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Higher education's digital moment?

The prospects for 'disruptive' change

SROC

15 April 2014

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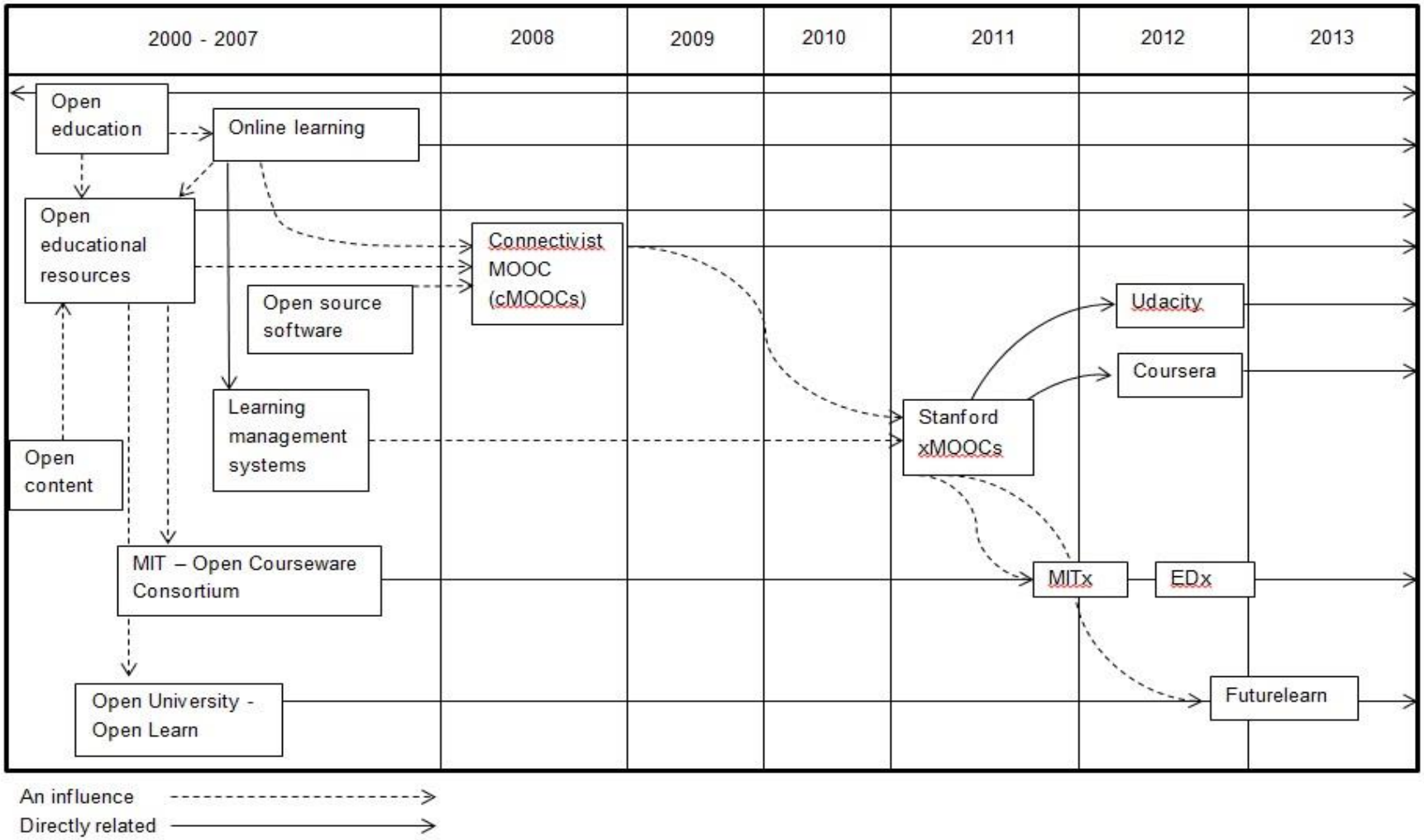
Just what is a MOOC?

Massive →	Scalable broadcast and peer learning pedagogy
Open →	Open registration, free content and flexible participation
Online →	Proprietary LMS or variety of free tools and resources
Courses →	Short modules across different subjects and levels

A MOOC big bang?



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Different pedagogical models

edX coursera

COURSEsites EDUCATE. ENGAGE. FREE.

course-builder Course Builder

YouTube

WordPress

Google+ Hangouts!

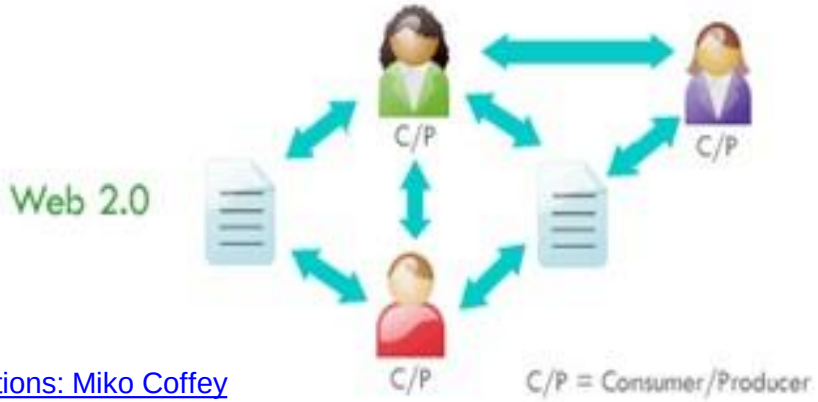
twitter

Pinterest

SOUNDCLOUD

Broadcast xMOOC

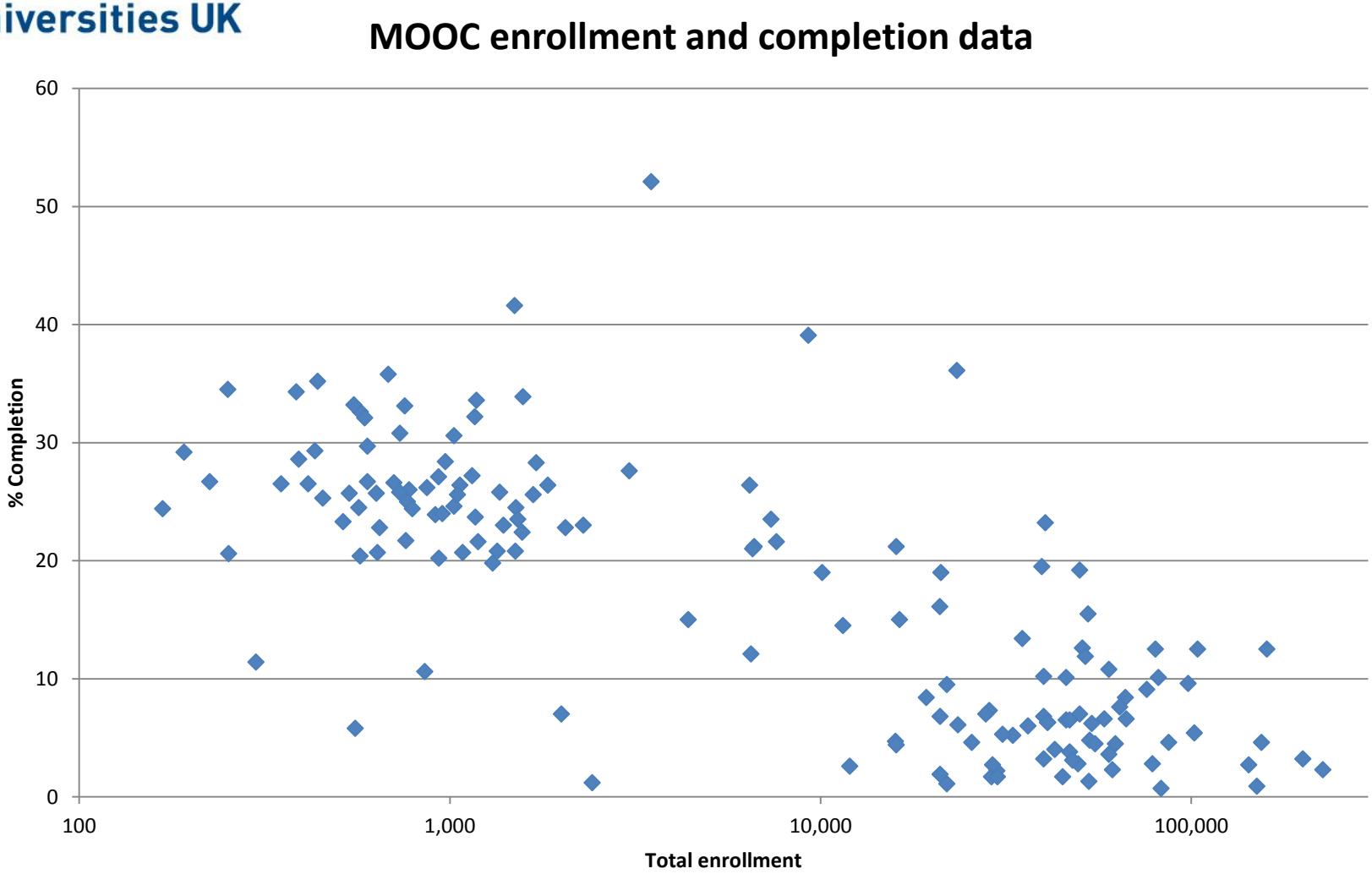
Connectivist cMOOC



Illustrations: Miko Coffey

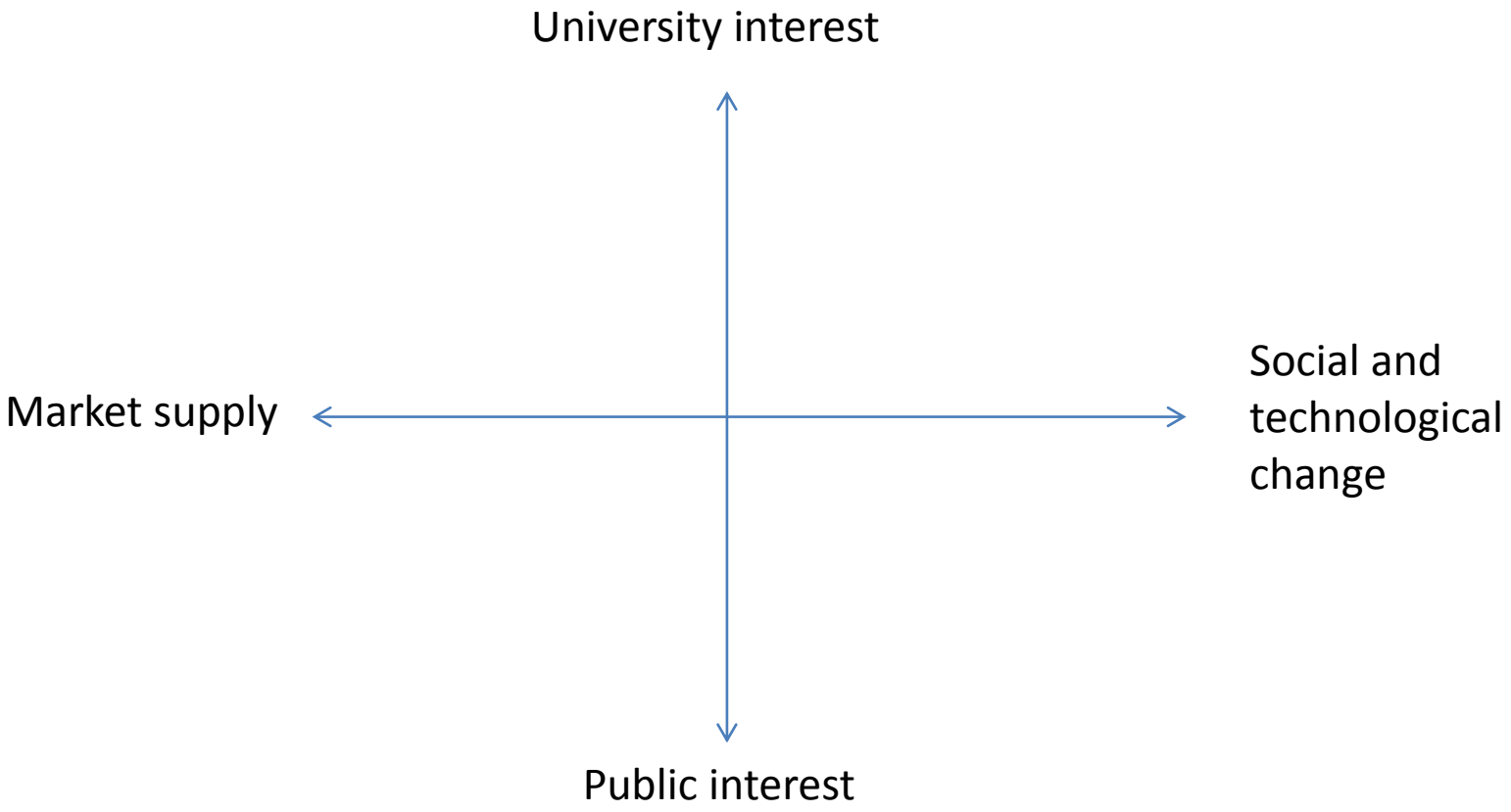
creative commons

How big is massive?



