



Cloud Computing – the architects’ perspective

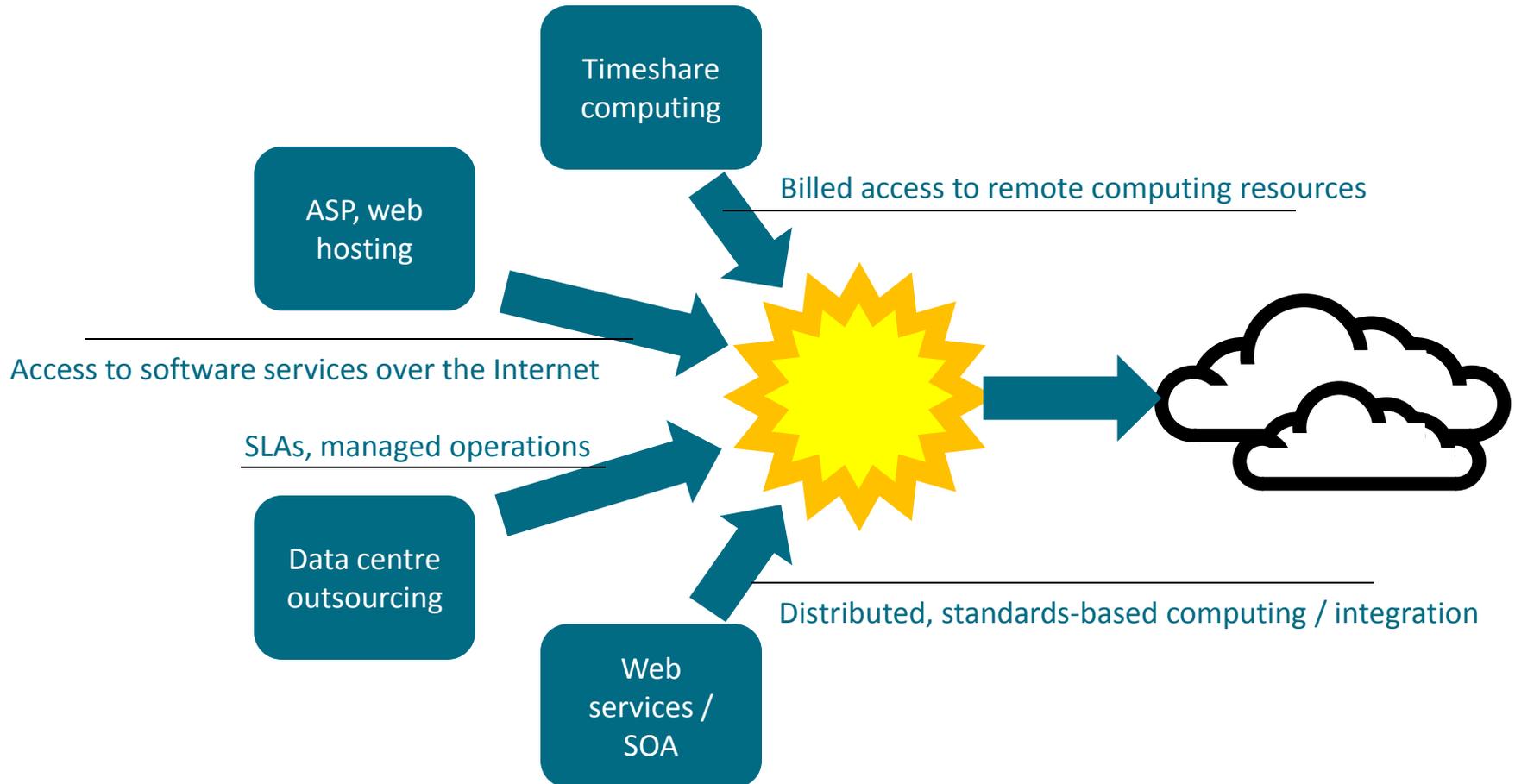
IASA ITARC NY, October 14th 2009

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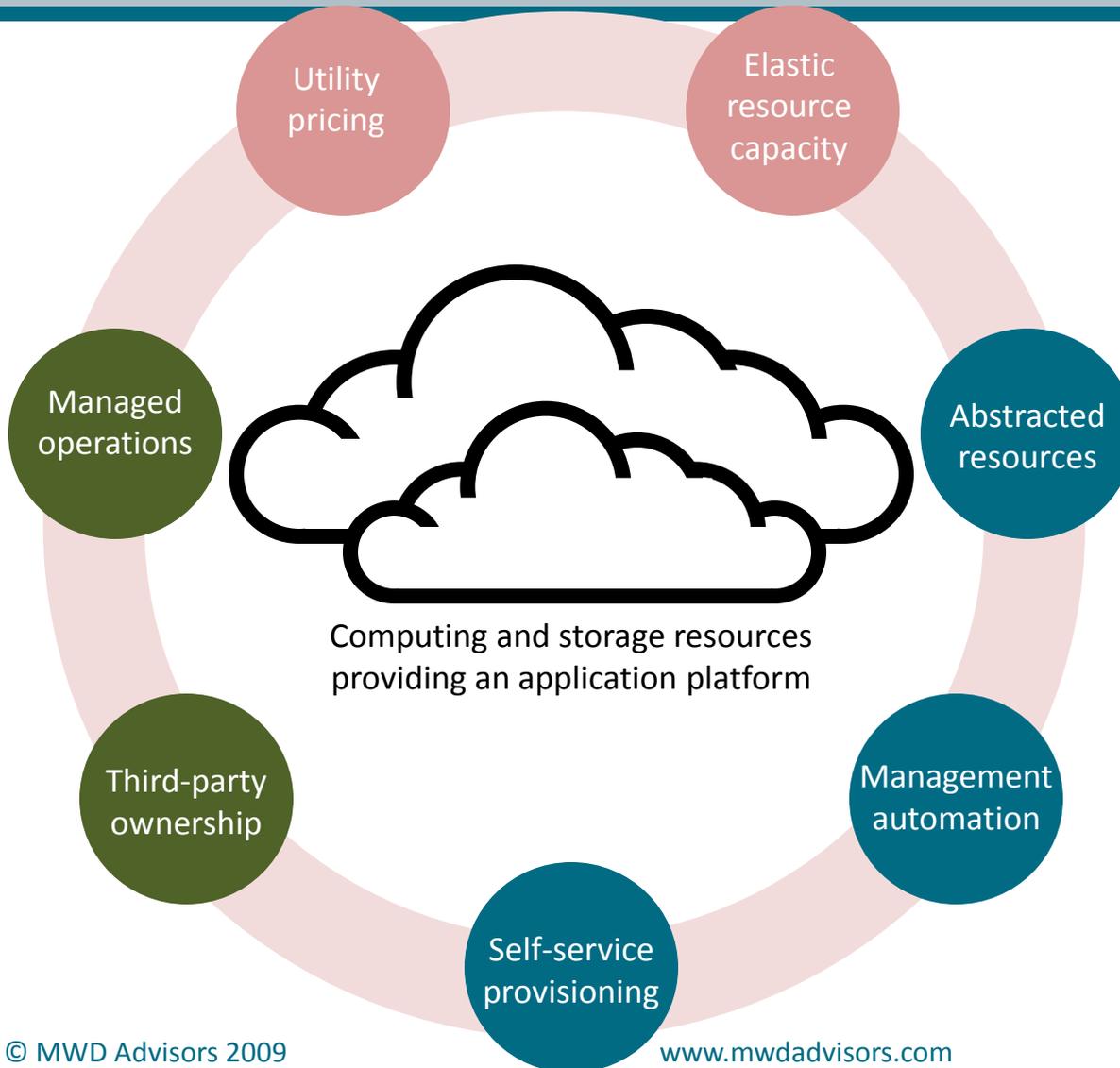
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Cloud Computing: evolution, not revolution



