

Business Information Technology, towards 2020

Changing the rules of doing business!

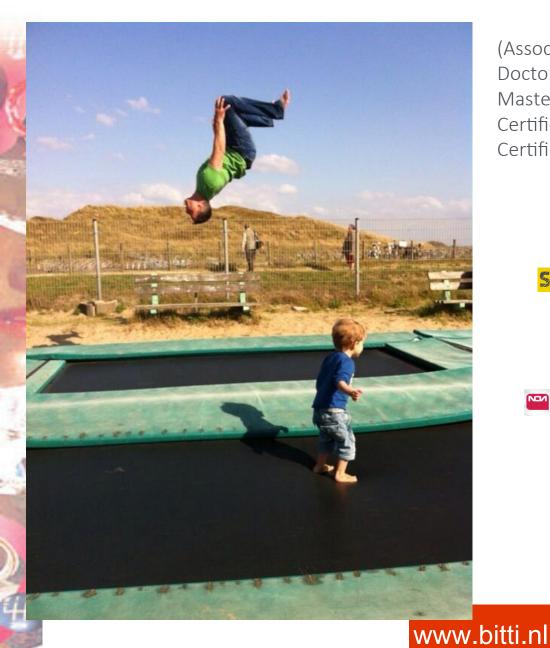
Dr. Barry Derksen





Volledig rapport?

- Vul de vragenlijst rondom trends in voor uw organisatie of uw klant.
- U ontvangt dan vanzelf het volledige rapport.
- Link naar vragenlijst:
- https://www.surveymonkey.com/s/PTRKMYC



About Barry

(Associated) Professor Doctor Master of Management Consultancy Certified Information Systems Auditor Certified in the Governance of Enterprise IT



Business & IT Trends Institute

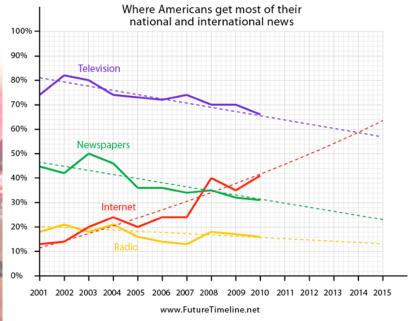




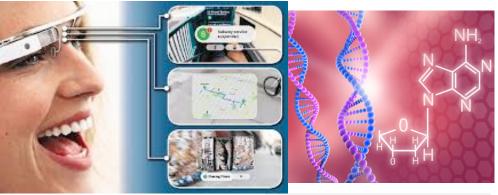


IT & Ice-skating Champion @ 0.001 seconds?





What's going on In 2014/2015



- Internet larger reach than TV
- Google glas publically launched
- First solar Airplane around the world (64 meter wing, 12.000 solar cells..)
- Personal DNA sequence < \$100
- Memristor technology available (nano technology not based on on/off switch)
- Smart watch is the new gadget (apple)
- Laser guns at U.S.Navy
- India to Mars (camera/ infrared/heatting, ..)

source: timeline.net

www.bitti.nl

Weathe

your 2015 management issues ...

