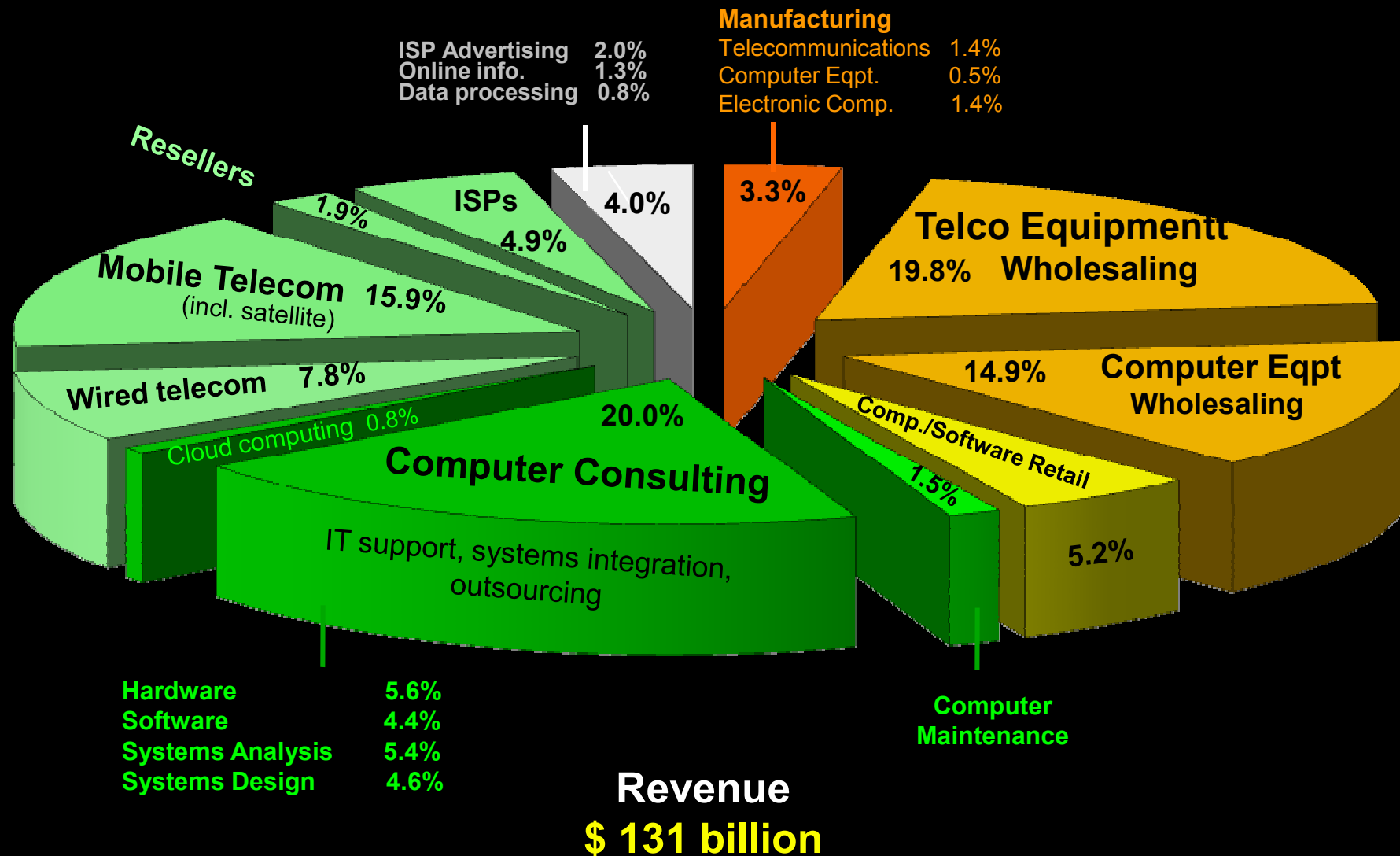
By Volume

By Value



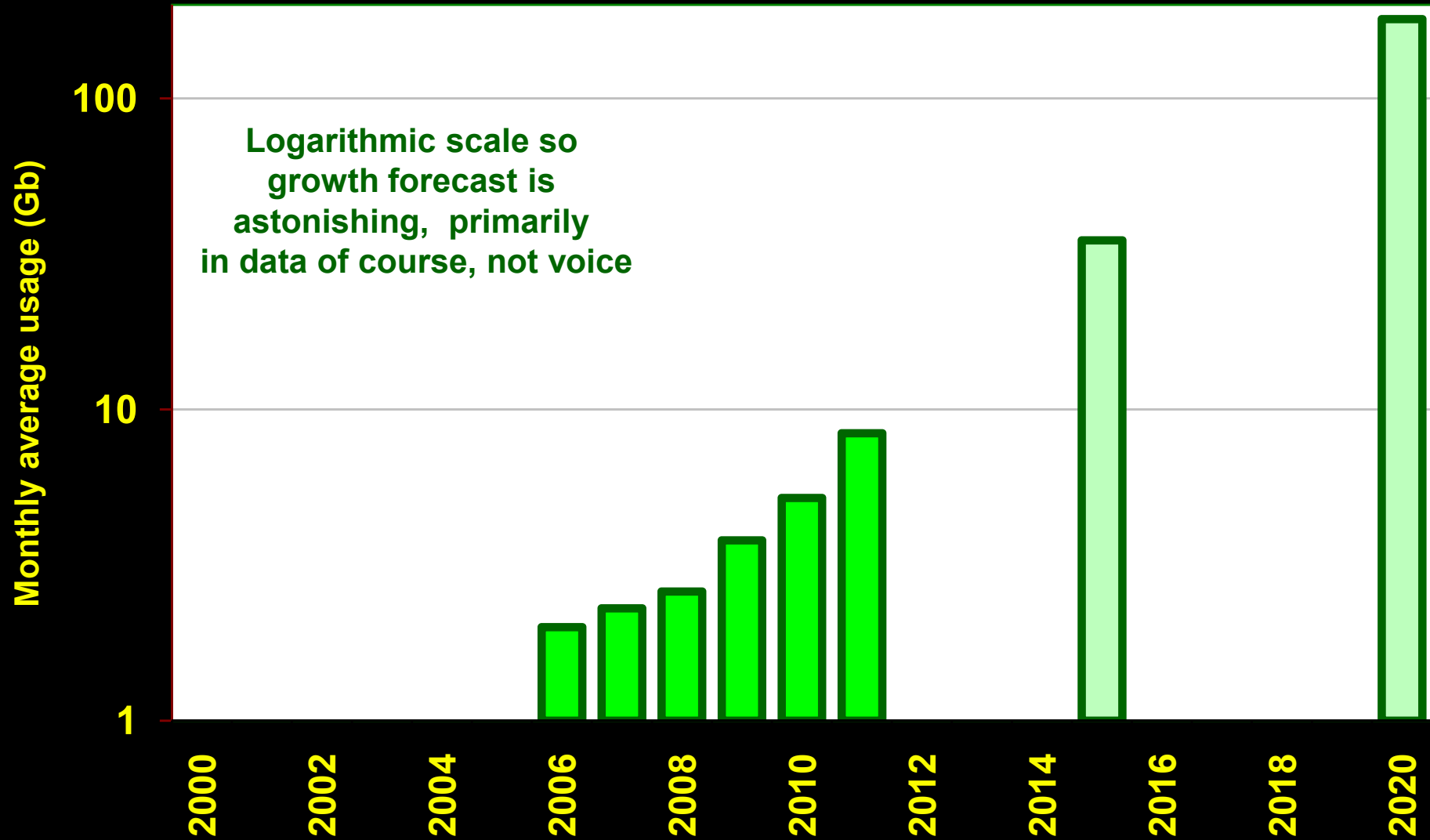
# The ICT Utility And Services

Australia F2012 (e)



# Broadband Usage

Average (GB/month)



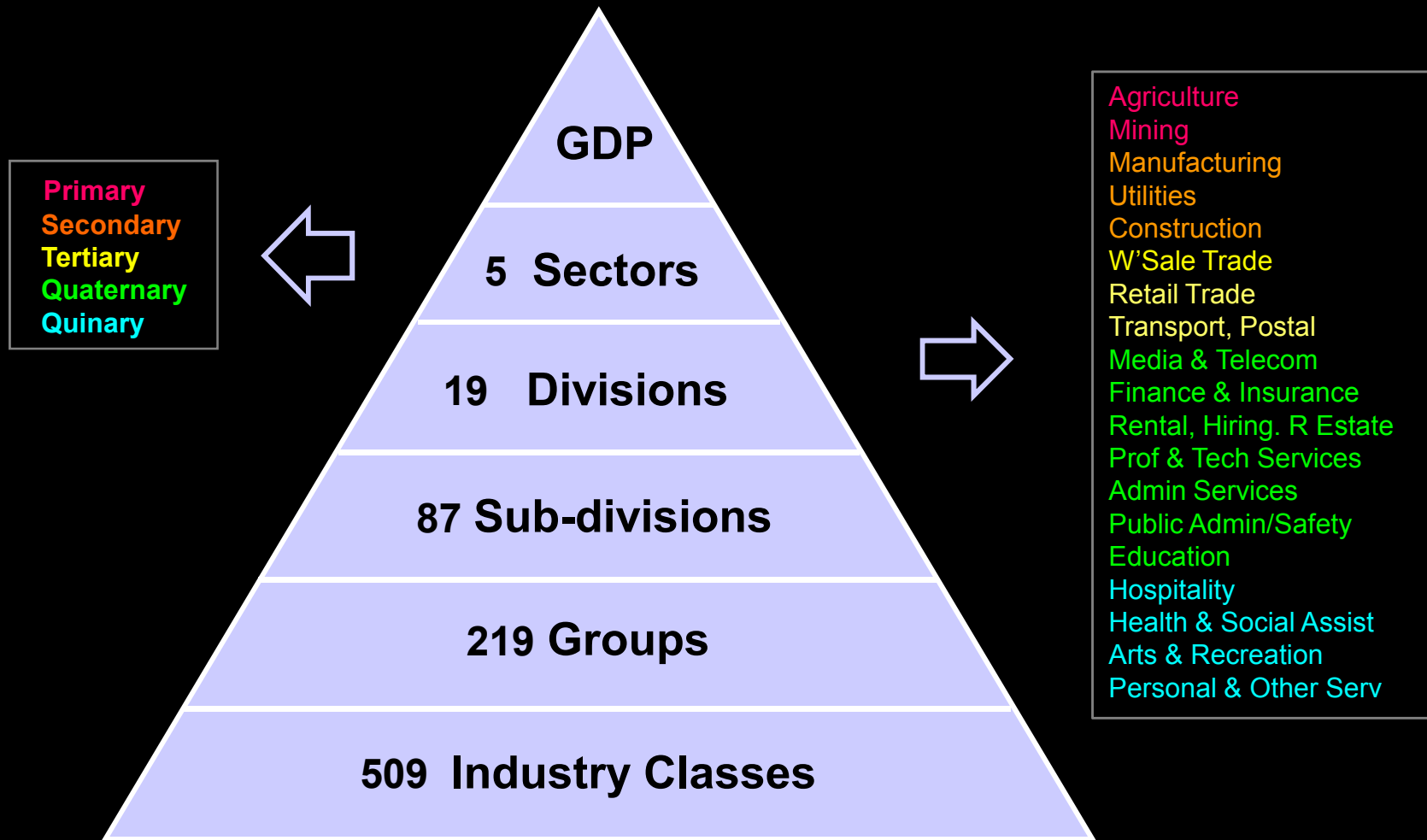
**2.**

**Digital Era Impact  
On Industries**

**The IBM report examined all 509 classes of industry in the Australian economy, a world-first, to see which of them would benefit or suffer from the advent of fast broadband (100+mbps) in the years and decades ahead**

# Industry Classification Pyramid

ANZSIC (Australian & NZ Standard Industry Classification)



Over ten thousand product groups below the class level

# Broadband Impact Rating

**A transformational impact rating** was given in cases where fast broadband would virtually underpin the industry in terms of product, features and delivery, or indeed enable the industry to exist at all