Data source (April 2014): http://www.katyjordan.com/MOOCproject.html

Analysing drivers of change



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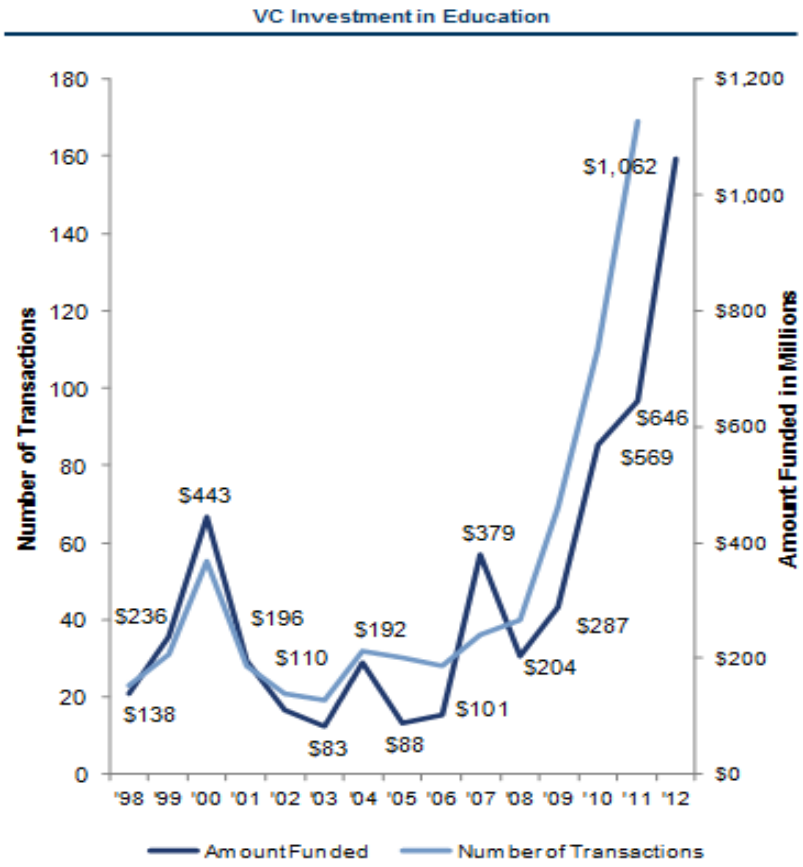
Supply side expansion

VC	Investment	Date	Category
greylockpartners.	creativeLIVE	2012	Online Higher Education
INSIGHT VENTURE PARTNERS	Udemy	2012	Online Higher Education
Jeff Bezos, Tony Hsieh	GA	2012	Post-Secondary
ANDREESSEN HOROWITZ	U UDACITY	2012	Online Higher Education
SEQUOIA CAPITAL	MIND SNACKS	2012	Smart Games
BENCHMARK CAPITAL	THE MINERVA PROJECT	2012	Online Higher Education
NEA.	EverFi	2012	Supplemental Online Education
KPCB NEA.	coursera	2012	Online Higher Education
ACCEL PARTNERS	KNEWTON	2011	Adaptive Learning
ANDREESSEN HOROWITZ	Kno	2011	Digital Textbooks
BENCHMARK CAPITAL	Grockit	2011	Social Learning / Smart Games
BESSEMER VENTURE PARTNERS	flatworld KNOWLEDGE	2011	Digital Publishing
SEQUOIA CAPITAL	inkling	2011	Digital Textbooks

Source: Bloomberg, Capital IQ, VentureSource and GS extrapolations



Courtesy of Goldman Sachs

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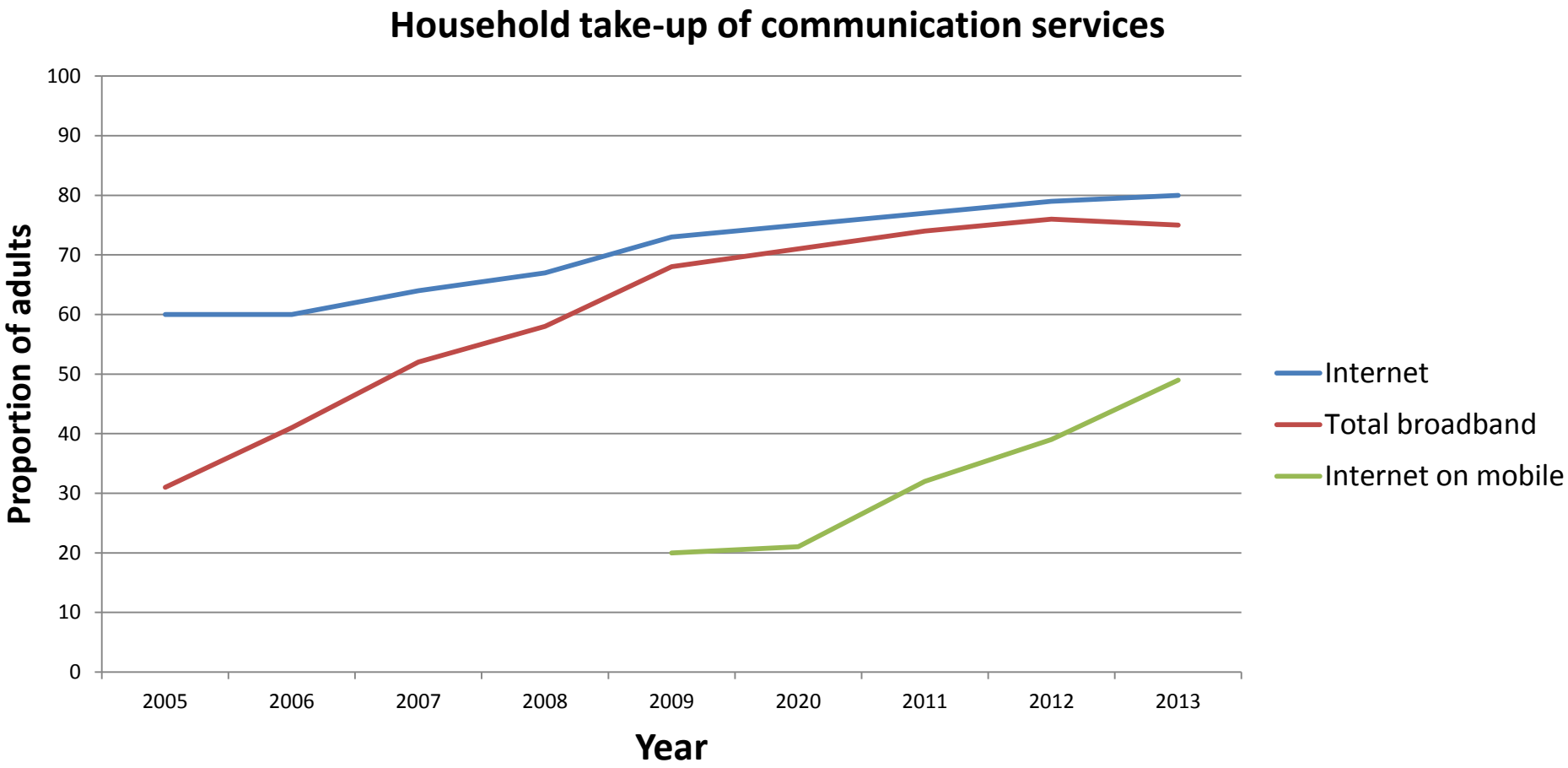
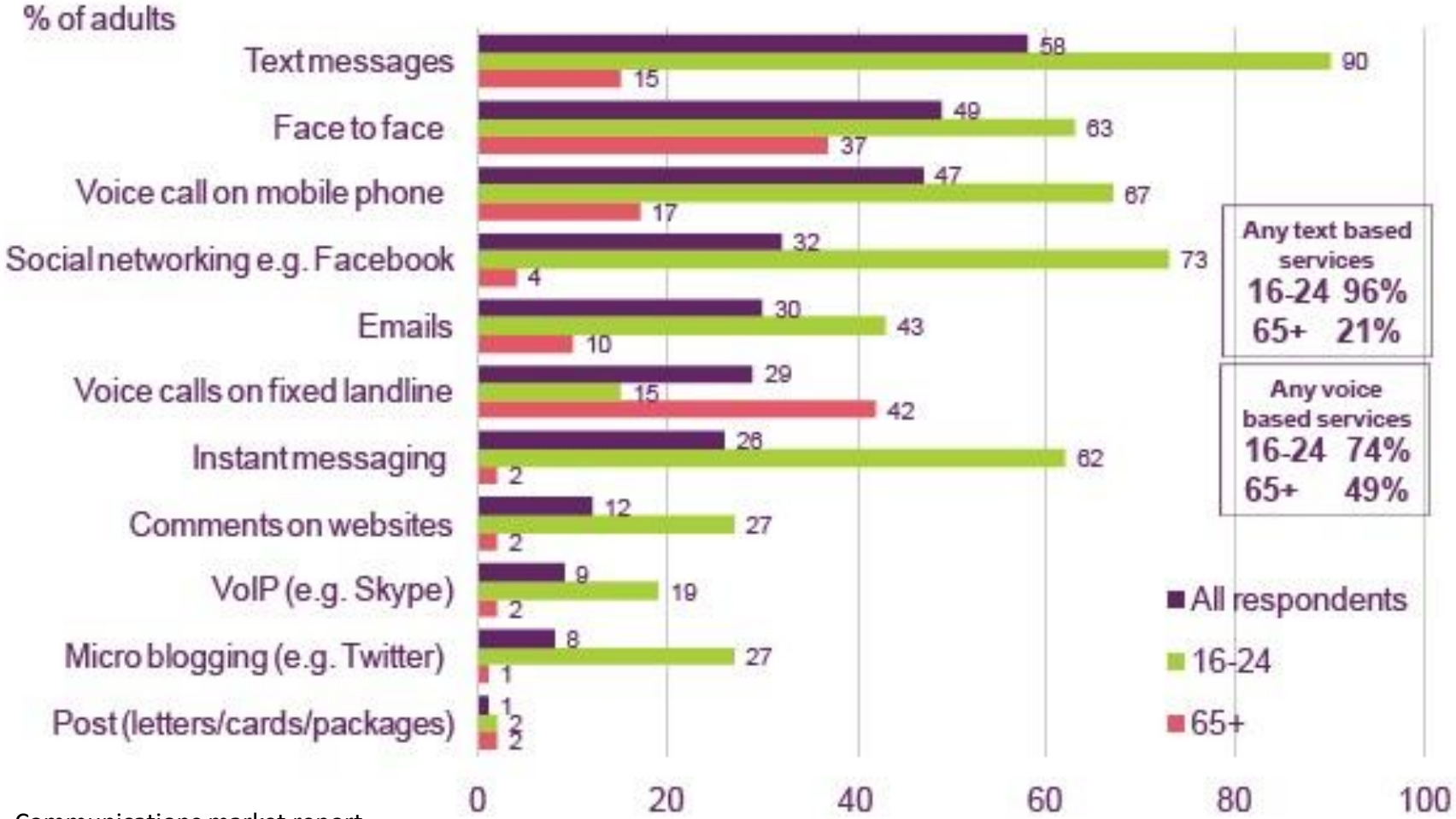
(What happened to the UK e-university?)

