

# MSc International Business – Information Management & Business Intelligence (IMBI)

Dr. Mark Vluggen



## **Dr. Mark Vluggen** (track coordinator)

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### **Education**

Master: Cases in MIS (EBC4038)  
Postgraduate: EMFC (Maastricht), EMMA (Paramaribo, Suriname)

### **Research**

Enterprise resource planning (ERP), Online reviews, Technology Acceptance  
Member editorial board International Journal of Accounting Information Systems  
Track co-chair at European Conference on Information Systems

# IT Doesn't Matter

- Title of an article by Nicholas Carr, published in Harvard Business Review May 2003
- Suggests IT no longer provides competitive advantage
- Followed by a book “Does IT Matter?” 2004
- Caused huge debate in IT and business communities



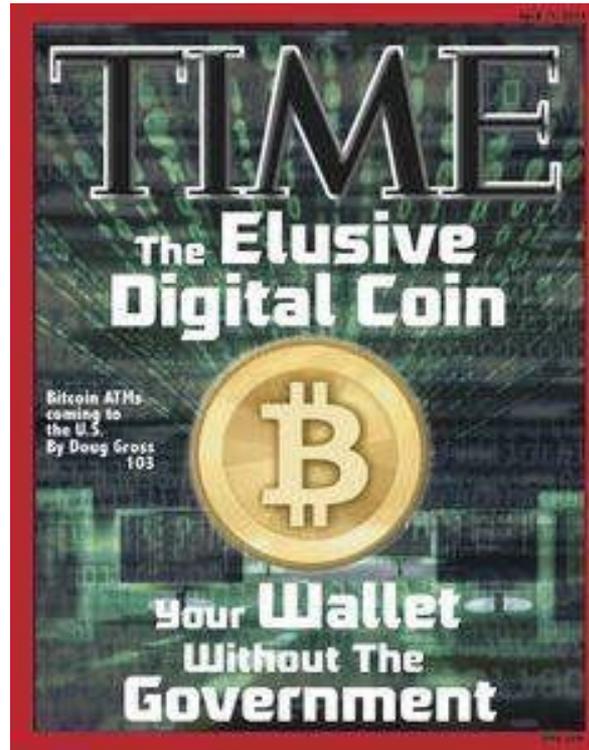
# Information Technology as a Fashion

- Enterprise resource planning
- Data warehousing
- Social media
- Cloud computing
- Green computing
- Big data & Data analytics
- The Internet of Things
- Blockchain technology

# The overwhelming response

- Competitive advantage is not the result of computers – It is the result of effective management by highly skilled managers
- Advantage comes from consistently using information better
  - This is why you should study the MSc IB – Information Management & Business Intelligence