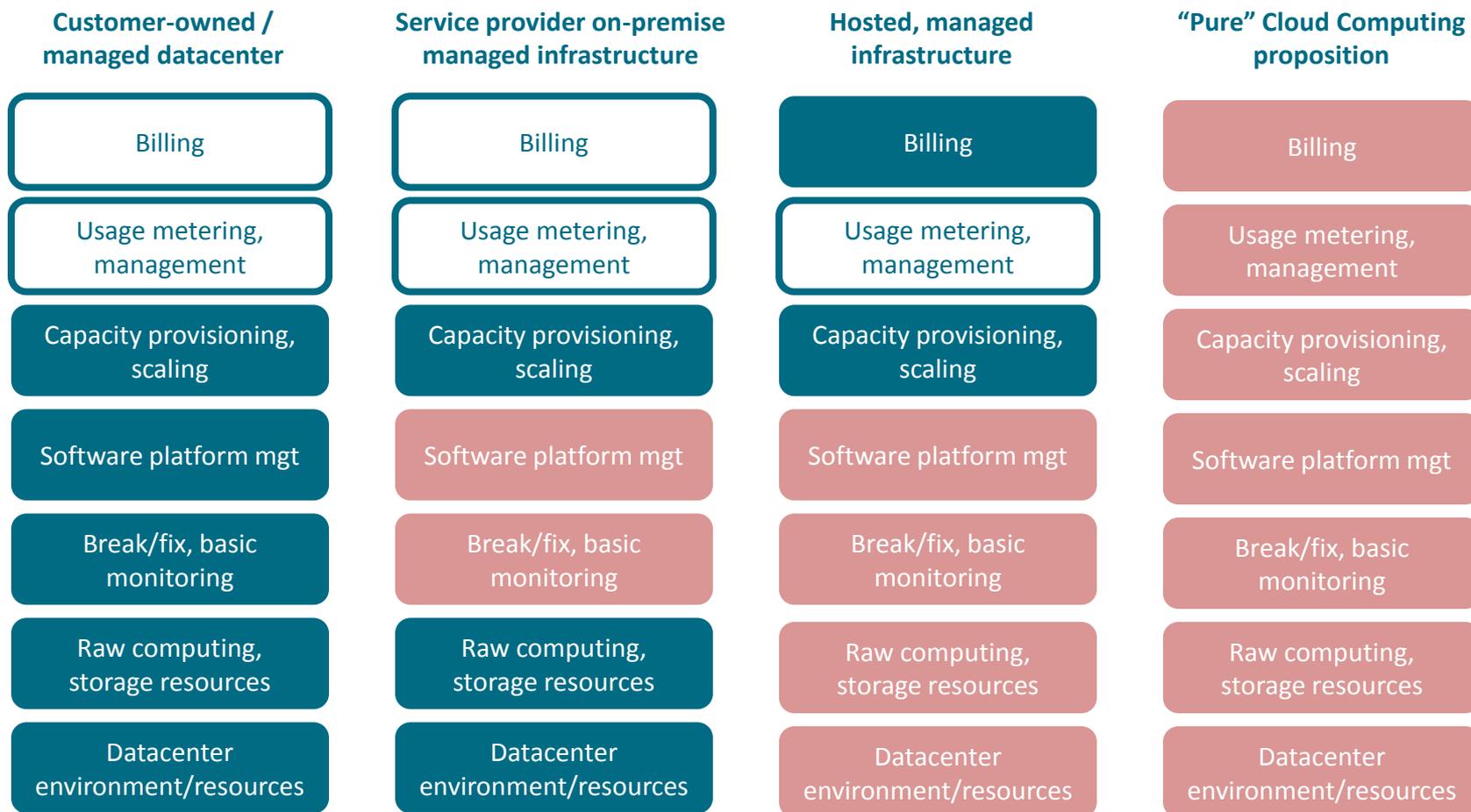
What is Cloud Computing?

Architectural, economic, strategic elements



- Economic element:** Pay-as-you-go, pay-as-you-grow, no capex
- Architectural element:** Simple, abstract environment for development
- Strategic element:** Focus on what makes you better, leave the rest to someone else

Another way to look at Clouds: Who does what?

