

'Change is the only constant'



Heraclitus

Philosopher

540 – 480 bc



With change comes risk



- Root causes of declines in public companies' value:
 - 60% strategic risks.
 - 30% operational risks.
 - 10% financial risks.

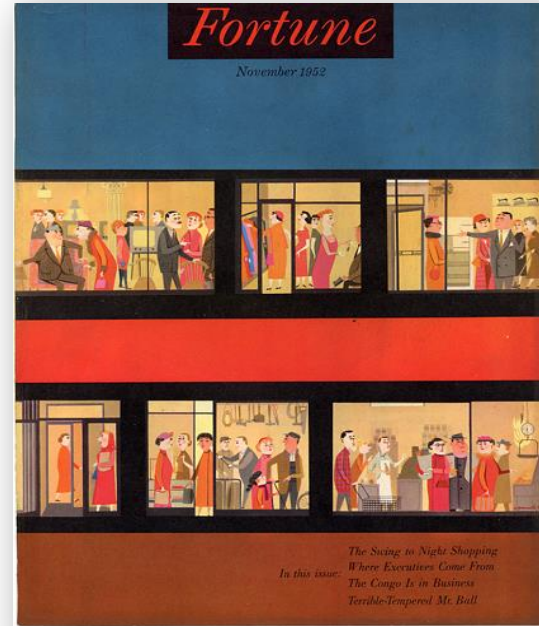


The rate of failure

- Only **71** companies remain today from the original 1955 Fortune **500** list.

"the assumptions on which the organization has been built and is being run no longer fit reality."

Peter Drucker



<http://notes.andrewromano.net/post/93865094/fortune-magazine-cover-images-1951-1955-it-was>