Availability of technology



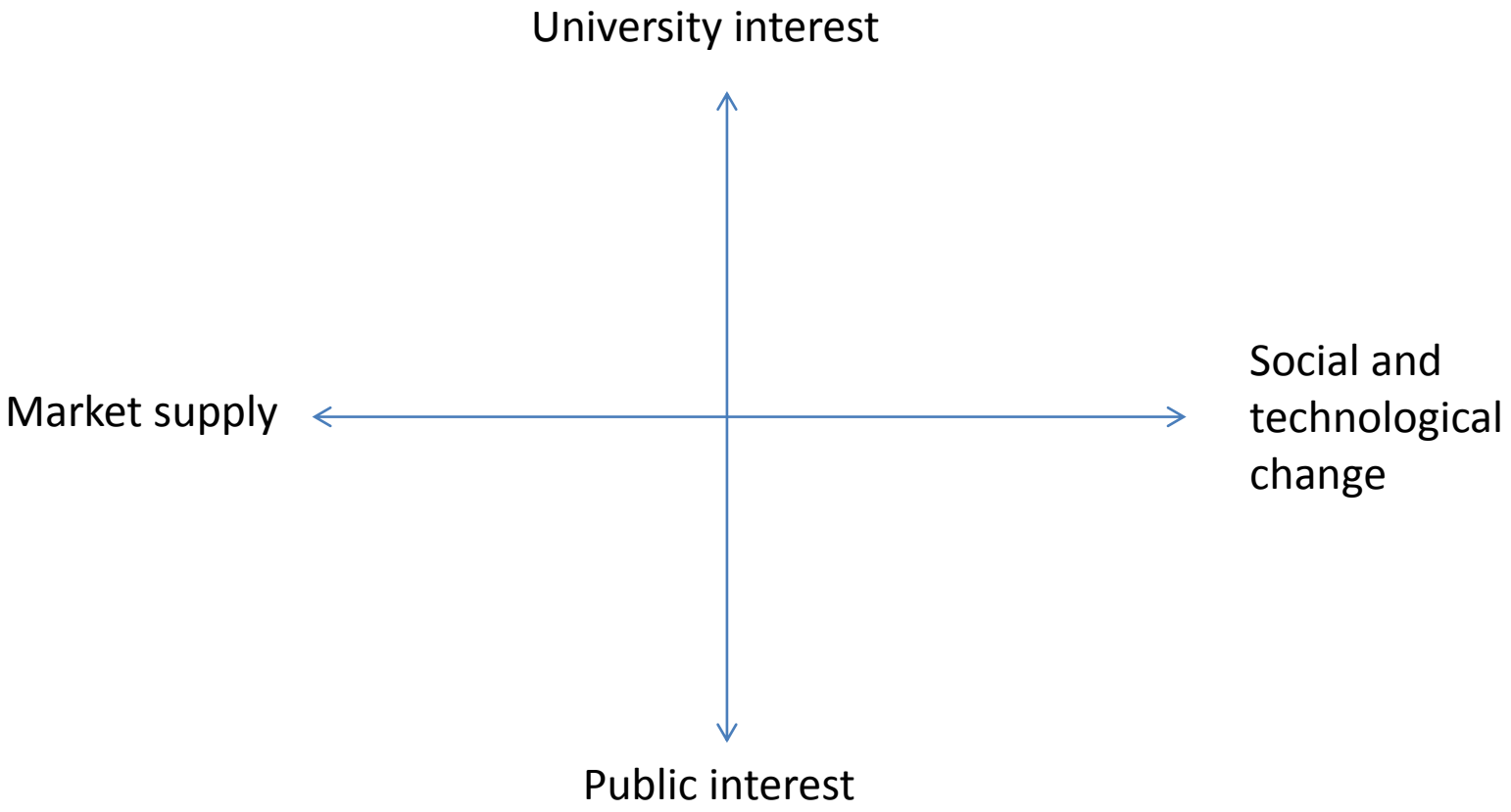
Ofcom communications market report 2012 & 13

Text based communication

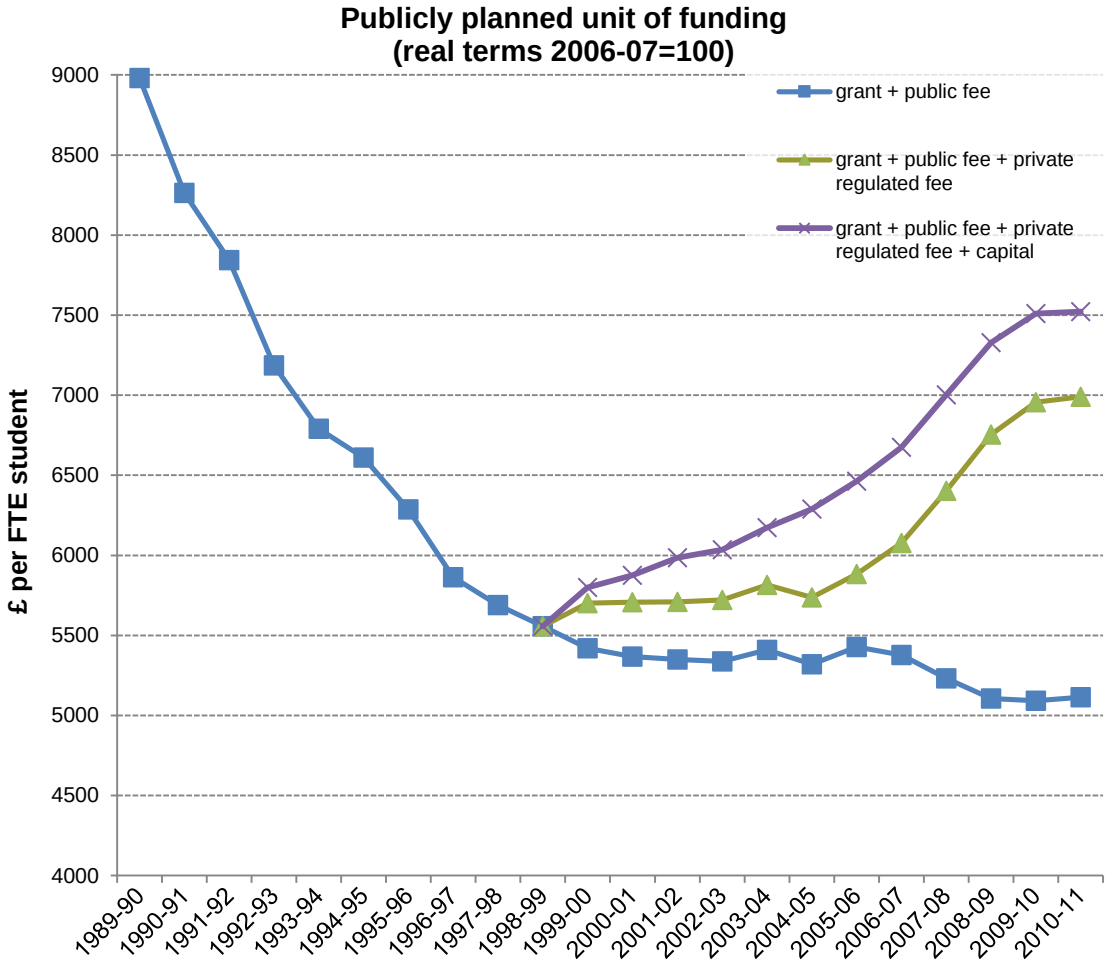


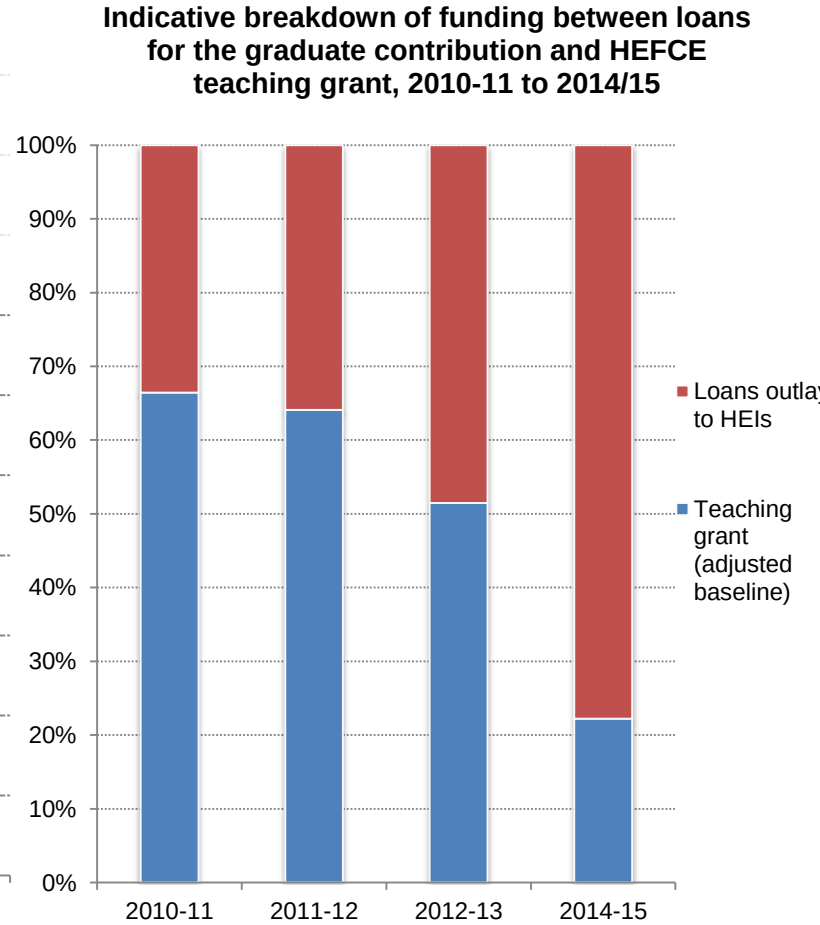
Communications market report 2012 (Ofcom)

Is this a moment?