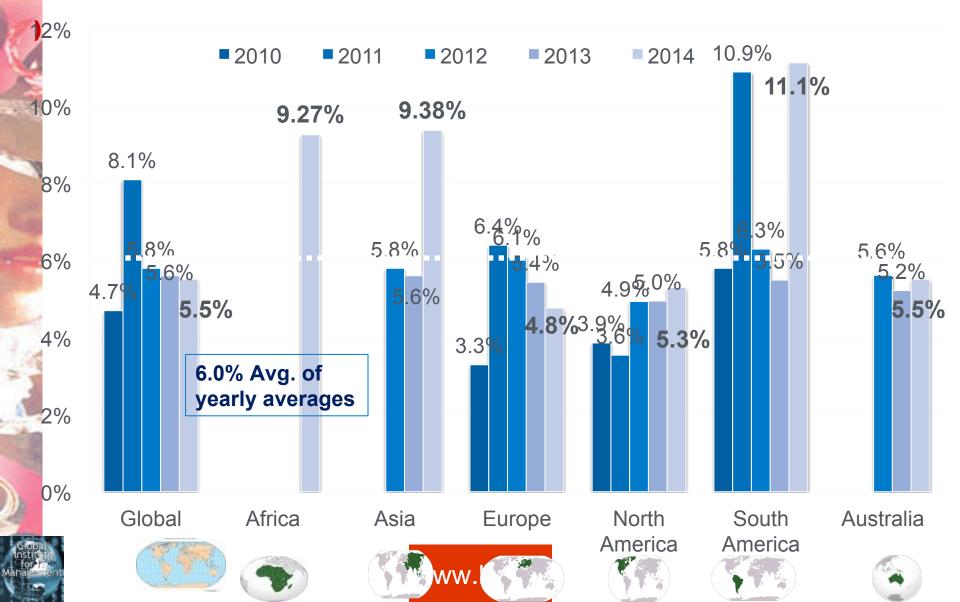
								7.
V	Management Concern	Global	North America	Europe	Asia	Australia	Latin America	Africa
A	ignment of IT and/with the business	1	1	1	1	8	35	1
2000	Business Agility	2	3	2	2	1	1	2
- 10	Velocity of change in IT	3	5	8	18	4	3	6
	Business Cost Reduction / Controls	4	9	3	4	19	2	5
Car	Business Productivity	5	4	4	5	32	6	3
and the second	Security /Privacy	6	2	32	30	38	31	31
Business Continuity/Disaster Recovery		7	11	9	3	24	37	8
-	Time-to-Market / Velocity of Change		7	8	14	5	3	36
	T Value Proposition in the business	9	6	24	29	18	24	34
-	Innovation	10	8	27	21	35	34	29

...making the organisation more productive with reliable, cheap instruments but with taking in account the alignment & security...

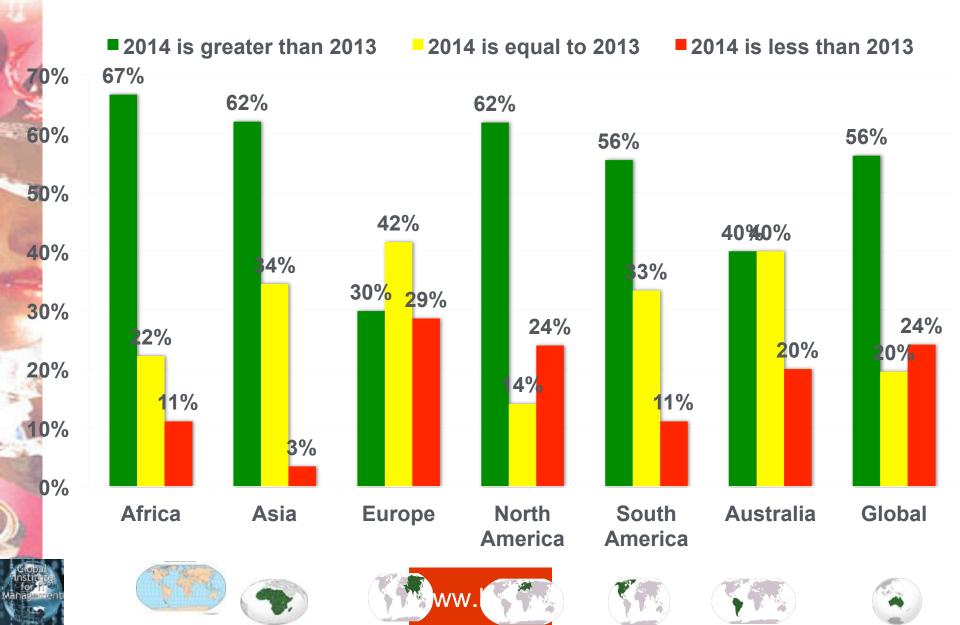
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bron: bitti.nl

PERCENTAGE OF REVENUE ALLOCATED TO IT BUDGET



IT BUDGET CHANGE ACTUAL 2014



To stay...Business Intelligence is big data &...