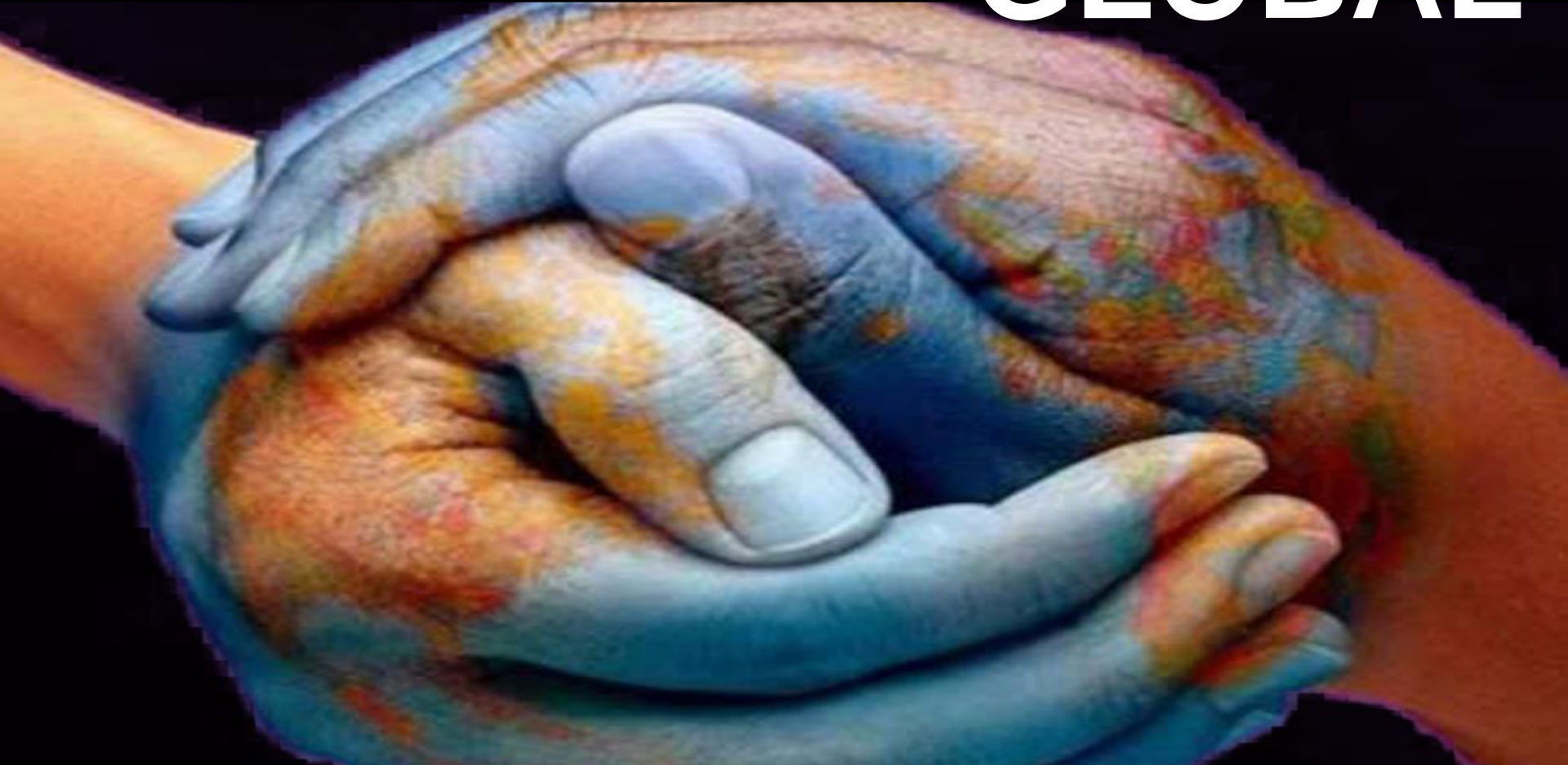


Mega trends

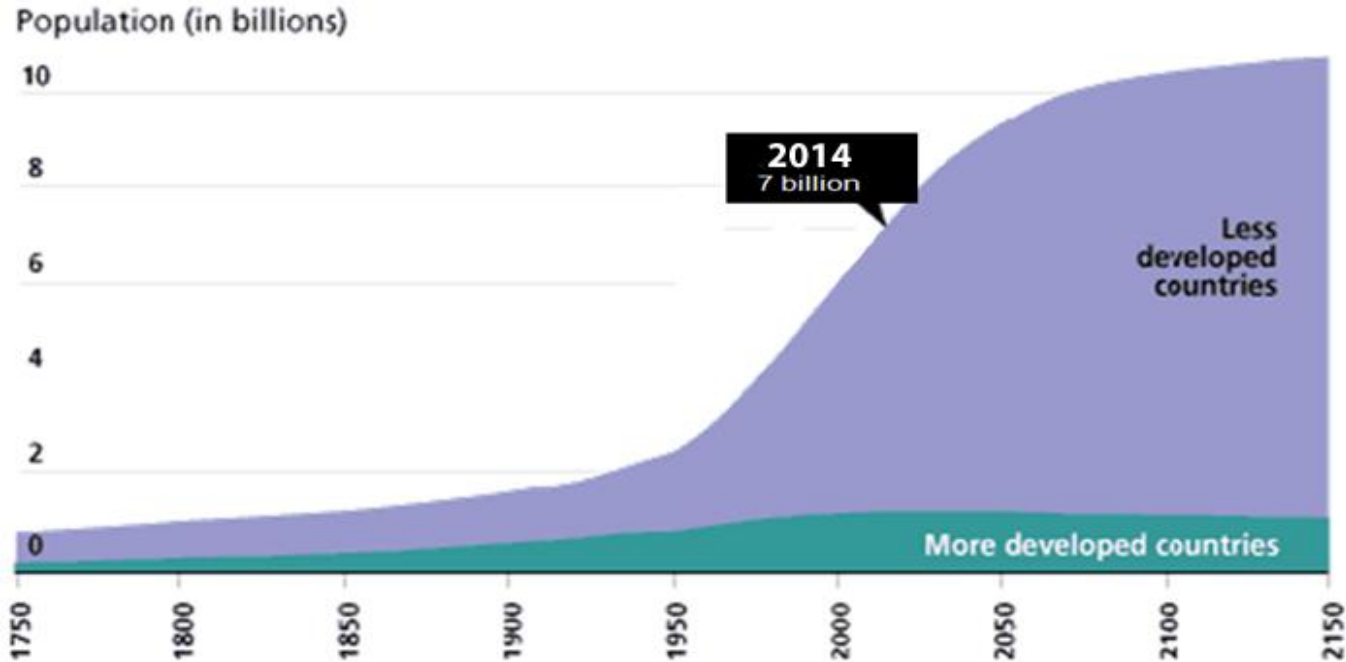
1. Globalization
2. Technology
3. Environment
4. Changes in work
5. Demographics & people
6. Consumption



GLOBAL



Global population growth



The global population is expected to rise from 6.5bn in 2005 to 7.7bn in 2020 and 9.6bn in 2050



Emerging global economic growth

- To 2030 - 70% growth from emerging economies.
- 6/10 fastest growing economies are African.
- By 2020 - Asean economy doubles.
- China – No.2 insurance market in 10 yrs.



<http://www.economist.com/node/17677746>

“the rise of emerging markets is forcing insurers to re-think their current business models...”



Global business shift - 2025

- 46% large firms headquartered in emerging markets.
 - 68% of new billion-dollar firms.
- 60% of people live in cities.
- 30% of GDP in 75 cities.
 - 30 in China.
 - 13 in USA
 - 3 in Europe



<http://andyvance.com/wp-content/uploads/2013/05/ShanghaiSkyline.jpg>





POLITICAL

EU relations

- Staying worth 5% of GDP.
 - £78bn a year: CBI
 - 1 in 6 plans EU expansion.
- The bookies have odds on leaving by 2020: (Nov 2014)
 - Leave: 11:10
 - Stay: 5:6



Brexit threat affects money flows and asset prices and major institutions leave.



A Citi view



- Defeat in an EU referendum would probably cause the government to collapse.
- A victory might leave the Conservatives so divided that a full five-year term is impossible.

<http://cdn1.tnwn.com/files/2010/09/image-by-Chakchouka.jpg>



Scottish referendum implications

- Almost all benefit spending could be devolved to Scotland.
- English votes for English Laws? (EVEL)
- If UK cities granted more power over tax & spending.
 - May boost growth by £79bn by 2030.



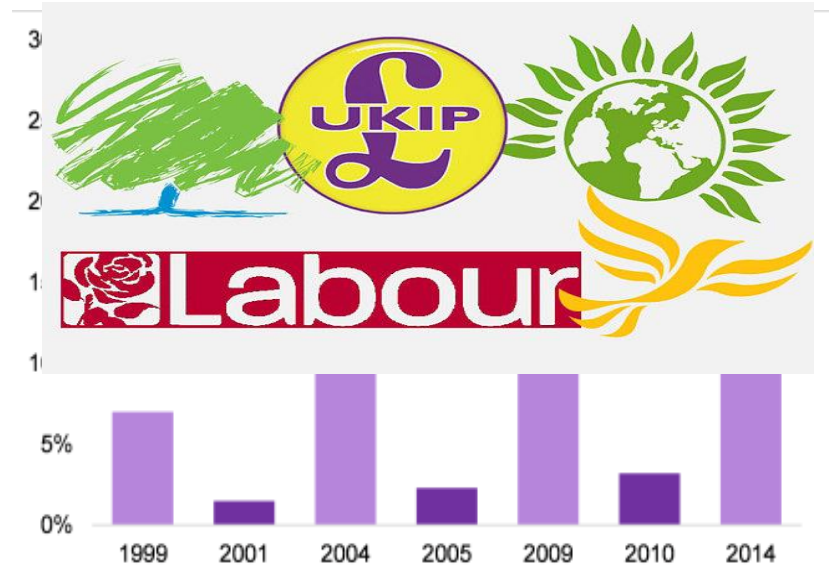
http://i0332byhws36el.cloudfront.net/social_media_meets_online_television_social_tv_brings_television_2.0_to_your_tv_set_what_are_the_implications_of_social_tv_id50046131.jpg