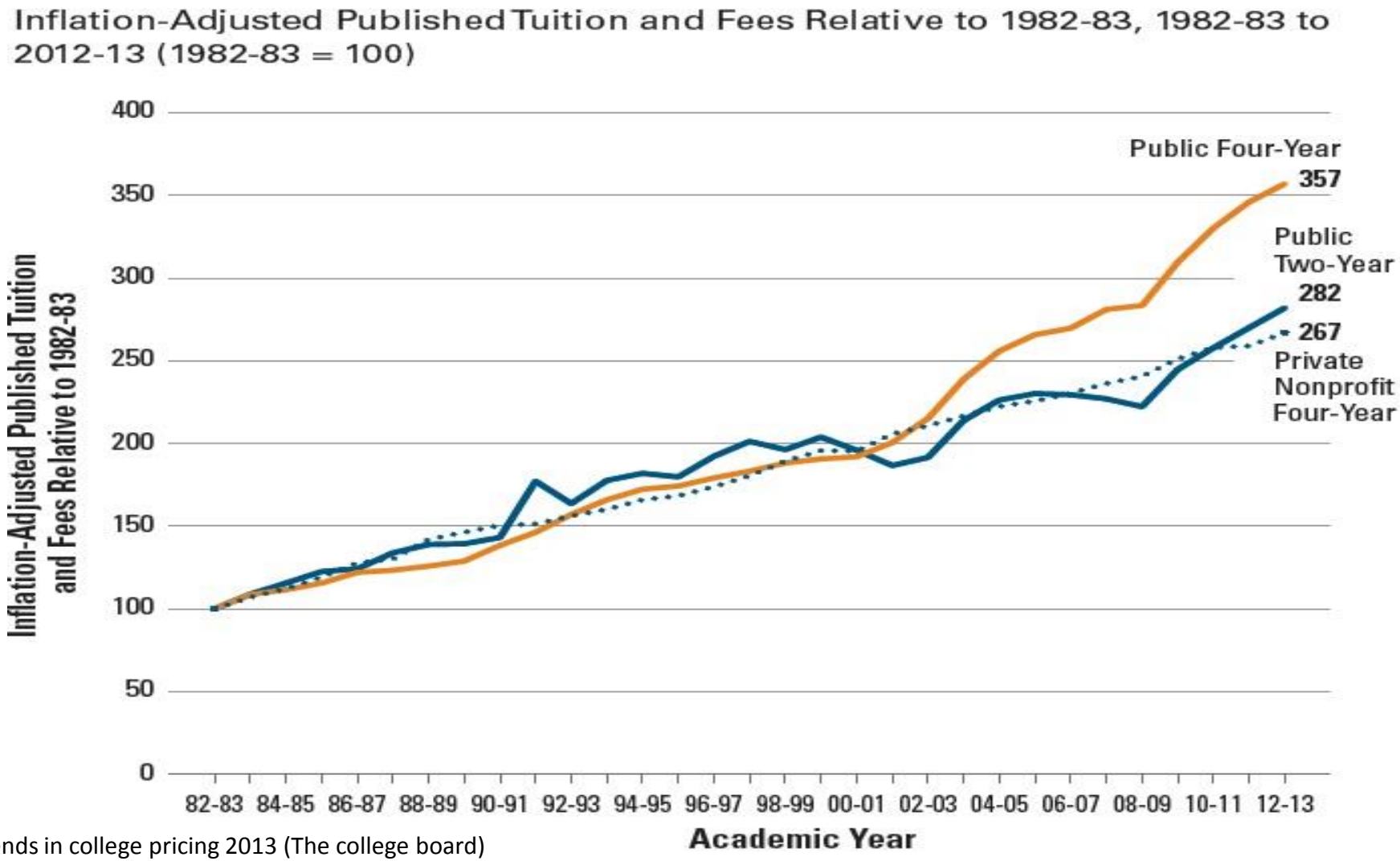


Funding expansion



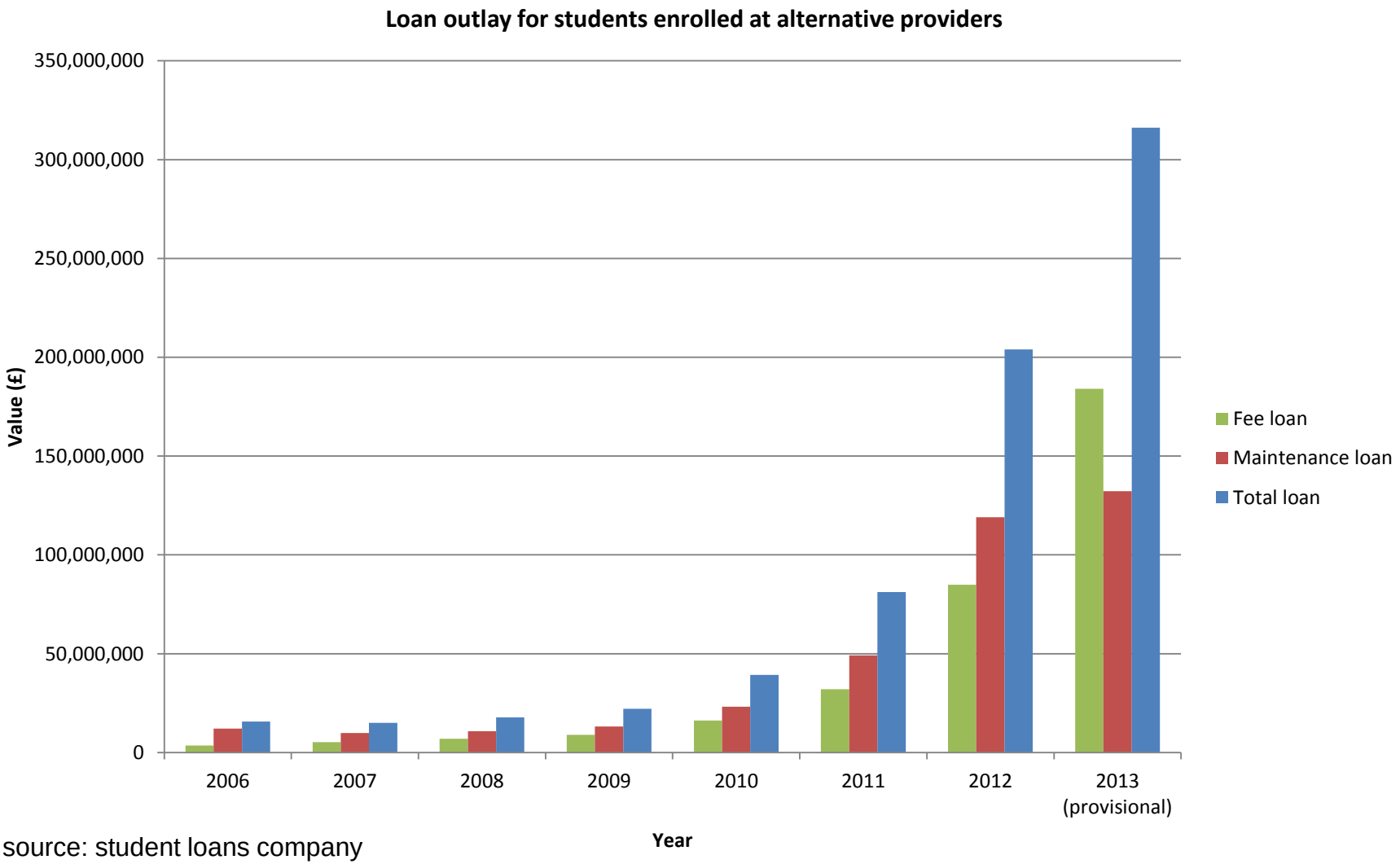


US student credit crunch



Trends in college pricing 2013 (The college board)

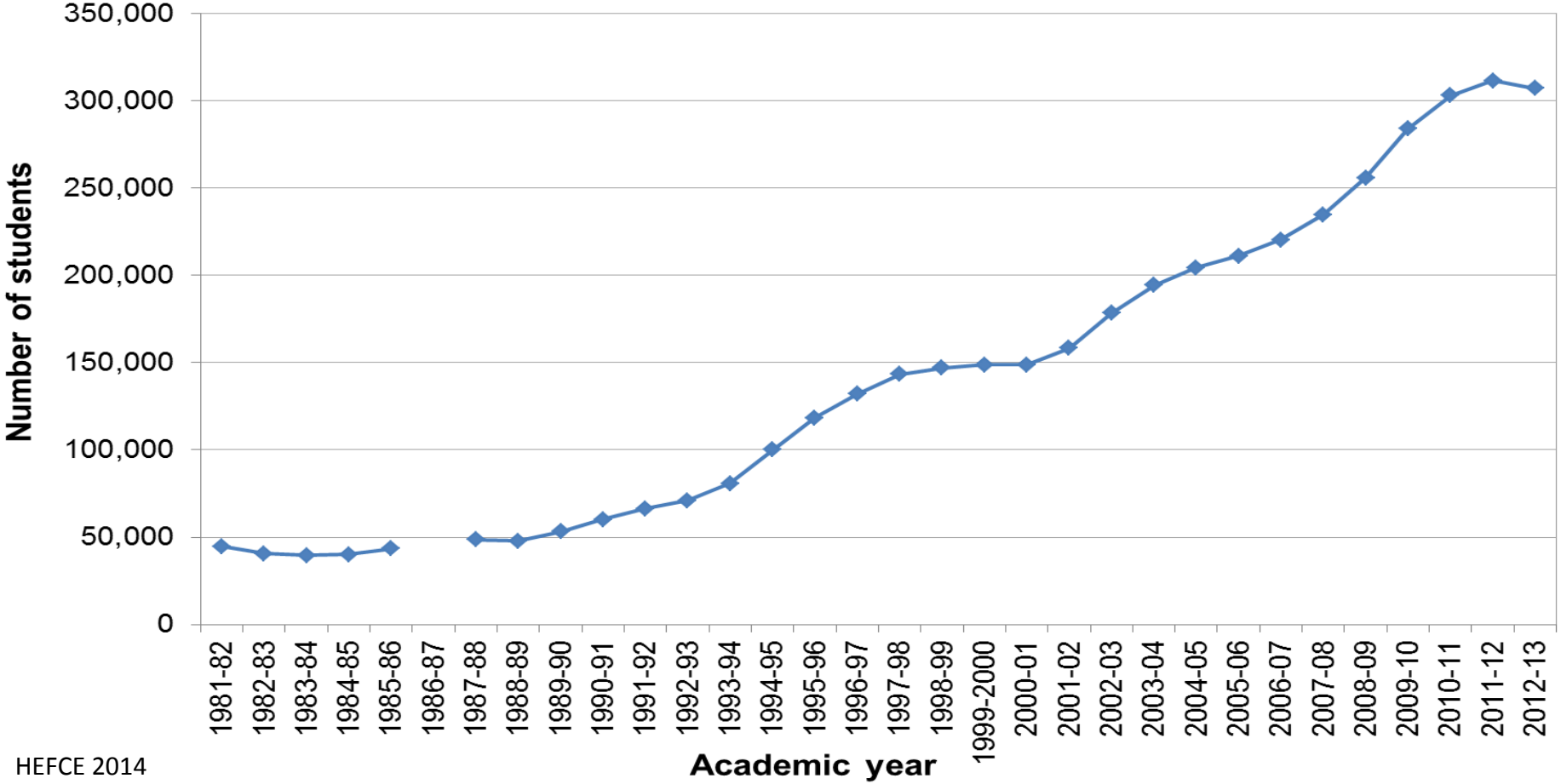
Supply side diversification



Data source: student loans company

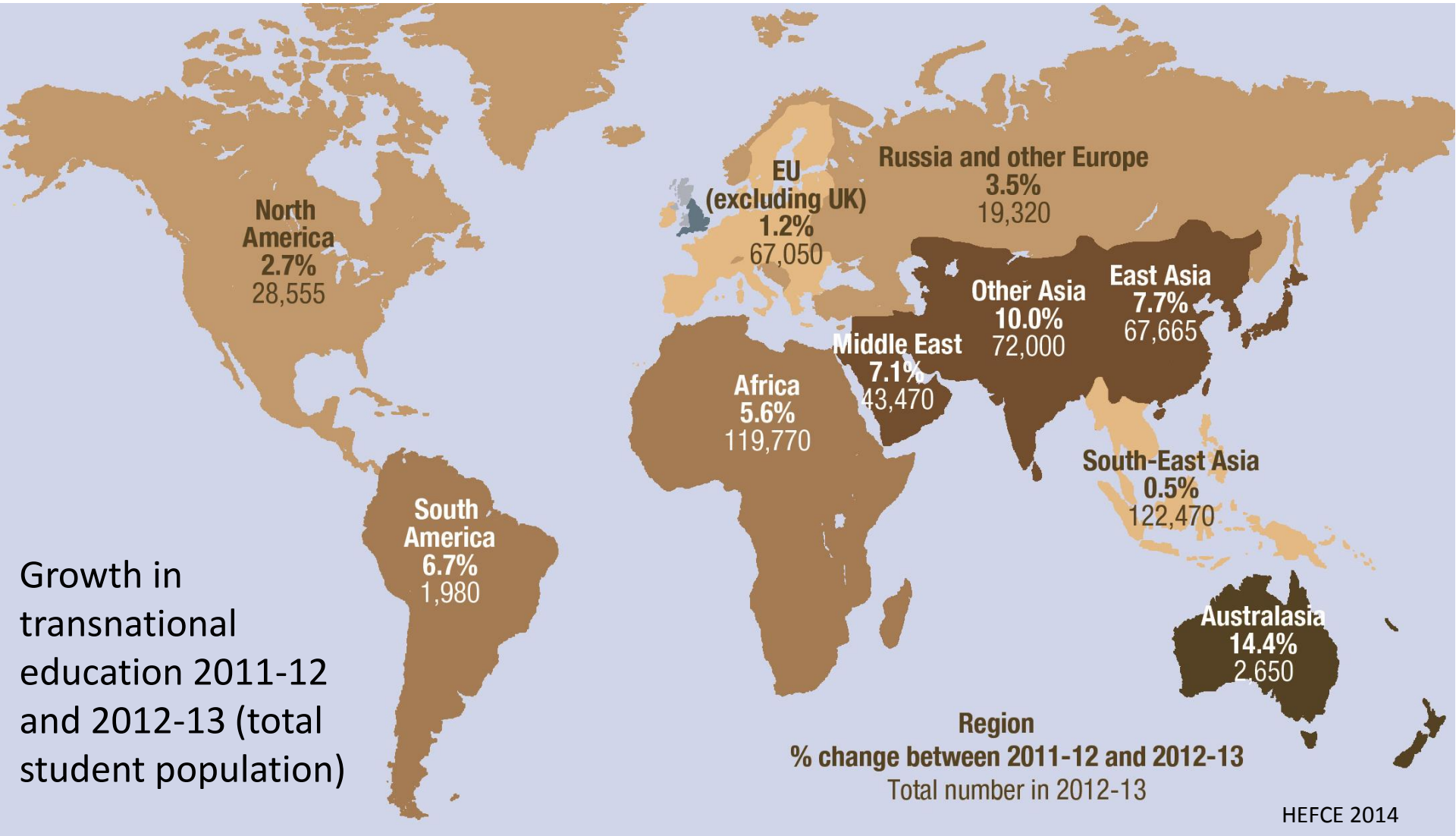
Expanding global demand

International and EU students registered on full-time programmes at English HEIs 1981-82 – 2012-13



