

jointly for our common future

WP6



The Knowledge Economy

The Knowledge Economy

1. What?
2. Who?
3. Scenario Analysis
4. How?





What?

What?

(...) The so-called knowledge company has become an organization, regarding the skills, not already a hierarchical type but "a coordination using external freely accessible or contractual expertise, setting in motion chains of suppliers and strategic allies, to "empty "of non-intellectual activities (simple manufacturing and service), becoming more and more a network of relationships and connections. (...)

Enzo Rullani





Who?

Who?

ACTORS

- ✓ Intelligent enterprise
- ✓ Intelligent service sector
- ✓ Intelligent public sector



Who?

INTELLIGENT ENTERPRISE

- **Selling ideas and not just products**
- **Products**, if innovative, are multipliers of the ideas contained therein
- **Ideas become business if you de-verticalise**, innovative services are outsourced if you give birth to new companies that manufacture ideas and not products
- **Ideas are sold primarily in the supply chain** (shared innovation, logistics organisation and computers, networks that specialize roles)



The key problem: human capital, the network of relationships



Who?

INTELLIGENT SERVICE SECTOR

- Create links between producers and users of knowledge
- The bonds are important in all cases (highly complex) in which producer and user must share the project and the responsibility of the process that moves from research to design, from its implementation to its practical use by the user / consumer
- The link does not prevent the proliferation of uses through:
 1. ICT technologies
 2. recognized standards, consolidation of processes
 3. outsourcing of services with the formation of networks of specialists that provide customers with different aspects of tertiary intelligence



Who?

INTELLIGENT PUBLIC SECTOR

- **Appreciate the importance of knowledge** as a crucial element for converting the economic value into resources for a territory (invests in training and in research to increase human capital and to encourage the emergence of excellence)
- **Favors the creation of networks** (relational and infrastructure networks)
- **Facilitates access to networks** (economic, cultural and regulatory)



SCENARIO ANALYSIS

**ELEMENTS that ACTORS must consider
now and in the future**

- ✓ *Globalization*
- ✓ *Demographics*
- ✓ *Personalization*
- ✓ *Knowledge management*





How?

How?

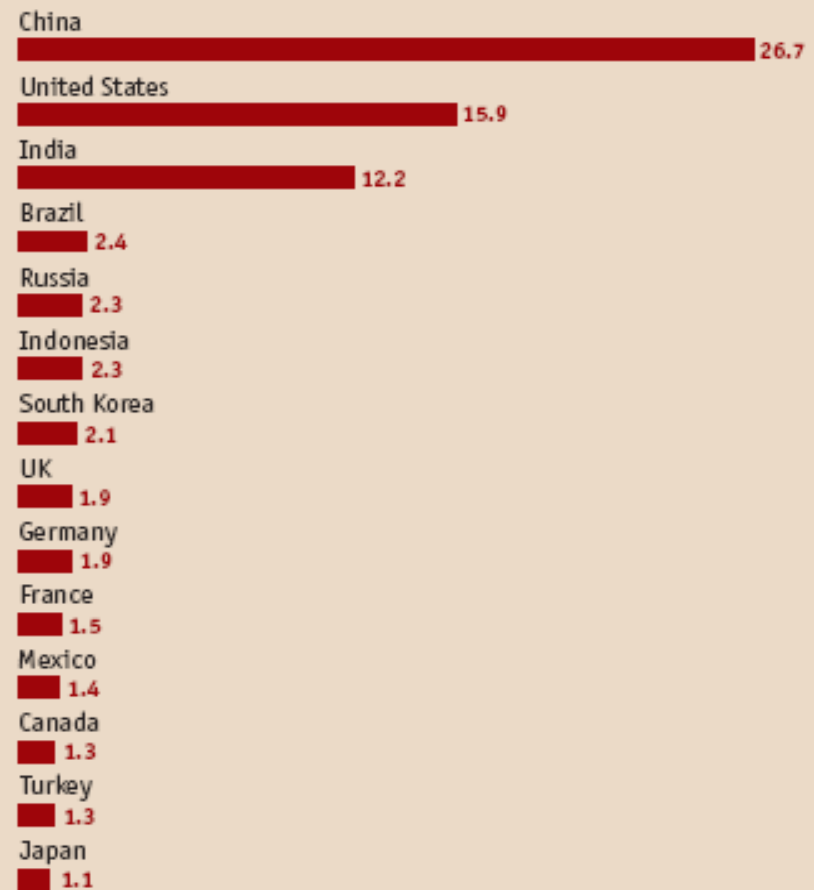
GLOBALIZATION

The share of the EU and the US in world income will stay about the same in 2020 as it was in 2005. The US will maintain one of the fastest growth rates in the industrialised world, thanks in part to a favourable demographic profile. The EU will make up for slower growth through territorial expansion, growing to a club of more than 30 countries.

