

Data Center Trends Global and UK

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The Brief

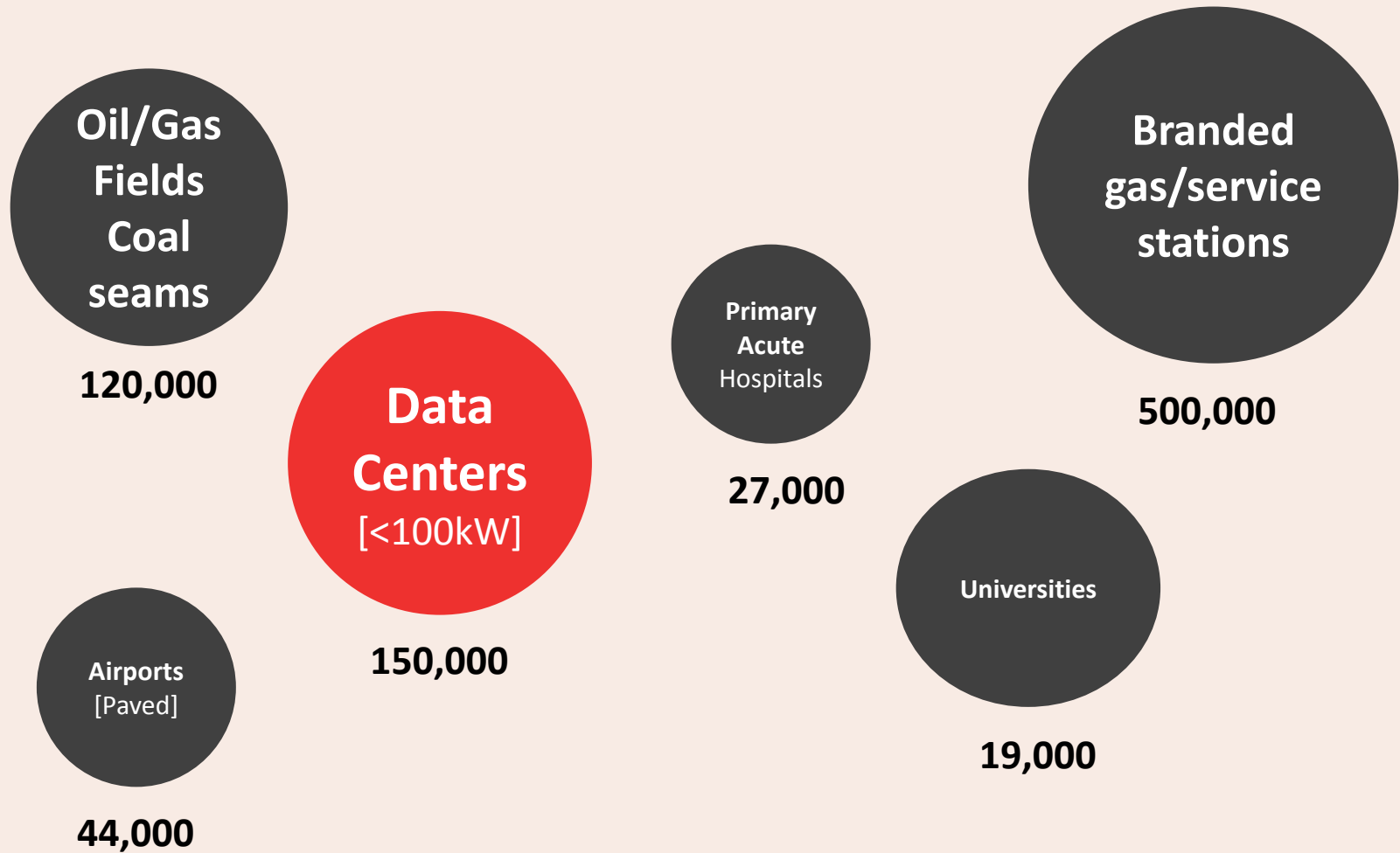
- Has the market for Data Centers in the UK changed during a period of economic uncertainty
 - What has driven these changes
 - What facts should M & E contractors take into consideration
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What We'll Be Discussing

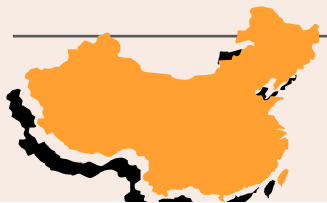
- Global Data Center Market Trends
 - UK Market Trends
 - Key Industry Changes
 - The Impact of Changes on Data Center M & E Contractors
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Global Data Center Trends

The Global Data Center Market 2012



The Data Center Industry as a 'Country'



China 4700 TWh(*)



USA 3750 TWh(*)



Japan 860 TWh(*)



UK 340 TWh(*)

Italy 310 TWh(*)



Spain 260 TWh(*)

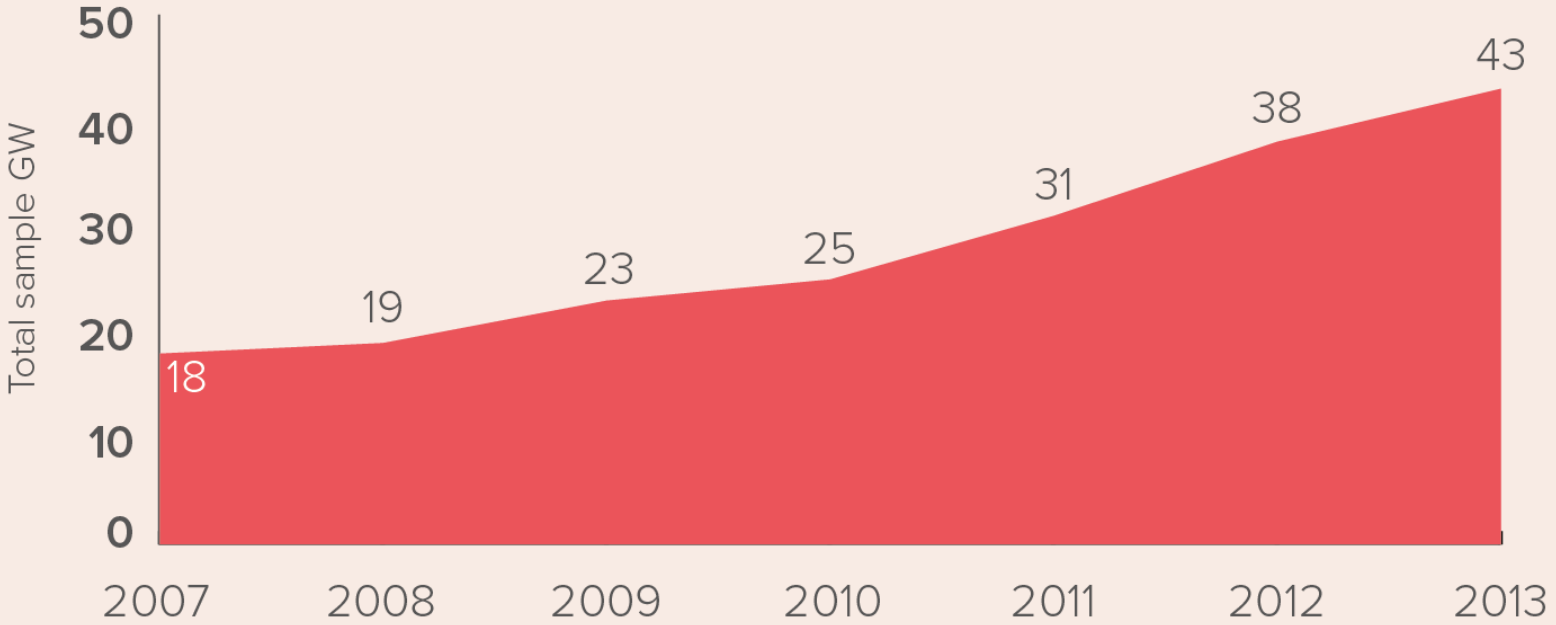


Datacenters
332.9
TWh**



(*) National Statistics for Electricity Usage ONLY 2010 I& 2011 The World Factbook & IAE data
(**) Based on Census 2012 population projections of maximum stated capacity including end user reporting of outsourced footprint

Global Power Growth

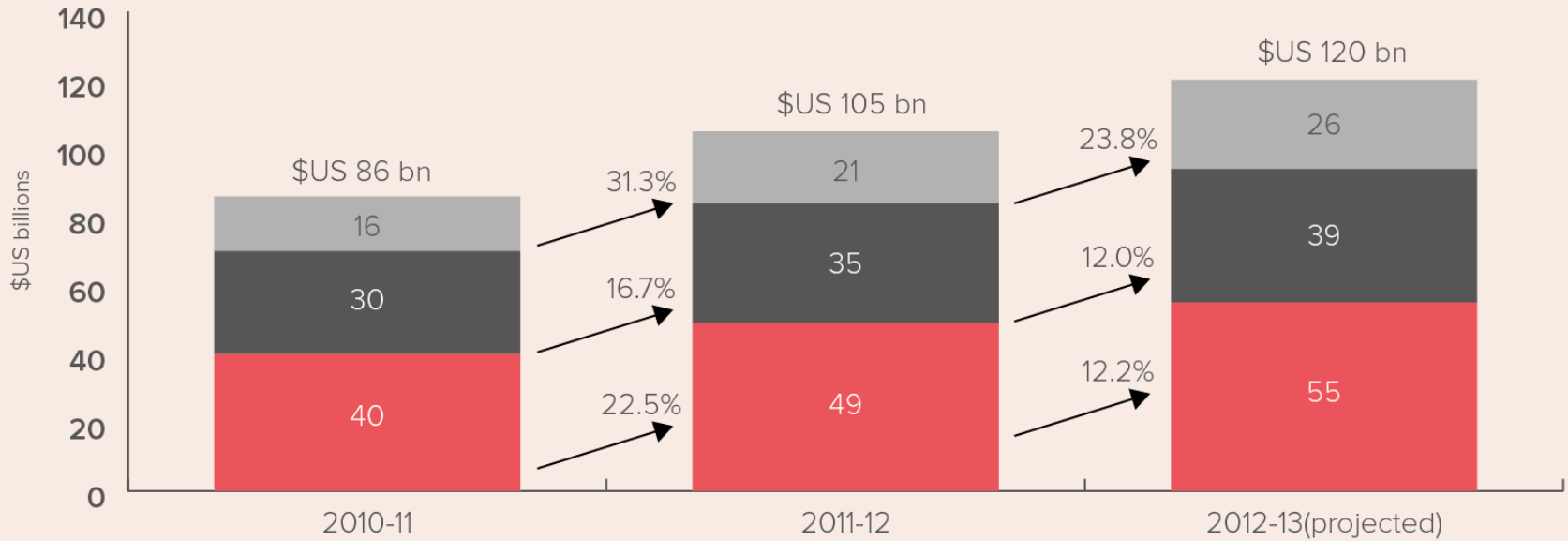


Source: DCD Intelligence 2012

Key

- Total GW (population)