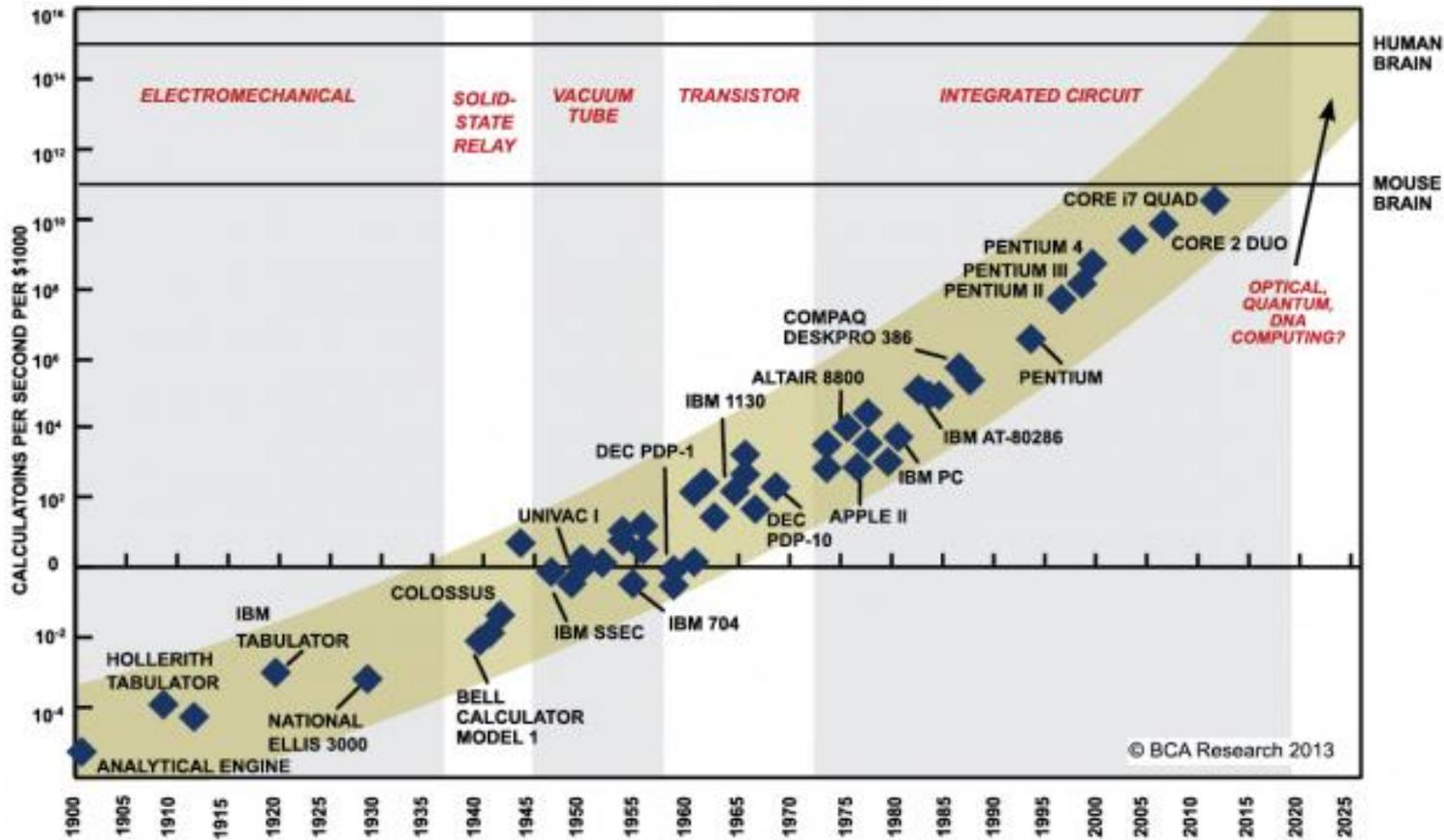
# Blockchain in the media



# IT Predictions

- “I think there is a world market for maybe five computers.” (*Thomas Watson, chairman of IBM, 1943*)
- “There is no reason anyone would want a computer in their home.” (*Ken Olson, founder of Digital Equipment Corp., 1977*)
- “I predict the Internet will soon go spectacularly supernova and in 1996 catastrophically collapse.” (*Robert Metcalfe, founder of 3Com, 1995*).
- “I see little commercial potential for the Internet for at least ten years.” (*Bill Gates, founder of Microsoft, 1994*)

# Moore's Law



SOURCE: RAY KURZWEIL, "THE SINGULARITY IS NEAR: WHEN HUMANS TRANSCEND BIOLOGY", P.67, THE VIKING PRESS, 2006. DATAPPOINTS BETWEEN 2000 AND 2012 REPRESENT BCA ESTIMATES.

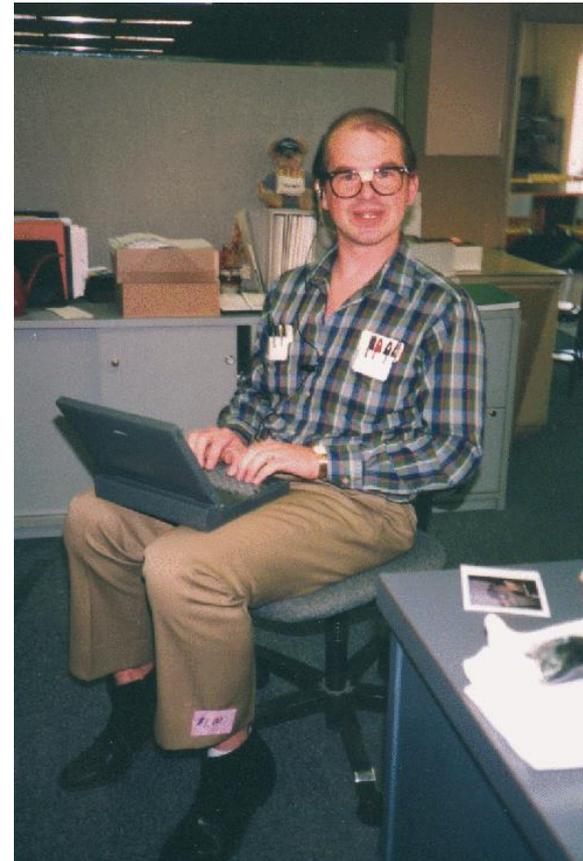
# Mainframe (80's) versus smartphone



# Ease of Use

```
C:\>DIR C:\DOS\M*.EXE
```

# IT and Business: A Problematic Relationship



# Some Geeks



# Get Involved... or accept the consequences

- IT investments not aligned with business strategy
- Prioritisation of IT projects missing
- Lack of standardisation in IT-applications
- No return on IT investments
- 'Blaming & shaming'