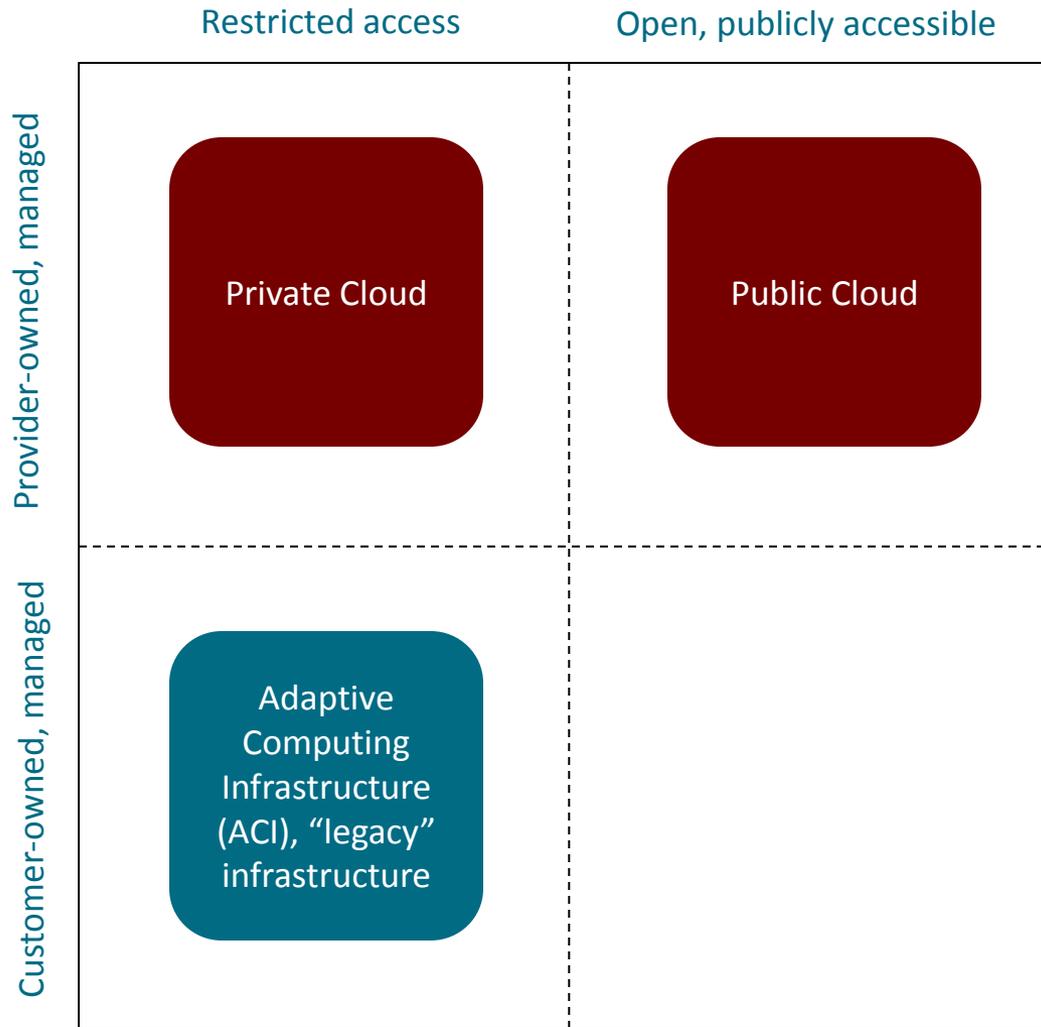


 = customer's responsibility

 = service provider's responsibility

 = not a focus

Cloud is a model of utility service consumption, not technology ownership

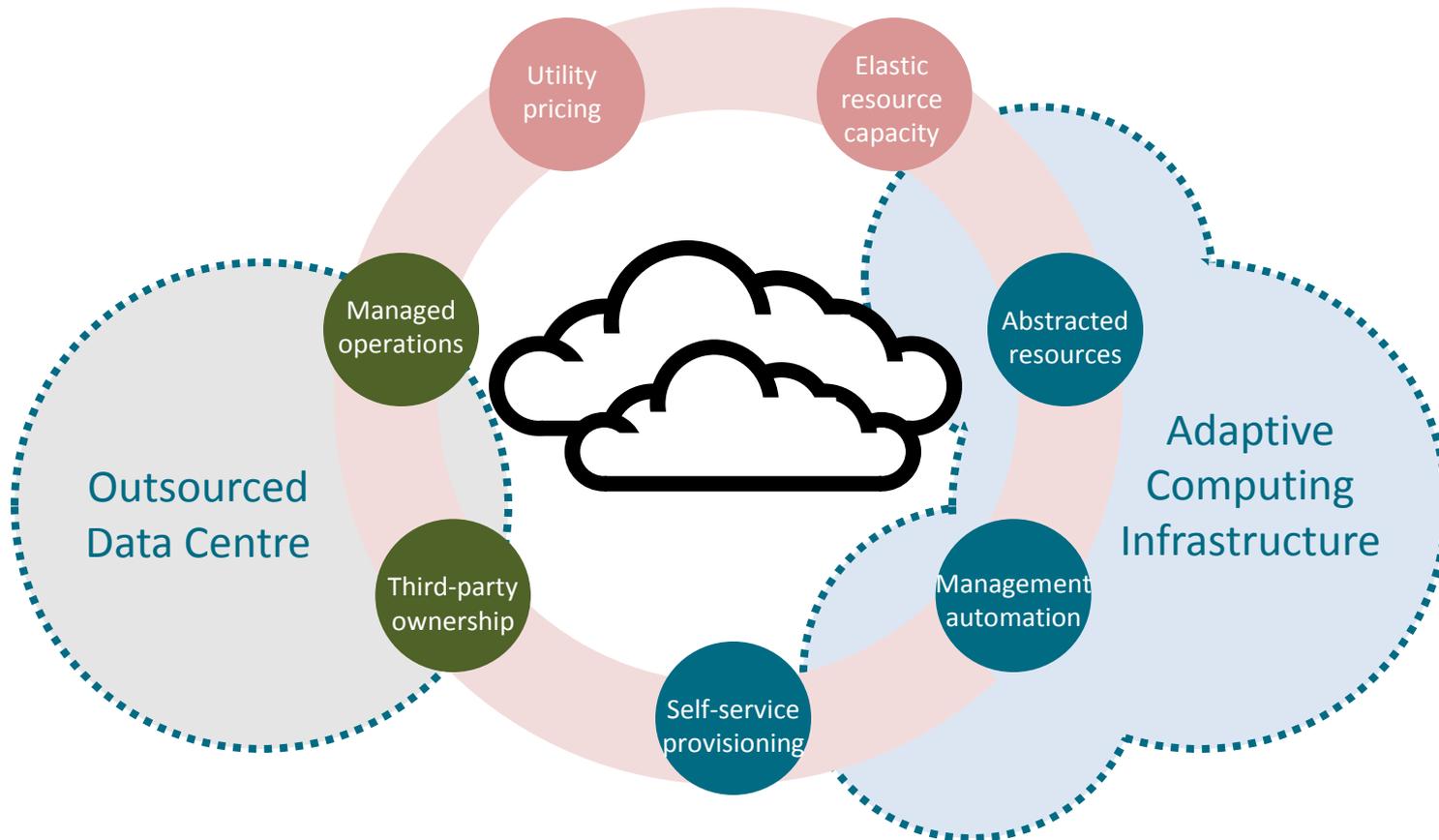


“Private Cloud” is about restricted, secure access to Cloud services – not customer ownership

We use the term “Adaptive Computing Infrastructure” to refer to “Cloudy” infrastructure that you can buy