Data Center Investment

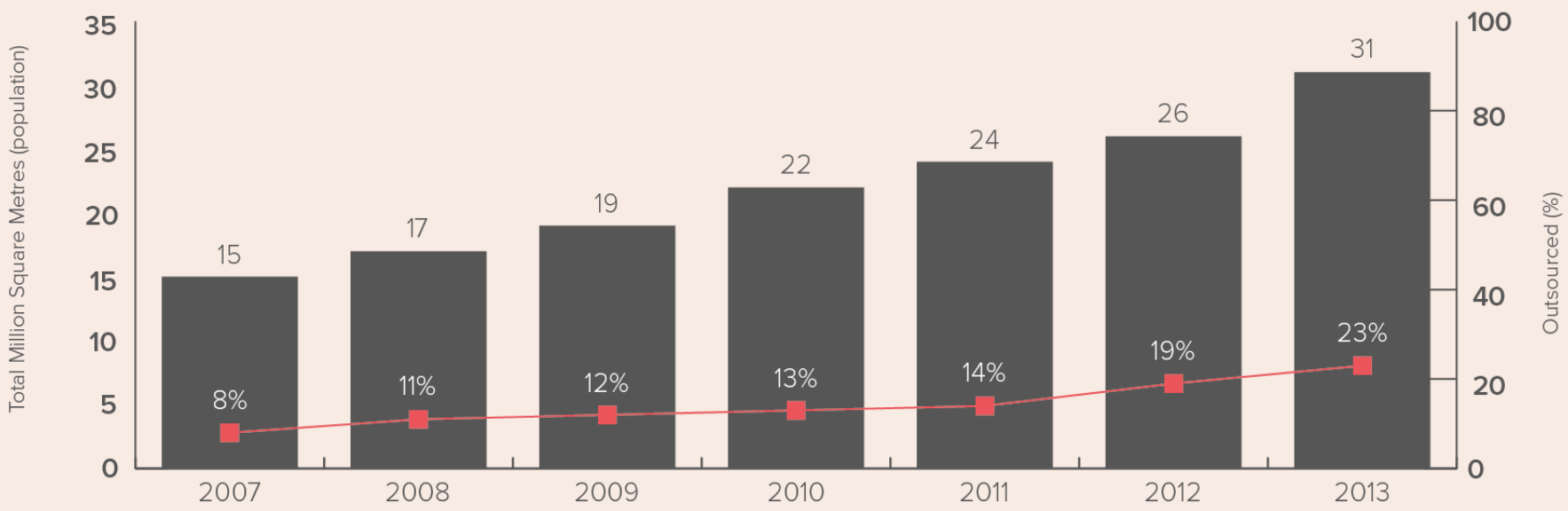


Key

●	Facility (in US\$ bn)	●	IT (in US\$ bn)
●	Outsourcing (in US\$ bn)	●	Growth Rate