A Citi view

- If Conservative majority:
 - Ends uncertainty over fiscal consolidation.
- A Labour majority:
 - Tax hikes for extra public spending.
 - Rather than reduce the deficit.

Could UKIP hold the balance of power?



http://i.telegraph.co.uk/multimedia/archive/03061/logos_3061351b.jpg



What regulators want



- British banks to ring fence retail banking from other activities by 2019.
- Shift from formulaic solvency measures to closer account of business' individual risk profile and wider market and systemic developments.
- Liquidity increasingly important.
- Deeper risk analysis and engagement with supervisors to manage effectively.





ECONOMY

Economic shifts

- Global trade x4 by 2030. (HSBC)
- By 2040, most African countries middle income. (UN)
 - 150m middle class. IMF
 - To grow to 1.1bn by 2060 (OECD)
 - 42% of the total population. Deloitte

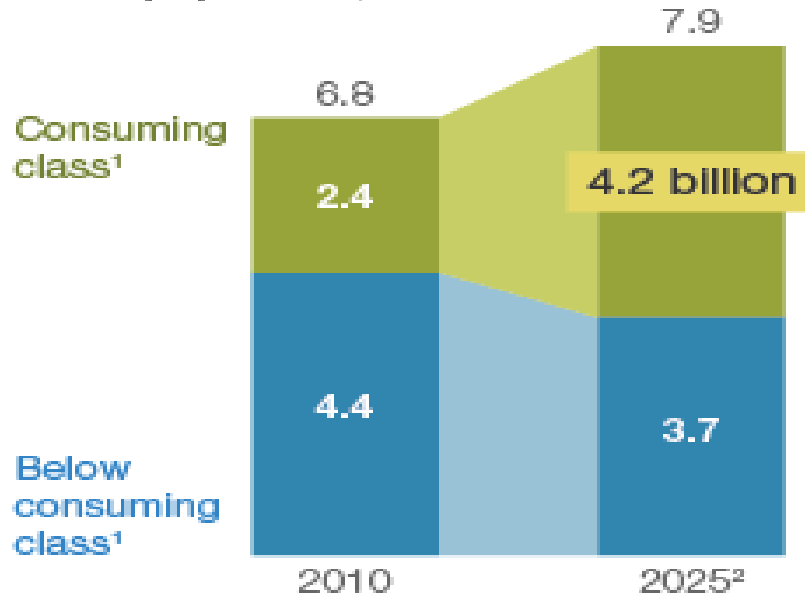


<http://www.aur.edu/wp-content/uploads/2012/09/featured-event-africa-rising.jpg>

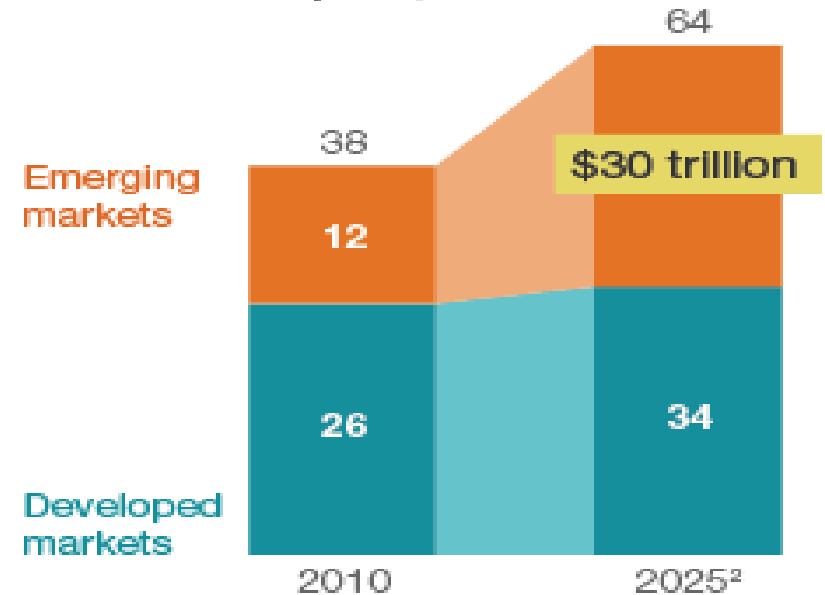


Where the growth is

World population, billions



World consumption, \$ trillion



Infrastructure

- Global infrastructure investment required to 2030 totals at least \$57.3 trillion.