Propelled by fast growth in China and India, Asia will increase its slice of world GDP from 35% in 2005 to 43% in 2020. But it is too soon to talk of Asia's century. On a per-capita basis, China and India will remain far poorer than Western markets and the region faces a host of downside risks. Asia will narrow the gap in wealth, power and influence, but will not close it.

Source: Economist Intelligence Unit

Contribution to global growth (2006-20, %)



Increase in a country's real GDP, at constant 2005 PPP, as a share of increase in global GDP over the same period.

Source: Economist Intelligence Unit.

How?

GLOBALIZATION

The world's largest economies

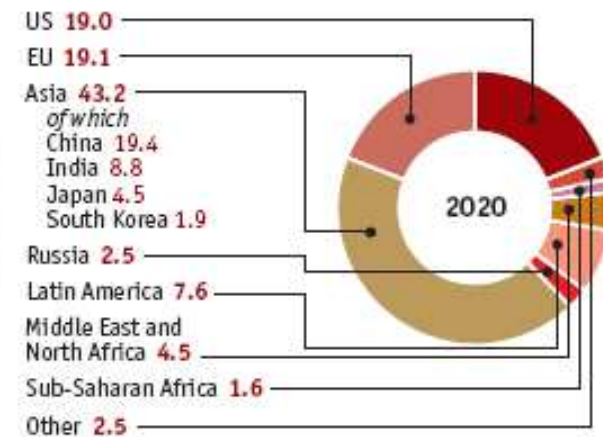
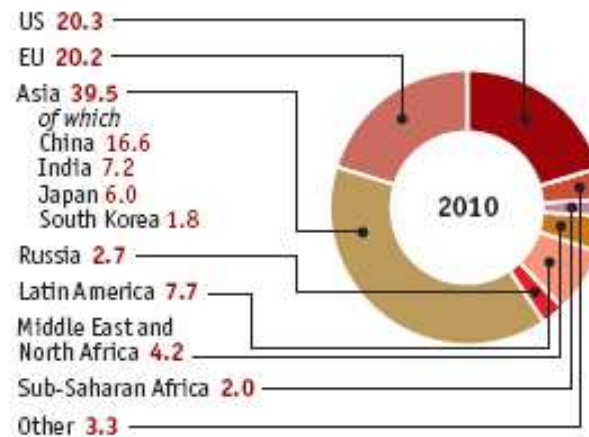
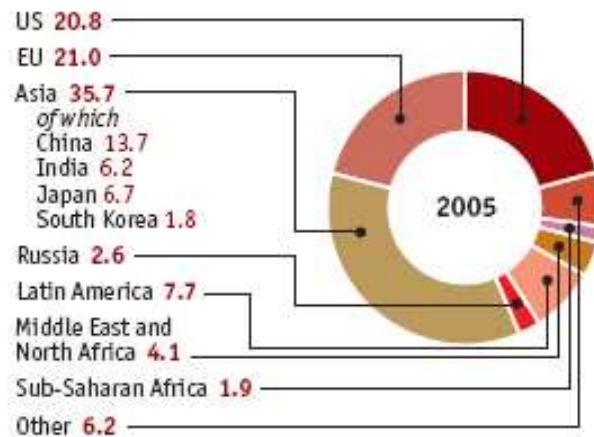
	GDP (US\$bn, at PPP)				GDP (US\$bn, at market exchange rates)			
	2005	World rank	2020	World rank	2005	World rank	2020	World rank
United States	12,457	1	28,830	2	12,457	1	28,830	1
China	8,200	2	29,590	1	2,225	4	10,130	2
Japan	4,008	3	6,795	4	4,617	2	6,862	3
India	3,718	4	13,363	3	759	12	3,228	7
Germany	2,426	5	4,857	5	2,829	3	4,980	4
United Kingdom	1,962	6	4,189	6	2,213	5	4,203	5
France	1,905	7	3,831	7	2,132	6	3,536	6
Brazil	1,636	8	3,823	8	787	11	1,600	13
Italy	1,630	9	2,884	10	1,720	7	2,543	10
Russia	1,542	10	3,793	9	749	14	2,692	8
Spain	1,151	11	2,427	14	1,119	9	2,146	12
Canada	1,071	12	2,423	15	1,122	8	2,206	11
South Korea	1,067	13	2,837	11	804	10	2,607	9
Mexico	1,059	14	2,459	13	752	13	1,450	14

Source: Economist Intelligence Unit

How?

