

Enterprise Cloud Computing: Opportunities & Challenges

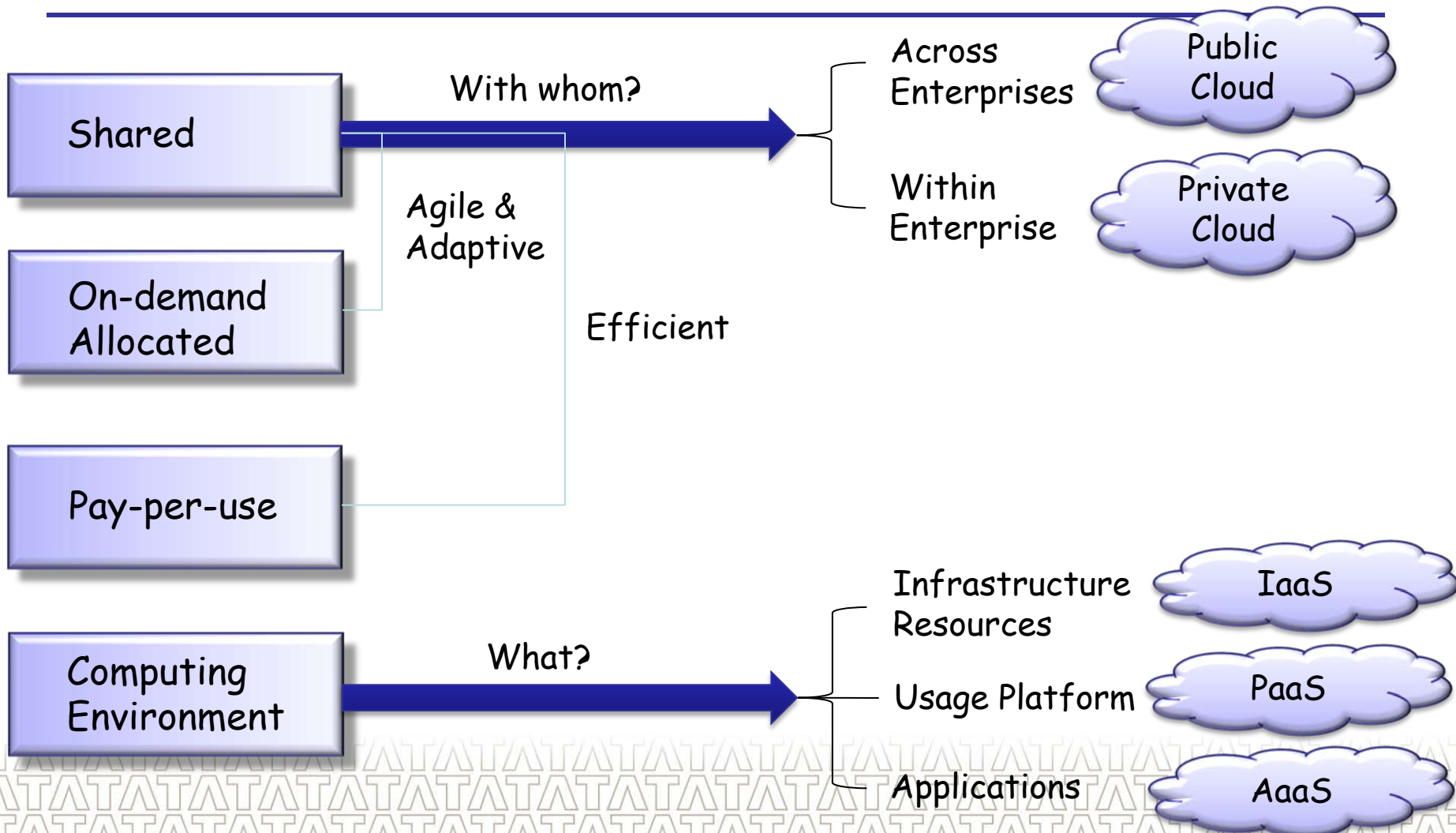
Harrick M. Vin

Vice President and Chief Scientist

Tata Research Development and Design Centre, Tata Consultancy Services (TCS)

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Cloud Computing and Enterprise



How can an enterprise benefit from such cloud offerings?

Enterprise Cloud Computing: Challenges

The problem: Too-many choices and constrains

- Lots of different platforms
 - Many providers - different levels of service
 - Several different financial models
- Many enterprise constraints
 - Business: Security/Privacy; Reliability/Availability; Auditability; ...
 - Technology: Specialized platforms; software licenses; ...
 - Application and usage:
 - Vertically vs. horizontally scalable applications
 - Predictable vs. highly fluctuating workloads

The challenge: Deciding on what, when and why

- "One-size-does-not-fit-all"
- Custom strategy depends on:
 - As-is state: Scale and complexity
 - Characteristics of solution platforms: Costs, benefits, risks and side-effects

Enterprise Cloud Computing @ TCS

Two-pronged Approach

Analytics-led transformation planning and execution

- Monitor → Analyze → Plan → Execute
- *iTransform*: Fact-based, systematized and automated strategy derivation
 - Address the what, when and why questions
 - Automation → Evolve strategy to accommodate change
- Cloud migration strategy execution
 - Leverage TCS Co-Innovation Network (CoIN)

Create specialized cloud-based solution platforms

- Domain-agnostic platforms: DR-as-a-Service and Assurance-as-a-Service
- Domain-specific platforms for SMB
 - Education, Manufacturing, Wellness, Retail, ...

Questions ???

For more information, contact:
Harrick Vin (harrick.vin@tcs.com)



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iTransform in Action

The screenshot displays the iTransform (SRL) application interface. The left sidebar shows a tree view of the project structure, including Servers, Data Center, Applications, and Costs. The main window is titled "Data Center -> Servers(2108) -> Location(2108)" and contains several tabs: Main, ConsolidateWithRefresh, Comparison, What [Consolidation Plan], When [Migration schedule], and Why [Business Case].

Under the "ConsolidateWithRefresh" tab, there are sub-tabs for "sparc servers" and "x86 servers". A table titled "Consolidation distribution for partition - sparc" shows the following data:

Partition	sparc
No. of servers	235
No. of servers left unchanged	6
No. of servers to be virtualized for consolidation	229

Below this, the "Comparison" tab is active, showing a table with sub-tabs for "Inputs", "Financial calculations", "Summary", and "Carbon calculator". The table displays expenditure and savings data for "3 year's total Expenditure" and "1 year Steady State Expenditure".

A		3 year's total Expenditure	% Savings
As-Is		€82,224,812	0
To-Be		€58,557,376	29

A		1 year Steady State Expenditure	% Savings
As-Is		€23,513,088	0
To-Be		€14,647,944	37

At the bottom of the window, there is a list of servers and a table for "Servers left unchanged: 6".

Name	Type	Utilization(%)	Rating(Watts)	Reason
NewServer9	[VACPQ03,40.0, VACPT01,40.0, VAECMSQ01,40.0, VAECMSQ04,40.0, XSIMOBAPP,40.0]			
NewServer10	[VACPP06,40.0, VACPP09,40.0, VACOND04,40.0, XSIMISCAP03,40.0]			

The Windows taskbar at the bottom shows the system clock as AM 09:36 and several open applications including iTransform (SRL).

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