HEFCE 2014

Developing domestic systems



Growth in transnational education 2011-12 and 2012-13 (total student population)

HEFCE 2014

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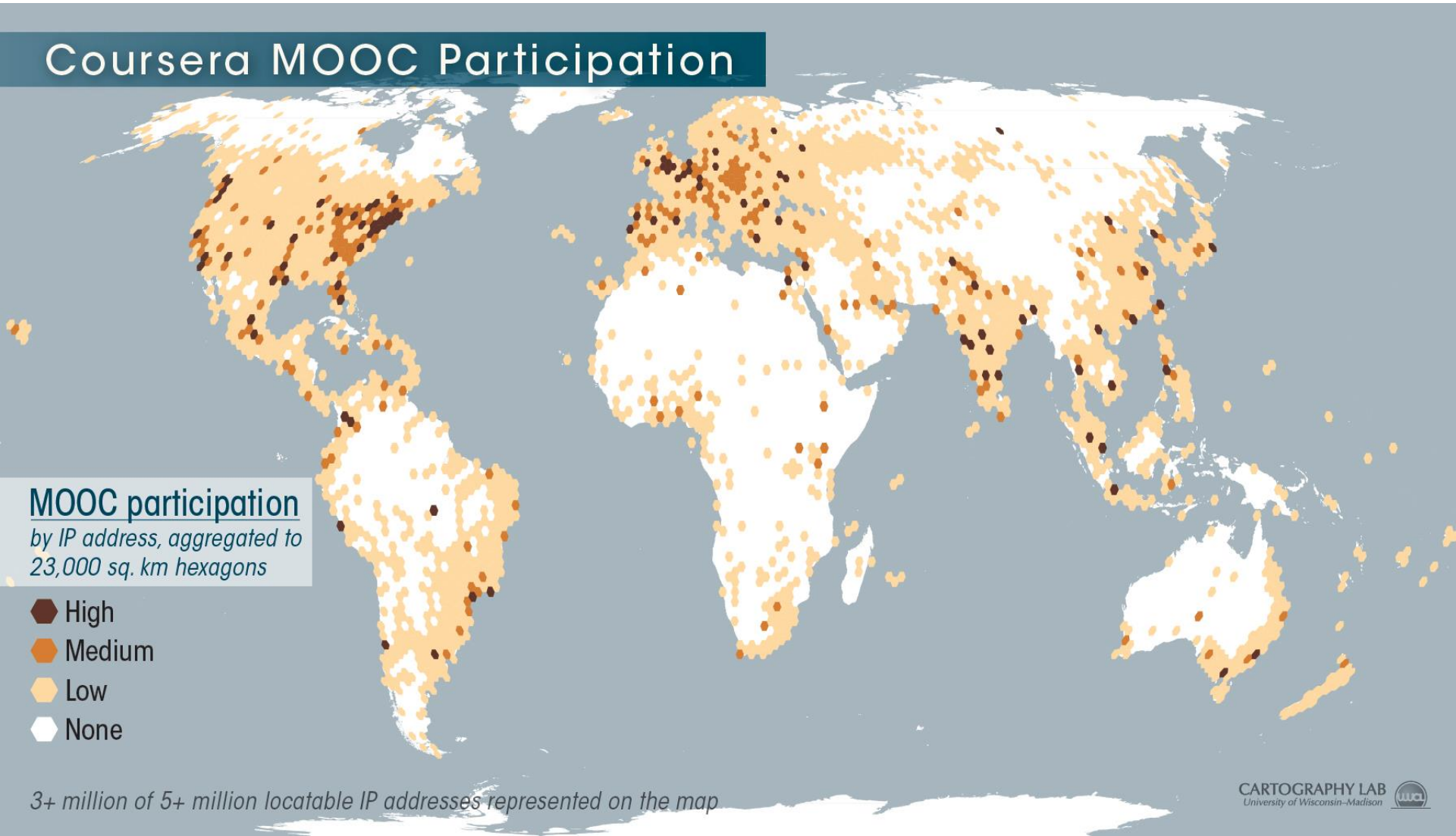
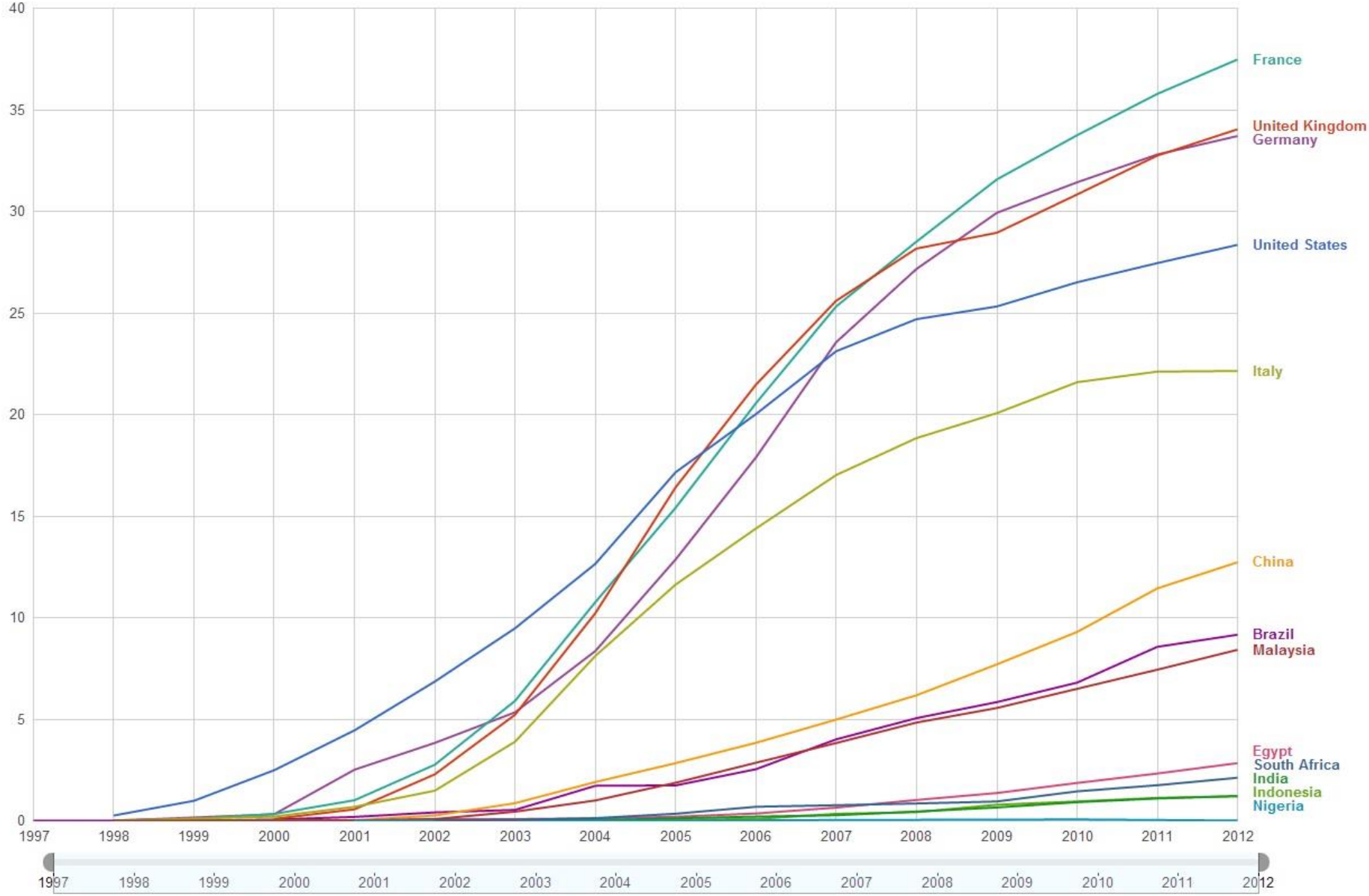
Global reach of online



Fixed (wired)-broadband subscriptions per 100 inhabitants



Data from International Telecommunication Union Last updated: Dec 13, 2013

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Shift to knowledge economies

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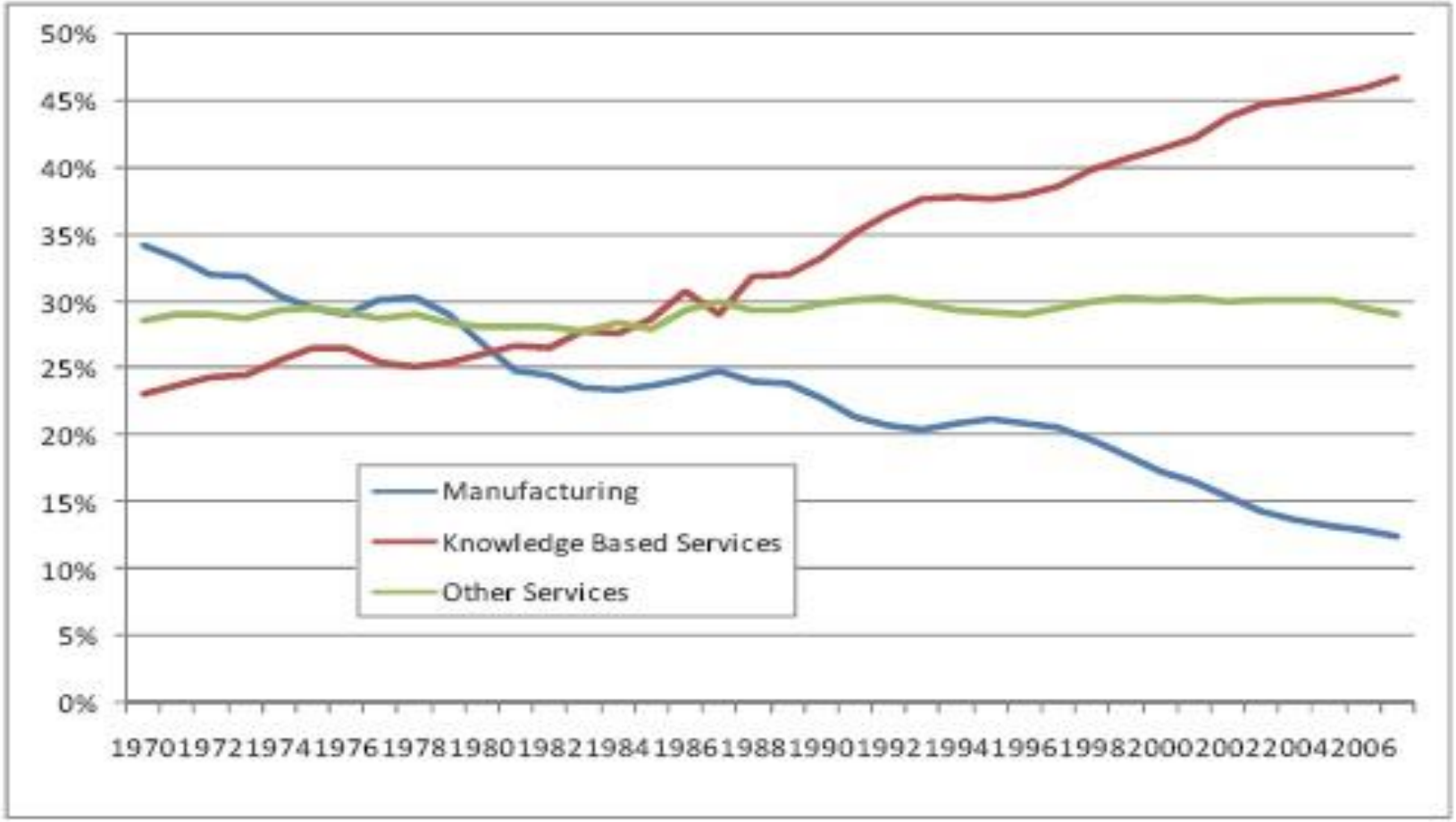
Economy restructures towards knowledge-based services (GVA, 1970-2007)