Overlapping value: Cloud Computing and its cousins

Public, Private Clouds



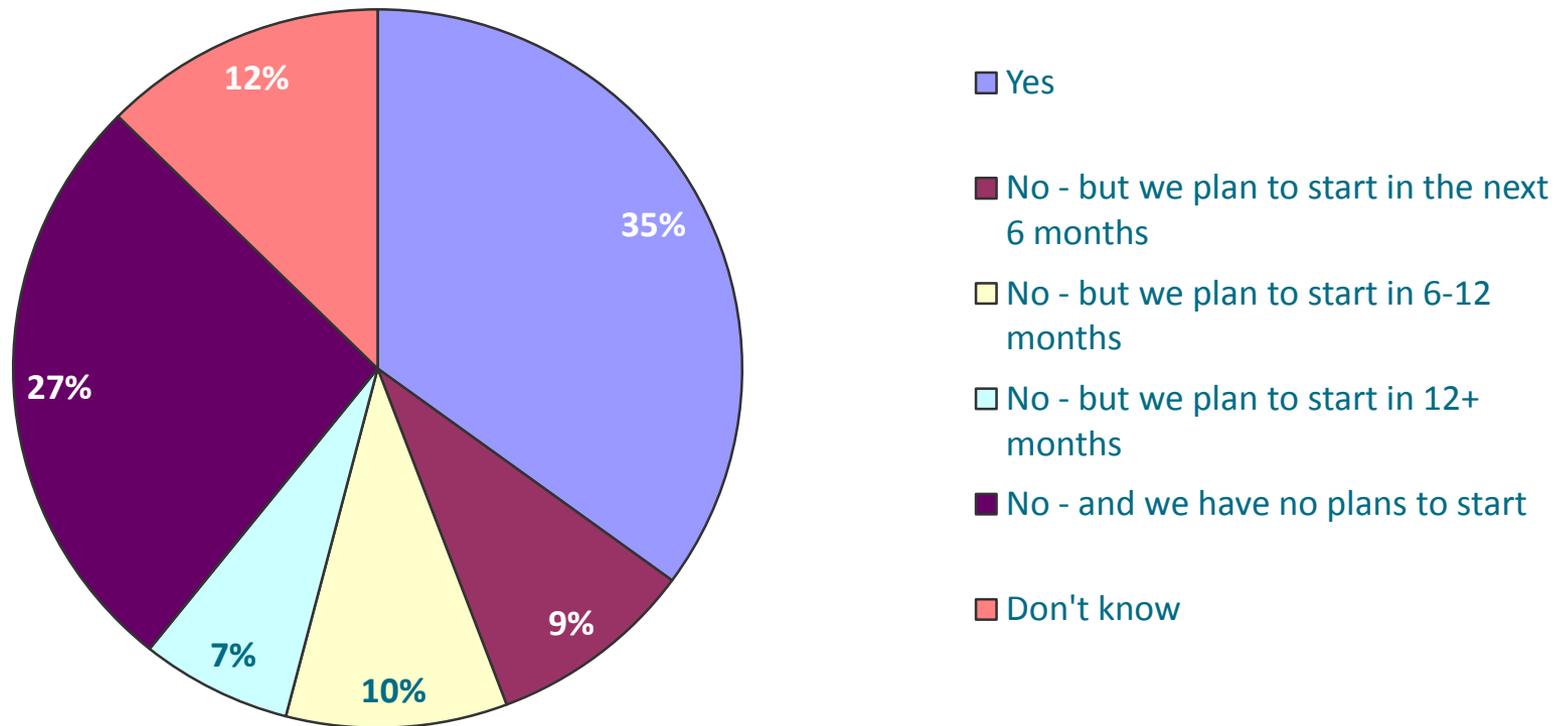
Into the mainstream

- Numerous large-scale examples of online services built on public Cloud resources
 - Twitter, etc
- Initial public Cloud take-up by online startups: now mainstream interest from enterprises
 - Washington Post, Harvard Medical School, etc
- Mainstream enterprise infrastructure software vendors defining Cloud Computing strategies, products, services
 - Microsoft, IBM, TIBCO, Oracle, Citrix, ...
 - For many it's simply a “stick it on AWS” strategy, or an Adaptive Computing Infrastructure (ACI) strategy

What do IT architects think? What are they doing? We asked you...

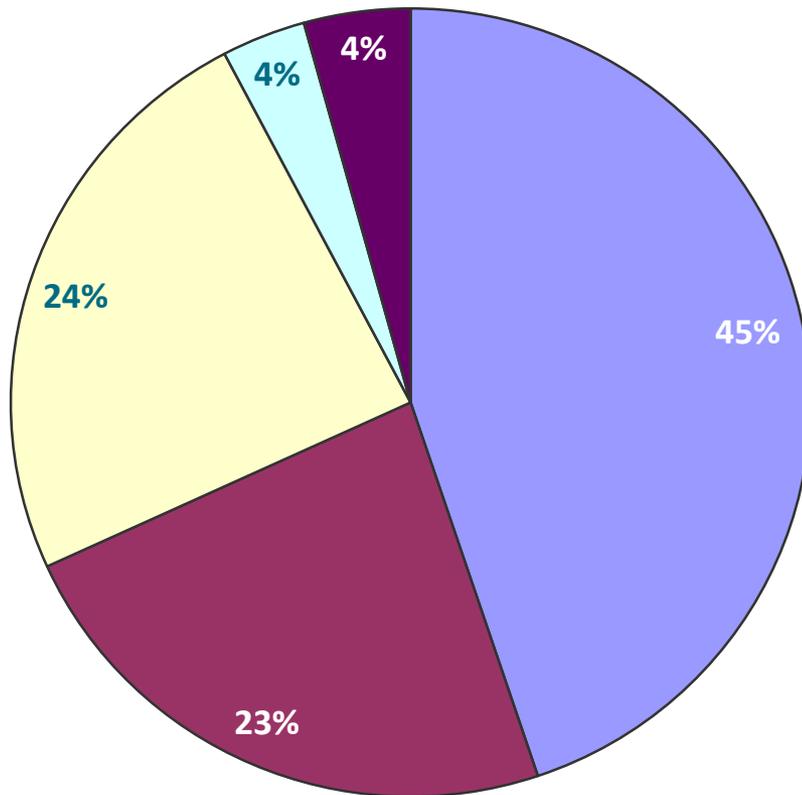
- “Developing in and for the Cloud”
 - Web-based survey conducted with IASA members September 2009
 - 358 respondents – range of IT architect roles
- One of a series of surveys we conduct with IASA members to learn about IT architecture practice (in return we provide proprietary content for IASA members)

Who's working with Cloud already?



61% are already using Cloud Computing resources, or have plans to start investing

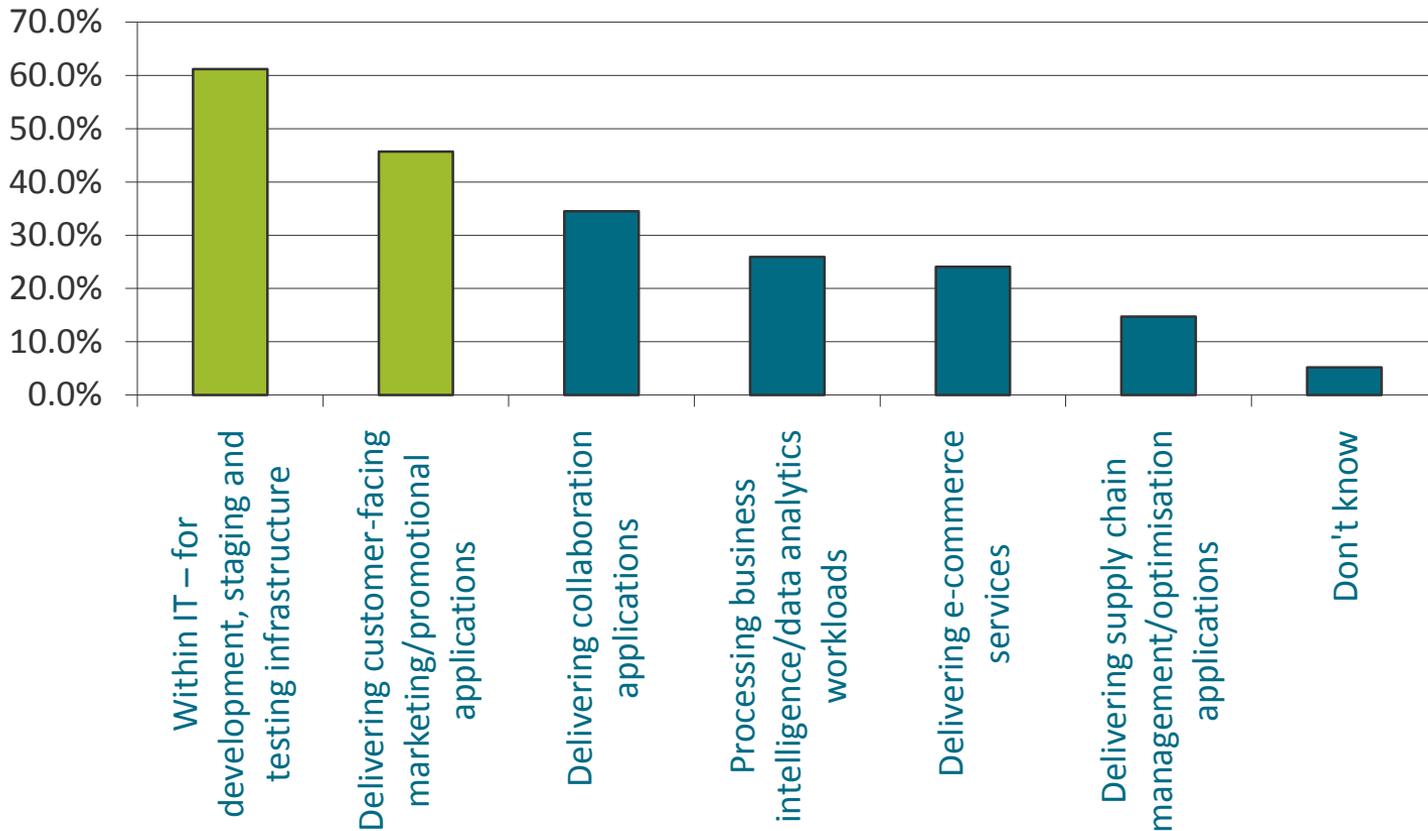
How much are you doing?