GLOBALIZATION

Share in world GDP (at PPP)
(%)



Note: The EU is expected to have 28 states in 2010 and 33 in 2020.
Source: Economist Intelligence Unit.

How?

DEMOGRAPHICS

Demographic evolution tends to be gradual and highly dependent on previous and present developments, at least over a 15-year time horizon. Thus the degree of confidence one can have in demographic projections is fairly high. According to the US Census Bureau and Economist Intelligence Unit forecasts, the world's population in 2020 will be 7.43bn, compared with 6.42bn in 2005. In 2020 the world's most populous countries will be China (1.43bn compared with 1.3bn in 2005), followed closely by India (1.3bn, 220m more than in 2005), with the US a distant third with 336m (296m in 2005).

Some countries will age faster than others. Take the old-age dependency ratios (the over-65s as a share of the population aged 15-64). Whereas the ratio in the EU25 will reach almost one-third in 2020 (it was 25% in 2005), in the US it will rise to only 25%, from 19% in 2005. The EU's average population profile will become somewhat younger with Turkey's accession. Turkey's old-age dependency ratio will still be only 13% in 2020.

Source: Economist Intelligence Unit

How?

DEMOGRAPHICS

PRODUCTS

PAST

DO IT YOURSELF MARKET



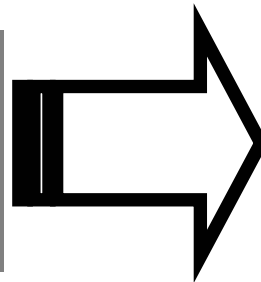
LOW MARGIN

FUTURE

DO IT FOR ME SERVICES



HIGH MARGIN



Source: Economist Intelligence Unit

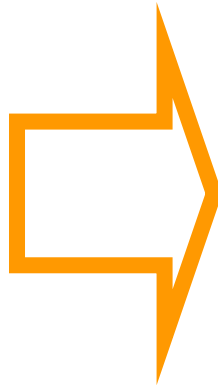
How?