Source: DCD Intelligence 2012

Growth in Space / Outsourced Footprint



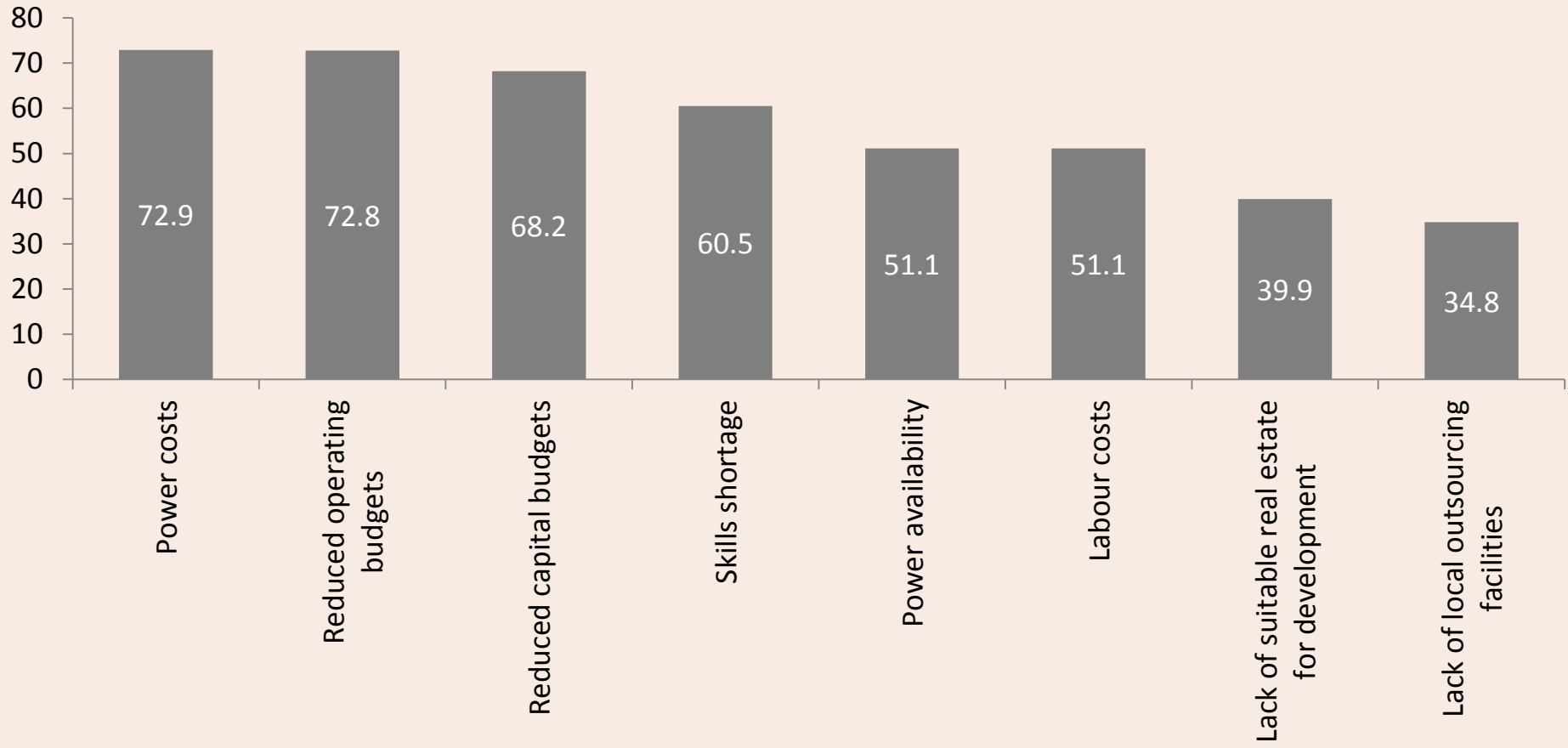
Key

●	Total Million Square Metres (population)	●	Outsourced (%)
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Global Trends: Key Challenges