1993	2000	2006	2008	2010
 Mission and Vision Statements 	1) Strate Str.pl. ning	1 Strate Str.pl. ning	1 Benchmarking	1 Benchmarking
2 Customer Satisfaction	2 Mission and Vision Statements	2 CRM	2 St Str.pl. lanning	2 Strategic Planning
3 TQM	3 Benchmarking	 Customer Segmentation 	Mission and Vision Statements	3 Mission and Vision Statements
4 Competitor Profiling	(4) Outsourcing	4 Benchmarking	4 CRM	4 CRM
5 Benchmarking	5 Customer Satisfaction	(5) Mission and Vision Statements	5 Outsourcing	5 Outsourcing
6 Pay-for-Performance	6 Growth Strategies	6 Core Competencies	6 Ba BSC Scorecard	6 Balanced Scorecard
7 Reengineering	7 Strategic Alliances	7 Outsourcing	Customer Segmentation	7 Core Competencies
8 Strategic Alliances	8 Pay-for-Performance	8 Business Process Reengineering	Business Process Reengineering	Change Management Programs
9 Cycle Time Reduction	Segmentation	Scenario and Contigency Planning	9 Core Competencies	9 Strategic Alliances
10 Self-Directed Teams	10 Core Competencies	10 Knowledge Management	10 Mergers and Acquisitions	Customer Segmentation

....Einstein's target was intelligence.

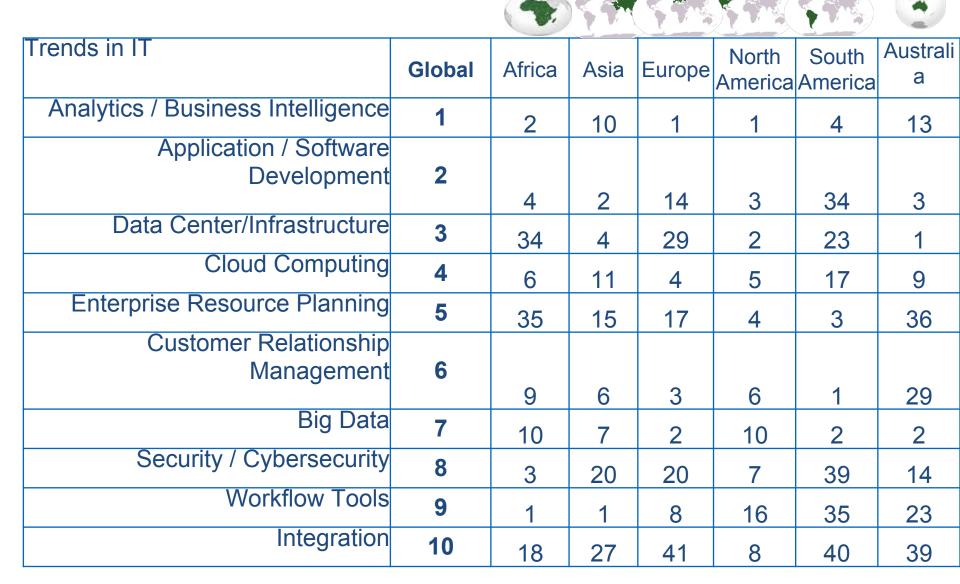
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source: Bain & Company

How do we determine 0,001s?

2014		2013
1	Analytics / Business Intelligence	1
2	Application/Software Development	5
3	Data Center / Infrastructure	new
4	Cloud Computing (e.g., SaaS, PaaS, laaS)	2
5	Enterprise Resource Planning	4
6	Customer Relationship Management	3
7	Big Data	7
8	Security / Cybersecurity	16
9	Workflow Tools (prev. Incl. collaboration tools)	9
10	Integration	11

ORGANIZATION'S LARGEST/MOST SIGNIFICANT IT INVESTMENT



- Comeback Virtual Reality
- 1st phase Masdar city (Abu Dhabi) ready: first complete green technology city, zero waste/carbon
- First moon tourist (Dennis Tito was in 2001 first space tourist)
- Batteries 10x longer & faster charged & in smart devices (based upon lithium -ion)
- 3d printing consumer product.
- 10 nanometre chips in mass production (Moore's law ends)

sources: FutureTimeline, Gartner, BITTI.nl

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130nm

120nm

110nm 100nm

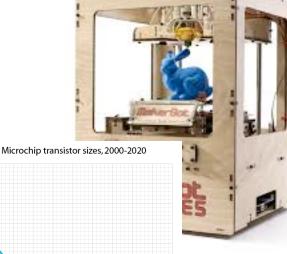
90nm

ර 80nm වේ 70nm

> 60nm 50nm

> 40nm

30nm 20nm 10nm



2015-2019

2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020

www.futuretimeline.ne

Year

Are you experimenting with?

