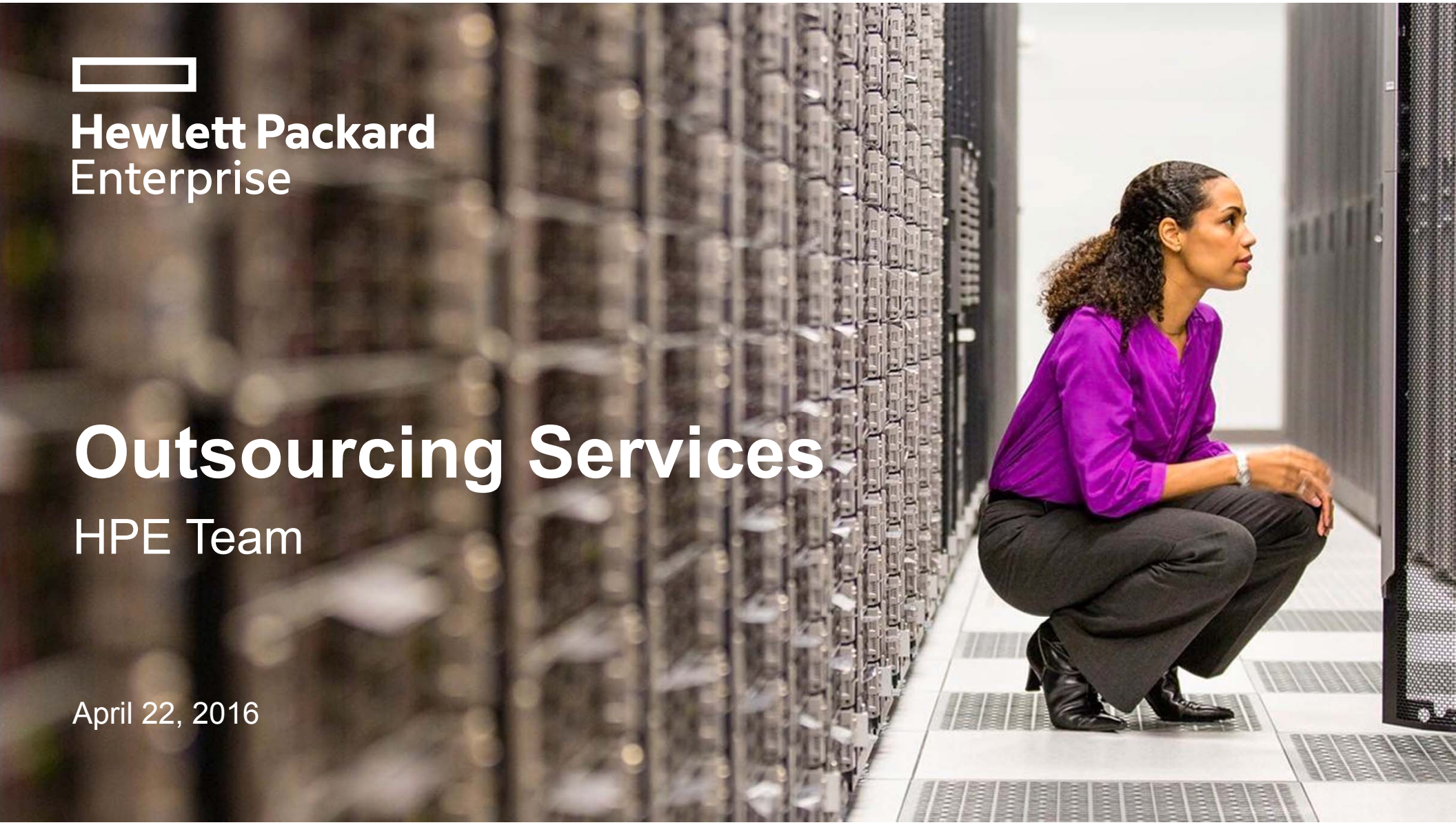

Hewlett Packard Enterprise

Outsourcing Services

HPE Team

April 22, 2016

Agenda

Technology
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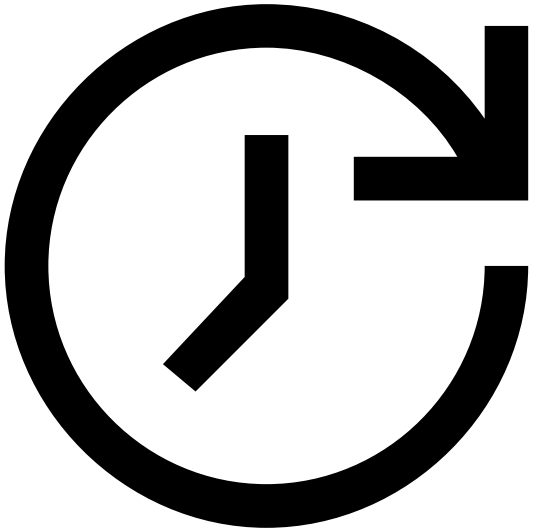

- Who am I
- Hewlett-Packard
- Solution Key Elements
- Q & A

Hewlett Packard
Enterprise

Background

Technology
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Dipl. Ing. Elektrotechnik (FH)

- Application Support Engineer
- Operations Implementation Consultant
- Account Delivery Executive
- Solution Architect
- Lead Solution Architect
- Global Account Solution Consultant
- Innovation and Design Authority ITO

Other skills: Program Manager, Escalation Manager, Chief Technology Officer,

Said Erkan, PMP®
Innovation and TechBoard Lead

said.erkan@hp.com
+49 (0) 160 9041 7535
Hewlett-Packard GmbH
Berliner Str. 111
40880 Ratingen
Germany

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Do you know ?

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„Yes the printer company“

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1,3

HP printers are sold every second

4 Billion

Photos are stored by 50 million customer at HP

26 Years

Old is the oldest HP product still being on

210.000

Service emplo-yees in 170 countries

54 Million

HP PCs are sold every Year

Every 3

Server worldwide ist a HP Server

321000

Employees

32.000

HP hold patents

70%

of all SMS are sent by HP Software

114,6

Billiion $ Revenue in fiscal year 2009

10 Million

Payroll services for more than 700 customers

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Hewlett Packard – Split in 2015

Two new independent publicly traded companies

Technology Arts Sciences TH Köln

	Hewlett Packard Enterprise	HP Inc.
Revenue Mix*	Enterprise Group 50%; Enterprise Services 37%; Software 7%; Financial Services 6%	Personal Systems 60%; Printing 40%
Financial Metrics*	Revenue **$52.7B**; Operating Profit **$4.9B**; Operating Margin **9.2%**	Revenue **$57.3B**; Operating Profit **$5.5B**; Operating Margin **9.5%**
Key Markets	Services, Cloud, Servers, Networking, Software, Converged Systems, Storage	Notebooks, Mobility, Ink Printing, Solutions, Desktops, Graphics, Laser Printing
Leadership	**Meg Whitman** President & Chief Executive Officer	**Dion Weisler** President & Chief Executive Officer

* Based on reported HP segment revenue and segment operating profit for the last twelve months from Q4 fiscal 2013 to Q4 fiscal 2014, totals do not include Corporate Investments segment or intercompany eliminations

Hewlett Packard Enterprise

An industry leader

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Key Markets

Cloud | Services | Servers | Storage | Software | