

## Forecasts and figures

# Demand and supply of e-skills and the role of ICT industry training and certification

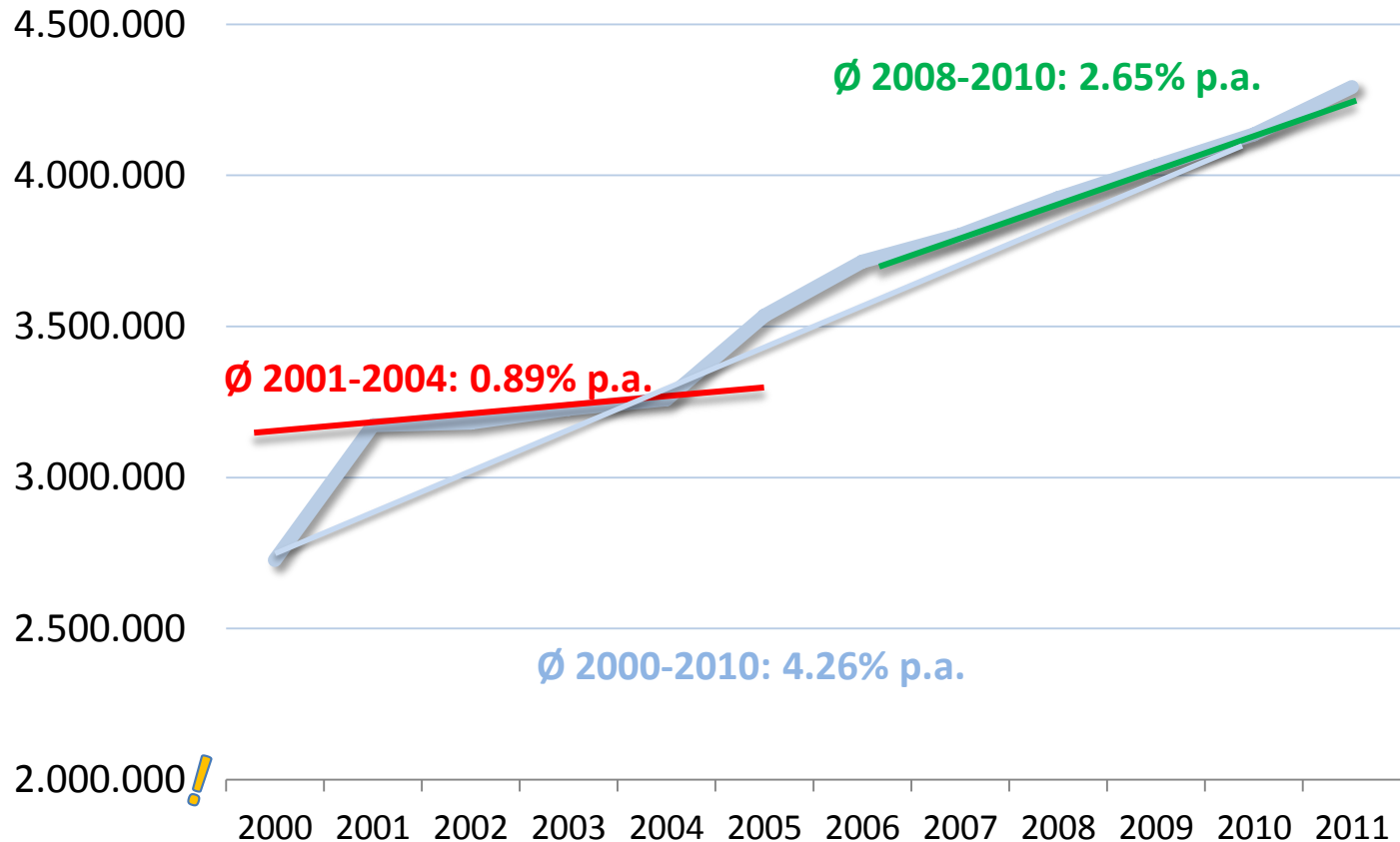
Werner B. Korte and Tobias Hüsing, empirica

European Conference

'Towards a European Quality label for ICT industry training and certifications'