- We're testing the model for one specific application
- We've already developed and deployed an application that's now being used "live"
- We're using Cloud resources for multiple applications
- Cloud Computing is now our de facto standard model for developing and deploying applications
- Don't know

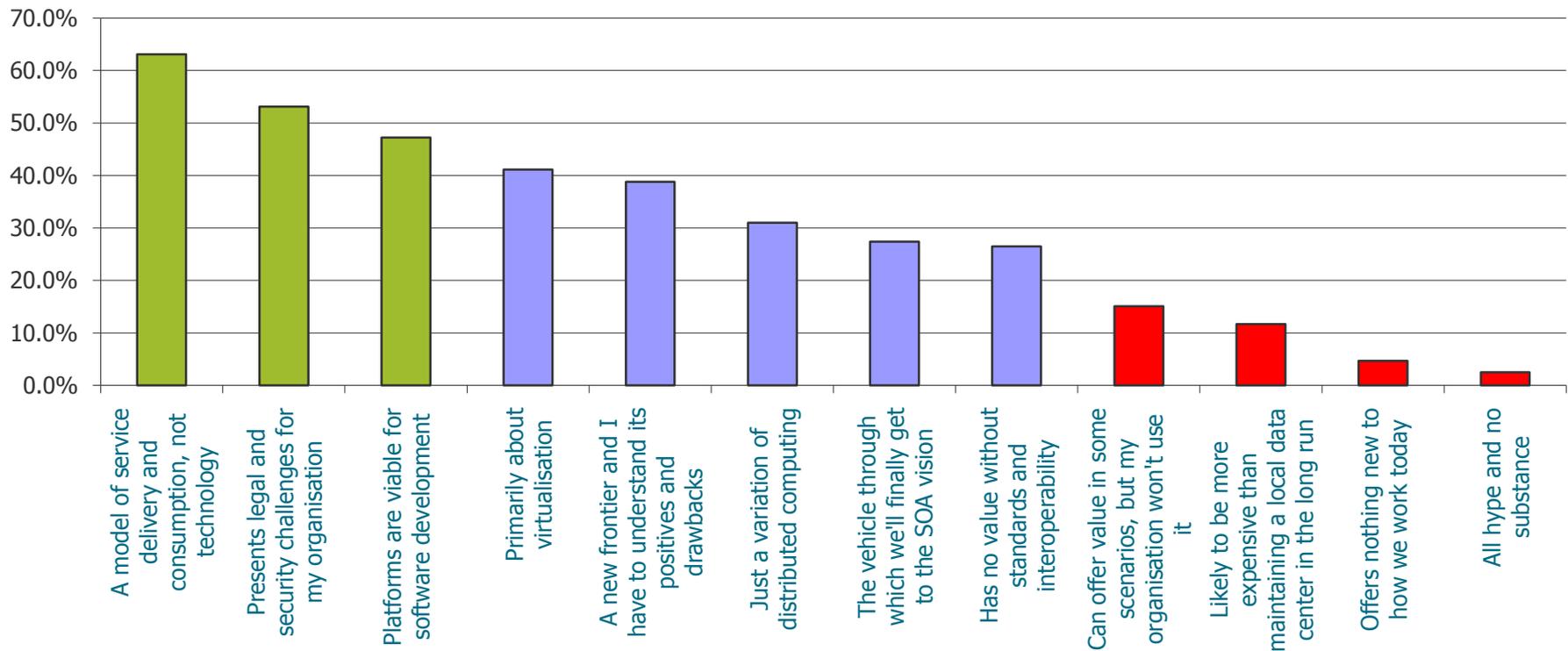
51% are already using Cloud Computing in "live" applications and processes

Where are you doing it?



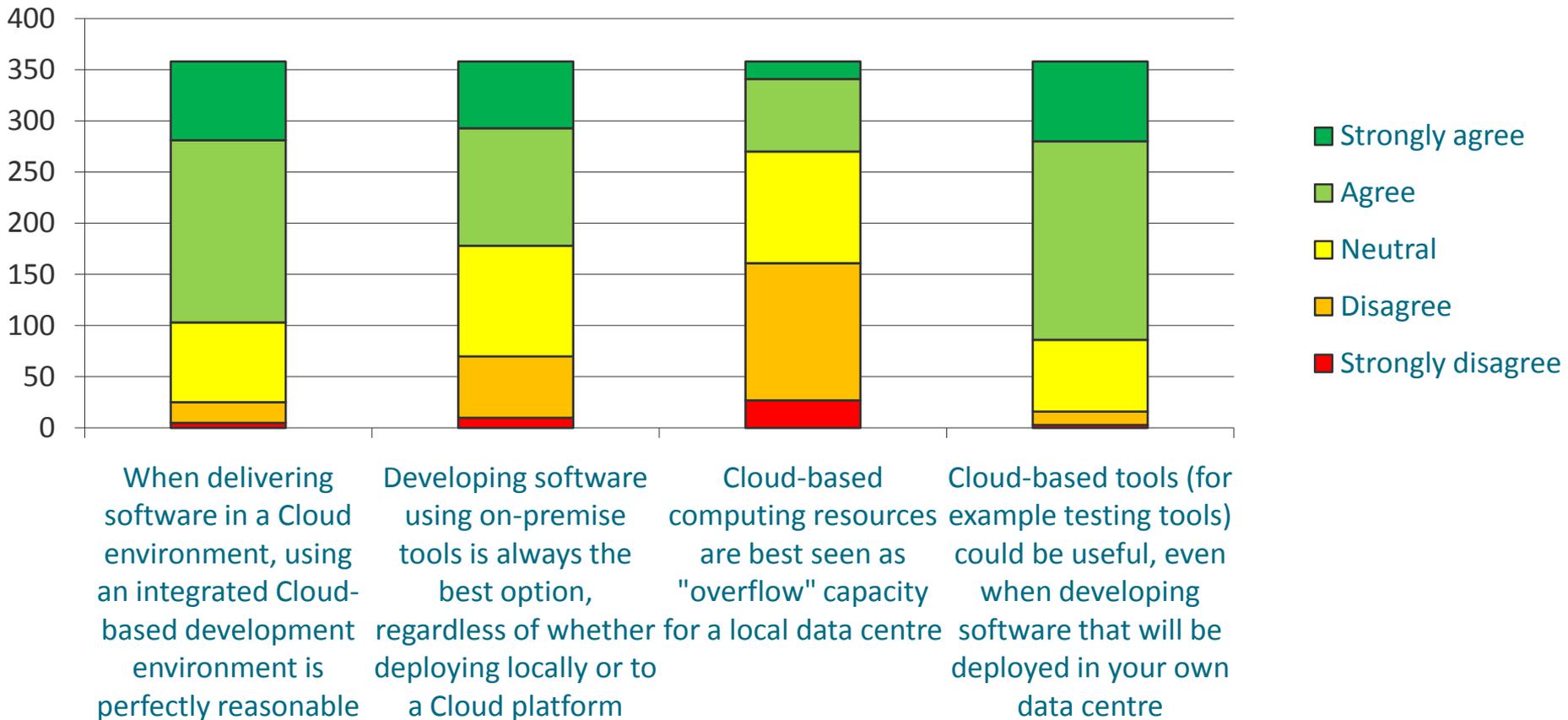
Internal IT use, and development of customer-facing marketing apps, most common