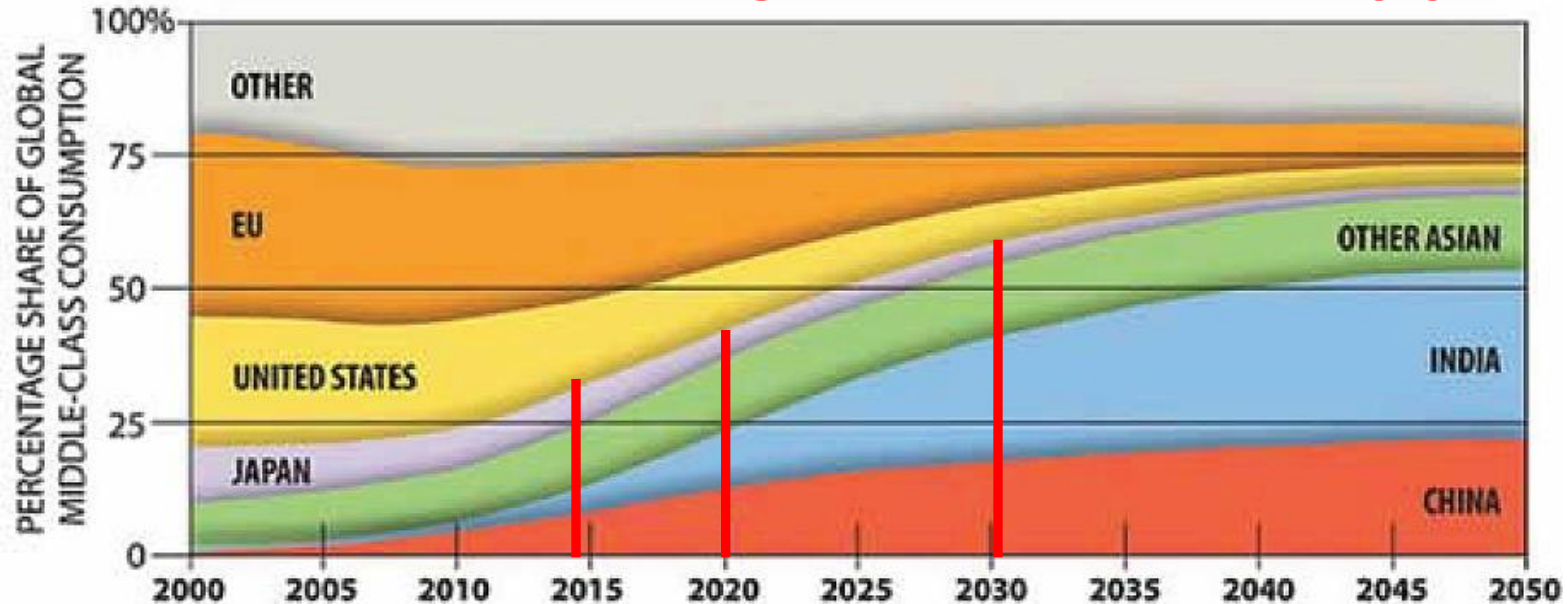


<https://62e528761d0685343e1c43d1b99a7430a4142d8d711978d9686.ssl.cf2.rackcdn.com/files/59777/width668/in7pw242q-1411459432.jpg>



‘Middle Class’ consumption

100 million becoming ‘Middle Class’ every year



SOURCE: H. Kharas (2010), 'The Emerging Middle Class in Developing Countries,' OECD Development Centre Working Paper No. 285

RICH CLABAUGH/STAFF



Halal markets

\$2.7 trillion today \$30 trillion by 2050 ¹

- Travel
- Tourism
- Hospitality
- Portals
- Web sites
- Banking
- Insurance
- Investments
- Capital Markets
- Development



- Real Estate
- Transportation
- Warehousing
- Industrial Parks
- Health
- Cosmetics
- Fashion
- Shopping
- Theme Parks
- Food

Today a product issue – tomorrow a supply chain issue



Global business shift - 2025

- 46% large firms headquartered in emerging markets.
 - 68% of new billion-dollar firms.
- 230 of Global Fortune 500.
 - 85 in 2010.
 - 45% of the total.
 - 5% in 2000.



<http://andyvance.com/wp-content/uploads/2013/05/ShanghaiSkyline.jpg>

<http://www.economist.com/blogs/schumpeter/2013/10/geography-business>
<http://www.flickr.com/photos/64377840@N05/10084858956/>



A lost decade



- The eurozone remains stuck in a deep structural slump,
 - Too little momentum to create jobs.
 - Relentless rise in debt ratios.

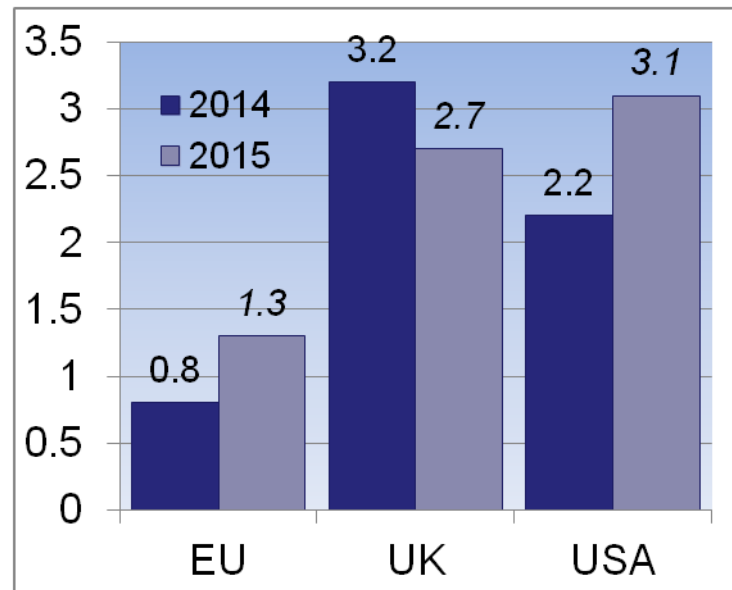
“Titanic Europe’ is heading for a shipwreck without radical change...”