Brussels, 24 January 2013

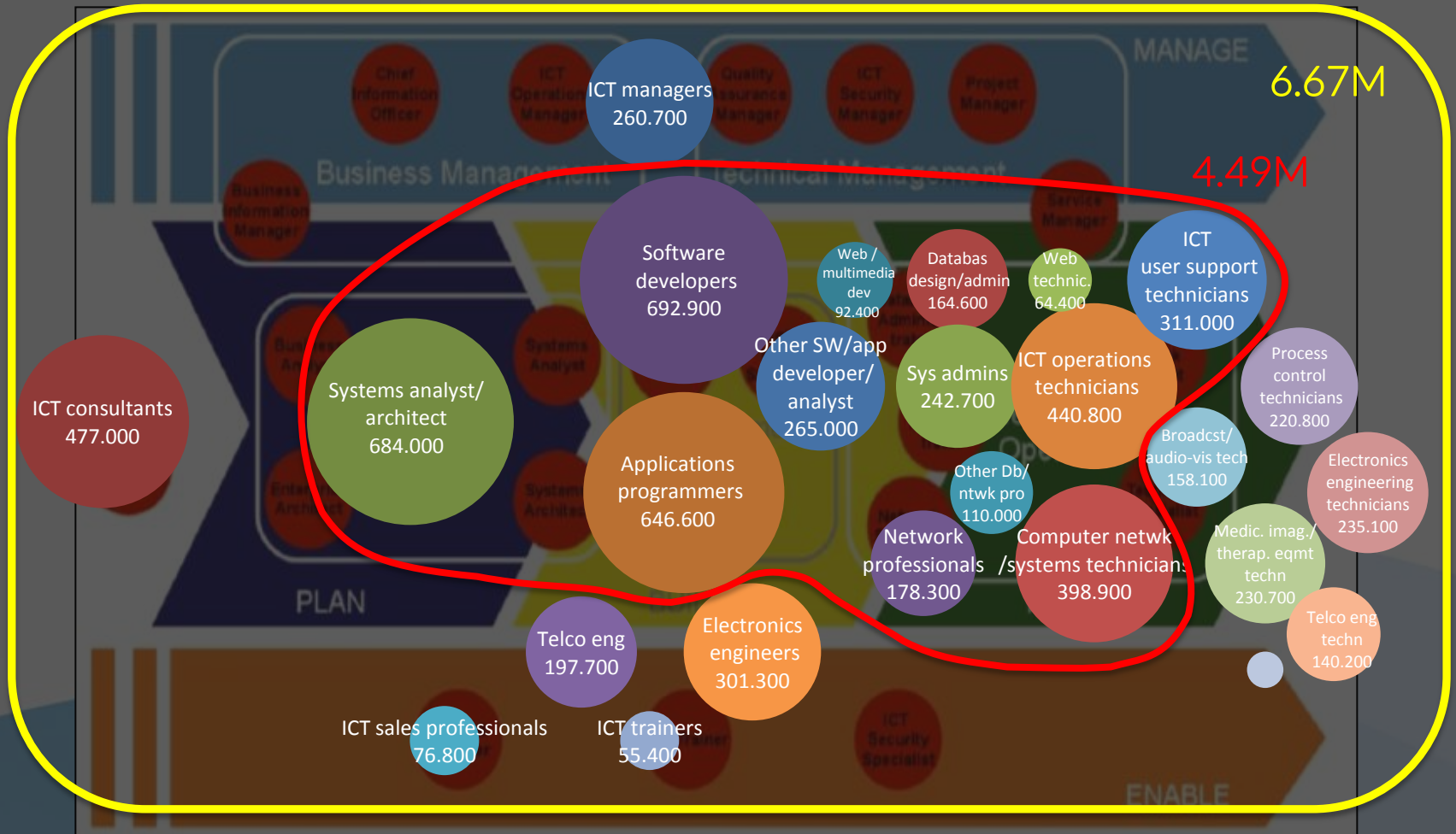
# ICT workforce growth 2000-2011



empirica 2013

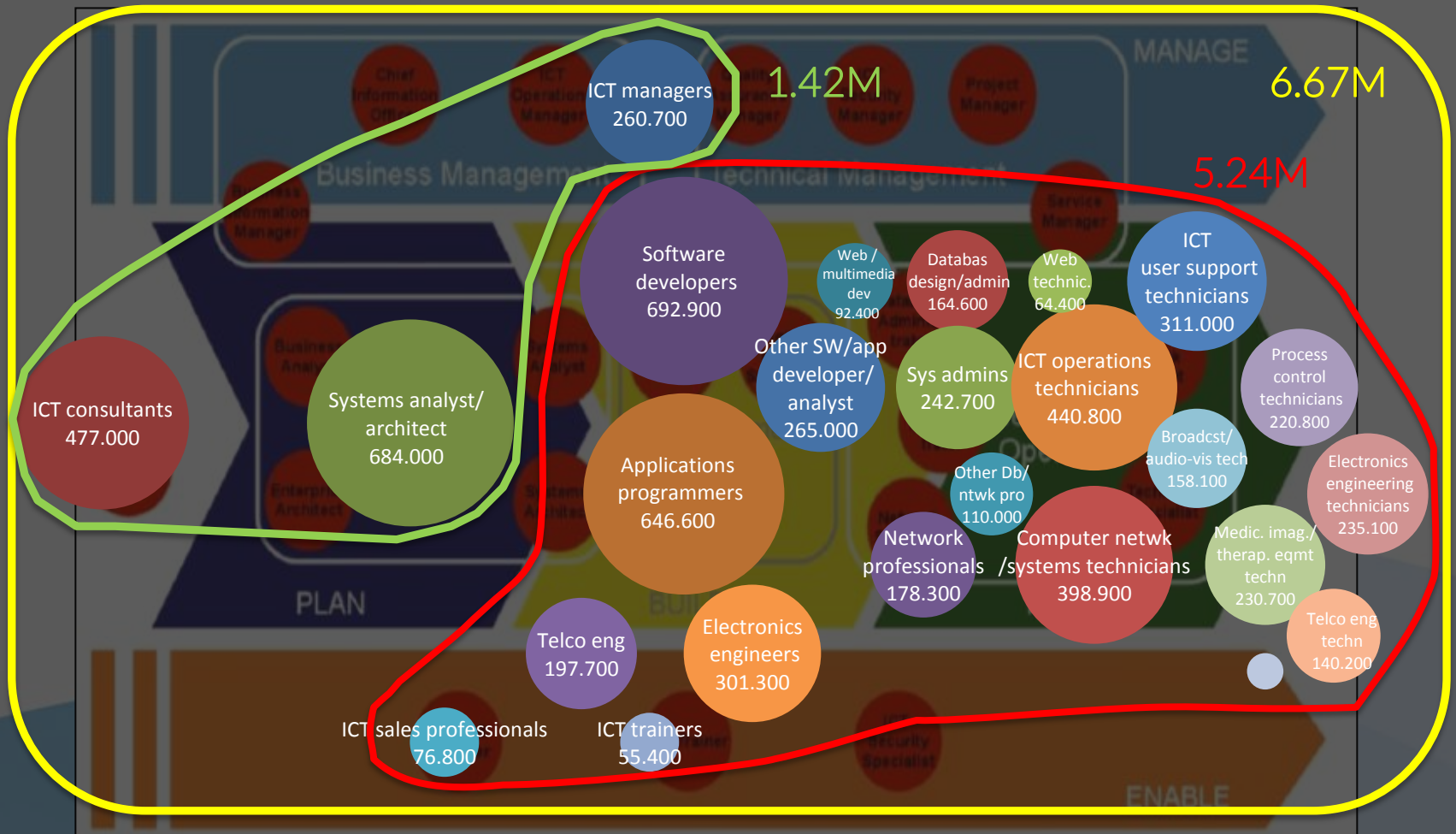
Source: Eurostat LFS. Narrow definition: 2000-2010 ISCO-88 groups 213, 312: "Computing professionals" and "Computer associate professionals". Break in series 2011: ISCO-08 groups 25 "ICT professionals", 35 "Information and communications technicians".

# ICT workforce definition



empirica 2013

# ICT workforce definition



empirica 2013

# Synthesis scenarios

- e-Skills VISION study (upcoming final study report)
- 5 initial scenarios
- Consultation and validation
- 2 synthesis scenarios:

*Return to confidence* scenario

<b>CAGR</b>	<b>GDP</b>	<b>IT Spending on GDP</b>
2010-2015	1.3%	2.9%
2015-2020	2.0%	5.4%