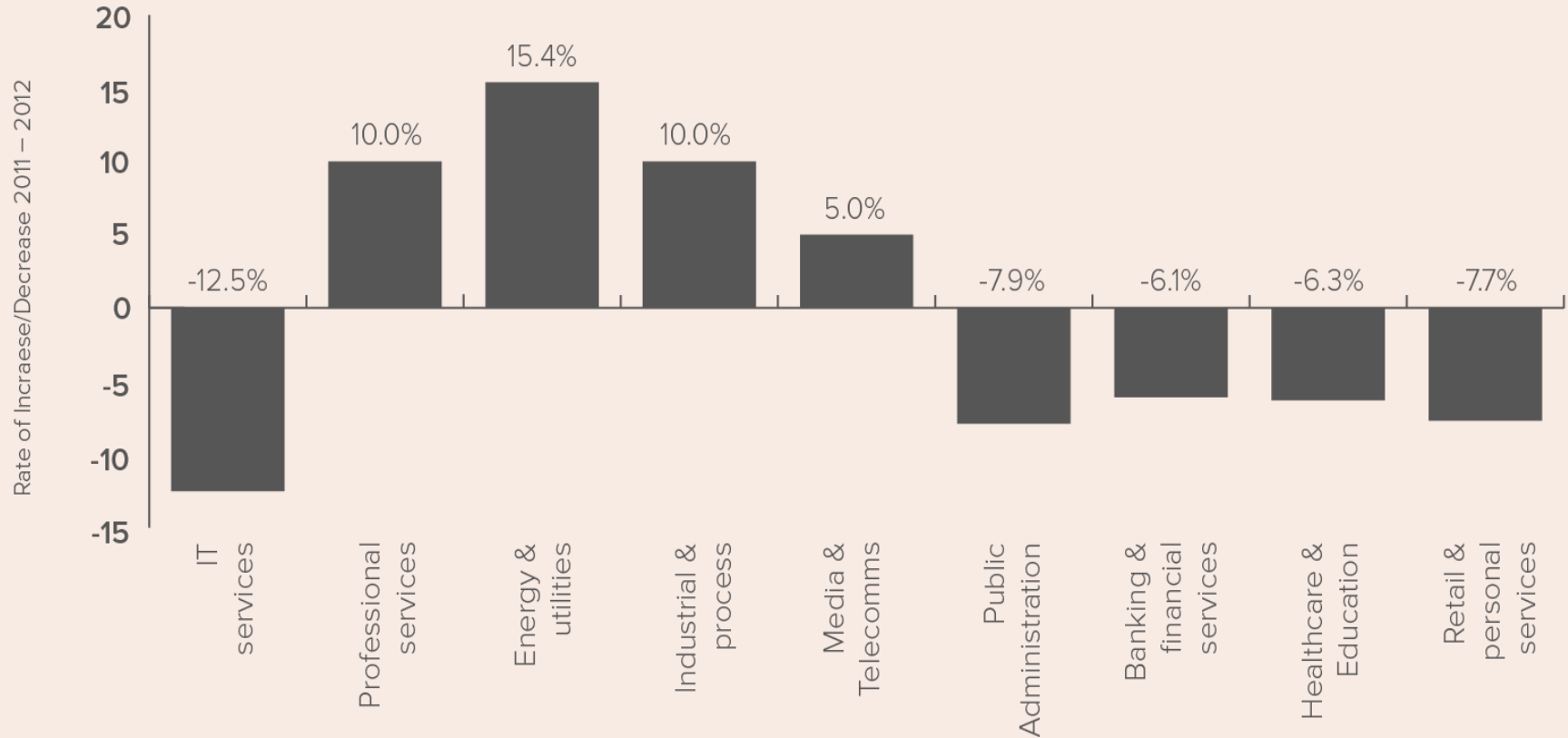


% Impact in next 12-18 months



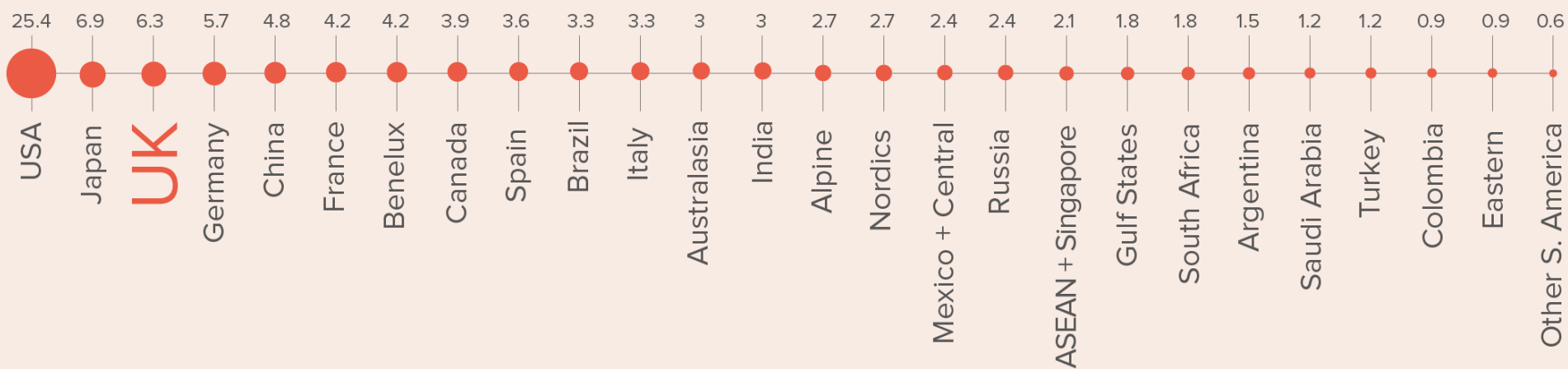
UK Data Center Trends

White Space per Industry Vertical 2011-2012