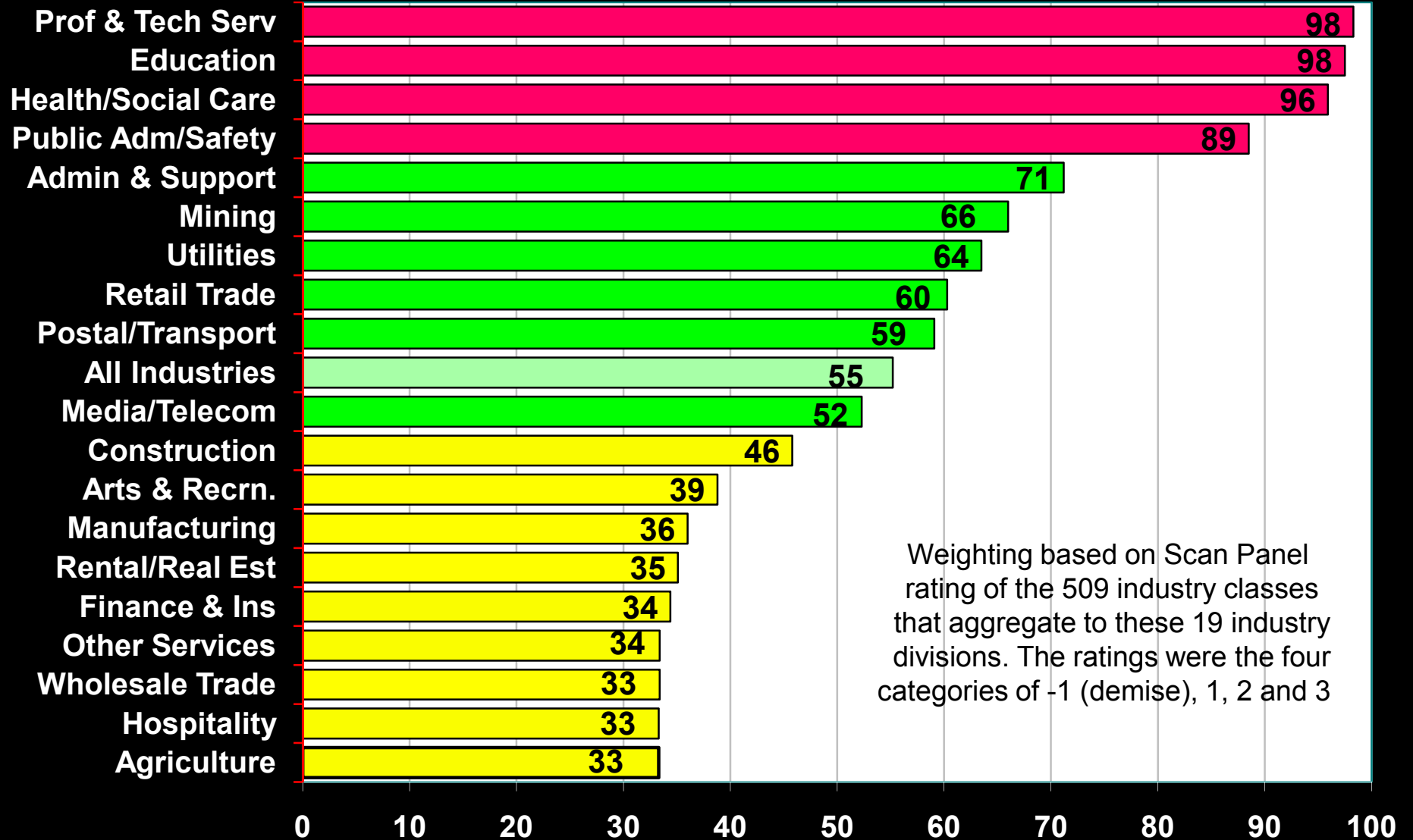
**A significant impact rating** inferred such possibilities as product embellishment, potential productivity gain or other advantage that could be reflected in faster growth, lower costs and/or higher profitability

**A generalised benefit rating** is one that virtually all industries would receive from fast broadband introduction, or a horizontal impact

**A likely demise rating** inferred the eventual extinction of the industry. Such a dire prediction was not allocated to any of the nineteen industry divisions, but it was allocated to 15 of the 509 classes (3%) that made up the 19 division and impacted <1% of GDP

