

Adopting Cloud in Your Enterprise

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Cloud Computing ...

Technical Definitions

- ✿ **Cloud Computing** is “a style of computing where *highly elastic* IT-enabled capabilities are *delivered as a service* to external customers *using internet technologies*” - Gartner

Cloud Computing ...

Technical Definitions

- ✿ **Cloud Computing** is “a form of standardized IT-based capability — such as *Internet-based services*, software, or IT infrastructure — offered by a service provider that is accessible via Internet protocols, is *always available* and *scales automatically to adjust to demand*, is either *pay-per-use* or advertising-based, has Web- or programmatic-based control interfaces, and enables *full customer self-service*” - Forrester

Cloud Computing ...

Technical Definitions

- ✿ **Cloud Computing** is “a model for enabling convenient, *on-demand network* access to a *shared pool* of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be *rapidly provisioned* and released with minimal management effort or service provider interaction”- National Institute Of Standards and Technology (NIST)

Why should you adopt?

- ✿ Cost Performance
- ✿ Agility & Elasticity
- ✿ Ubiquity & Utility



Roadblocks

- ✿ Security
- ✿ Compliance
- ✿ Integration
- ✿ Governance



Cloud Adoption Cycle

- ✿ Explore and Experiment
- ✿ Adopt and Integrate
- ✿ Evolution and Governance
- ✿ Decommissioning



3 Challenges for CIOs

- ☀ Visibility

- ✂ Where does your IT stand today?

- ☀ Value

- ✂ What is the value of IT to Business?

- ☀ Technology

- ✂ Moving from Applications to Services... Is IT mature enough?



Top Questions from CIOs

- ✿ Why should I explore Cloud? What's in it for me?
- ✿ Moving which applications to cloud gives most value?
- ✿ Which applications and environments are most easily migrated?
- ✿ What Cloud models are right in my organization?
 - ✗ What model (PaaS or IaaS) is suitable for my organization?
 - ✗ Where should I host? Public/Private/Hybrid
 - ✗ Single / Multiple Cloud Provider or Aggregator
- ✿ How to move the applications to cloud?
- ✿ How to manage assets and vendors upon adopting cloud?
- ✿ What quantified value can I expect in each phase of adoption?

... Which Services/Apps/Components?

- ✿ Multiple Methodologies Exist
 - ✿ HCL's CRI Methodology
 - ✿ CA's Quadrant Framework
 - ✿ Forrester's Framework
 - ✿ Freeform Dynamics' Framework



...Which Services/Apps/Components?

Business Criticality	Application Origin	Demand Elasticity
Application Complexity	Maintenance Complexity	Integration Complexity
Regulatory / Compliance Needs	Data Sensitivity	Uptime Requirements
Support Requirements	Technology Suitability	Application Stability

Assessment Dimensions of HCL's CRI Methodology.

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...Which Cloud?

- ✿ Cloud Affinity of technologies
- ✿ Cloud Affinity of application portfolios
- ✿ Cloud Affinity of activities
- ✿ Cloud Affinity of processes
- ✿ Maturity of Organization's Processes

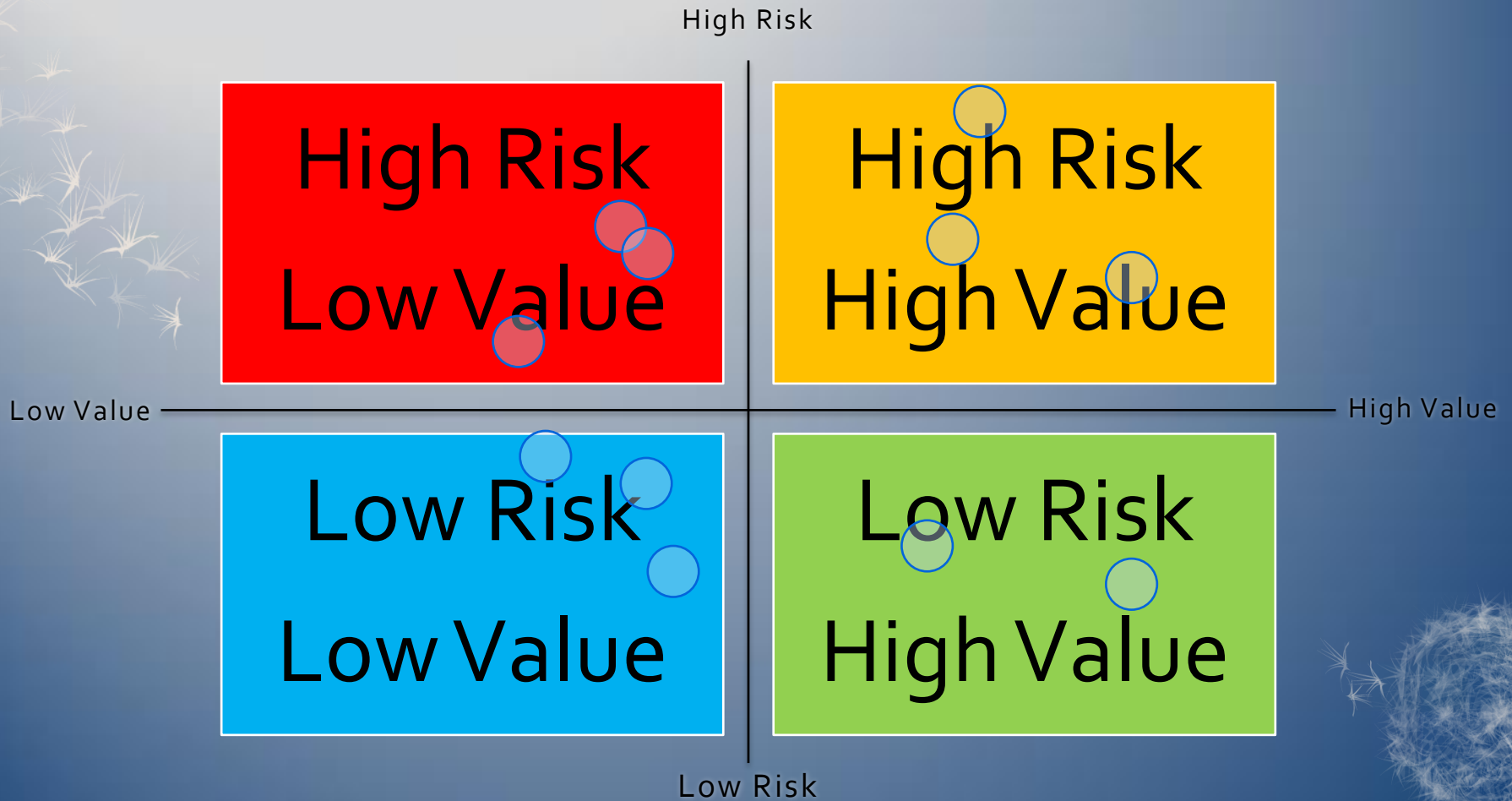
Cloud Affinity is part of HCL's CRI Methodology.
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Pilots

- ✿ Identify right candidates
 - ✿ Processes / Applications / Infrastructure
- ✿ Critical Mass
- ✿ Balancing Risk vs. Value



Pilots

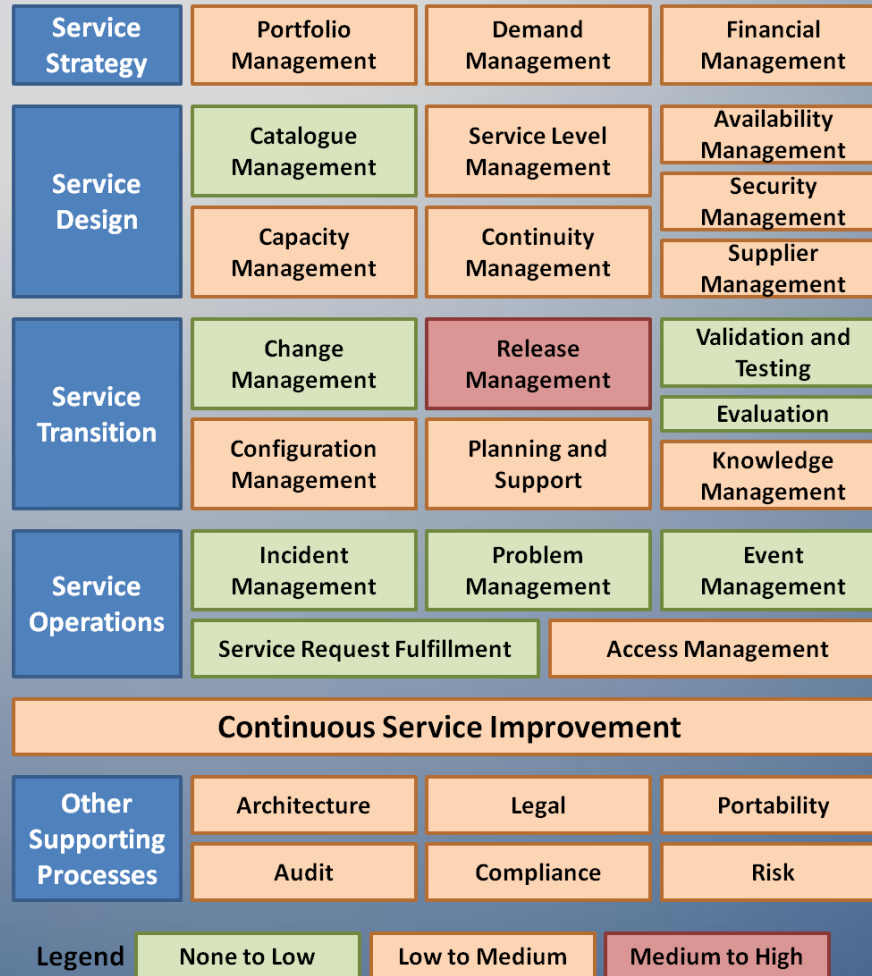


Governance

- ✿ Conduct Current Governance Maturity Assessment
- ✿ Identify Gaps vis-à-vis Chosen Cloud Model
- ✿ Prioritize Risk vs. Effort
- ✿ Plan to achieve in line with adoption roadmap



Governance



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Above picture is part of HCL's CRI Methodology.
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Organization Maturity

- ✿ Vendor / Supplier Maturity
- ✿ Enterprise Architecture Maturity
- ✿ Program Management Maturity
- ✿ Portfolio Complexity and Ownership
- ✿ In-house Skills
- ✿ ...



Application Migration / SaaS Enablement

- ✿ Technical Evaluation
- ✿ Architecture Evaluation
 - ✘ Anti-patterns
 - ✘ Re-factor / re-architect
- ✿ Migrate vs. SaaS
- ✿ Data Model Changes
- ✿ Build / Buy / Migrate



Business Process Perspective

Identify which business processes are mature enough... or immature enough

Define objectives, requirements and SLAs

Identify suitable SaaS alternatives
Conduct gap analysis & identify customization needs

Architect and Implement
Define data model and perform data cleansing

Migrate process and associated data

Application Perspective

Identify which applications make good pilot candidates

Conduct migration assessment for target cloud environment

Create/Update Enterprise Cloud Architecture

Re-platform / Modify Application code and data

Migrate application and associated data

Environment Perspective

Identify which environments are suitable for cloud

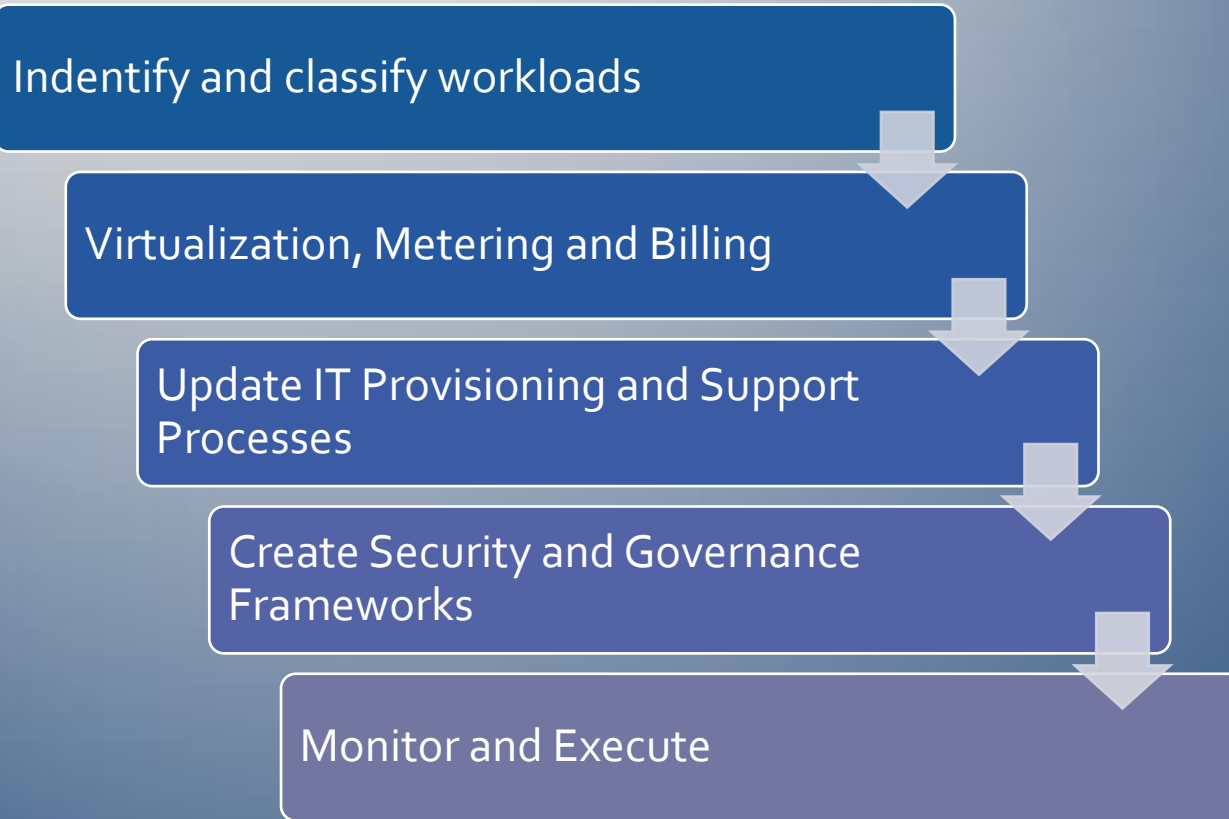
Create/Update Enterprise Cloud Architecture

Update Enterprise Development Guidelines

Modify IT Services and Support Processes

Train and Re-skill Staff

Infrastructure Perspective



Financial Perspective

Benefits	
IT Operational Benefits – One Time	
Server renewal cost avoidance	\$
IT Operational Benefits – Recurring	
Reduced people costs	\$
Removed infrastructure maintenance	\$
Reduced application maintenance	\$
Reduced application development costs – productivity	\$
Reduce application development tooling costs	\$
Infrastructure optimization to elastic demand	\$
Reduced / optimized software licence costs	\$
Business Benefits	
Faster project returns through project acceleration	\$
Faster cycle times on Innovation projects	\$
Removed depreciation liability	\$
Investments	
One Time Investments	
Cloud Strategy Architecture & Roadmap development	\$
Application Migration	\$
Replatforming	\$
Interface modifications	\$
Data Migration	\$
Cloud Enablement	\$
Infrastructure set-up	\$
Legal and Compliance	\$
Cloud vendor selection	\$
Cloud Governance Framework development	\$
Application Decommissioning	\$
Data Archivals	\$
Asset write-offs	\$
Organizational Change Management	\$
Communication management	\$
Training	\$
Documentation	\$

**Cloud Benefit
Quantification**

**Cloud Investment
Projections**

Cloud Benefit Quantification is part of HCL's CRI Methodology.