Work Foundation: A plan for growth in the knowledge economy (2011)

Source: EU KLEMS Database

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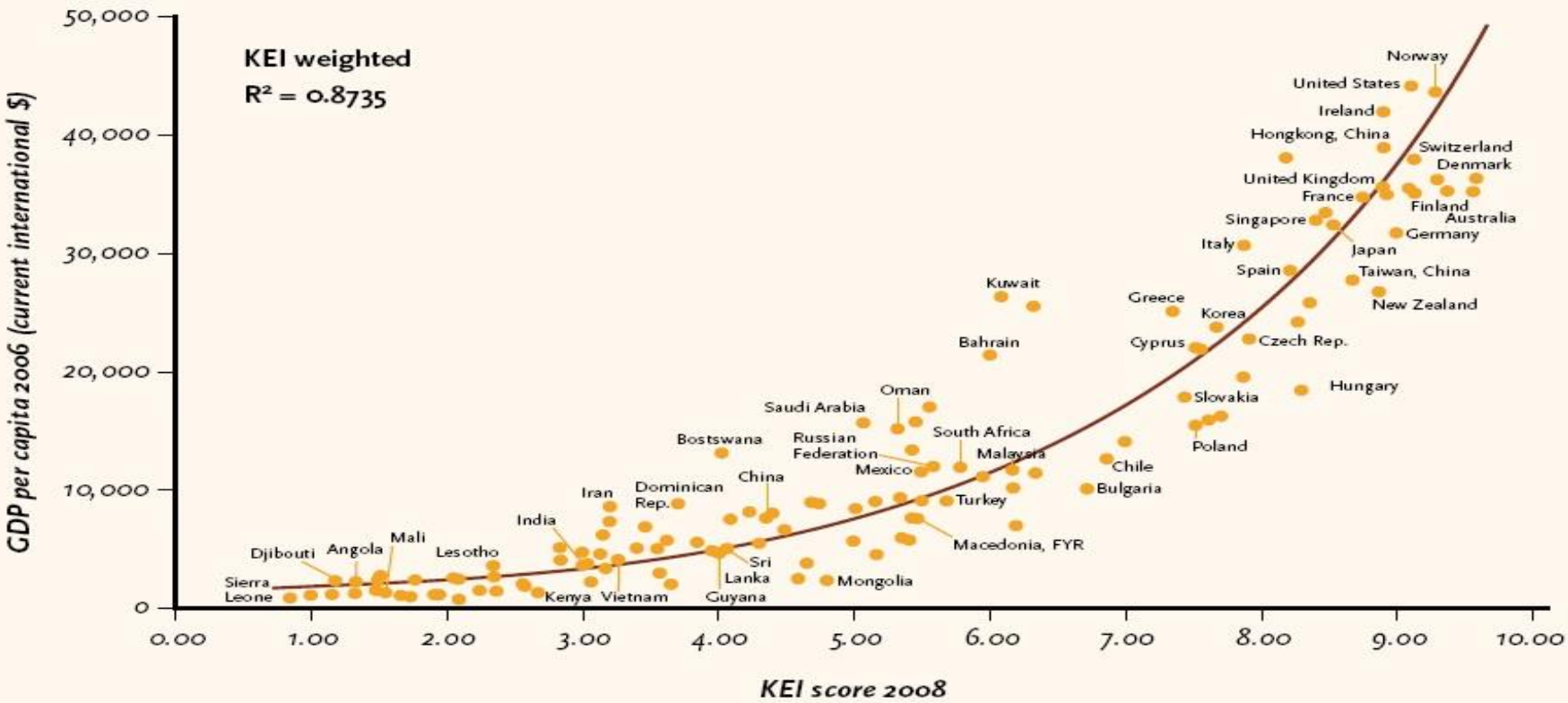
Global knowledge economies

Figure 4. The Knowledge Economy and current economic performance



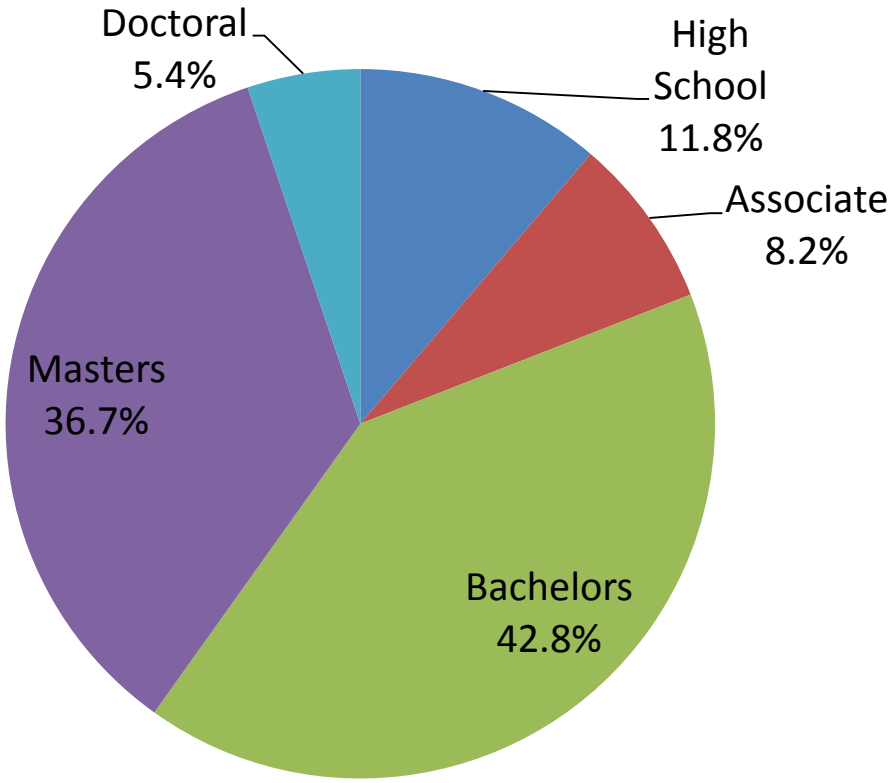
Source: World Bank.

Serving knowledge workers?

Propositional knowledge & flexible delivery

↕

Advanced learners & digitally literate



Coursera 2013: survey data of prior level of education

Post-graduate and CPD market?

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What are the implications?

A new marketing arm for the existing system?

A low cost + scalable model of delivery?

A fundamental transformation of the system?

…or none of the above?

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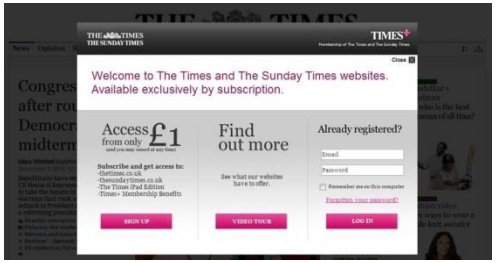
Disruption or evolution?

- Higher education a service rather than substitutable product?
  - Demand – the appeal of institutions
  - Process - developmental and experiential
  - Standards – statutory and professional
  - Content – supported by complex expertise
  - Strategy – proactive and innovative institutions

Digital rights strategy

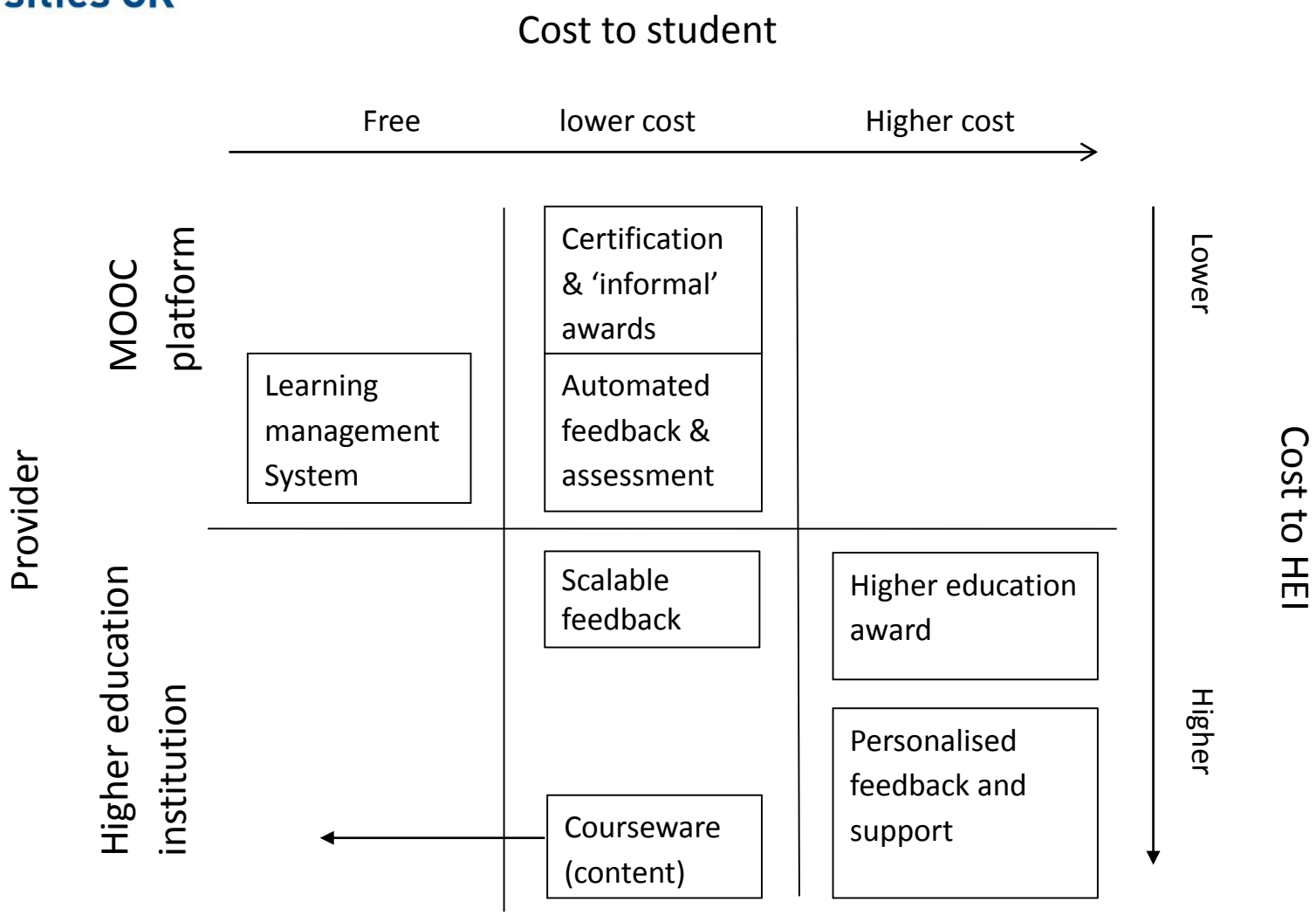
- Resistance

- Blended



- Services

Shifting value chain?