What do architects think of Cloud Computing? It's not about technology



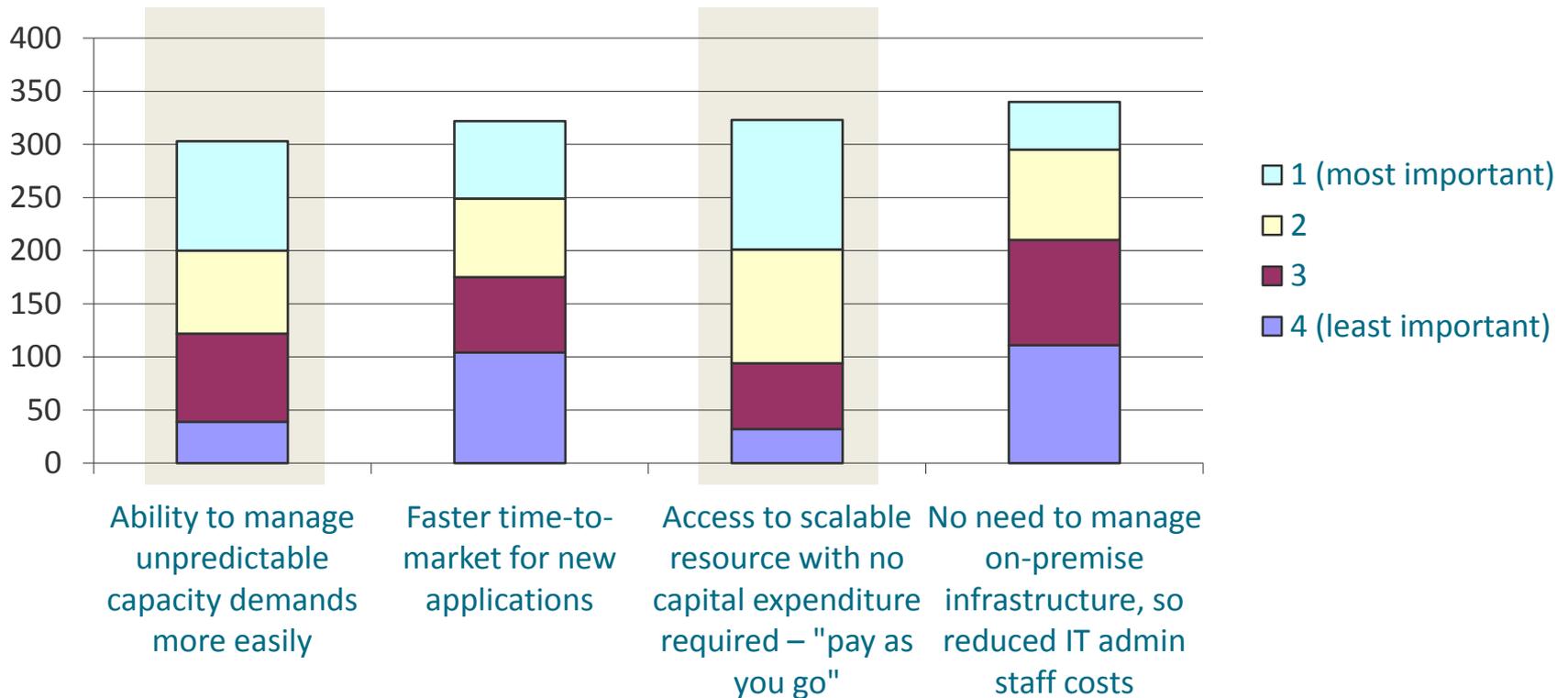
Negative statements were far and away the least agreed with

Perceptions about different development models: very open-minded!