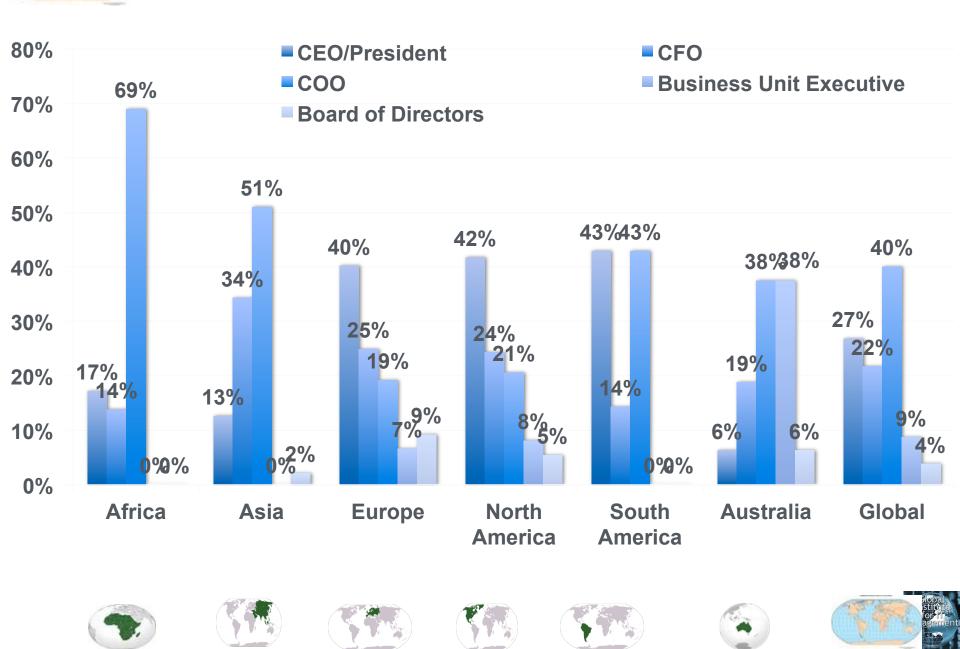


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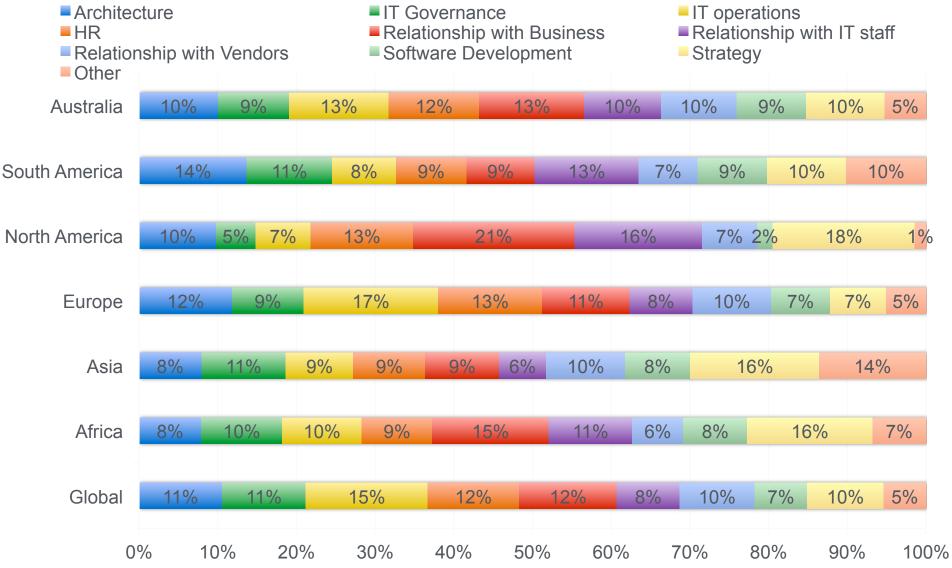