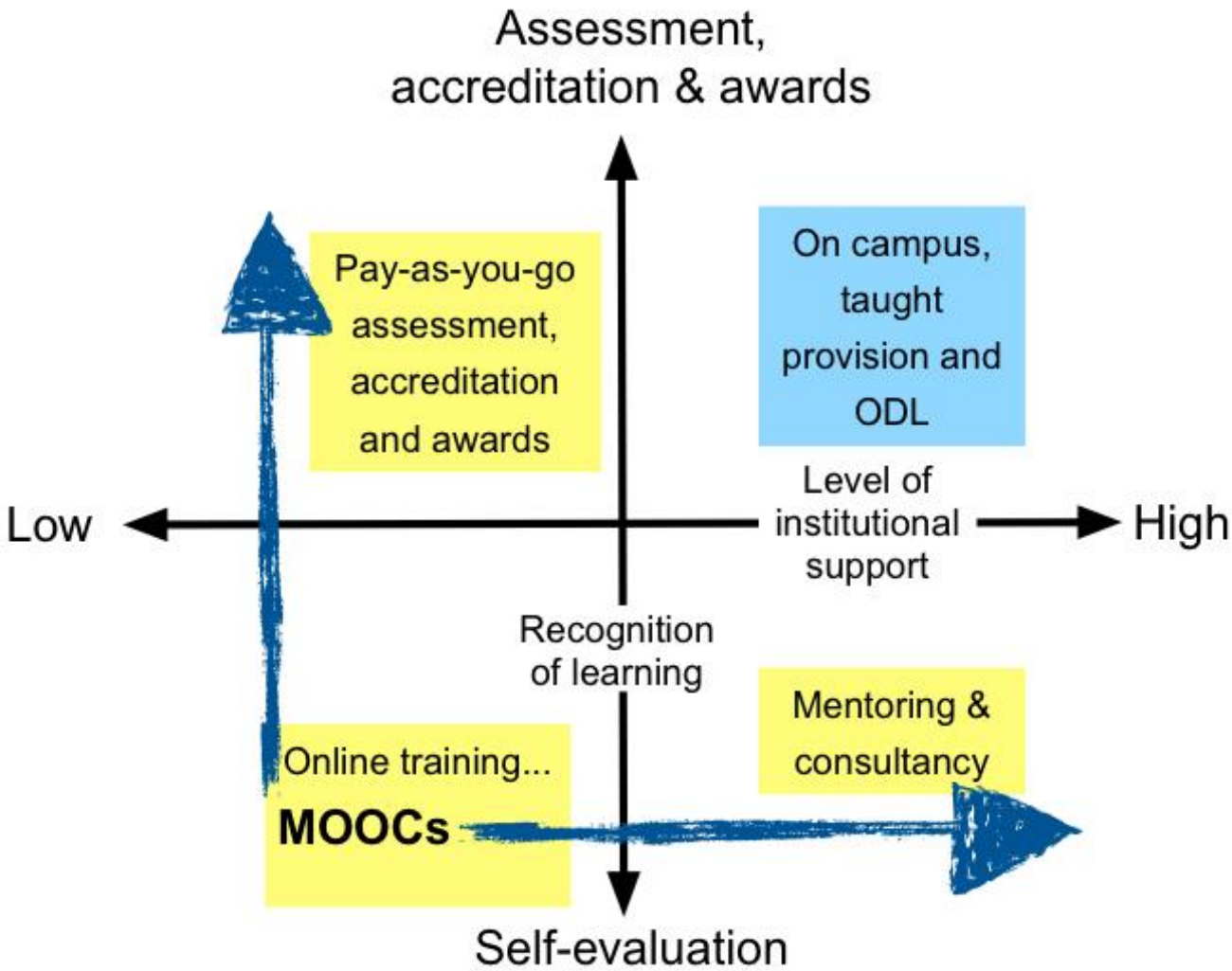


Unbundling credit

- Formal academic awards
  - Validation & accreditation
  - Articulation & transfer
  - Recognition of prior learning

- 'Informal' awards
  - Professional accreditation
  - Certificates
  - Badges

Pick and choose your route…?



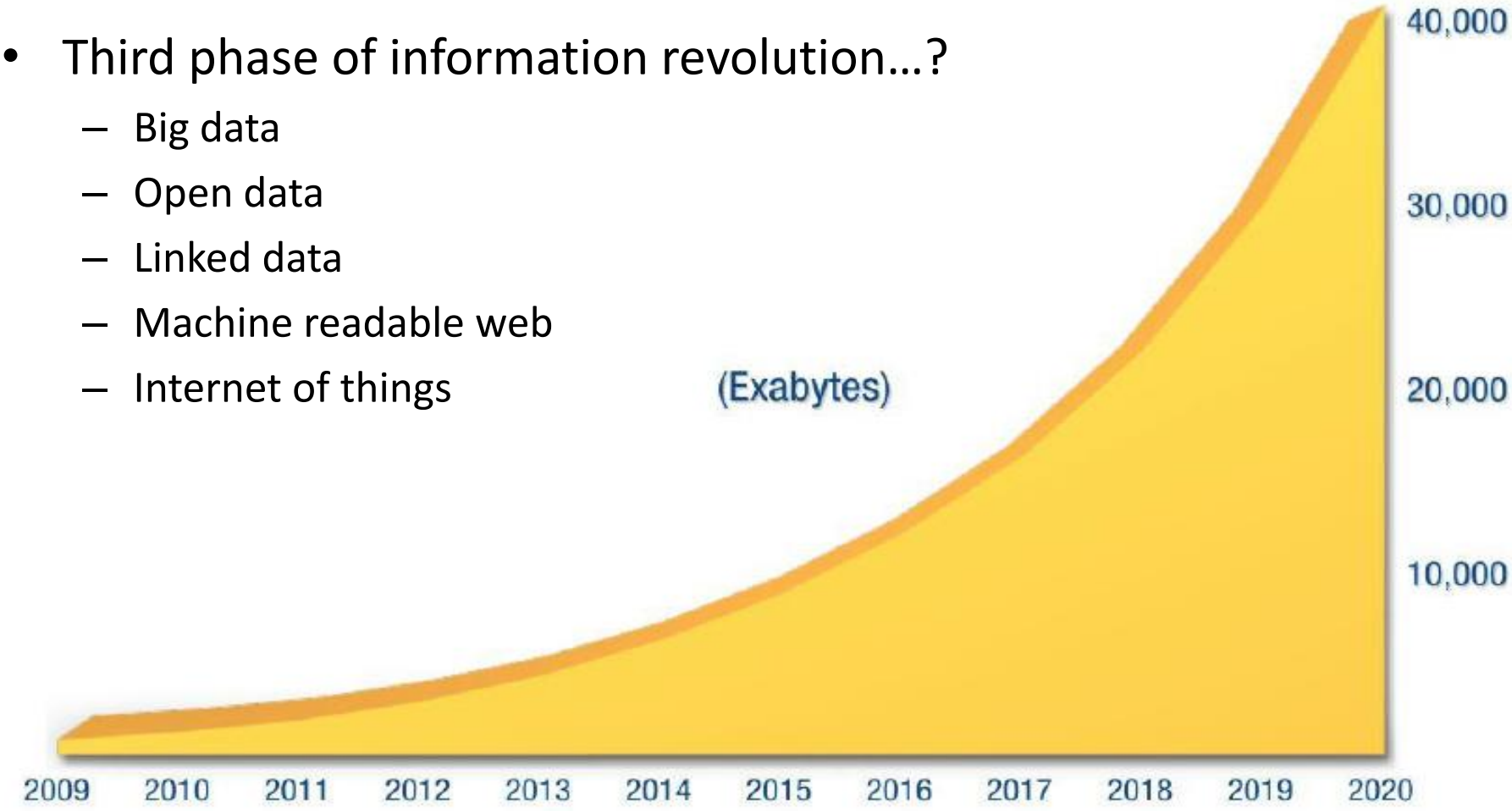
Beyond MOOCs: Sustainable Online Learning in Institutions:
Li Yuan, Stephen Powell and Bill Olivier (Cetis, 2014)

Rethinking the class

- MOOCs as laboratories:
  - How to build peer learning
  - How to design broadcast
  - How to blend across provision
  - MOOCs as courseware
  - Opening the classroom

Creating value from data

- Third phase of information revolution…?
  - Big data
  - Open data
  - Linked data
  - Machine readable web
  - Internet of things



Source: IDC's Digital Universe Study, sponsored by EMC, December 2012

Scalable personalisation

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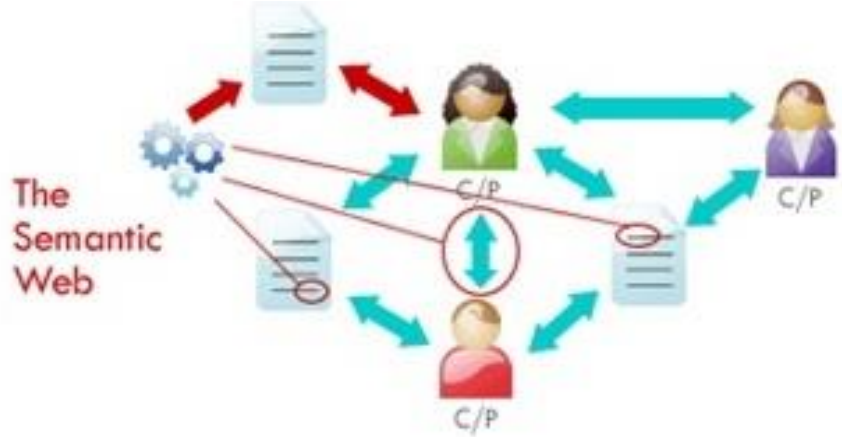
Analytics and big data