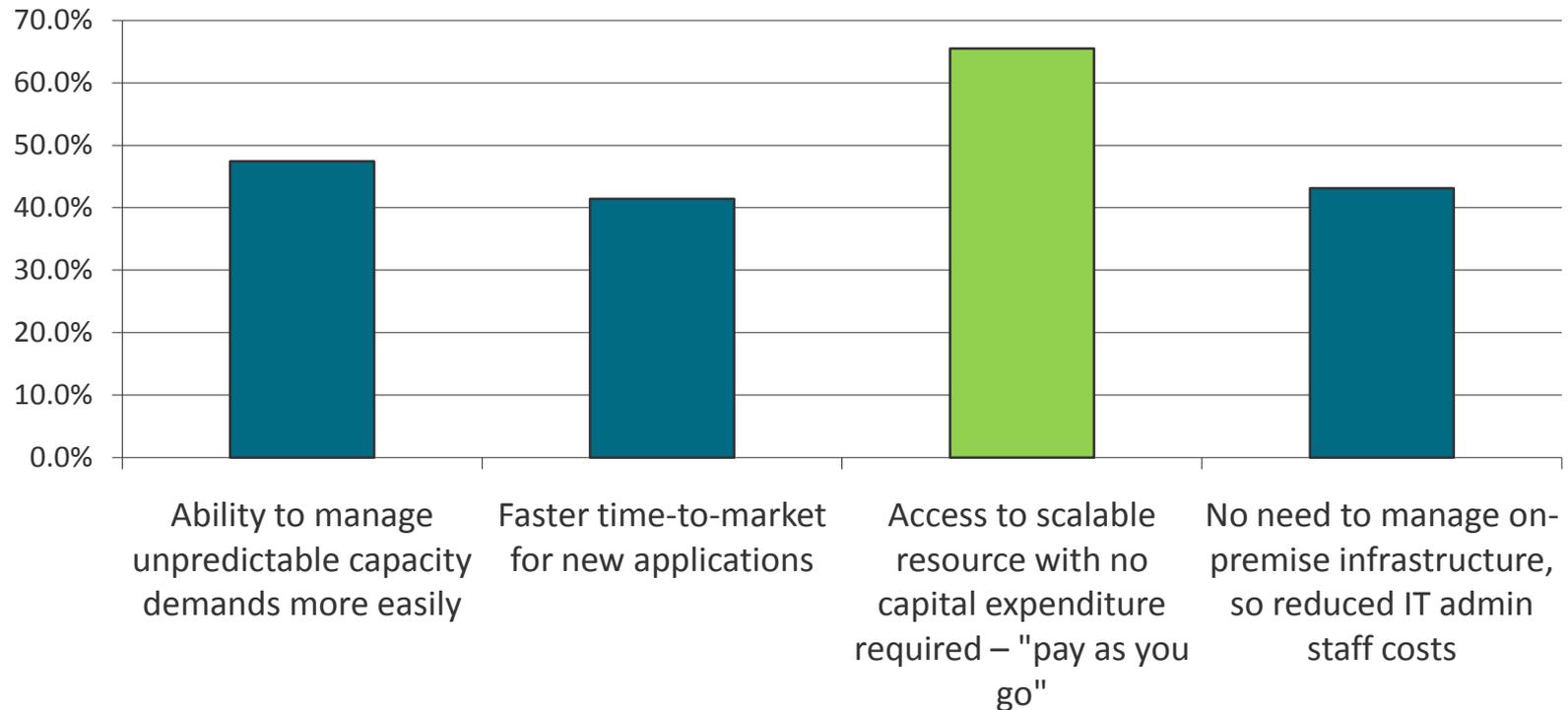
Open to using Cloud-hosted development tools

What are the potential benefits?



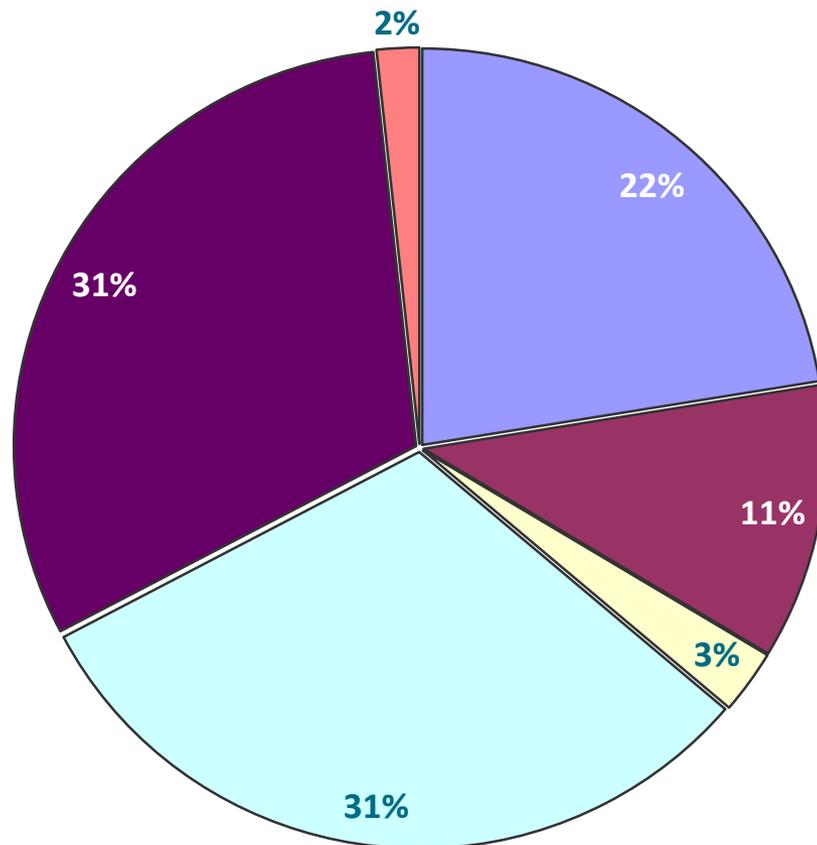
Economic value elements of Cloud Computing are front-of-mind today

What are the actual Cloud Computing benefits achieved? (by those who've started)



Economic benefit is the most commonly-cited as experienced

How successful are we – so far?



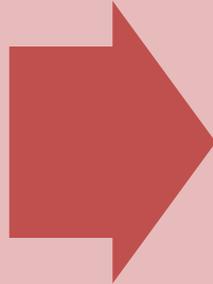
- We're seeing very significant benefits from our Cloud Computing initiative(s) that have given us a good return on our investment so far
- We're seeing some benefits but we've also had to make significant investments, and the business value returned has been patchy
- Our initiative hasn't returned anything like the level of benefit we hoped for
- It's too early to be 100% sure, but I'm confident we have the right approach
- It's too early to say

It's early days, but overall we're seeing definitely positive results

3 entry points for Enterprise Cloud investment: Aligned with key Cloud elements

Economic elements

Utility pricing,
elastic capacity



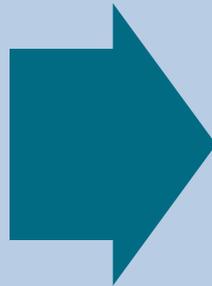
Non-uniform workloads

Where the expense of acquiring infrastructure is difficult to justify

- Application development, test, staging
- Large dataset batch analytics
- Online promotions

Architectural elements

Virtualisation,
automation,
provisioning



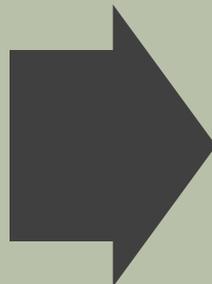
Rapid time-to-market

Where a ready-to-use platform is highly compelling

- Service/application prototyping
- High business demand for new application functionality