# Fast Broadband Benefit Ranking

Weighted benefit % of revenue in each industry division





# **There are 15 of the nation's 509 at risk of demise**

**Reproduction of Recorded Media**

**Book & Magazine Wholesaling**

**Entertainment Media Retailing**

**Newspaper Publishing**

**Magazine & Other Periodical Publishing**

**Book Publishing**

**Directory & Mailing List Publishing**

**Other Publishing (exc. Software, Music, Internet)**

**Software Publishing**

**Motion Picture Exhibition**

**Radio Broadcasting**

**Free-to-Air Television Broadcasting**

**Cable & Other Subscription Broadcasting**

**Video & Other Electronic Media Rental & Hiring**

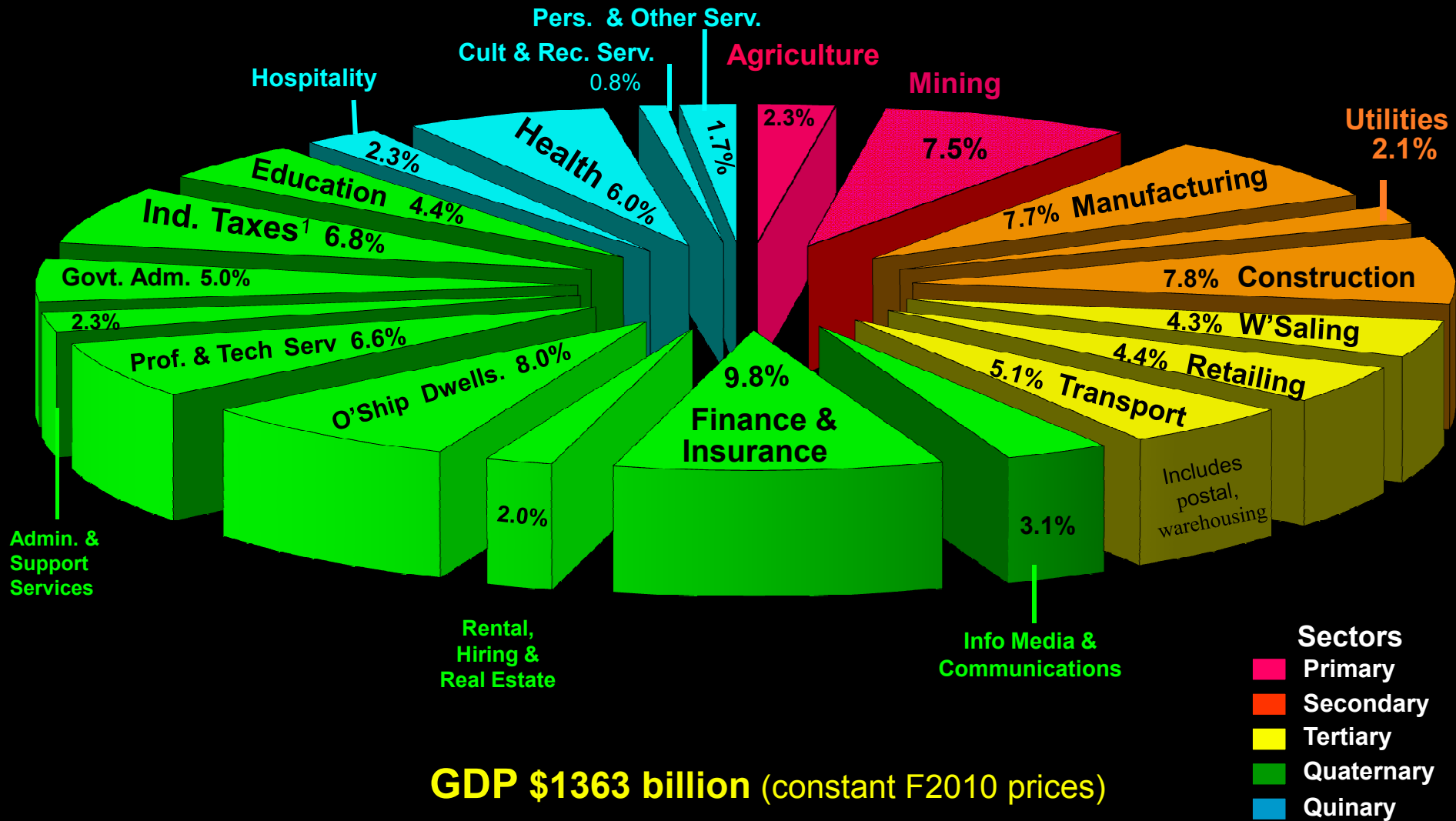
**Photographic Film Processing**

**3.**

**Some Industries  
Changing Fast**

# Australia's Industry Mix In 2012

Shares of GDP in constant F2010 price terms Year to June 2012



**GDP \$1363 billion** (constant F2010 prices)

Note <sup>1</sup>: includes stat. discrepancy (0.1%)

# Industry-specific Technologies

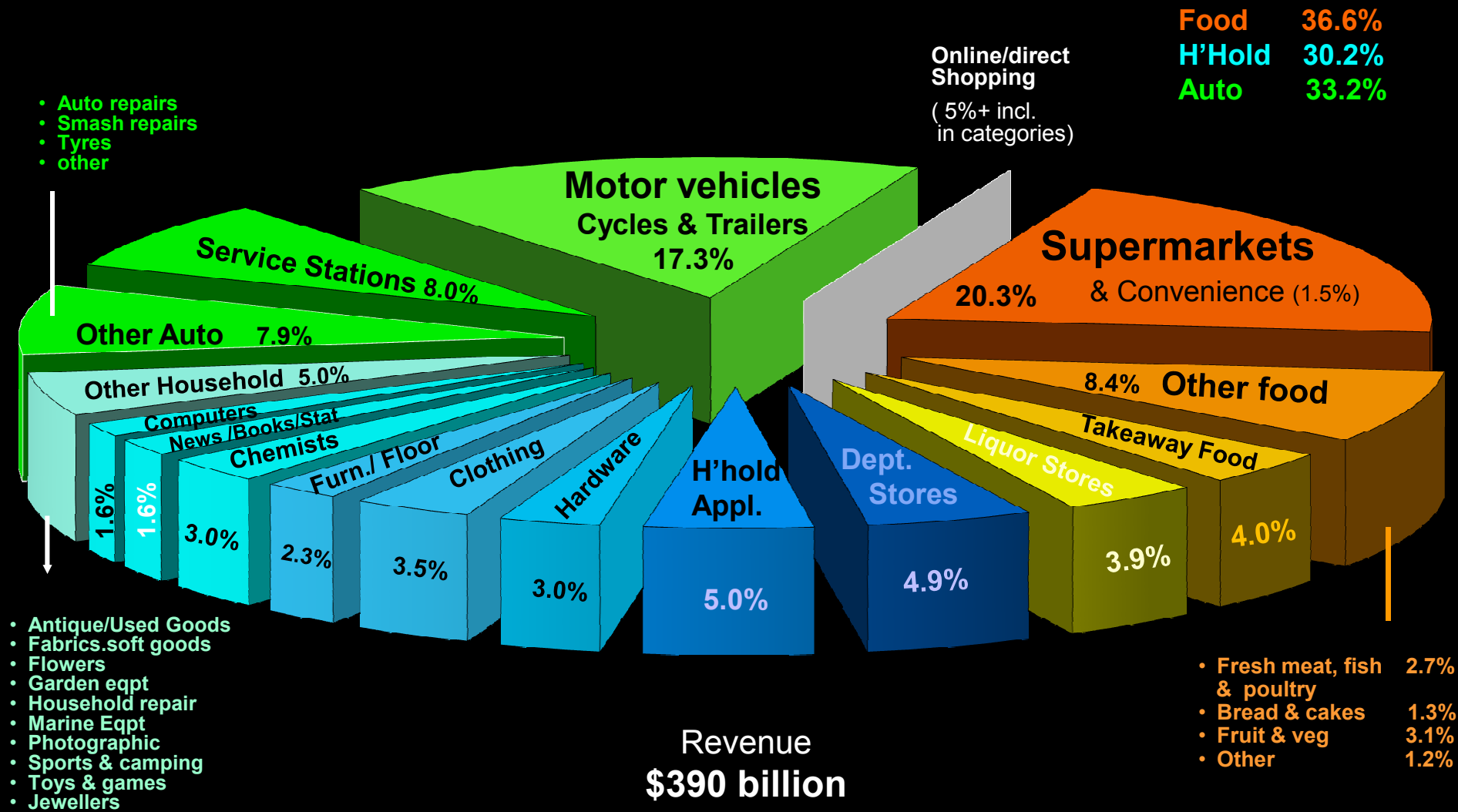
Nearly all industries benefit from a pervasive utility such as ICT. However, it is well to note that there are other industry-specific systems and technologies such as:

- ❑ open-cut operation and robotics in mining
- ❑ online commerce (following self service) in retailing
- ❑ print to electronics, and analogue to digital in media
- ❑ virtual transactions, compulsory super in finance
- ❑ robotics in warehousing and manufacturing
- ❑ biotechnology in pharmaceuticals industries
- ❑ virtual classrooms & tutoring in universities
- ❑ laser levelling/satellite tracking/GM in agriculture
- ❑ remote diagnostics, robotics, analytics in health
- ❑ nanotechnology, quantum physics and others