Stefano Fassina, the former deputy Italian finance minister



UK forecasts

- 2015 forecast:
 - BoE 3%, IMF 2.7% and CBI 2.7%.
- 2.5% GDP growth in 2015: PwC
 - Consumer spending at 2.3% in 2015.
 - Moderating to 1.7% p.a. in 2016-20.
- Growth of 2.4% in 2015: EY
 - Below 3.1% growth expected this year.



IMF, Oct 2014



Sharing economy

By 2025

- \$15bn (£9bn) globally could rise to \$300bn.
- Currently worth £500m to UK.



<http://www.collaborativeconsumption.com/wp-content/uploads/2013/04/ChosunSharingEconomy.jpg>





SOCIAL

Fewer marriages



<http://erikbrewer.files.wordpress.com/2009/06/cohabitation1.jpg>

- 92% of women and 87% of men aged 60 have been or are married.
- 76% of young adults want to marry.
- Current trends suggest only 52% will.



More singles, more 'boomerangs'

- 3.7m living with parents by 2020.
 - From 3.5m today
- 50%+ of 20-34 yr olds "priced out" of housing market by 2040.
 - Absent radical supply change



<http://dreamfilm.ca/wp-content/uploads/1-Generation-Boomerang-logo.jpg>



UK home life

- 29% of 26.4m households have single occupants.
- To grow by 163,000 a year to 10.9m in 2031.
 - Some 40%. Government projections



<http://www.michaelmedved.com/wp-content/uploads/180104962-300x200.jpg>



Global ageing by 2050

- Over 60's:
 - Mature economies - 22% to 33%.
 - Developing world - 9% to 20%.
- 25% of China's people over 65.
- Japan alone has 30% over 60 now.
 - 64 countries will have by 2050.



<http://www.global-ageing.eu/Bilder/collage.png>

By the time a person born today is 80, their life expectancy would have gone well past 110.



Ageing workforce

- 20% don't expect to retire.
- 2020: 36% of UK working pop'n will be aged over 50.
- 2028: 1 in 4 UK employees could work until they're 70.



http://i.telegraph.co.uk/multimedia/archive/01802/retirement_1802700b.jpg

35% of UK workers not contributing to any savings.



And we're living longer lives

- Human life expectancies have the potential to reach 500 or possibly even 1000.

“In the near future, the next two to four decades, the disease of ageing will be cured.”

AGEING CURED



Dr. Aubrey de Grey B.A.,
M.A. and Ph.D.,
University of Cambridge,
Cambridge, UK.
Born 20th April 1963



Robert A. Freitas Jr. is
Senior Research Fellow
at the Institute for
Molecular Manufacturing



Health and wellness

We are living longer but not necessarily healthier.

By 2030

- Overweight & obese doubles to 3.3bn.
- Non-communicable diseases to cost £29tn.
- Cancer rates jump 75%.



EU immigration



- 48.5% 50 or over by 2050: Eurostat
- To keep workforce at 2010 level, immigration of 25m required by 2020: Chatham House

Portugal, Denmark, Finland & Ireland



http://i.telegraph.co.uk/multimedia/archive/02700/eu_2700771b.jpg



UK immigration



- Net immigration of 12m by 2060.
Eurostat
- 30m+ people living in the UK will have an immigrant background by ~2050.

<http://static.guim.co.uk/sys-images/Guardian/Pix/cartoons/2012/8/10/1344614653410/Multicultural-Britain-008.jpg>



Gen Z and brands

- 52% of UK millennials think brands have potential as a force for good.
- 40% negative towards the way brands communicate with them.



<http://cached.imagescaler.hbpl.co.uk/resize/scaleWidth/620/offlinehbpl.hbpl.co.uk/news/OKM/828D3B74-5056-BE10-F67B31FE4243F0A6.jpg>



TECHNOLOGY & COMMUNICATIONS



Technology and communications

'For a list of all the ways technology has failed to improve the quality of life, please press three.'

Alice Kahn.

1. Growth of the Internet
2. Inter-cloud services
3. Social Networks
4. Mobile devices
5. Big data - Prescriptive Analytics
6. UAV's
7. 3D printers
8. AI, Avatars & virtuality
9. Augmented reality - Google Glass
10. Humanoid robots and transhumanism



Work automation

Manual Clerical Managerial Professional



<http://www.audiotech.com/trends-magazine/wp-content/themes/Trends/thumb.php?src=http://www.audiotech.com/trends-magazine/images/articles/2012/04/02.png&h=300&w=565&zc=1&q=90>

- Technology to automate a third of UK jobs over next 20 years.
Deloitte
- 60% of CEOs believe smart machines to be a 'futurist fantasy.'

**Automation could challenge global economic order.
It will redefine notions of value, work and employment.**



Unmanned Autonomous Vehicles



Nearby



Prentiss Brown Thea...

★★★★★ 0.44mi



Banana Republic

★★★★★ 0.02mi



Posh Bagel

★★★★★ 0.02mi



Steamer's Grill Hou

★★★★★ 0.04mi



Old Town

★★★★★ 0.04mi



GapBody

★★★★★ 0.04mi



Wine Cellar

★★★★★ 0.05mi



Mobile to 2018

- Mobile data traffic growth 61% cagr.
- 66% of devices – smartphones.
- Speeds increase 2.6-fold.
- 15.9 Exabyte's/month. 69% video.
- Functions:
 - Payments
 - Environment
 - Travel
 - Health & wellness
 - Context etc.