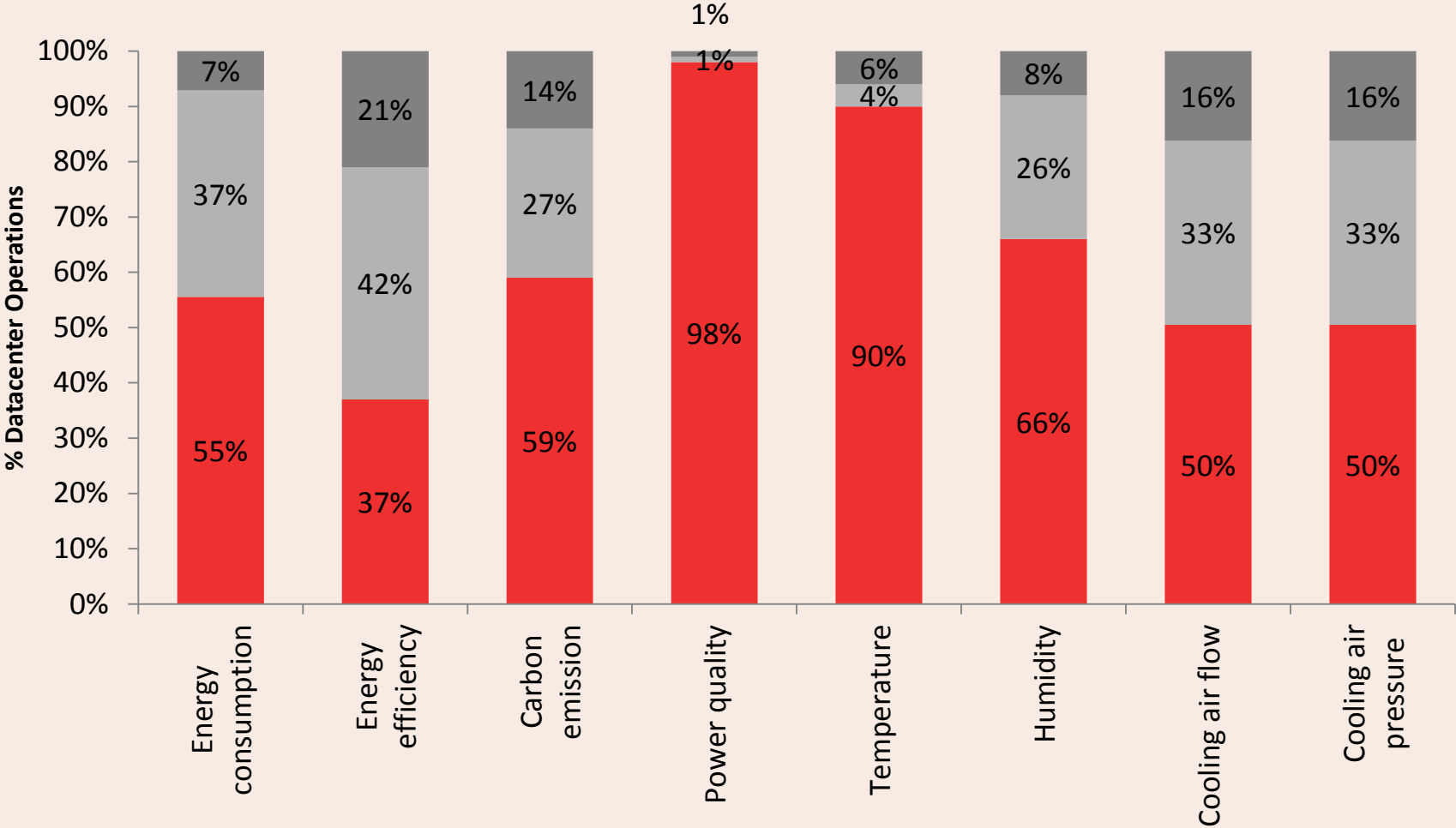


Source: DCD Intelligence 2012

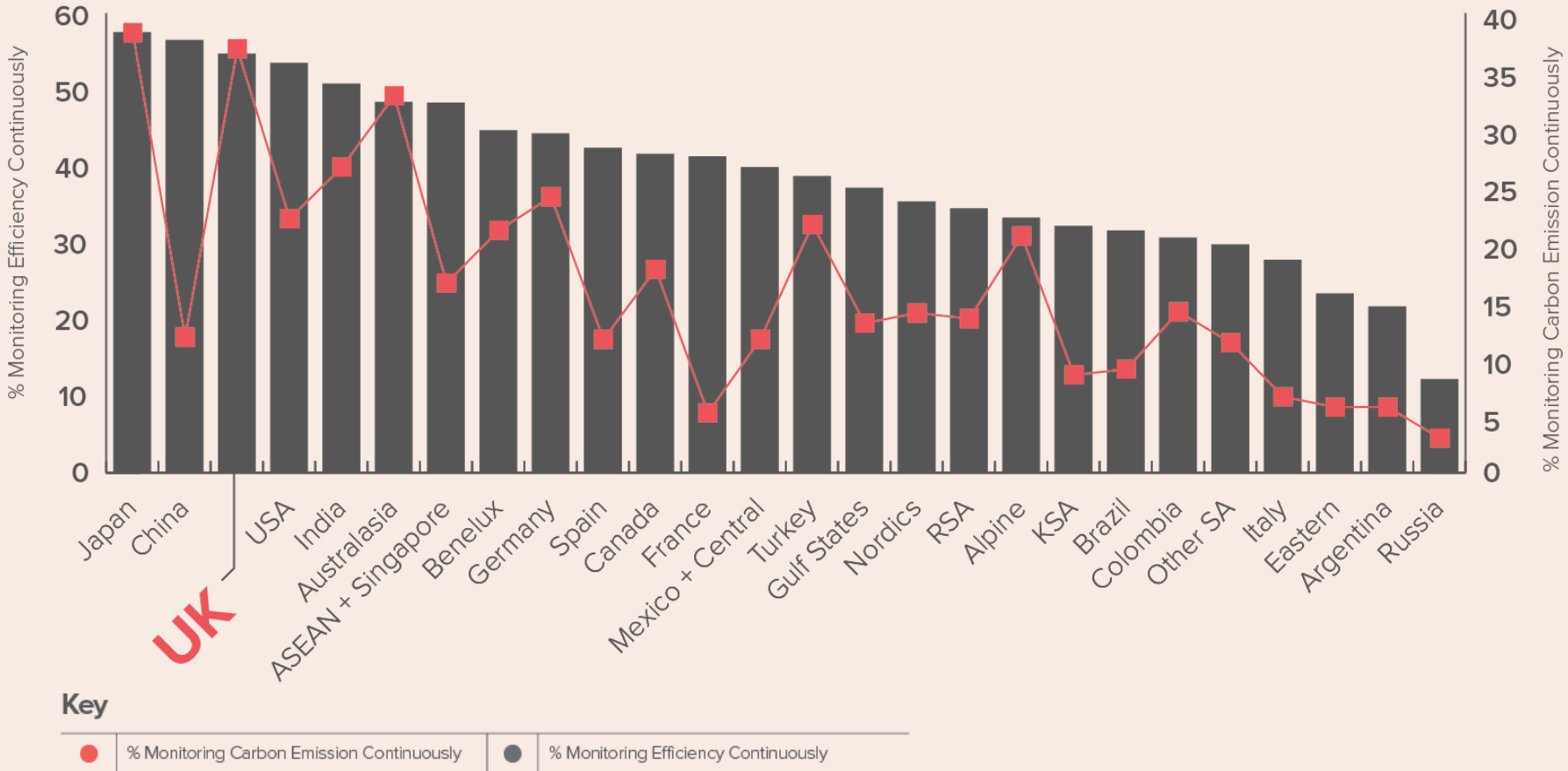
TWh Requirements 2012: UK share of the Global figures (%)