# **The Retail Industry**

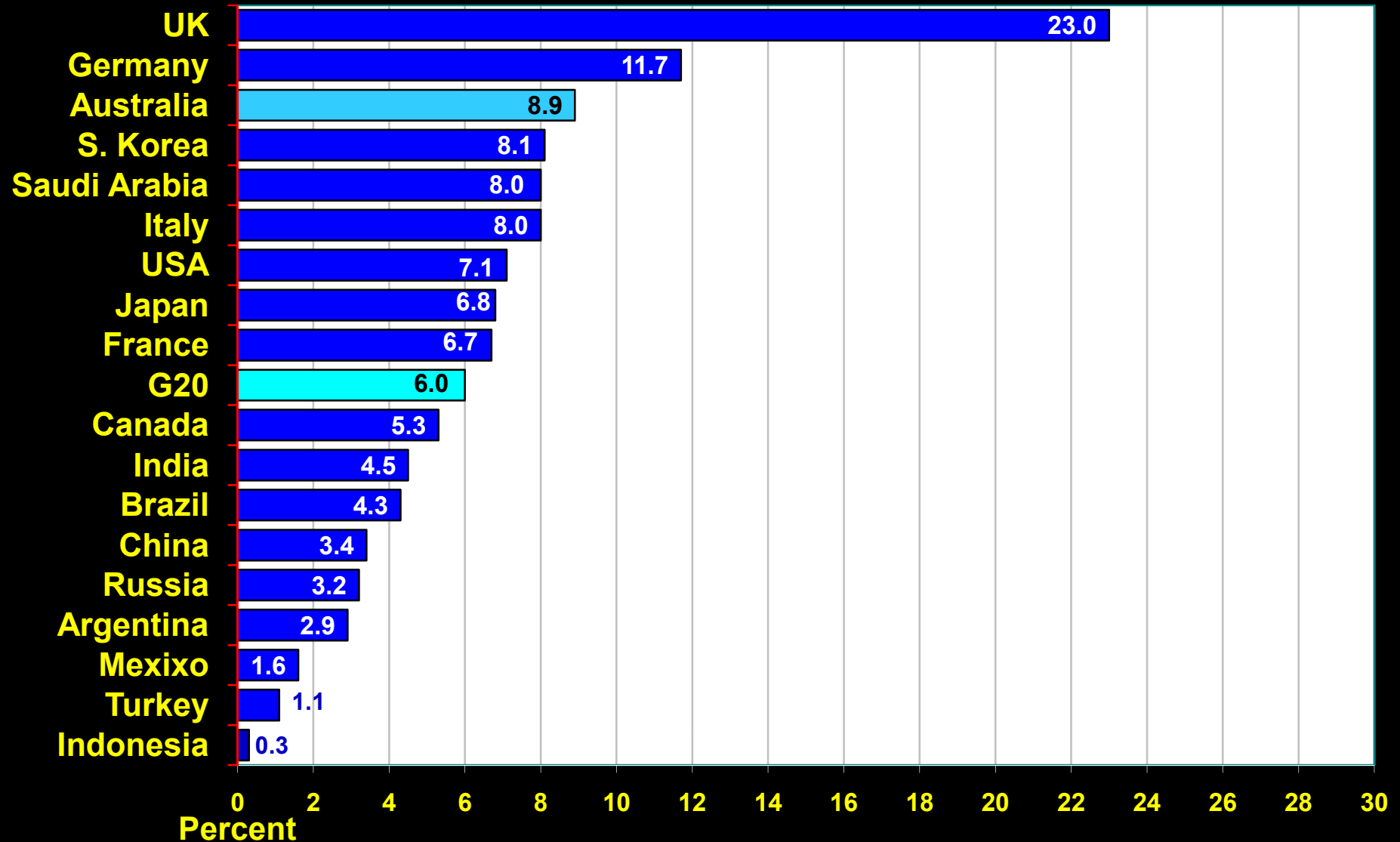
# Retail Industry

By Industry Group F2011 (E)