Wearables 1.0



IRONMAN

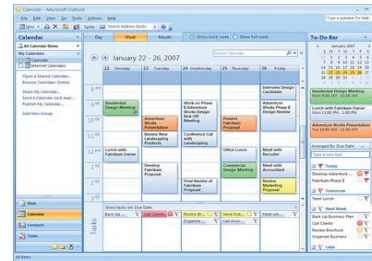
Wearables 2.0



INVISIBLE MAN

The mobile consumer in context

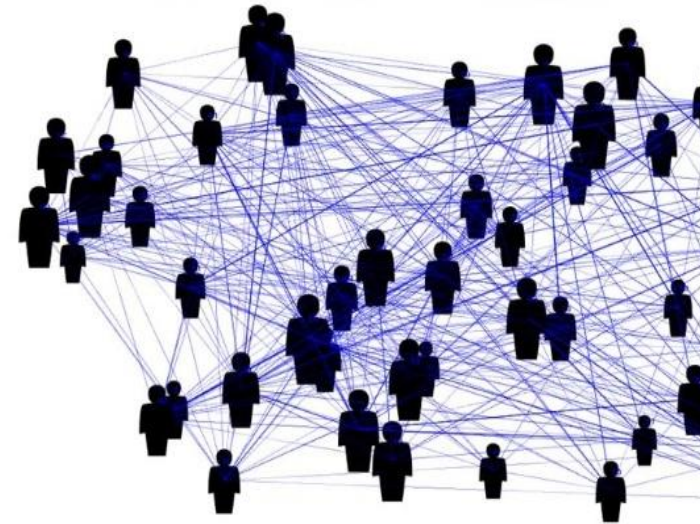
- Where am I?
- What am I doing?
- Who's around me?
- Where am I going?
- What would help me?
 - Where
 - What
 - Who



The post e-mail era

Adds \$1.3tn per year – 66% through collaboration

- Change the way we work.
 - Work Swarms.
- New Management processes.
 - Collaborate around problems.
 - Faster and more creative solutions.
- New financial solutions
 - Crowdfunding
 - Pooling for risk sharing.



Social Media



Big data

- Every day we create 2.5 quintillion bytes of data:
 - A new Google every 4 days.
- 88% of execs call big data analytics a top priority.



BIG data & predictive analytics

- Of 64% who have invested in or plan to invest in big data:
 - Only 8% started using it.
- **Social media** and **data analytics** are the two technologies that pose the greatest risk to business models.



<http://www.emediavitals.com/sites/emediavitals.com/files/odo-lowres.jpg>

Predictive and Prescriptive analytics are ‘game changers’



Predictive analytics

- 41% of FS org's say predictive analytics is more about minimising risk than exploiting opportunities: SAP

73% say it would help them to make better offers to their customers.



Prescriptive analytics



- Prescriptive analytics predicts *multiple* futures based on the decision maker's actions.

Obtaining a different level of insights (from data) will be one of the truly powerful opportunities of the next few years.



Mobile payments

- Worth \$5.25t by 2020.
 - CAGR of 127.5% to 2020.
- 2/3 would use it if convenient.
- Physical money disappears in Sweden by 2030.
- Mass market adoption of Apple Pay in mid-late 2016. GigaOM



Alternate payments

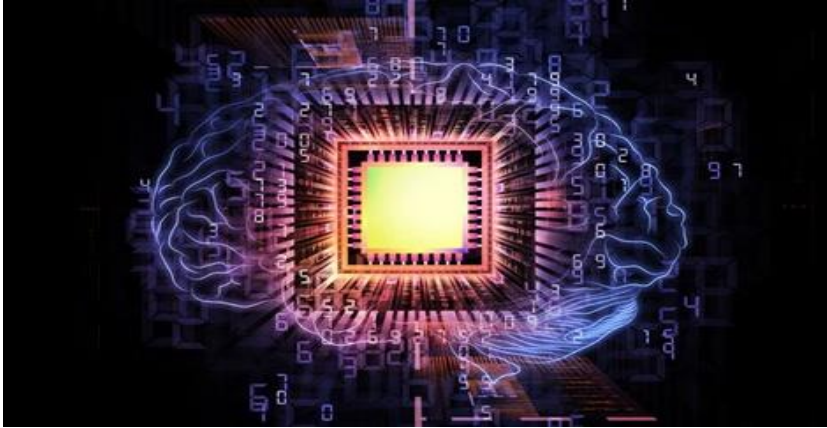


- Technology is reinventing services offered to customers.
 - By 2020, the value of alternate payments will equal that of cards in Europe.

<http://www.businesscloudnews.com/files/2013/09/Learning-datacentre.jpg>



Cognitive computing



- IBM Watson being used at call centres for:
 - Investment advice.
 - Legal advice
 - Medical diagnosis.

<http://odn.nextgov.com/media/img/upload/2013/03/21/032113chipNG/nextgov-medium.jpg>

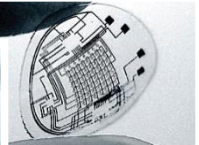
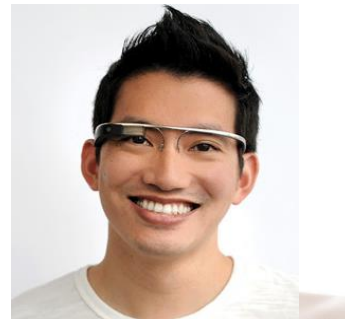
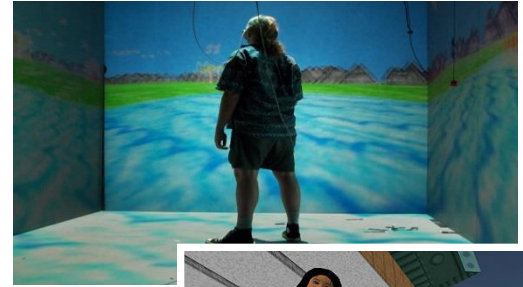
By 2025 it will reduce complexity brought about by enhanced data volumes.