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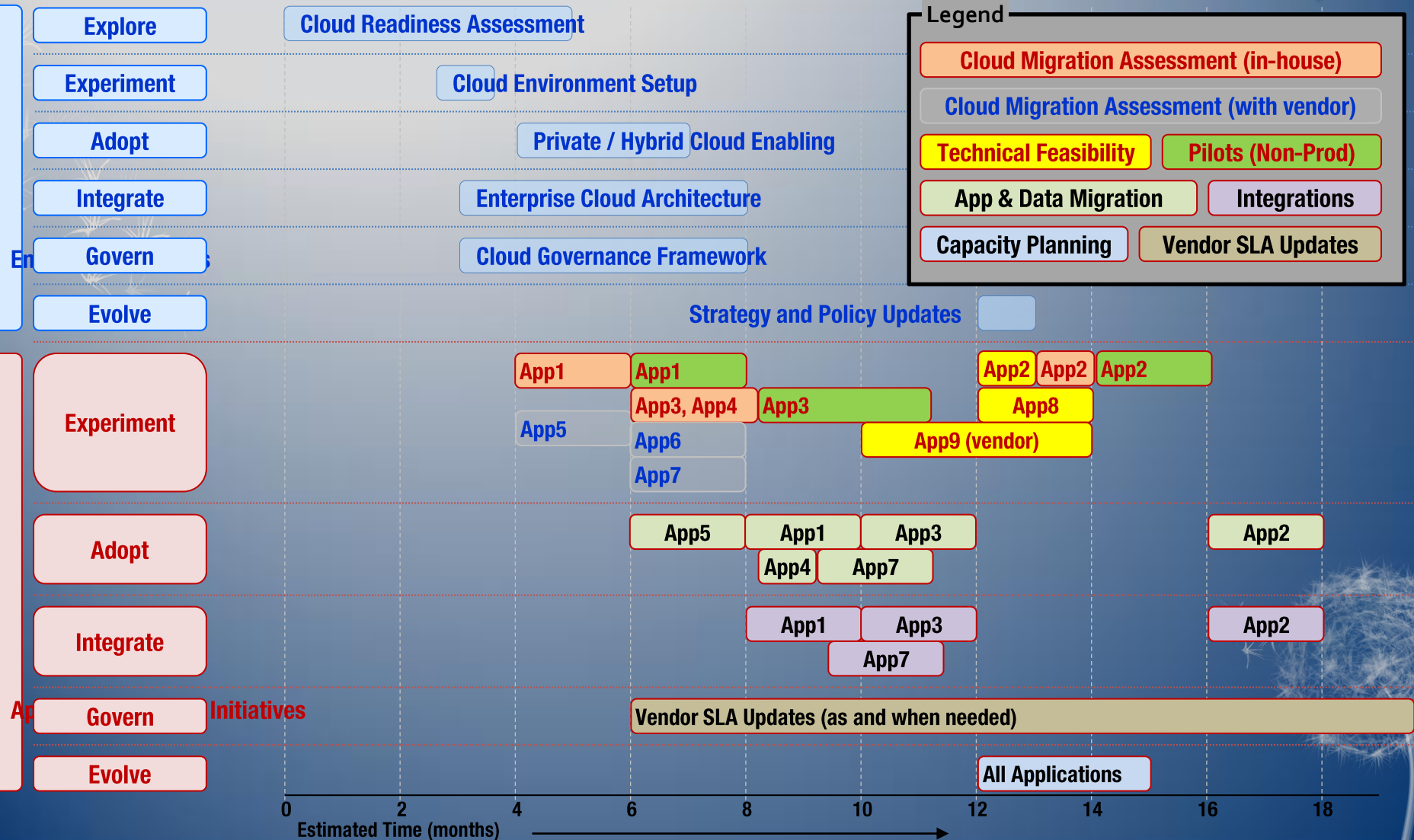
Low Hanging Fruits

- ✿ Websites
- ✿ B2C Applications
- ✿ Test Environments
- ✿ New Developments
- ✿ Idea Incubators



Sample Cloud Roadmap

Cloud Journey



Thank You

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