# Online Retailing

International comparison 2016(F) , % of total retail sales

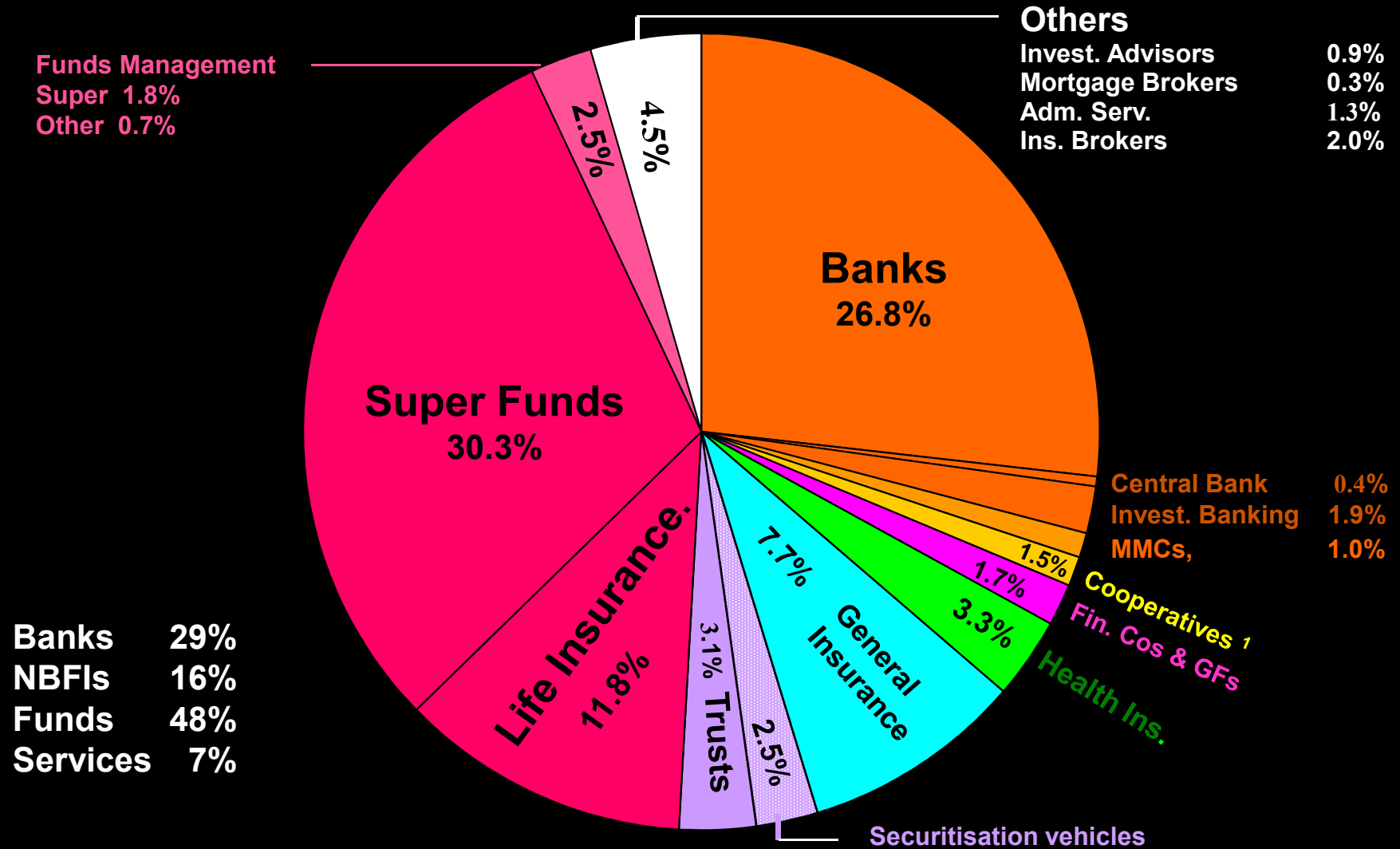


# **The Finance & Insurance Industry**



# Financial Institutions & Corporations

Australia Revenue F2012 (F) % of total



**Banks** 29%  
**NBFIs** 16%  
**Funds** 48%  
**Services** 7%

**\$534 billion**

Note: 1. CUs ,BS , Friendly Soc .

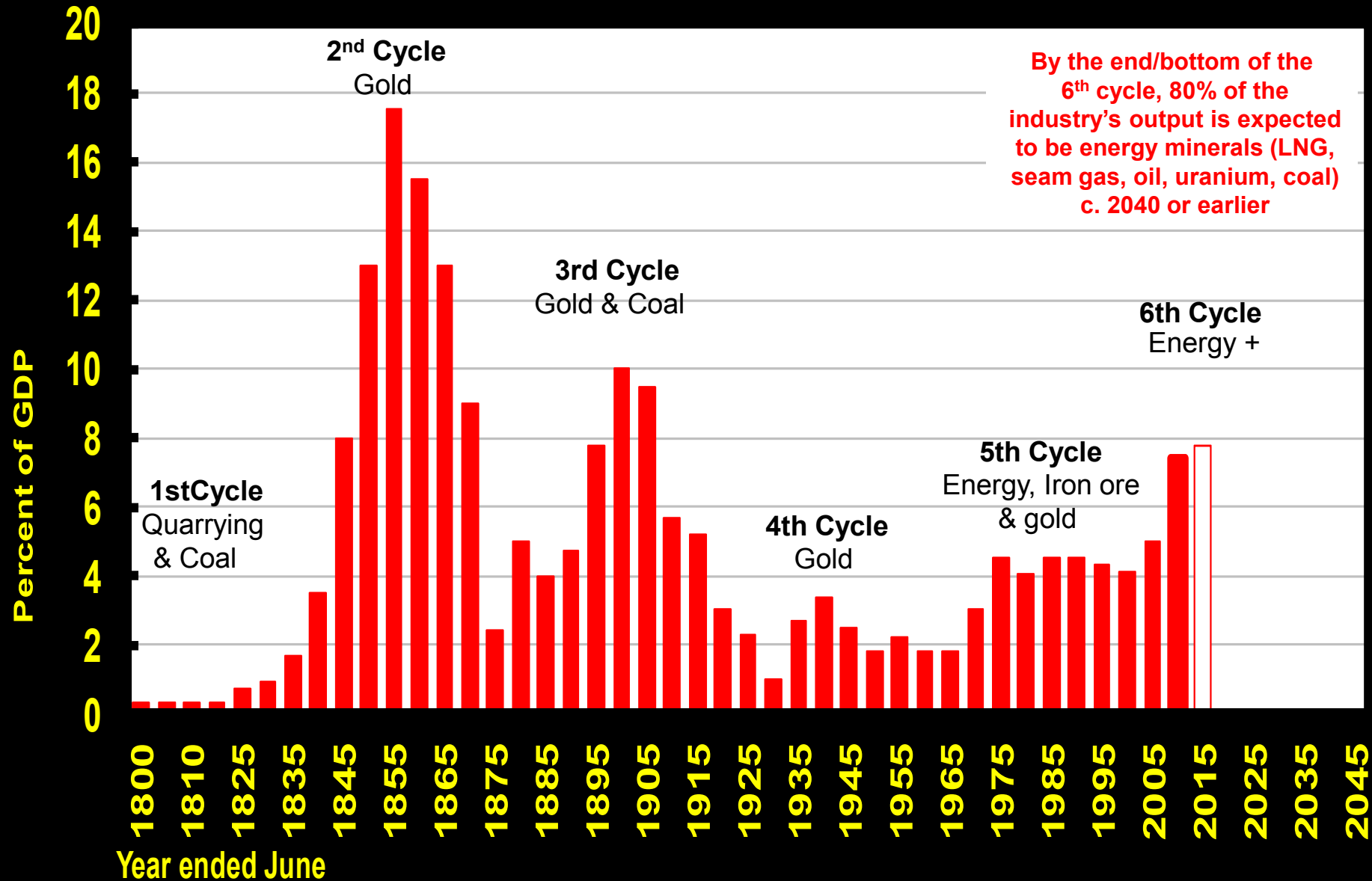
# Some Challenges

- ❖ **Managed funds and non-bank financial institutions are now bigger than banks in revenue terms.**
- ❖ **Fees for service now exceed income from interest differentials on loans, so?**
- ❖ **How long will branches be required (like churches)?**
- ❖ **How expensive is it to have multiple distribution channels for financial services ?**
- ❖ **Could individuals and businesses use banks overseas?**
- ❖ **What impact will PayPal and other channels have?**
- ❖ **How can financial institutions differentiate themselves?**