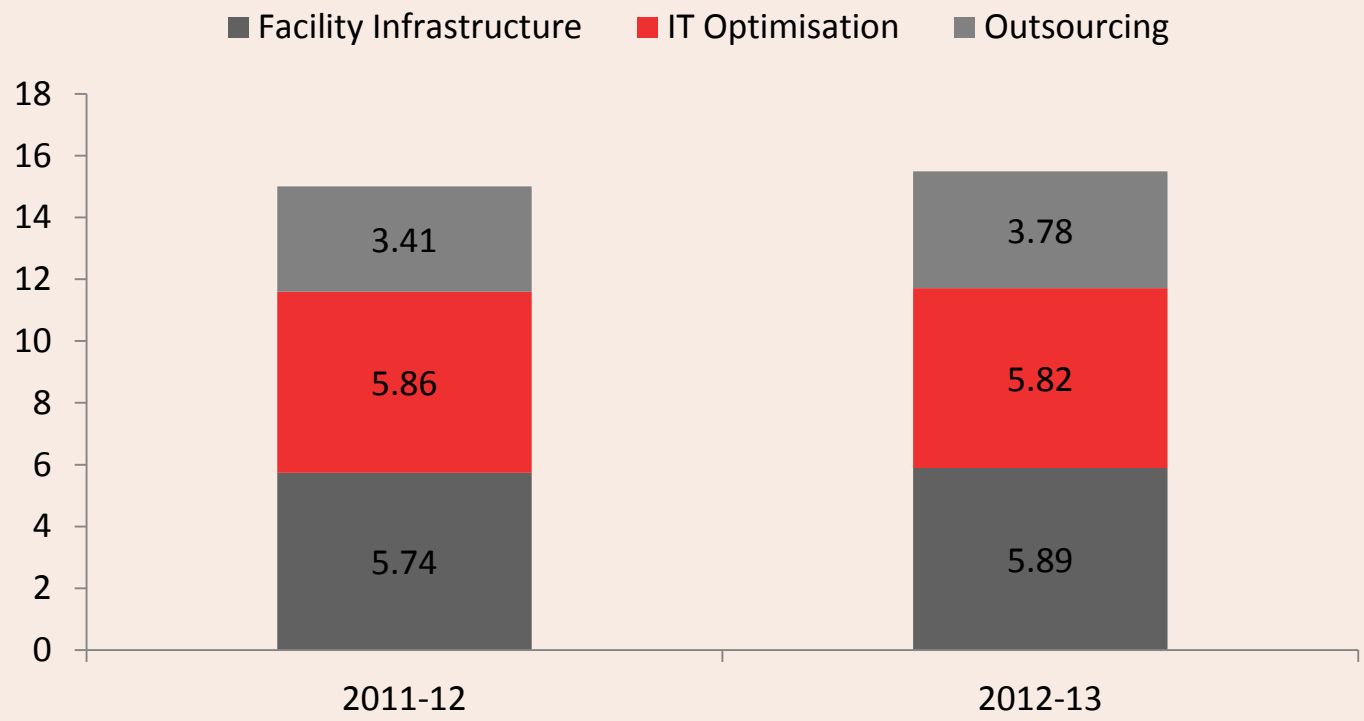
Monitoring Key Parameters: UK 2012



Global Energy Monitoring: UK focus



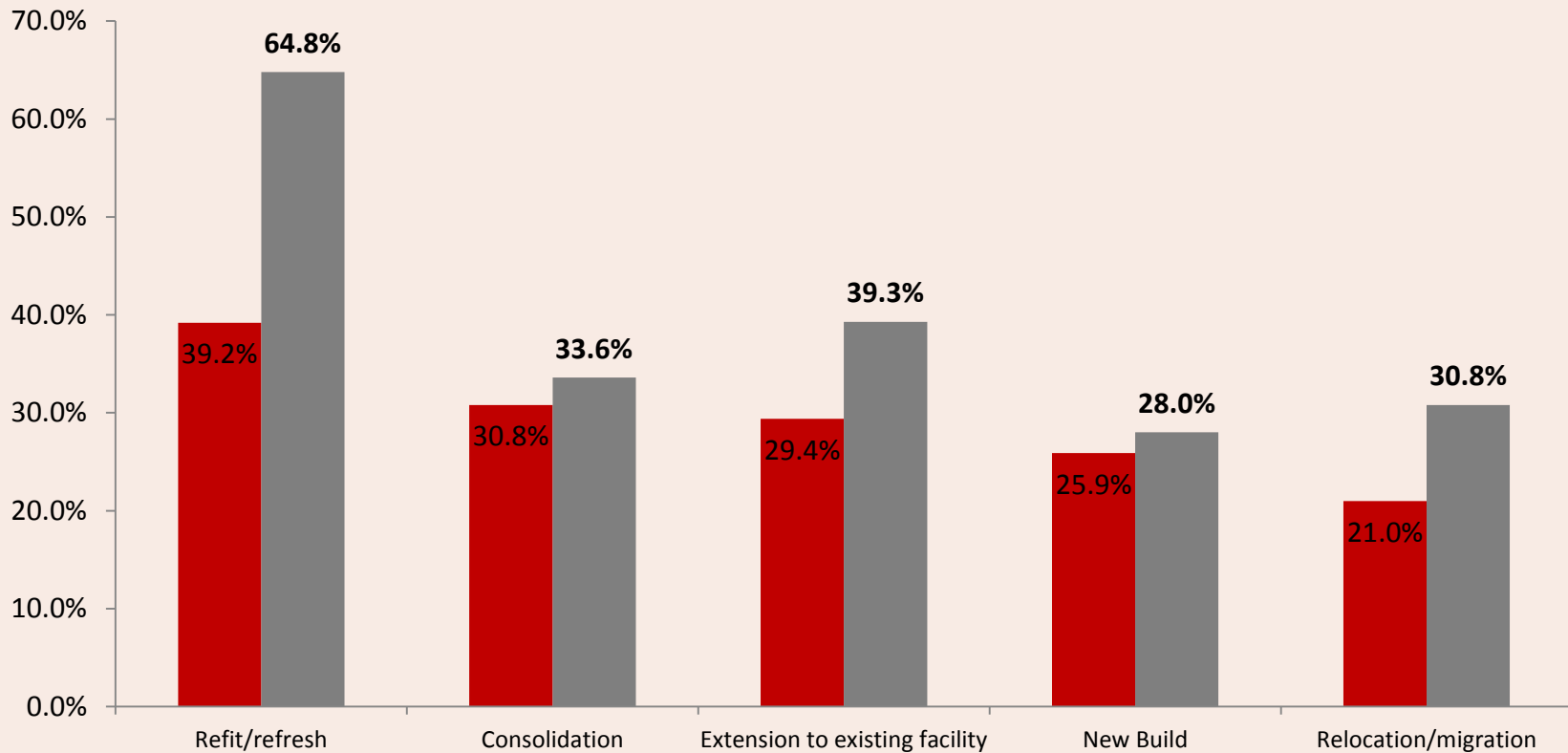
DC Investment Amounts by Avenue UK 2011-13 (US\$ bn)



Investment Avenues: Major increase in refit/ refresh

% Organisations

■ 2012 ■ 2013



Industry Changes

What has changed over the Past 5 years in terms of the facility?