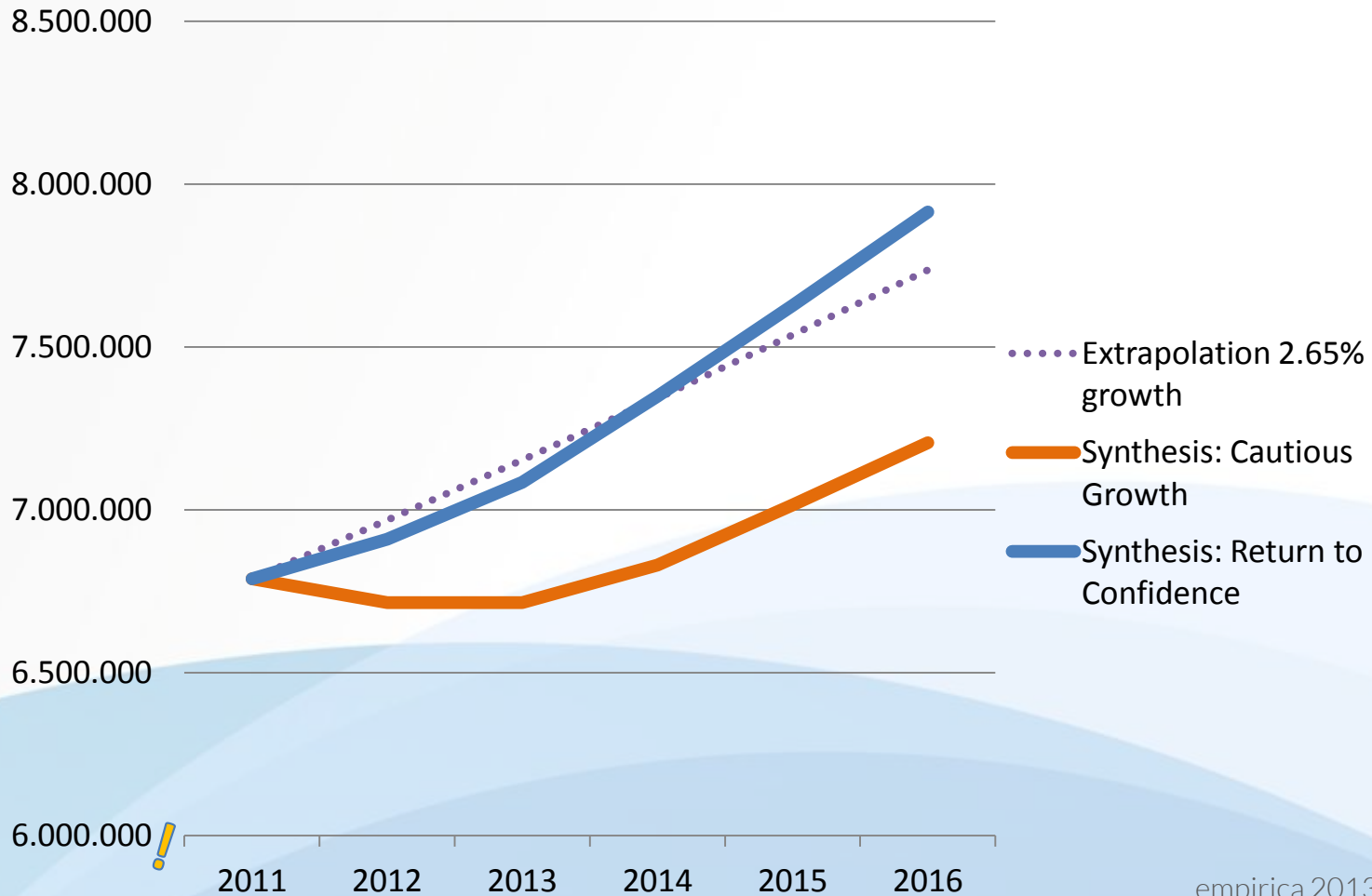
*Cautious growth* scenario

<b>CAGR</b>	<b>GDP</b>	<b>IT Spending on GDP</b>
2010-2015	0.92%	2.1%
2015-2020	1.65%	4.3%

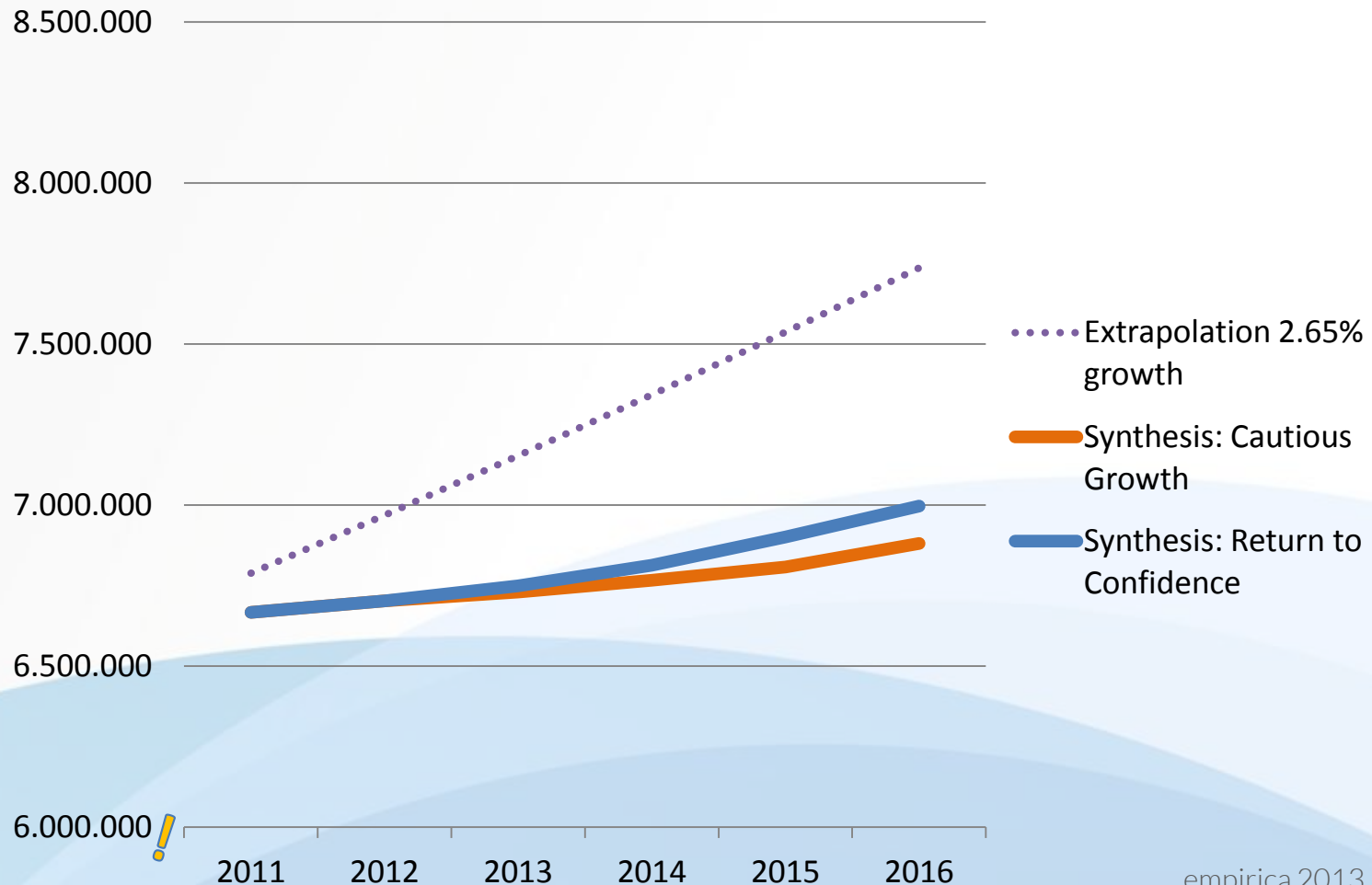
Source: IDC

Note that further impact beyond GDP and IT spending applies in subscenarios!