# Why should you choose Information Management & Business Intelligence?

- Business today cannot function efficiently and effectively without information systems
- Business today needs efficient and fully automated decision making tools
- There are unlimited possibilities for information systems & data analytics in organisations

# Information Management vs Computer Science

	IM	CS
Focus	Organisation	Software
Objective	More efficient or effective business	Reliable computer program
Core Task	Determine business requirements for information systems	Deliver information systems to meet defined requirements
Theoretical vs. Applied	Balanced	Applied
Typical Starting Job Title	Business Systems Analyst	Application Programmer
University Home	Business Schools	Science College, Technical Universities

# From information to business solutions

- Internet & Clouds
- ERP/MRP
- Review systems
- Social & professional networks

Distilled information



Business Intelligence



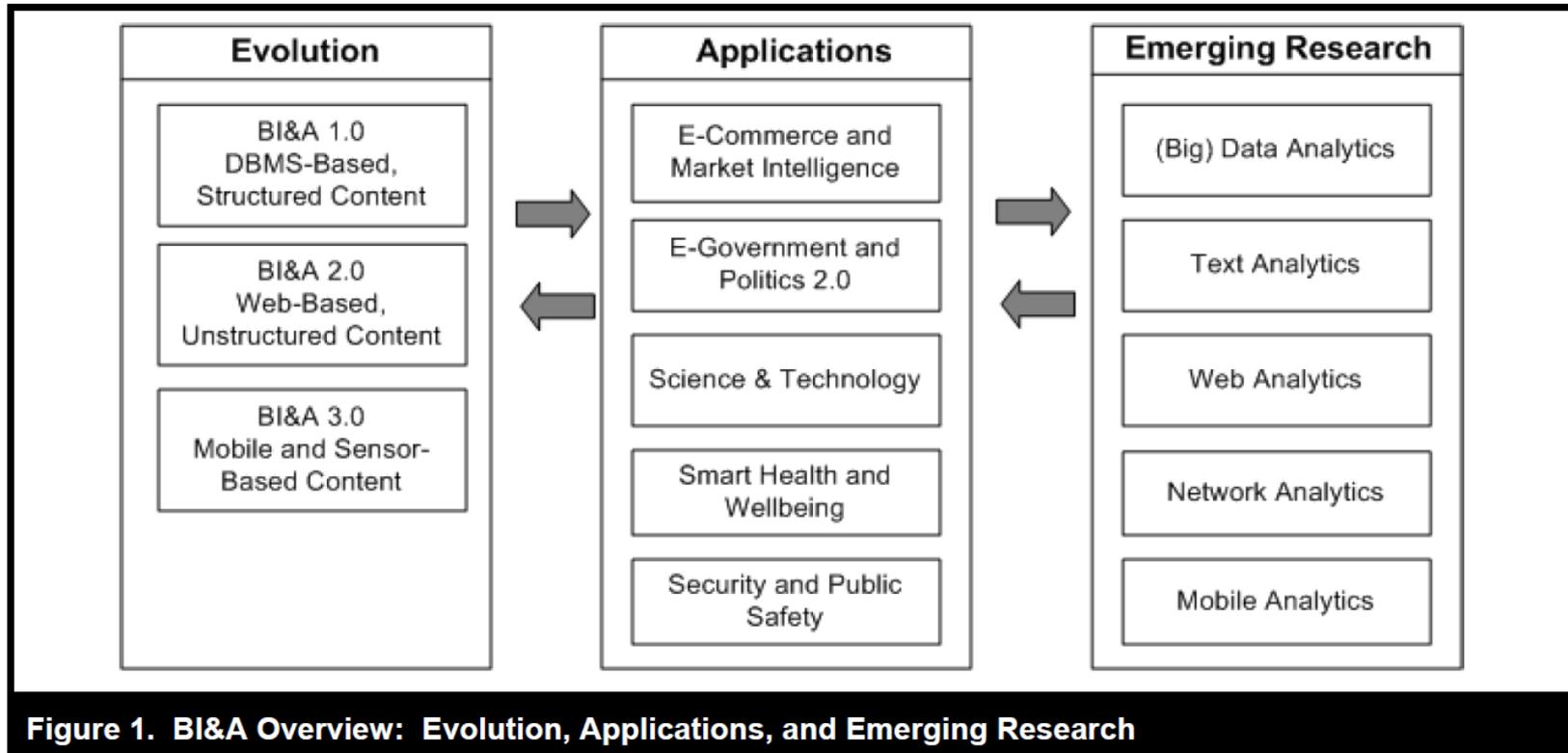
Business solution



# Information Management

- The Cost of IT: Managing an IT Budget
- The Value of IT: How to Measure It?
- Setting Investment Priorities
  - Innovation: Emerging Technologies (e.g. internet of things, cloud computing, gamification)
- Project management
  - Change management issues
  - The Runaway Project
- Vendor Partnering (e.g. cloud computing, outsourcing)
- Managing Outsourcing Contracts
- Managing the Applications Portfolio

# & ... Business Intelligence



# What is the specialisation structure? (1)

<i>Block</i>	<i>IB/IMBI</i>	
1	Cases in Management Information Systems	Business Analysis
2	Data Management	Business Intelligence Case Study
3	Skills Training: Writing a Master's Thesis	

# What is the specialisation structure? (2)

<i>Block</i>	<i>IB/IMBI</i>	
4	IT Project Management	Writing the Master's Thesis
5	Managing ICT in a Global Environment	
6	Completing the Master's Thesis	

NB. The details of this specialisation could change; before applying, please check [www.maastrichtuniversity.nl/sbe](http://www.maastrichtuniversity.nl/sbe) for the latest information.

# Cases in Management Information Systems

- Discuss how businesses can use information systems to improve their performance
- Use company cases and academic literature

*Block*

*IB/IMBI*

1

Cases in Management  
Information Systems

# Business Analysis

- Learn modern forecasting techniques and the basics of time series analysis