# **Mining & Energy Industry**

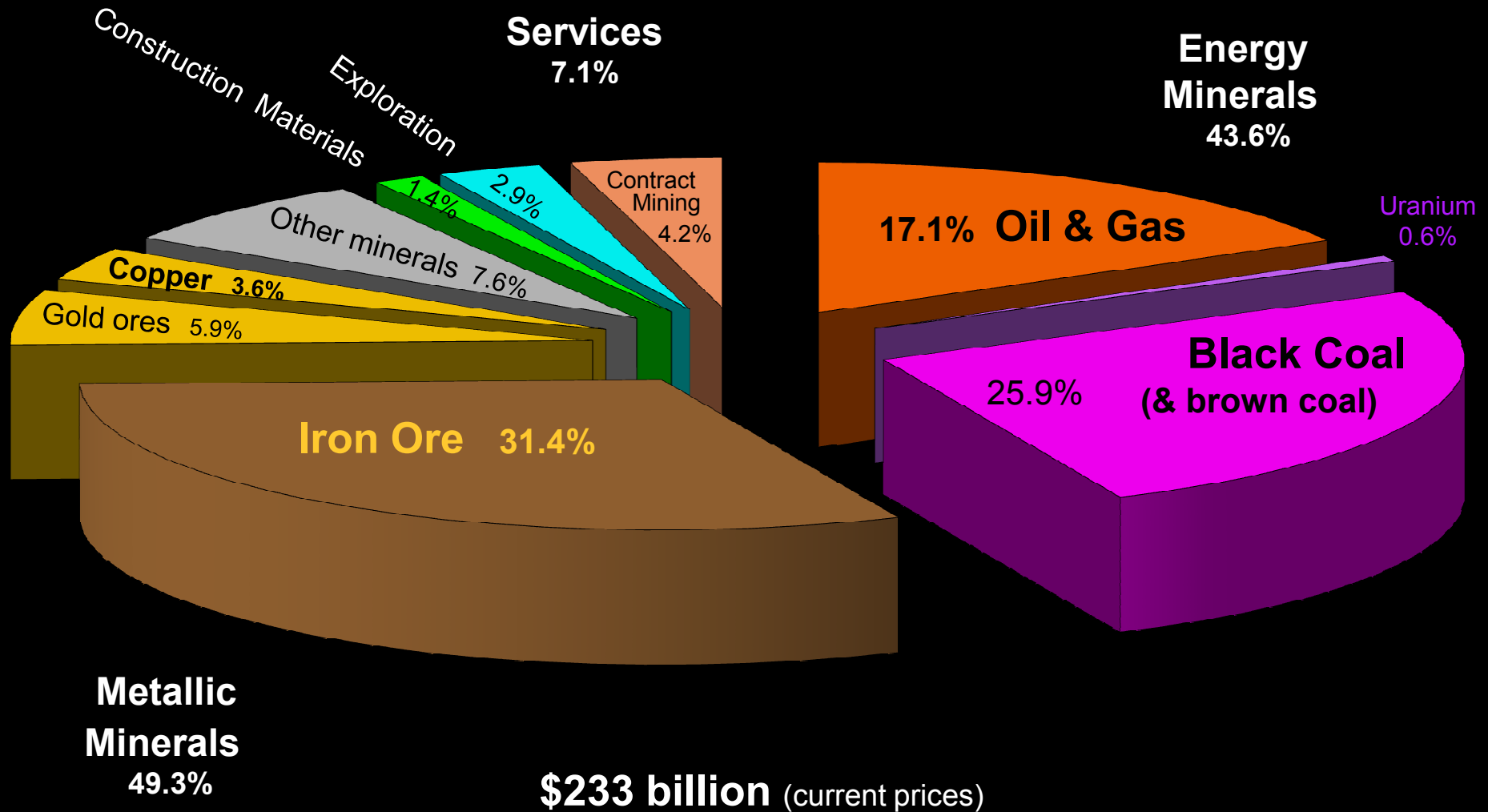
# Mining Industry Division Lifecycle

Value added as % of GDP (current price basis)



# Mining

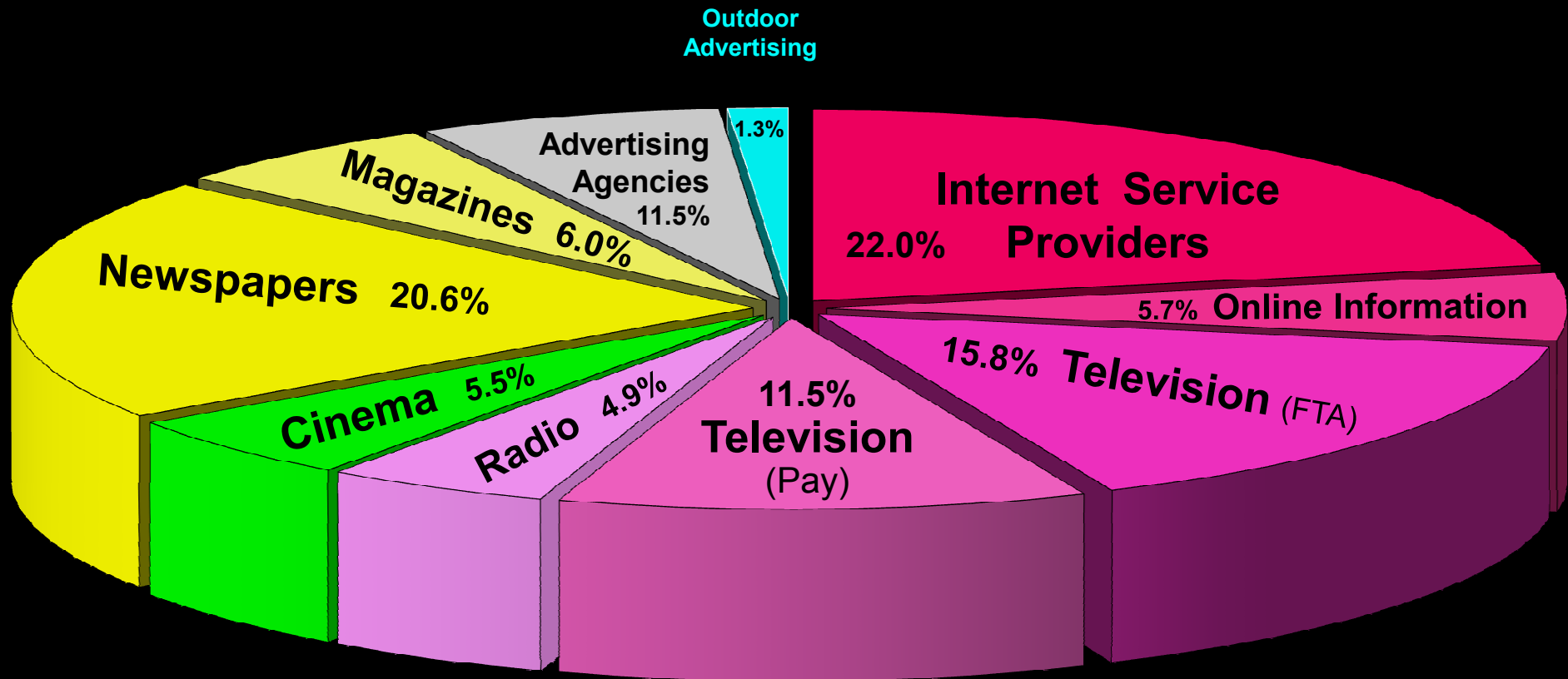
Share of revenue basis F2012 (E)