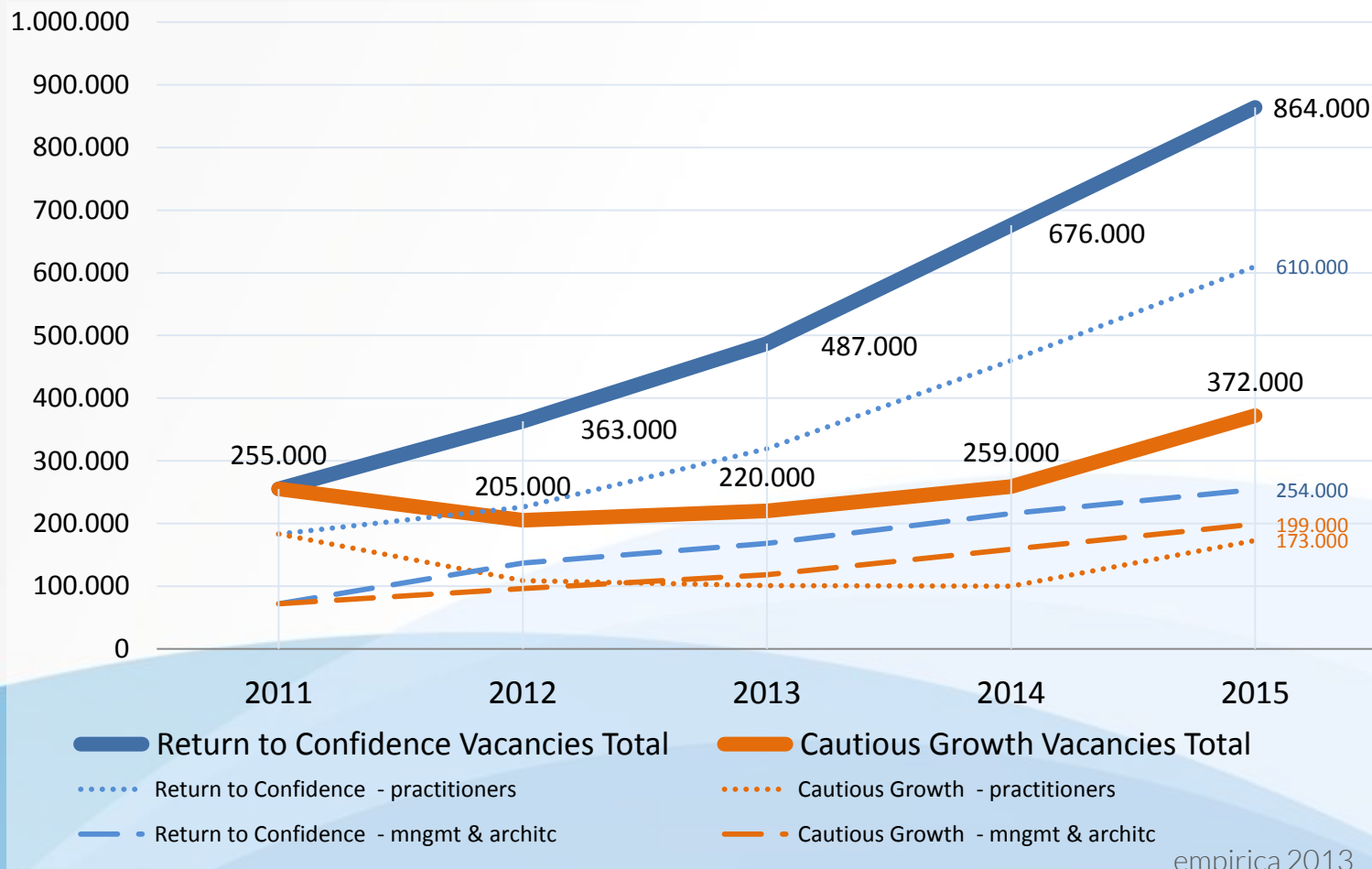
# Demand growth expected



# Supply growth expected



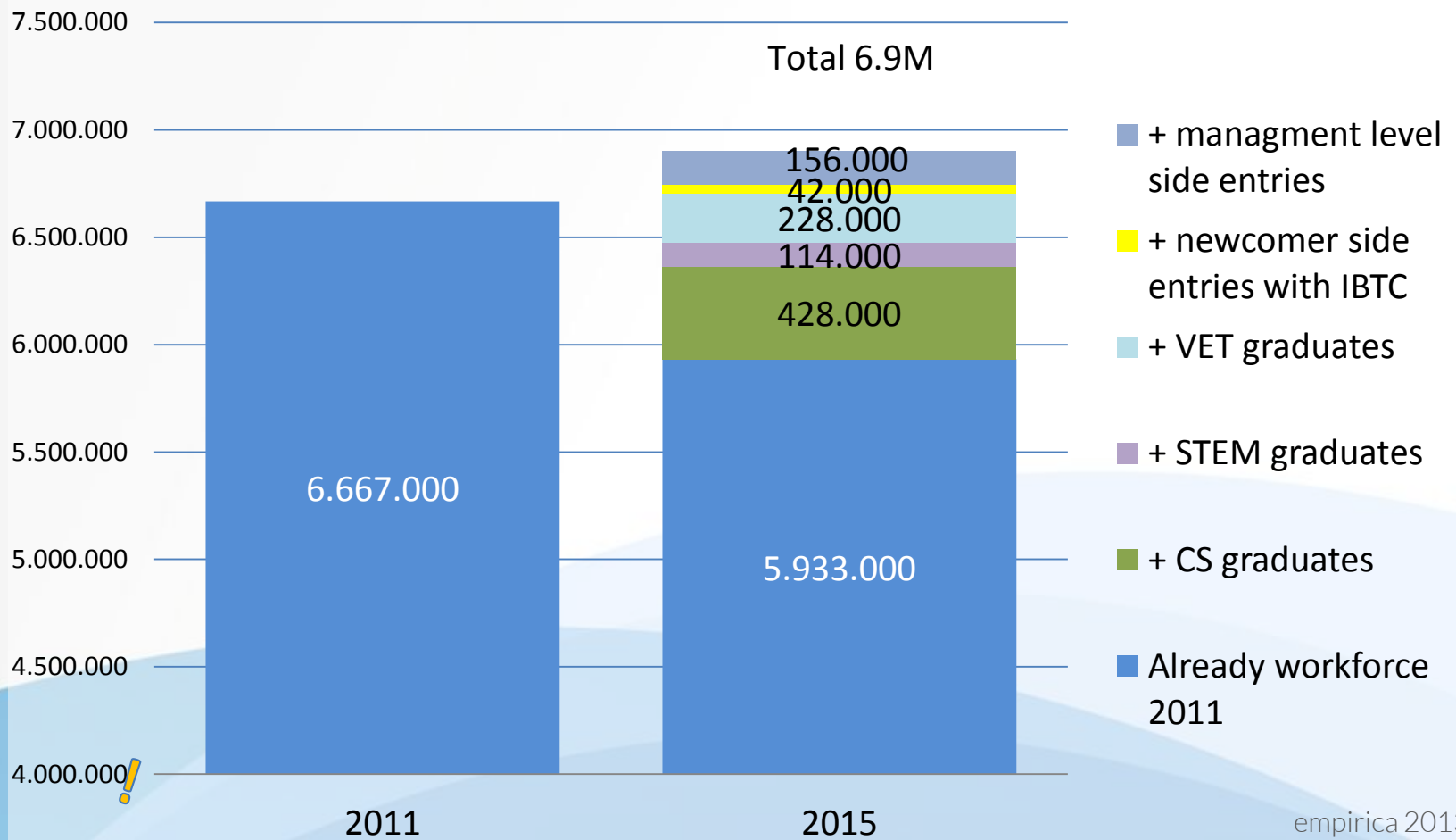
# Skills shortages: expected vacancies





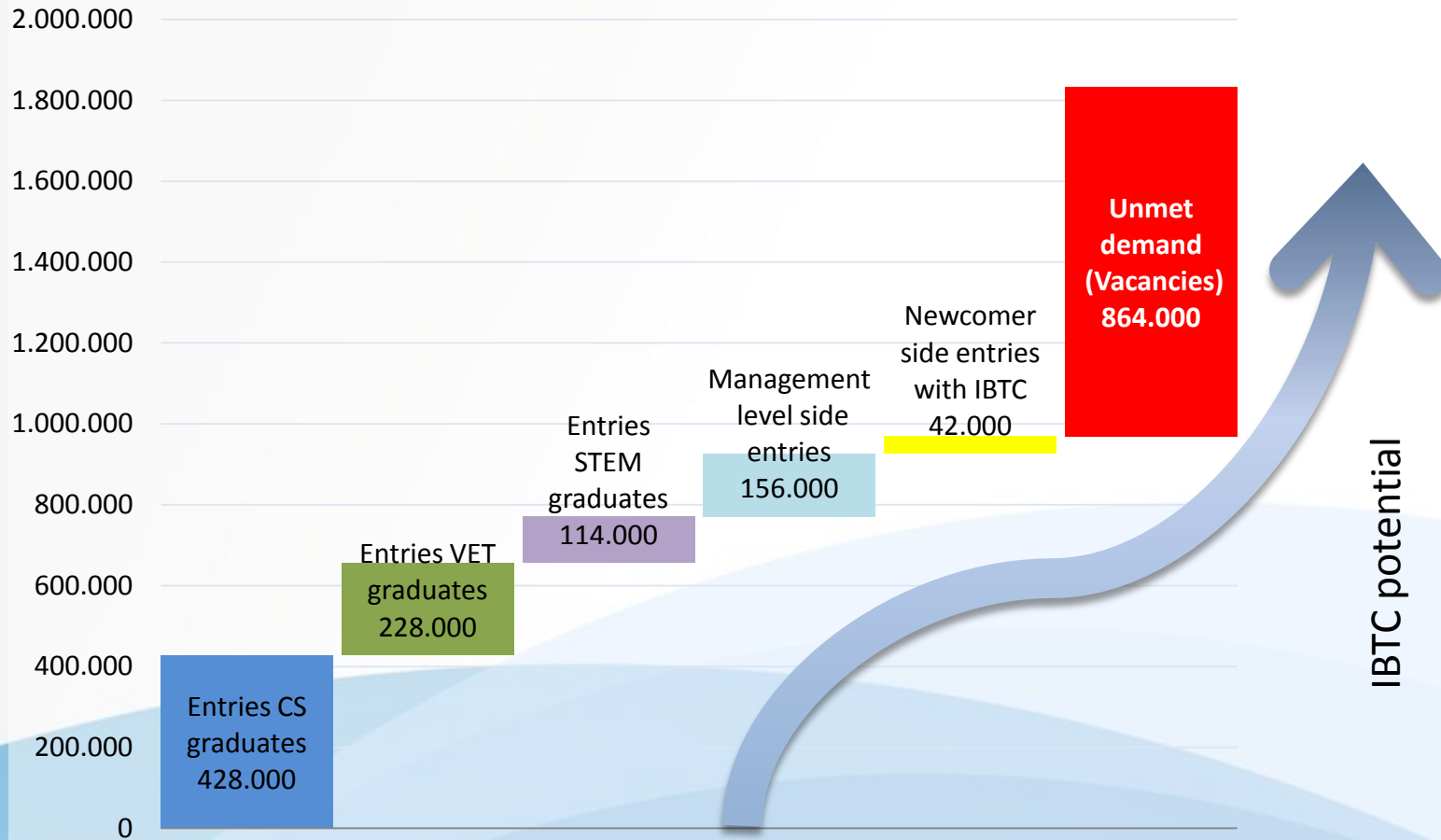