HOM CIOS OR EQUIVALENT REPORTS: 2014



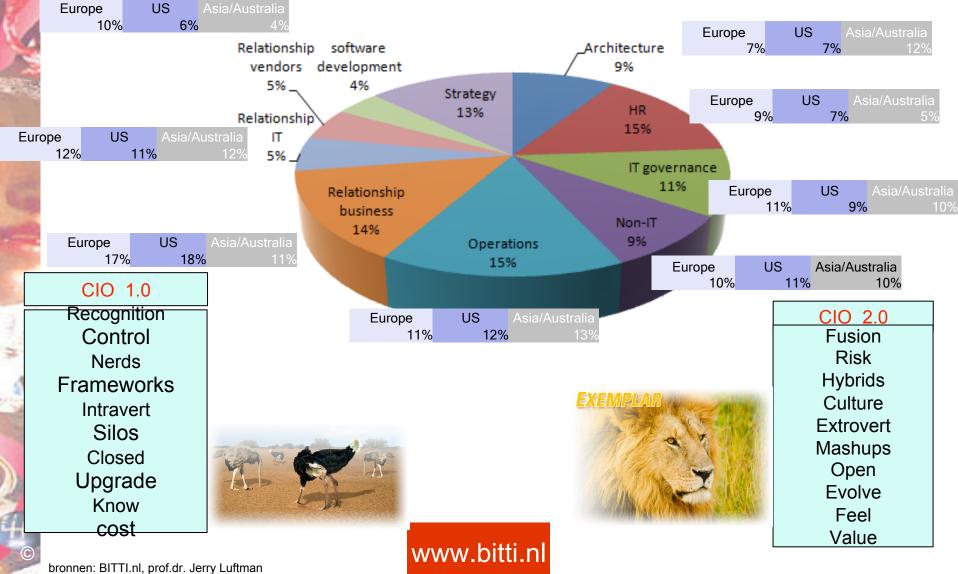






Extreme makeover CIO

How CIO's (should) spend their time?



To watch for!

• Phase 1: Media & Information publically available Last 20 years: Internet changed publicity... participation was in 'bits'

- Phase 2: Social Media is hot
- Phase 3: From bits to Atoms (digitalizing the physical environment)







Internet & Economy

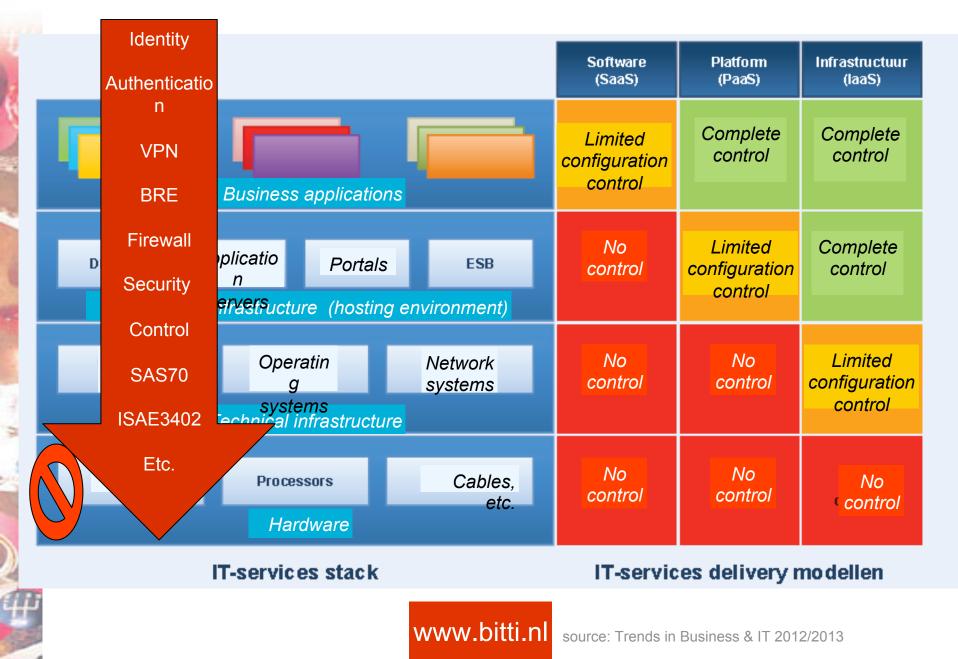
1995-2005 1 st phase Internet	2005-2015 2 nd phase Internet	2015-2025 3rd phase Internet	
Low level of o	digitalization	Drivers: Robotics Wearables Smart systems	Smart Cities Singularity Quantified self 3D printing
Search	Social	Physical element High Level of dig	
Media / Information		Digitalizing the physic	cal environment (production, healthc