Engaged through technology

By 2019

- 3D virtual reality displays,
- Embedded in glasses & contact lenses.
- Primary interfaces to connect with other people, computers, the Web and virtual reality. Kurzweil
- Linking our senses with other people's senses or machines.



‘Imagine enjoying a court side seat at a game, studying in a classroom of students and teachers all over the world or consulting with a doctor face-to-face – just by putting on goggles in your home.’ Mark Zuckerberg



“When you put on the goggles, it’s different from anything I have ever experienced in my life,”

Mark Zuckerberg



Brain-to-computer interfaces

- Future pilots control their aircraft by merely thinking commands.
- Now demonstrated the feasibility of flying via brain control - with astonishing accuracy.



http://wingwire.com/app/webroot/files/4_525_1403287387.jpg

**Scientifically viable in 2020; mainstream in 2022;
financially viable in 2027**



Brain-to-brain interfaces

- Brain interfaces transmit information between people.
 - Allowing the receiving brain to perform tasks without training.



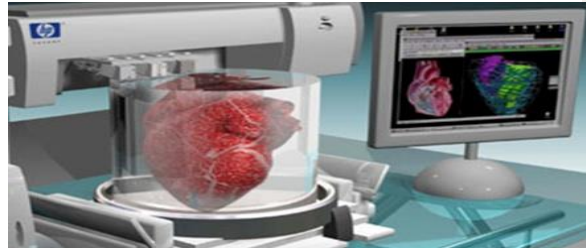
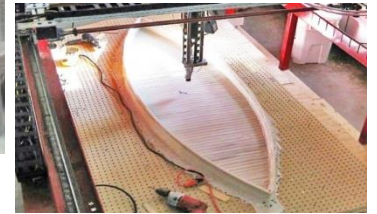
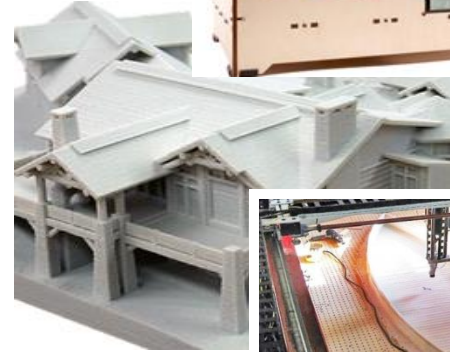
**Scientifically viable in 2025; mainstream in 2026;
financially viable in 2027**



3D Printing

The next trillion £ industry

- A £2bn industry by 2018.
- Airbus - 3D printed planes by 2050.
- First “printed home” built.
- Commercial buildings will follow.
- Transform manufacturing, insurance, distribution, logistics, retailing, food, surgery.



Intercloud

- A network of interconnected global cloud of clouds.
- Consolidates the average of 759 cloud services per org.
- Key enabler of the IoT.



http://talkincloud.com/site-files/talkincloud.com/files/imagecache/medium_img/uploads/2013/05/cloud2.jpg

Creates a faster, more agile I.T. Management and organisational structures must change to take advantage



Software Defined Networks

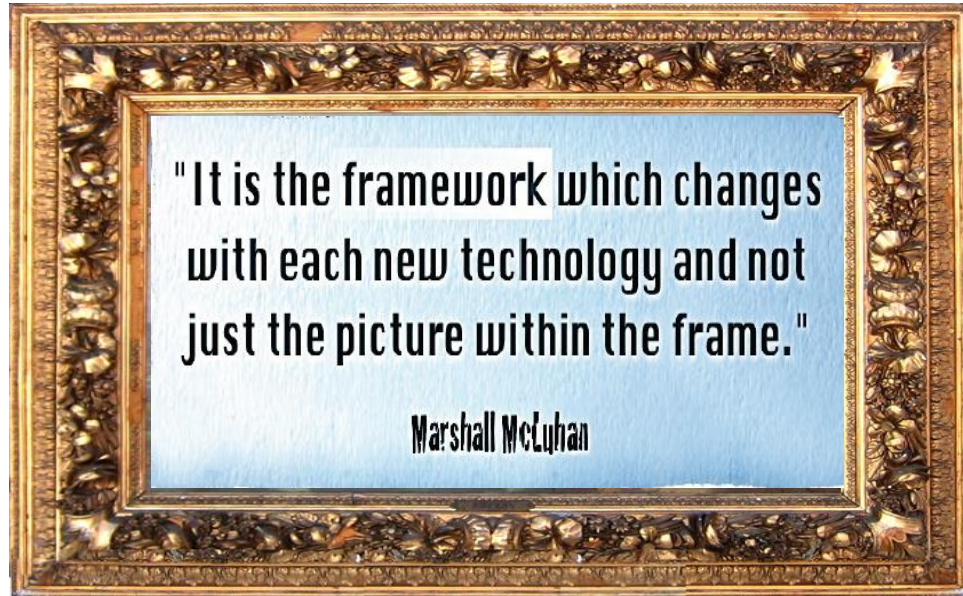


- A new approach to networks that helps remove their physical limitations.
- \$2bn by 2016.
 - From \$200m in 2014.

1 in 5 enterprises are using SDN, and 55% are evaluating whether to do so.