# Where supply in 2015 comes from

Return to confidence scenario



# New demand and how it's met

Return to confidence scenario

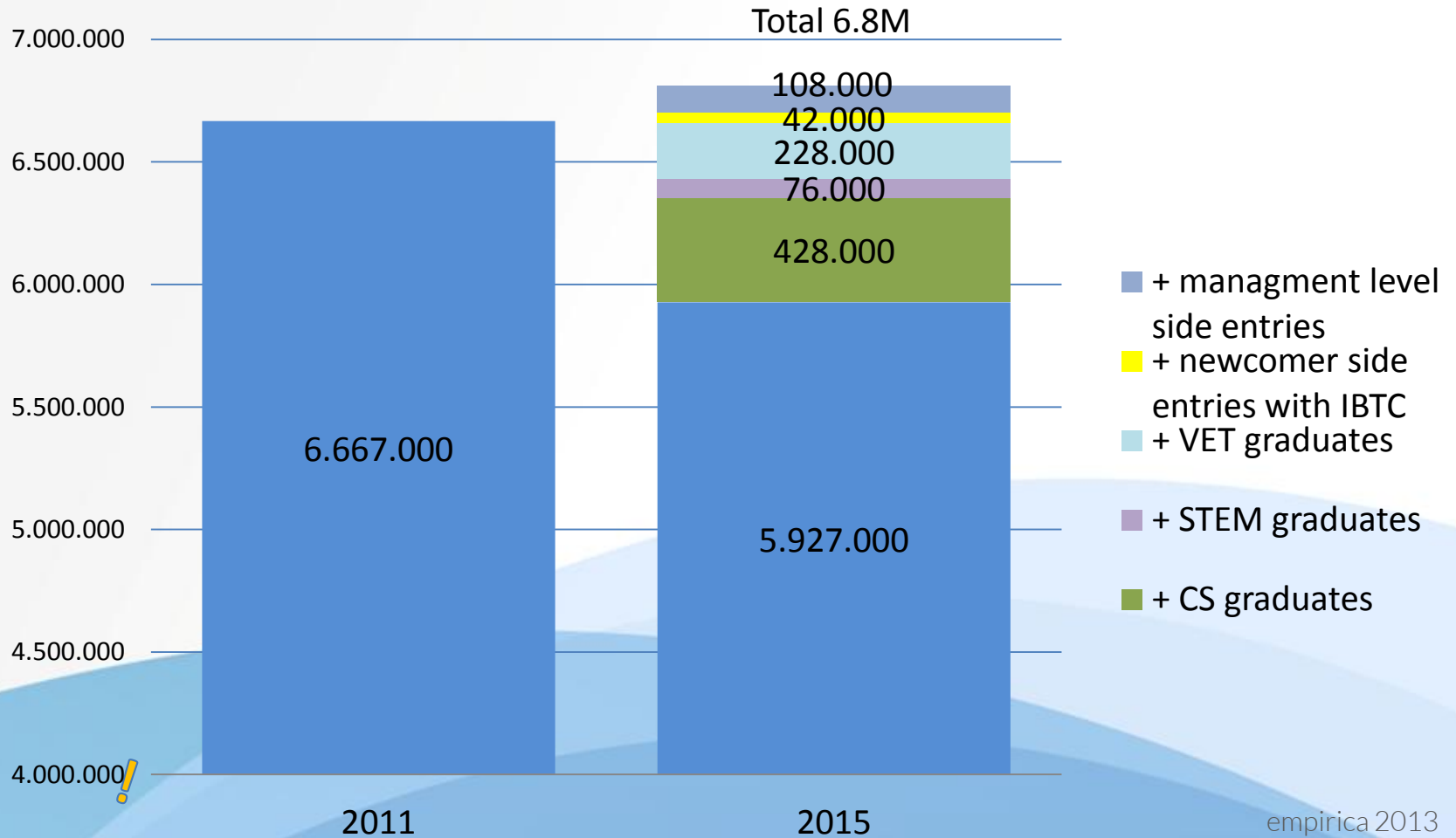