Strategic elements

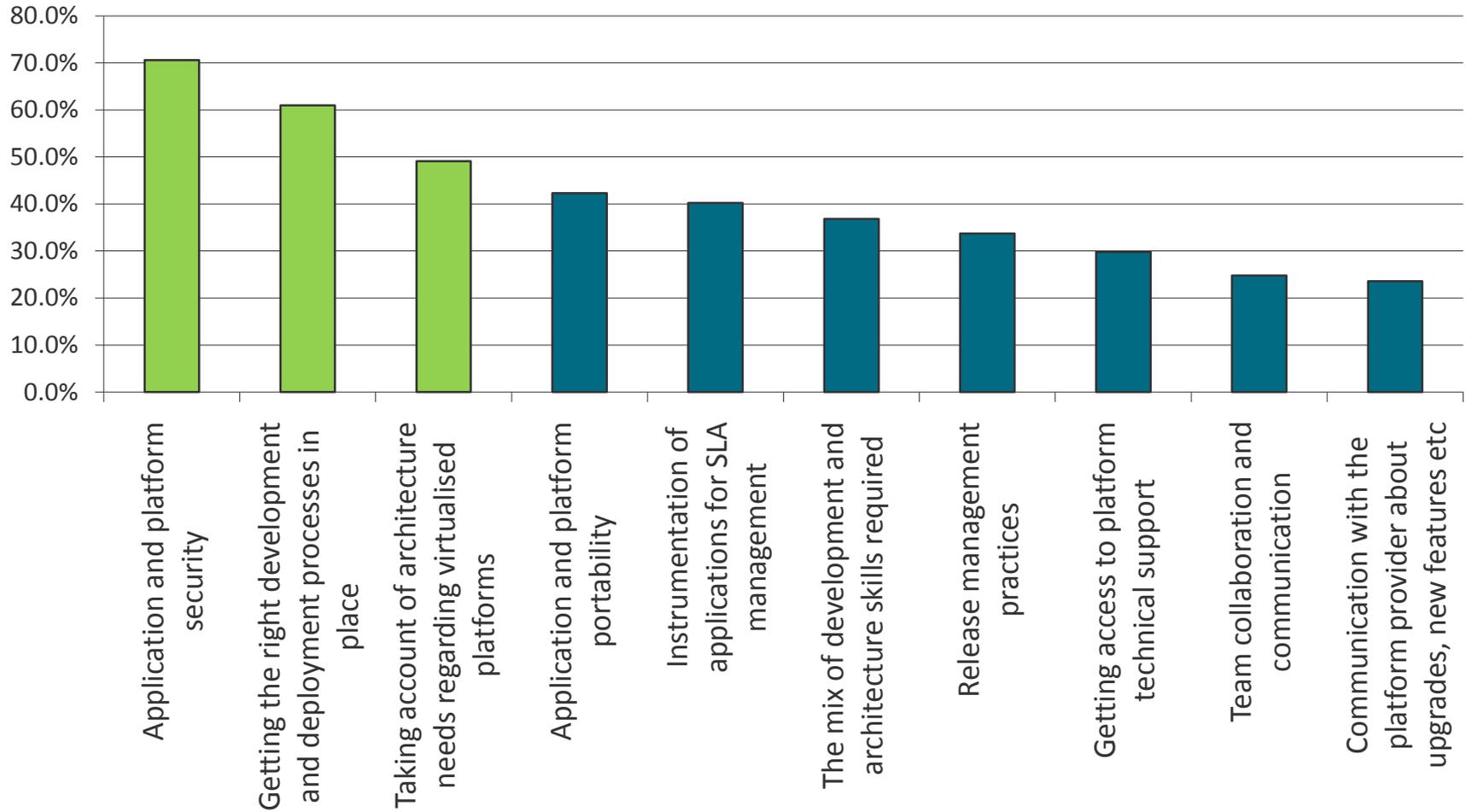
Third-party
ownership,
management



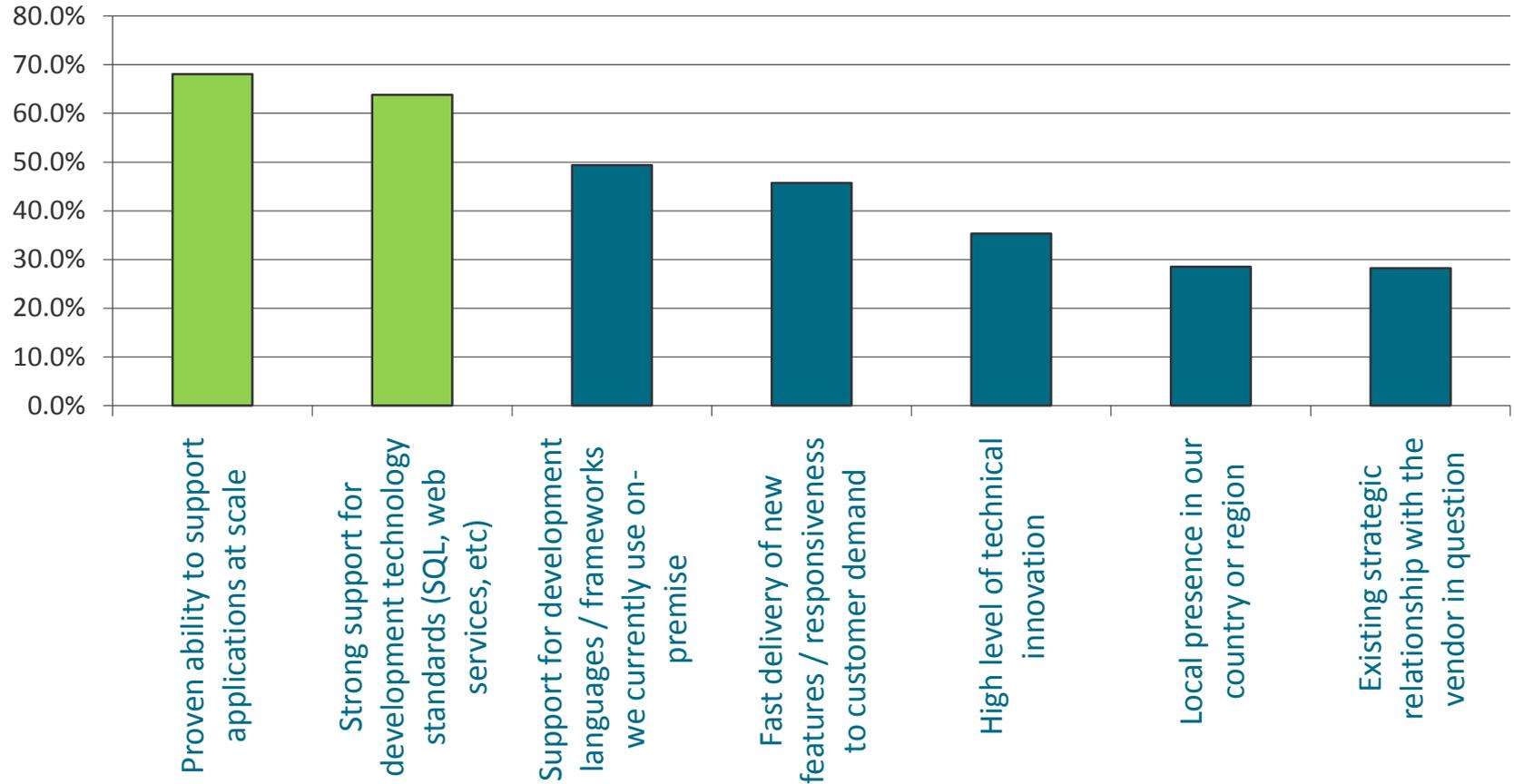
"Cloud by stealth"

Where an existing service provider implements own Cloud infrastructure to gain economic advantages

Development management – most important concerns



Supplier selection – most important concerns



Scalability and standards are *much* more important than existing relationships

Summing it all up

- Cloud Computing adoption is still in its early stages but progressing quite fast amongst the IASA community
- Given early stage of adoption, benefits appear to be flowing quite strongly
- Economic benefit (pay-as-you-go, pay-as-you-grow) is most important to people right now
- Potential for Cloud-based tools appears to hold water
- From a development management perspective, security, process and virtualisation are most important
- From a supplier selection perspective, proven scalability and support for standards are most important

Thank you! Questions?



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