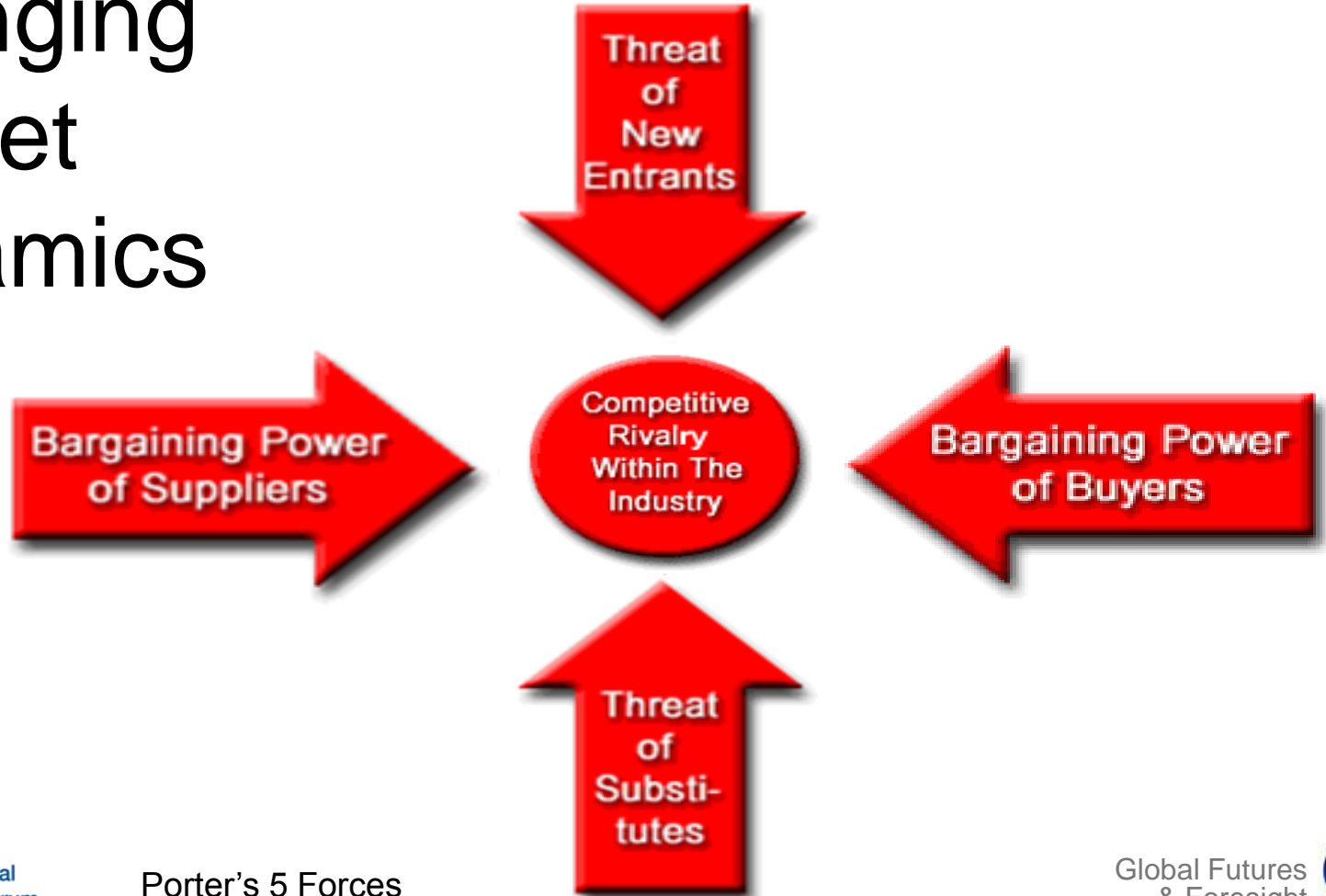
Film and video do differ chiefly



BUSINESS



Changing Market Dynamics



Reorientated business models

- From 'inside-out' to 'outside-in.'
- A shift to a world of:
 - Web-based.
 - Decentralised.
 - Front-office-oriented.
 - Mobile.
 - Touch-screen.
 - Consumer-oriented.
 - Co-creation



<http://www.thehartofmarketing.com/wp/wp-content/uploads/2011/02/customer-centric-outside-in-reorg-harte.jpg>

Informed by data analysis.



Emerging competition

- From non-banks could erode 1/3 of traditional bank revenues by 2020.
- 89% of insurers say competition intensifies in distribution in 3 years.
- 64% say from non-insurance players - Google, Amazon, Walmart...



Challengers

53% don't think their bank is any different from other banks.

- Metro Bank
 - 2010, had 9,000 current accounts.
 - 2014, had 318,000.
- Handelsbanken
 - Tripled the number of its UK branches between 2009 and 2013.



<http://unbounce.com/photos/barrier-to-entry.png>



Alternative finance

- UK alternative finance market grew 91%:
 - From £492m in 2012.
 - To £939m in 2013.
- Last 3 years contributed £1.74bn of financing.



Hyper personalisation



- Tomorrow's technology will know what we want before we know we want it ourselves.
- 68% of consumers aren't okay with targeted advertising - '...they don't like having their online behaviour tracked and analyzed.'



Value shifting outside the enterprise

- Organizations outnumbered by the resources provided by their network.
- Business value from the social world.
 - Crowdsourcing.
 - Open and social supply chains.
 - Open innovation.
 - Co-creation.
 - Social media marketing.



Sloan Review (MIT)

80% of executives worldwide say enterprise-wide collaboration is the key to success.



Agility and preparedness



- 73% of execs believe their company needs to be faster in order to adapt to change.
- 70% of CEOs want to extend their planning horizon to plan for 3+ years.

PwC

<http://www.opinionspost.com/wp-content/uploads/2014/04/foresight.jpg>



The branch footprint

- 80% of the UK market can be covered today by 800 branches: CACI
- 500 branches will be sufficient in 10 years' time: Deutsche Bank
- The big 6 UK banks have 7,995 in total.



<http://www.raincoastcomputing.com/sites/default/files/footprints325x225.jpg?1325018054>



So much change

- New thinking
- New culture
- New behaviours
- New partners
- New channels
- New insights and offers
- New customer engagement
- New technologies
- New business models

DELIVERING IN