- Learn how to turn a business problems into a mathematical model and how to solve the model using available software

<i>Block</i>	<i>IB/IMBI</i>	
1		Business Analysis

# Data Management

- Data Modelling and SQL
- Relational databases (first part of the course)
- New developments (e.g. Hadoop, MapReduce, second half of the course)
- Gain hands-on skills plus theoretical background

*Block*

*IB/IMBI*

2

Data Management

# Business Intelligence Case Study

- Learn how to tackle real-life business problems, e.g.,
  - Capacity planning in a hospital
  - Implementing quality control in a hotel
  - Customer segmentation at a bank
  - etc

*Block*

*IB/IMBI*

2

Business Intelligence  
Case Study

# Writing a Master's Thesis

- Understand the basic requirements of a master's thesis
- Develop a high quality research proposal for a master's thesis
- Apply for thesis supervision

*Block*

*IB/IMBI*

3

Skills Training:  
Writing a Master's Thesis

# IT Project Management

- Learn all aspects of managing IT projects
- Integral to every IT related job

*Block*

*IB/IMBI*

4

IT Project  
Management

# Managing ICT in a Global Environment

- Prepares for a globalised IT world
- Global outsourcing
- Cross-cultural issues in IS
- Coordination and control of international IT operations

*Block*

*IB/IMBI*

5

Managing ICT in a  
Global Environment

# Master's Thesis

- In-depth study of an IM/BI problem
  - Academic relevance
  - Managerial relevance
  - Case study/internship possibilities
- Scientific study

<i>Block</i>	<i>IB/IMBI</i>	
4		Writing the Master's Thesis
5		
6	Completing the Master's Thesis	

# Is IB/IMBI right for you?

- Have an affinity for quantitative reasoning, IT and its potential for organisations
- Be able to think in a logical and structured way
- Have the desire to study and work in an international environment
- Programming / technical / sophisticated mathematical skills are not necessary

# Job Prospects are Excellent

- Typical starting positions of IM students
  - IT Consultant (e.g. Accenture, IBM Consulting, PwC)
  - Data analyst (e.g. Henkel)
  - Systems Analyst (e.g. Shell, ING Bank, Cisco Systems)
  - Project Manager (e.g. ABN AMRO)
  - IT vendors (e.g. SAP, Google)
  - Startup (e.g. SpamExperts, i2 Solutions)
- Further down the career path
  - Manager of the IT function in an organisation
  - Chief Information (Knowledge) Officer

# Further questions?

[www.maastrichtuniversity.nl/sbe](http://www.maastrichtuniversity.nl/sbe)

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