New entries and vacancies by 2015

empirica 2013

# Where supply in 2015 comes from

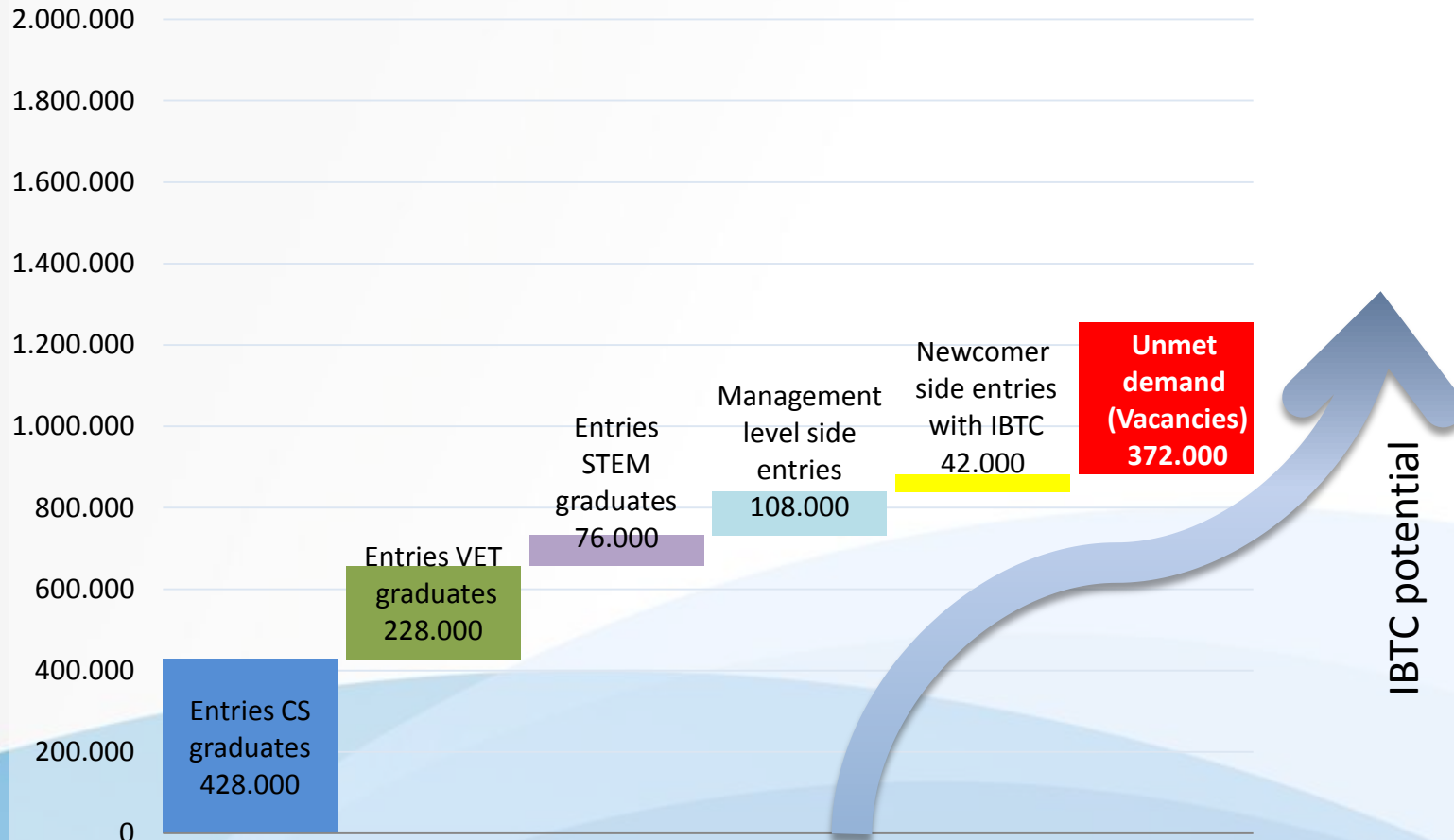
Cautious growth scenario



empirica 2013

# New demand and how it's met

Cautious growth scenario