DEMOGRAPHICS

PRODUCTS

PAST

Quality
and
Price



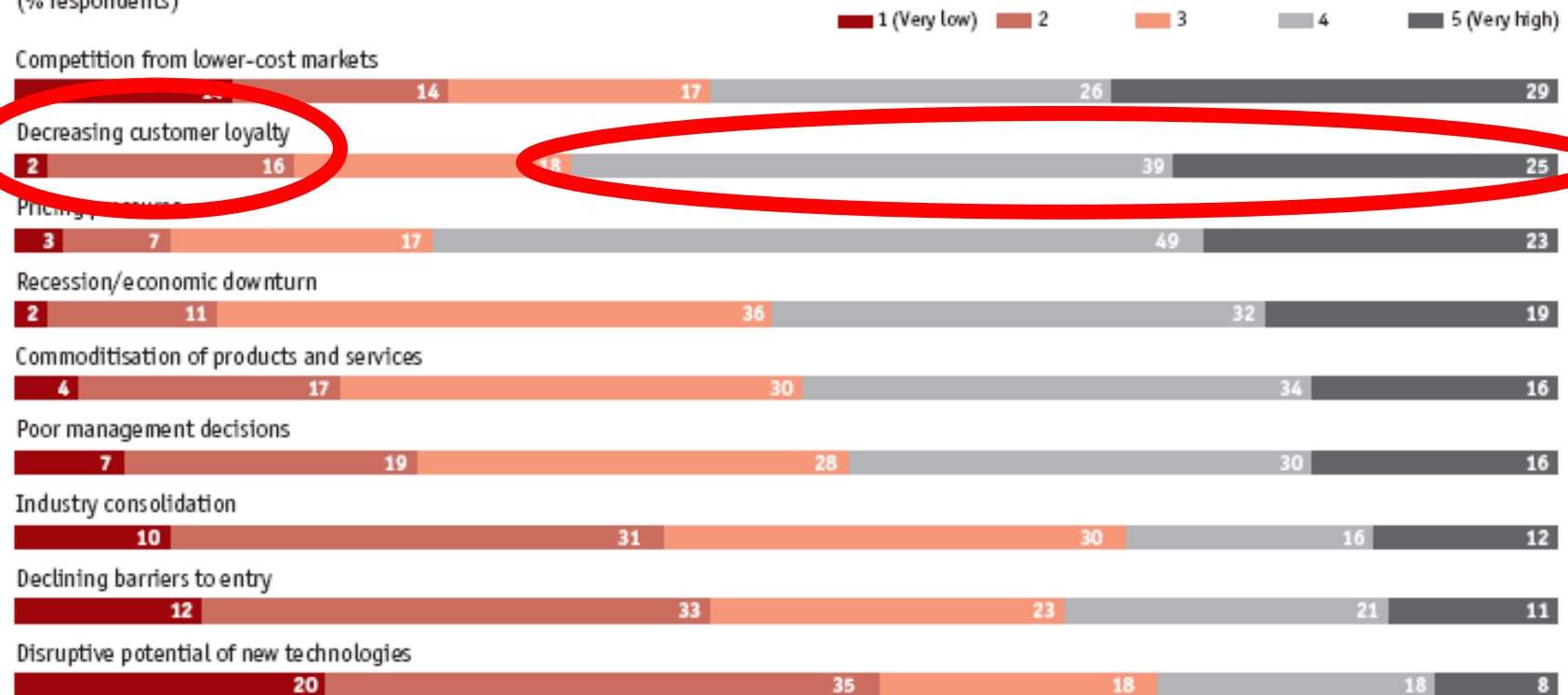
NOW and FUTURE

Quality Price
and
PERSONALIZATION

How?

DEMOGRAPHICS

In your view, how threatening are the following risks to your company between now and 2020? Rate each risk on a scale of 1 to 5, where 1=very low and 5=very high.
(% respondents)



How?

KNOWLEDGE MANAGEMENT

Improving the productivity of knowledge workers through:

Technology
Training
Organisational change

will be the major boardroom challenge of the next 15 years.



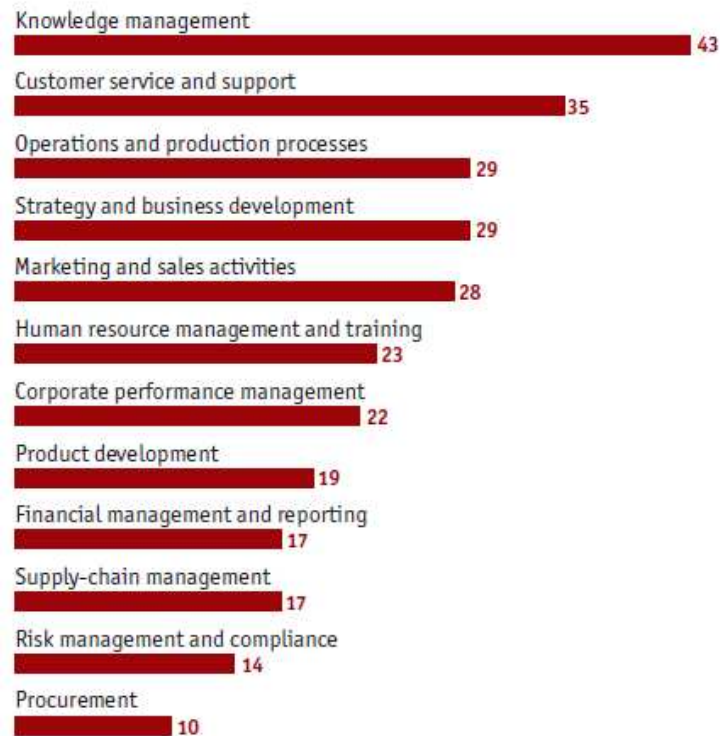
How?

KNOWLEDGE MANAGEMENT

Which of the following areas of activity offer the greatest potential for productivity gains over the next 15 years?

Select up to three activities.

(% respondents)



Source: Economist Intelligence Unit survey, 2005.



How?

EFFECTS ON BUSINESS

**LOST OF
CONTROL**
on started
processes

Emerging countries
(China, India, ...)
Finance



From a world of
NEEDS
to a world of
WHISES

Subjective
freedom of
choice



Circuits
AMPLIFIED
and energies
LATENT

Media
Fashions, Lifestyles
Technology



The company must extract value from
the **COMPLEXITY**;
that means from
the **VARIETY**, the **VARIABILITY** and the **INDETERMINATION**.

How?

What have to do businesses?

- **Create networks of relationships**
- **Focusing on excellence through innovation**



How?