# **The Media Sector**

# Australian Media Industry

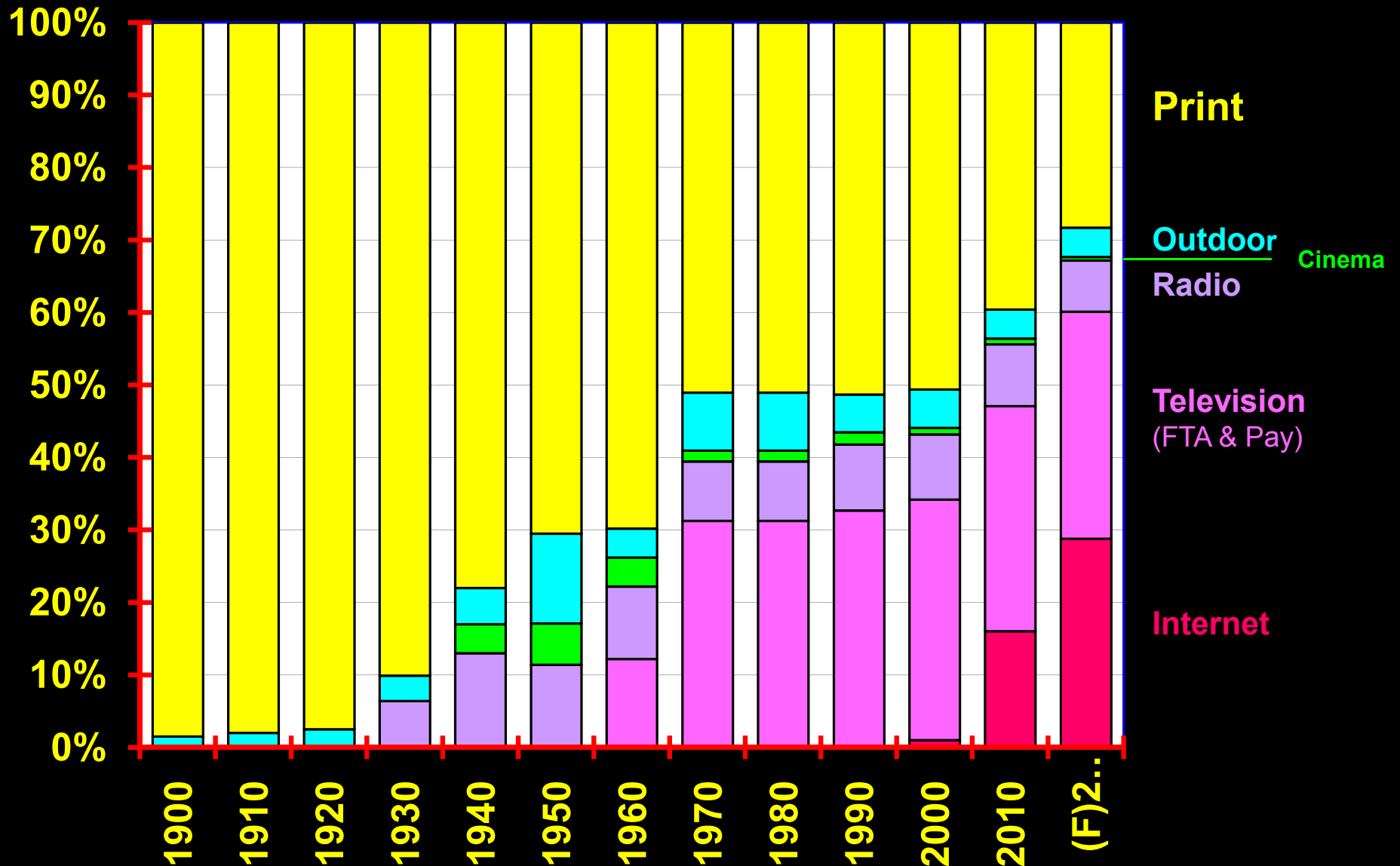
Share of total revenue basis F2012



**Revenue**  
**\$31.7 billion**

# Main Media Advertising Expenditure

1900 - 2020 (F), % of total





# Media & Telecom Performance

Enterprise	Revenue	Return on S/F after tax, %	
	(latest, \$ billn.)	Latest	Last 5 years
Telstra	25.64	29.2	29.4
Singtel Optus	9.43	11.9	12.1
News Australia	2.98	-10.7	-2.5
Fairfax Media (F2012)	2.33	-133.8	-27.4
Foxtel	2.22	n.a	n.a
Nine Entertainment	1.96	loss <sup>1</sup>	-38.1
Seven West	1.94	8.7	67.0
APN News	1.10	-4.0	4.5
Ten Network	1.00	1.8	11.1
Southern Cross Media	0.50	3.5	3.4
STW Communications	0.32	10.3	9.4
Thompson Reuters	0.29	7.2	35.3 <sup>2</sup>
Clemenger Group	0.23	15.6	13.1
Google Australia	0.20+	-7.9	-17.6
<b>Average</b>		<b>-5.7%</b>	<b>8.3%</b>
(Excluding Telecoms)		-11.0%	5.8%

Note: <sup>1</sup> loss on negative S/H funds <sup>2</sup> 4 years only

**4.**

**The Changing  
Enterprise Scene**

# **The Big Changes For Enterprises**

**In The New Age , 1965-2040s**

- **Business reverses from production to market orientation**
- **Protectionism fades, and international trade grows**
- **Goods industries lose importance as share of GDP**
- **Over 100 new service industries emerge**
- **Outsourcing of non-core activities (the virtual corporation)**
- **Importance of intellectual property (IP) over hard assets**
- **OH&S becomes de rigueur; ditto world best practice (WBP)**
- **Old style employment gives way to contractualism**
- **SMEs increase share of economy (new industries, outsourcing)**
- **Emergence of franchising, and strategic alliances**
- **Adopting an information mindset, a condition of survival**