New entries and vacancies by 2015

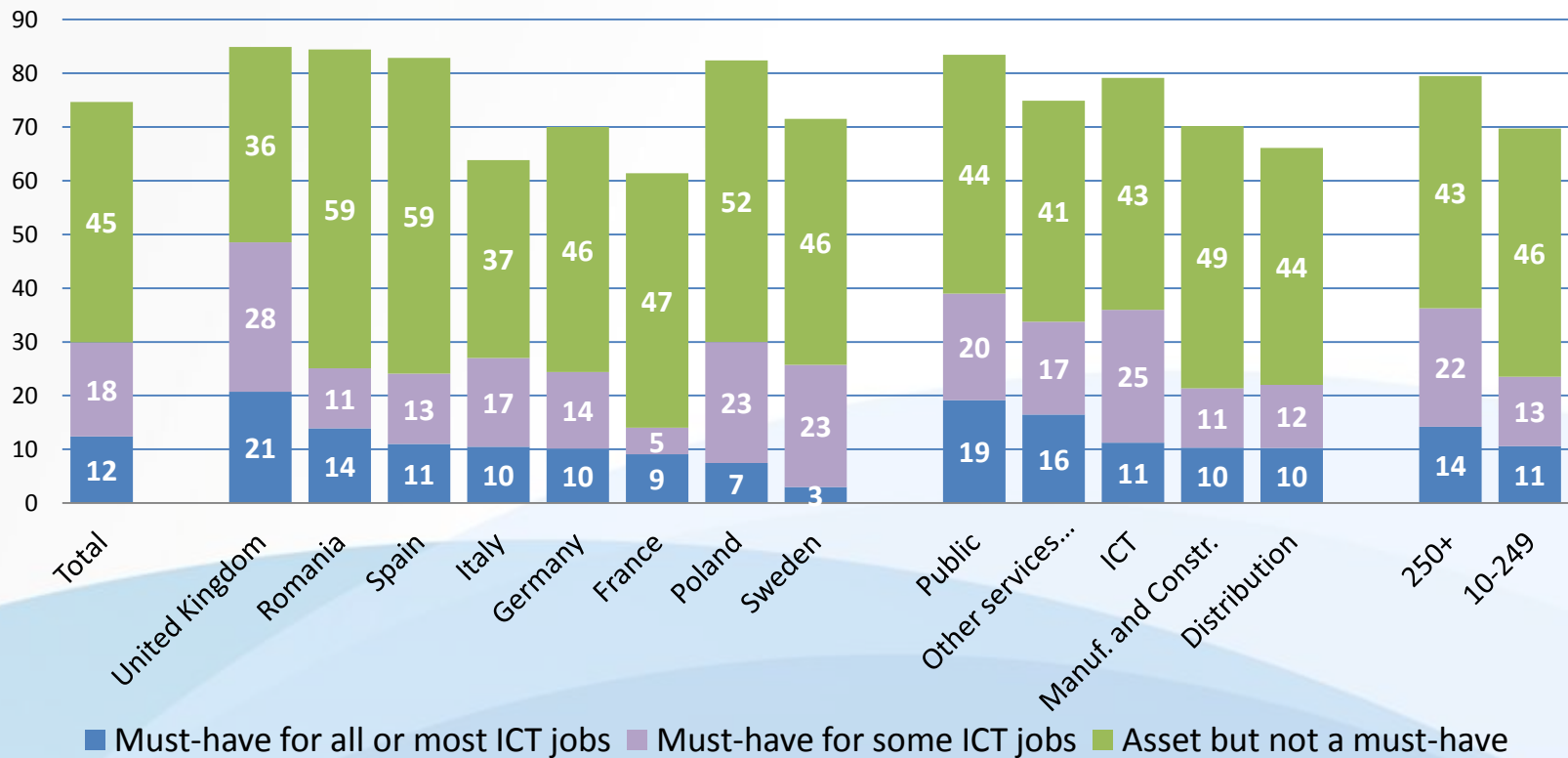
empirica 2013

# IBTC – CIO POV\*

\*Industry based training and certification: the Chief Information Officers' point of view