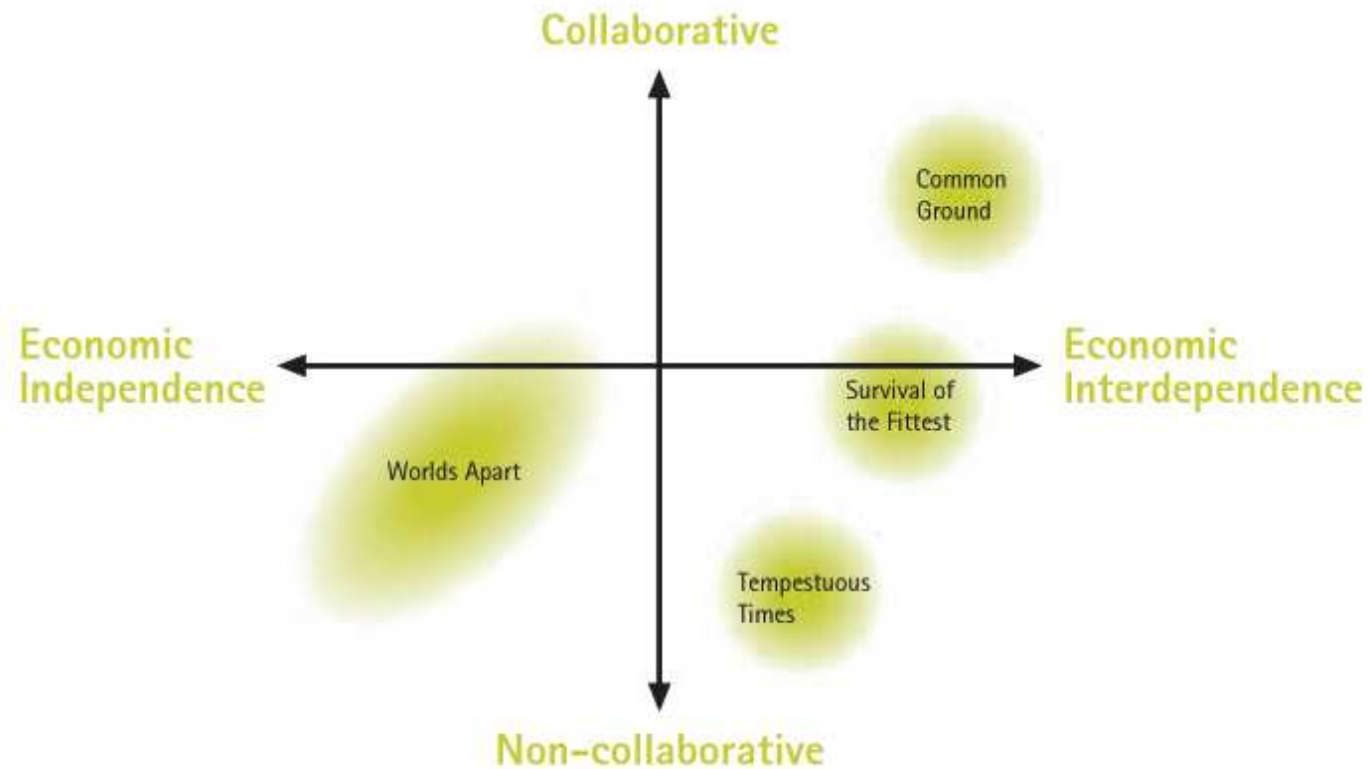
AN ENTERPRISE IN THE NETWORK...

- invests in the creation of resources that allow development of ties and networks (communications, logistics, guarantee and in hi-tech ANALYSIS, TEST AND VALIDATION OF PROTOTYPE, CERTIFICATIONS, patents)
- organizes ALLIANCES, ASSOCIATIONS, BUSINESSES JOIN NETWORK AND SYSTEMS SERVICES Syndicated, DIES STABLE SUPPLIER-CUSTOMER, PARTNERSHIPS FOR R&D, networks for the development of technology platforms
- using the modular manufacturing that allows you to create economies of scale with the modules by changing the architecture of the product or of the service on the basis of single use
- networking the PEOPLE
- OPEN INNOVATION practice (licensing in and licensing out)
- use of outsourcing (including the R & D)



How?

AN ENTERPRISE IN THE NETWORK...



Source: Accenture



How?

THE EXCELLENT ENTERPRISE

- Excellence, in dynamic and evolutionary terms, is a tension towards the creation of value that translates into more resources to the territory in terms of employment, wealth and improvement of quality of life
- YOU DO NOT GET EXCELLENT CASUALLY
- The excellence does not match with the attainment of perfection
- BUT coincides with a strong propensity for innovation

