Challenge Future

Global mega trends

December 2012
Global economics is being influenced by 6 mega trends

Megatrends

1. Globalization
2. Consumption Patterns
3. Governance & Activism
4. Resources & Environment
5. Demographics
6. Technology & Innovation

Wildcards

1. Random events that have a low probability of occurrence and a major impact on the mega trends
Source: A.T. Kearney
Globalization is shaking the foundations of the world as we know it and shifting economic power from „North“ to „South“.

1. The term South was first coined by the UN in the 1960s to refer to those countries that were not part of the 1st World (i.e. NATO) or the 2nd World (i.e. the Soviet Union); with the collapse of the Soviet Union, the term is usually used to refer to all emerging markets.
The old rules of sale no longer apply, as the new consumer is fully mobile, and could be anywhere at anytime.

72.6% mobile penetration globally

- 47% of mobile users are in Asia
- 130% penetration in Western Europe – meaning that there are more phones than users

17% smartphone penetration expected by 2014

11% of US smartphone users make mobile purchases
Social media is emerging as a burgeoning marketplace

Social Media is mobile and prolific …

- **800,000,000** Active Facebook users
- **200,000,000** Users accessing Facebook through their mobile devices
- **130** Friends per user

... and consumers are increasingly choosing text as a communications medium

- **6.1 Trillion** Text messages sent globally in 2010
- **64%** Increase expected by 2013

Source: Media reports, Mobithinking global statistics
And is giving consumers a say in developing their own products and services

Consumers as Co-creators

- Goyard, Louis Vuitton and Coach allow customers to stamp monograms on their bags for a personal touch
- Nike ID has captured the market for personalized athletic footwear
- Burberry launched an online service for bespoke trench coats in 2011
- New sites like Threadless.com and FashionStake.com rely on crowd-sourcing to determine assortment

Localized Design

- Adidas established a Design Center in Shanghai in 2008 to create closer connection to Chinese consumer
- Marc Jacobs launched a collection of sari-inspired dresses to court the Indian consumer and Louis Vuitton celebrated Diwali in store windows
- Prada is launching a “Made in…” series, to create localized designs by collaborating with artisans and using traditional materials and techniques of a region

Customized offerings require a nimble supply chain to meet demand
On the commodities market, easy access to information is allowing consumers to put great pressure on suppliers. Consumers have a variety of new ways to search for the lowest price. Example: the mobile consumer. Ubiquitous access to information facilitates consumer price discovery, and enables convenient comparison shopping.

While they are forced to do so by falling or slowing income growth, the chart shows the real personal disposable income (% change p.a.) from 2004 to 2016 for various countries: China, France, India, Japan, Mexico, United Kingdom, and United States.

Source: Economist Intelligence Unit, A.T. Kearney
We are at a unique historical moment when every major global power is redefining itself

The US faces a formidable array of challenges to its leadership

“Perhaps the greatest danger to a sustainable future . . . is our seeming inability to balance the needs of the present with the requirements of years yet to come.”

Center for the Study of the Presidency

Europe’s historical experiment with unity is being put to the test

• Where is the EU moving post-Lisbon? Will it widen and deepen, or has it reached the limits of integration? Unification or federation?
• Financial crisis in Greece has shown cracks in the broader EU architecture

With remarkable economic dynamism, China still faces significant challenges

• Stratification a major concern—income, use of resources, environment
• How to incorporate the 900 million in the interior in the other China
• Uncertainty about how Beijing will reconcile its political system with its market capitalism

Delineating the boundaries of the next Russia

• Evolving legitimacy role in Federation and in relations with Near Abroad countries
• Raises overarching questions about what kind of Russia it wants to be—democratic or less than democratic—and where it wants to be (i.e., oriented toward Europe or Asia?)
We are entering an era of heightened global demand for food, water and energy

**Strong demand pressures**

- We will see a doubling of demand for food, water and energy by 2050
- Energy demand continues to grow with non-OECD countries driving the bulk of the growth
- Unsustainable water use has already led to aquifer and great lake depletion

**Volatile and rising natural resource prices**

- The FAO warns that there are permanent factors underpinning prices that will work to keep them at both higher average levels than in the past and reduce the long-term price decline in real times

**World Marketed Energy Demand: OECD and Non-OECD, 1990-2035**

(quadtrillion btus)

**FAO Food and Oil Price Indices, 2000-2010**

(Base=2002-2004)

Source: Energy Information Agency, Food and Agriculture Organization
Only sustainability will allow 8 billion people in 2040 to live at high standards on our planet.

2040: 8 billion people striving to …

- … consume
- … be mobile
- … communicate
- … use energy
- … be healthy

We will need 5 planets …

… or become “sustainable”

Source: A.T. Kearney
5 Knowledge work is an increasingly important component of the global economy

Ratio of intangible to tangible investments\(^1\), US companies

<table>
<thead>
<tr>
<th>Decade</th>
<th>1950s</th>
<th>1960s</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>54</td>
<td>62</td>
<td>60</td>
<td>82</td>
<td>110</td>
<td>136</td>
</tr>
</tbody>
</table>

Contribution of knowledge industries to GDP in selected high-performing OECD countries

<table>
<thead>
<tr>
<th></th>
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<td>US</td>
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<td>42</td>
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<td>41</td>
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<td>Belgium</td>
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<tr>
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<td>40</td>
<td>39</td>
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<td></td>
</tr>
<tr>
<td>France</td>
<td>40</td>
<td>40</td>
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<td></td>
</tr>
<tr>
<td>Korea/Netherlands</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Intangible investments are R&D, software, design and new product development; tangibles are machines and buildings
Source: US Federal Reserve, OECD, A.T. Kearney
5 The supply of educated workers is increasingly coming from the developing world

Emerging markets such as China, Egypt, South Korea, Indonesia, Thailand and Turkey are producing as many or more university graduates as established markets.

Tertiary Graduates, 2010 (000s)

68% of US engineering doctorates in 2007 were awarded to foreign students, three-quarters of whom are from Asia, up from 51% in 1999

Source: UNESCO, National Science Foundation, A.T. Kearney
6 Developed countries are investing heavily in R&D to stay competitive in global economy

Knowledge centers like Finland, and Japan spend large percentages of their GDP on R&D...

Gross Expenditure on R&D as a % of GDP, Selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP % of R&amp;D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>3.5</td>
</tr>
<tr>
<td>Japan</td>
<td>3.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.9</td>
</tr>
<tr>
<td>Germany</td>
<td>2.5</td>
</tr>
<tr>
<td>France</td>
<td>2.1</td>
</tr>
<tr>
<td>China</td>
<td>1.5</td>
</tr>
<tr>
<td>Russia</td>
<td>1.1</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.9</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.5</td>
</tr>
</tbody>
</table>

...and have a large pool of knowledge workers

R&D Personnel per 1,000 total employment, Selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Personnel Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
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</tr>
<tr>
<td>Japan</td>
<td>11.1</td>
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<tr>
<td>France</td>
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<td>Germany</td>
<td>7.5</td>
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<tr>
<td>Russia</td>
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</tr>
<tr>
<td>Switzerland</td>
<td>7.0</td>
</tr>
<tr>
<td>China</td>
<td>1.6</td>
</tr>
<tr>
<td>South Africa</td>
<td>1.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: OECD Science and Technology Industry Outlook, A.T. Kearney analysis
Wildcards are random events with low probability to happen, however their number is enormous.

What if two of these wildcards would happen by 2025?

Source: A.T. Kearney