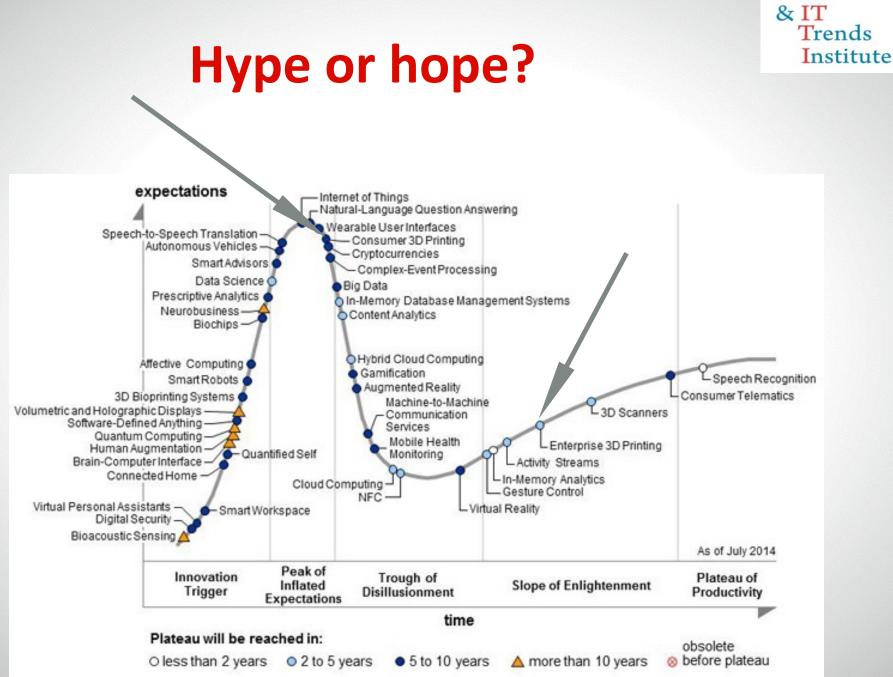
Media / Information 15% of the Economy Digitalizing the physical environment (production, healthc are, homes, cities,....) 85% of the Economy

What to do: seconds or euro's in business & IT alignment



Trend = Cloud





Business

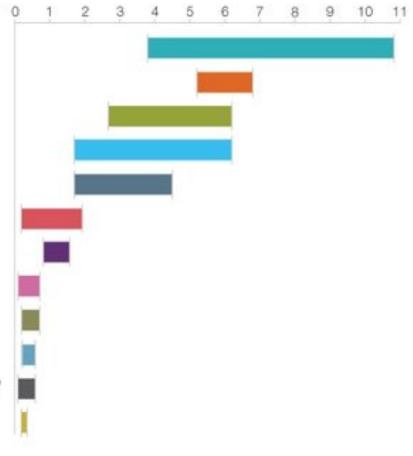
Disruptive Technologies next few years

A gallery of disruptive technologies

Estimated potential economic impact of technologies across sized applications in 2025, \$ trillion, annual

www.bitti.nl

- 1. Mobile Internet
- 2. Automation of knowledge work
- 3. Internet of Things
- 4. Cloud
- 5. Advanced robotics
- 6. Autonomous and near-autonomous vehicles
- 7. Next-generation genomics
- 8. Energy storage
- 9. 3-D printing
- 10. Advanced materials
- 11. Advanced oil and gas exploration and recovery
- 12. Renewable energy



source: McKinsey



- > 10,000 drones worldwide
- Games real-life (e.g. 3d)..
 & bigger / more intelligent than Google.
- Human A.I. becomes reality
- Groceries without seeing someone

sources: FutureTimeline, Gartner, BITTI.nl

Trend: predictability decreases, impact increases



CONSUMPTION SPREADS FASTER TODAY ENT OF 5. HOUSEHOLDS 90 80 COLOR TV RLECTRICITY 60 COMPUTER 50 AIR-CONDITIONING -80 CLOTHES WASHER. **CELLPHONE** TELEPHON 30 CLOTHES DRYER DISHWASHER VCR REFRIGERATOR 20 STOVE INTERNET MICROWAVE AUTO RADIO 1945 1915 1930 1960 1975 1990 200