KNEWTON

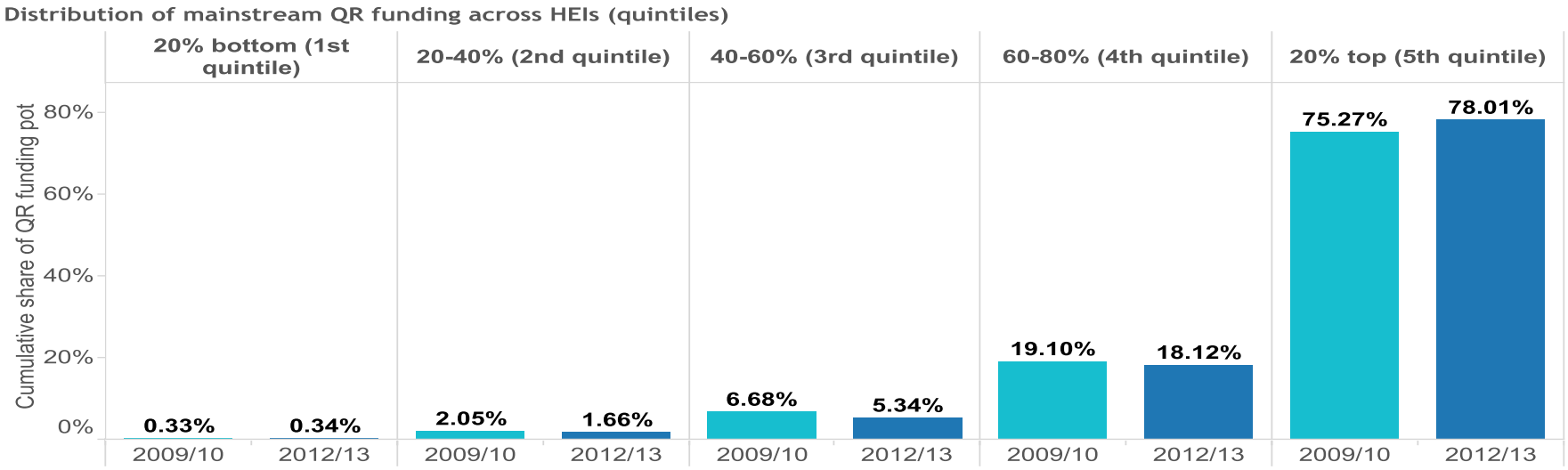
PRISM

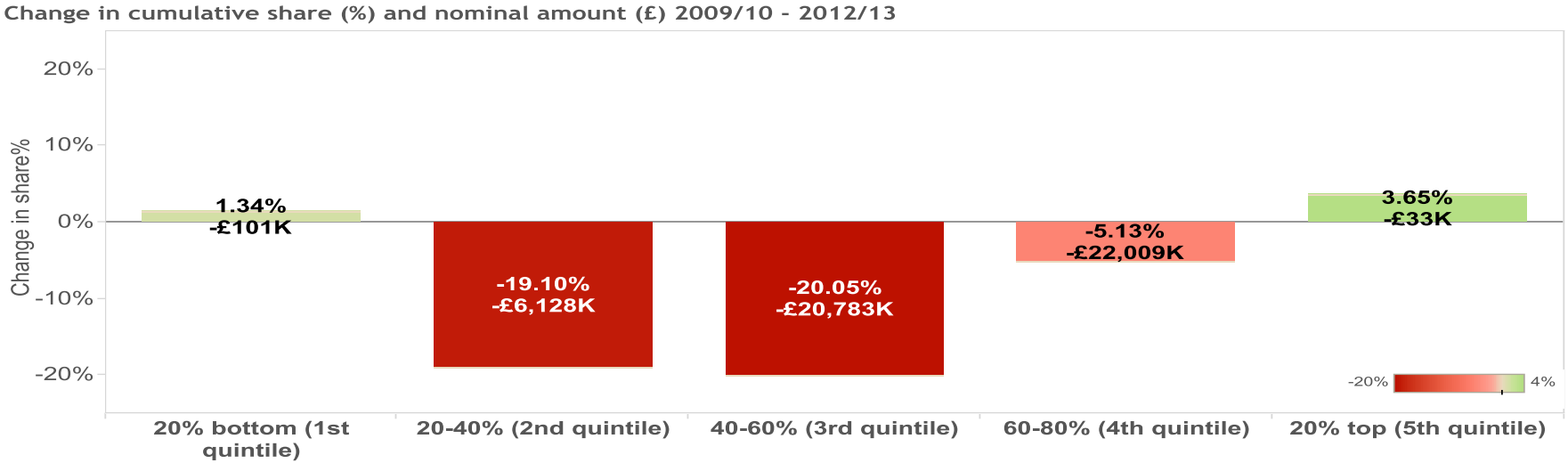
Linked data



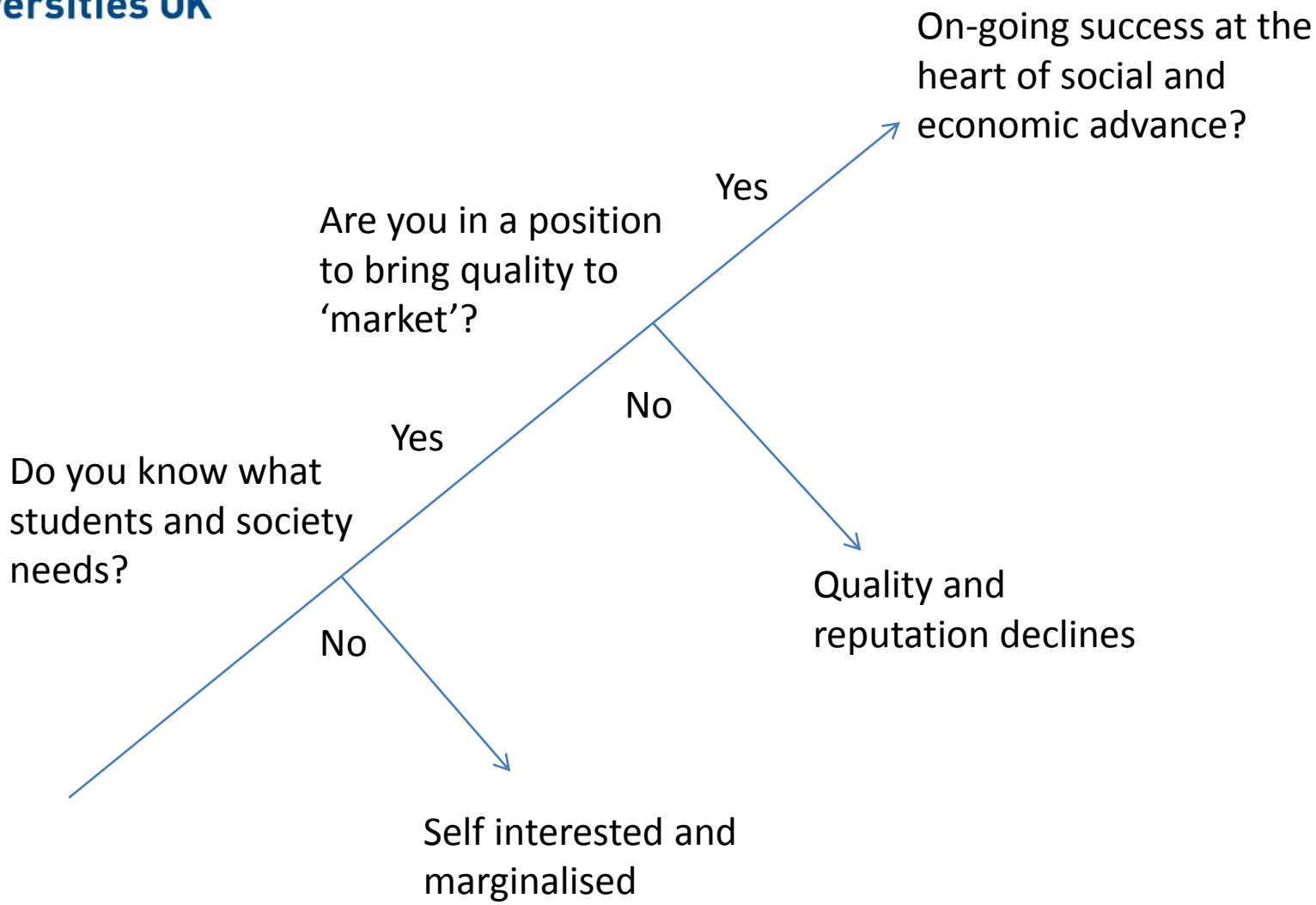
- Course design
- Adaptive learning
- Social network analysis
- Signposting

… ‘content’ is King?

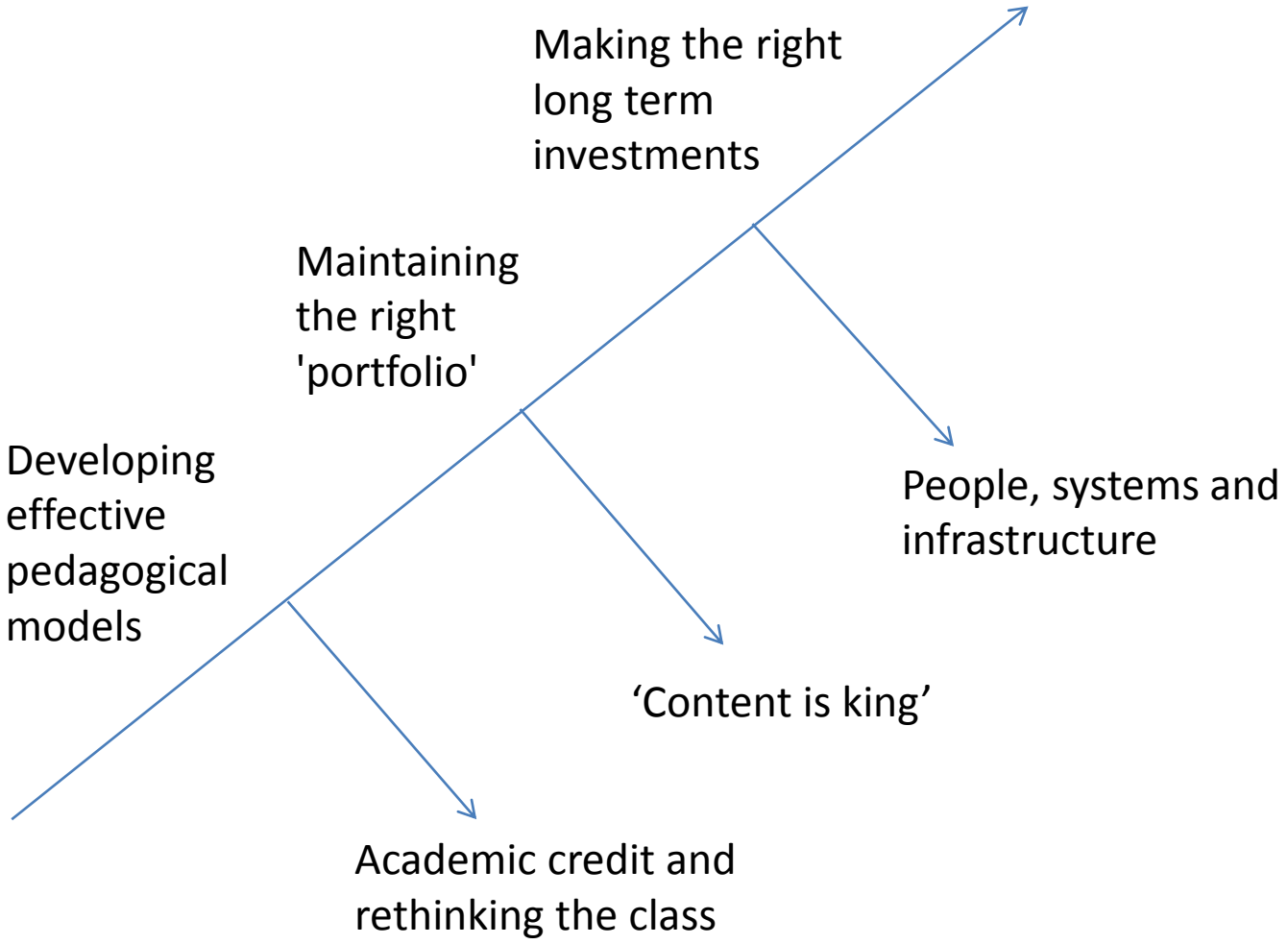




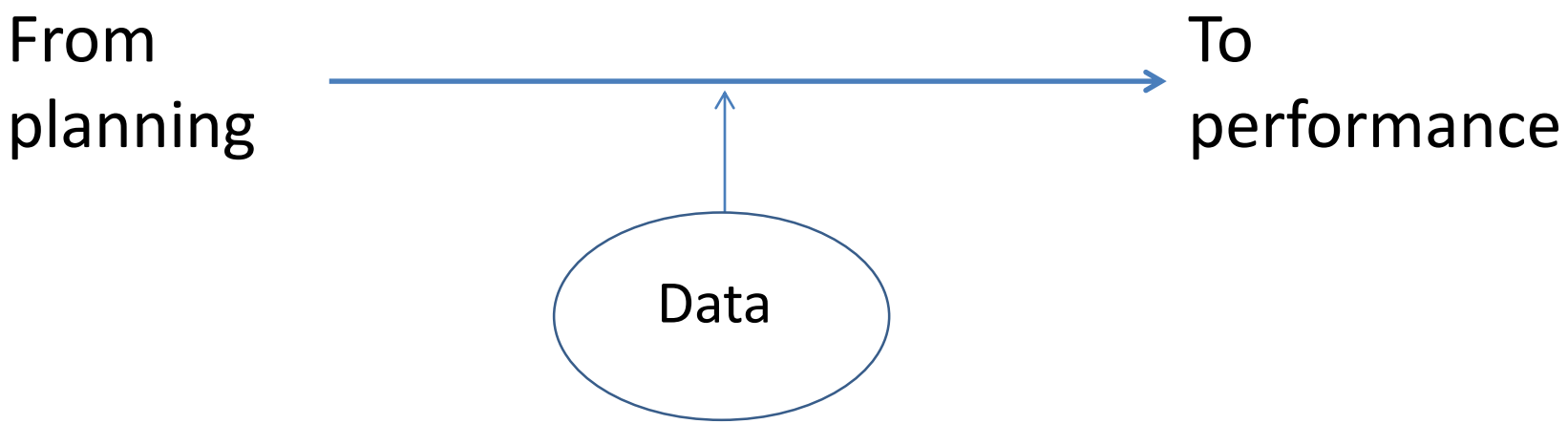
Developing institutional strategy



Bringing knowledge to ‘market’…



…in an increasingly complex operating environment



The real value of data is using it

–

not collecting and owning it

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What are UUK are doing to help?

- Influence the policy environment & support our members:
  - Diamond efficiency programme (2)
  - Sustainable student funding panel
  - Creating value from data
  - Economic value of higher education
  - Immigration
  - Regulation

More information

Massive open online courses: higher education's digital moment (2013)

Futures for higher education: analysing trends (2012)

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