## Relevance of holding IBTC certificate in recruitment or promotion of ICT professionals

Weighted by employment

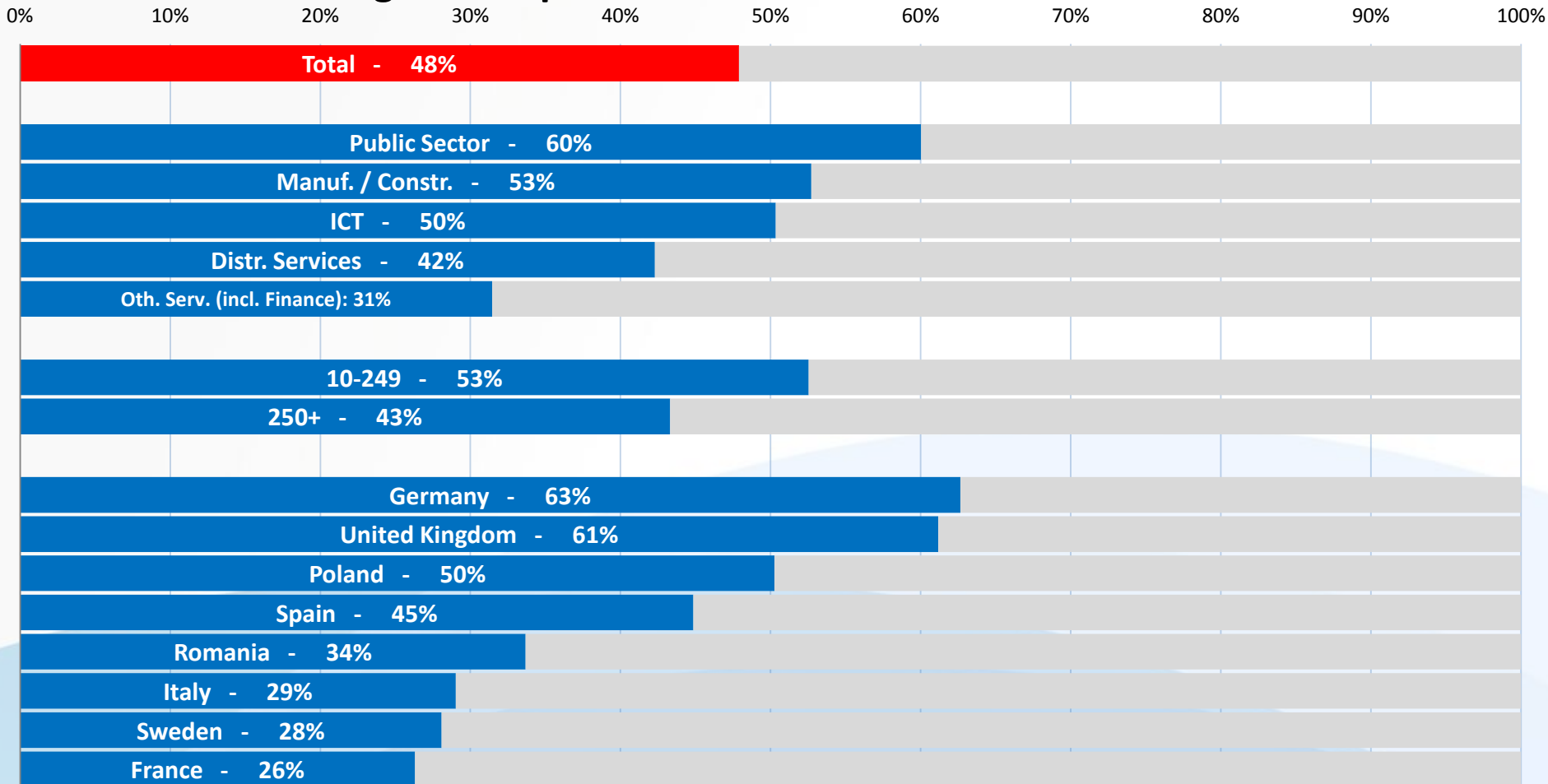


Source: Empirica survey of HR and CIOs in 2012

empirica 2013

# ~ 50% of ICT professionals have gone through certification

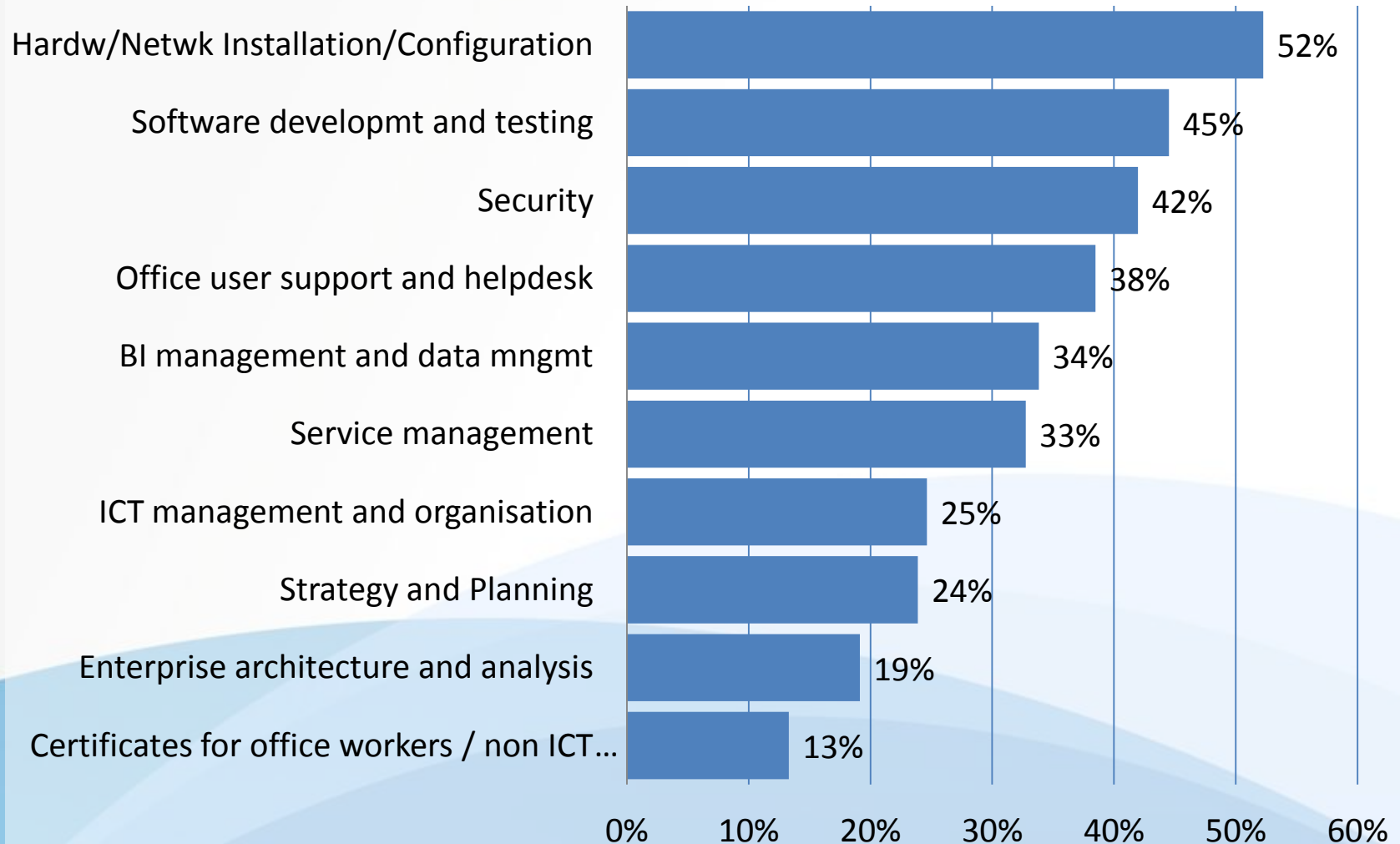
## Percentage of ICT professionals with at least one certification



Source: Empirica survey of HR and CIOs in 2012

empirica 2013

# Where CIOs see IBTC important



Source: Empirica survey of HR and CIOs in 2012

empirica 2013

# Conclusions

## In / by 2015

- Total demand will grow between 230,000 and 840,000
- Total supply will grow between 140,000 and 235,000
- Vacancies will be between 372,000 and 864,000
- Demand for ICT management and architecture level experts expected to increase steadily,
- ICT practitioner demand to increase as well, but more volatile and dependent on scenario
- Unmet demand ~ between 1 and 2 times the number of CS graduates leaving universities in four years

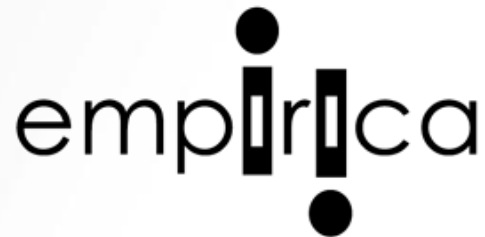


# Conclusions

## IBTC – Industry-based training & certification

- CIOs / HR representing 5 million (75%) ICT professionals see high relevance of IBTC for hiring / promotion decisions
- CIOs / HR representing 2 million (30%) ICT professionals see IBTC as **indispensable** for hiring / promotion decisions
- Cross-country, cross-sectoral relevance
- Hardware/network, software development, security domains
- IBTC a significant market
  - ~50% have a certification -- more than 3 million certified ICT professionals.
  - Market estimate at least between 300,000 - 500,000 annually
- Training and certification can significantly contribute to closing the e-skills gap

# Thank you for your attention



empirica GmbH

Oxfordstr. 2

53111 Bonn, Germany

e-Mail: [info@empirica.com](mailto:info@empirica.com)

Web: [www.eskills-quality.eu](http://www.eskills-quality.eu)