EVERYTHING!

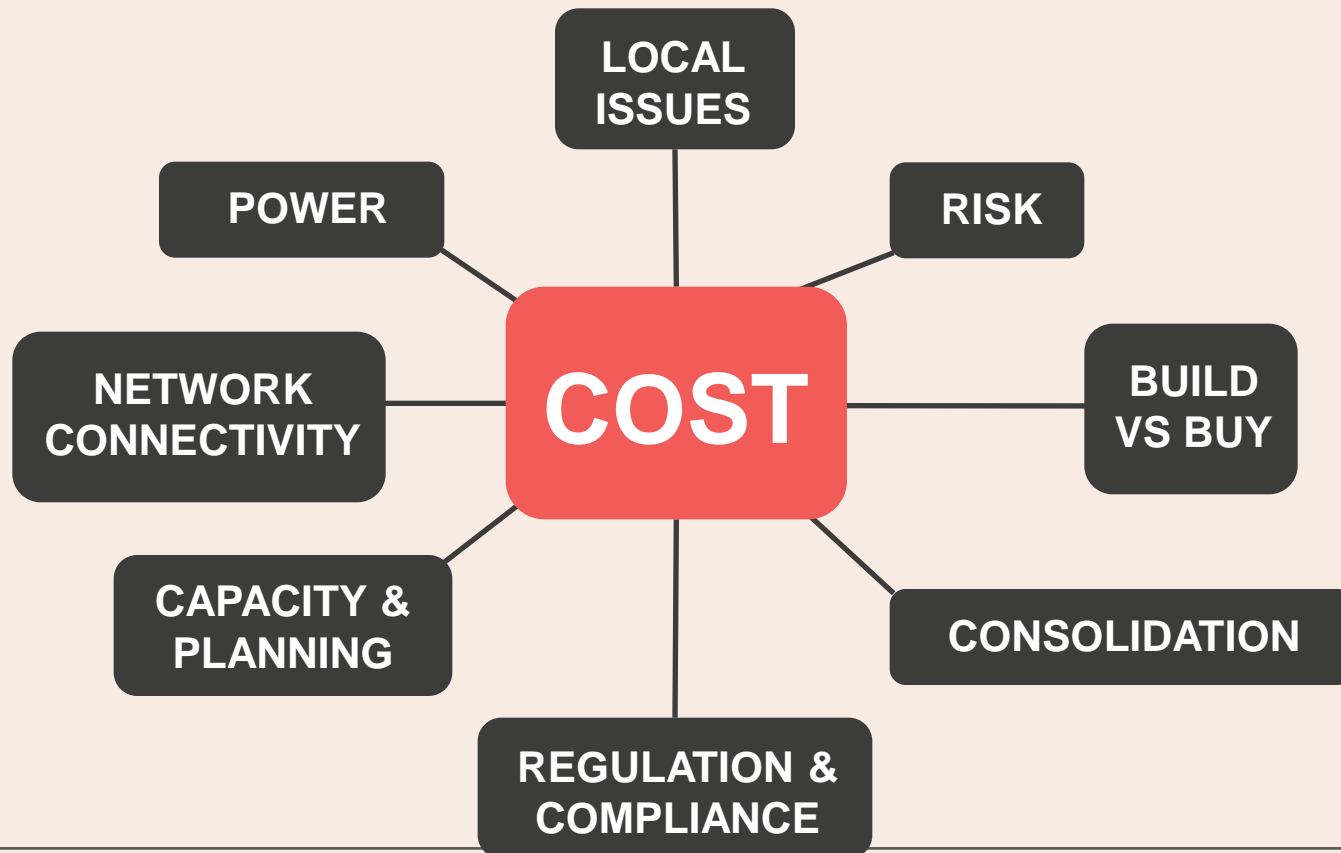
- Reduced Budgets
 - Technological change acceleration
 - Increased use of outsourcing
 - Consolidation Projects
 - Efficiency
-

Increased Focus on Efficiency

- Driven By
 - Technological Change
 - Space Constraints
 - Consolidation
 - Reduced Opex budgets
 - Increasing cost of Power
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Change in Facility Design

- Energy Efficiency
 - Reluctance to be 'tied in' to one vendor
 - Increased refit / refurb cycles
 - Efficiency Measures determined from the outset
 - Difficulties in capacity planning
 - Increase in popularity of modular data center design
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INTERNATIONAL DATA CENTER STRATEGY

Risk Assessment Touches All Points



What Does this mean for the Future (and for M & E Contractors)

- Less Data Centers Being Built?
 - Fall in White space 2011 – 2012

Forecast to grow from 2.95msqft in 2012 – 3.13msqft in 2016

- But – Refit / Refresh cycles accelerated
 - DC operators want to be vendor neutral in order to allow for new technologies
 - Cost vs Risk paramount
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