RANKING OF IT MANAGEMENT

WORRIES

Global	Africa	Asia	Europe	North America	South America	Australia
1	_	_	_			_
	1	3	1	3	2	1
2	11	5	2	10	1	2
3	30	34	29	1	30	40
4	5	40	18	2	17	19
5	24	7	3	20	3	30
6	12	1	7	18	6	14
7	2	10	4	11	25	24
8	16	2	5	17	12	16
9	9	8	6	15	11	20
10	10	30	12	4	22	11
	Global 1 2 3 4 5 6 7 8 9	GlobalAfrica11211330455246127281699	GlobalAfricaAsia11321153303445405247612172108162998	GlobalAfricaAsiaEurope1131211523303429454018524736121772104816259986	GlobalAfricaAsiaEuropeAmerica1131321152103303429145401825247320612171872104118162517998615	GlobalAfricaAsiaEuropeAmericaAmericaAmerica113132211521013303429130454018217524732036121718672104112581625171299861511



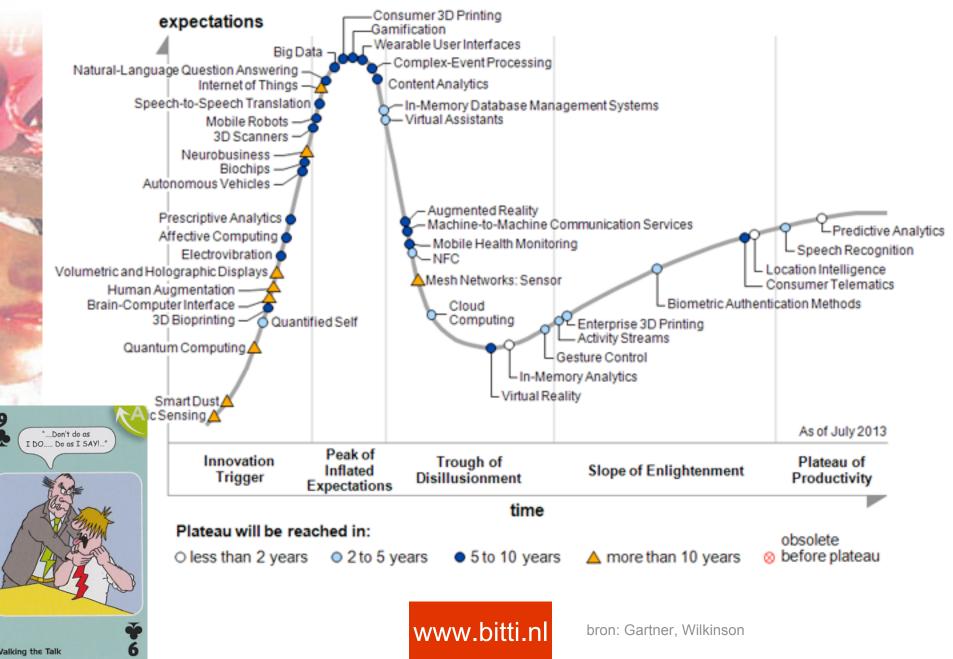
2030-2040

- Smart Grids realised in all western countries
- Most cars will be plug in electric
- AI is normal usage within organisations
- Super fast 'crime-scene investigation'
- New rols: avatar manager, body part maker, waste data handler
- Quantum computers anywhere
- Old computers will receive the 03:14:07 UTC on Tuesday, 19th January 2038 Bug





Trend = not made by...



Dr.Barry Derksen **Business & IT Trends Institute** www.bitti.nl barry.derksen@bitti.nl

professor at Novi University of Applied Sciences Associated professor at Vrije Universiteit Amsterdam - Post Graduate IT Auditing

Manager at Stedin

ICT-BEHEER EN OUTSOURCING

RENDS IN IT

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Barry Derksen Rusines HC pm od www.bitti.nl

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Business &

IT Trends bij

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TRENDS IN BUSINESS &

2012/2013

sichten, inrichten & errichten met Business & IT Richten, inrichten &



AcademicDissertation

Impact of

IT Outsourcing

on Business &

IT Alignment

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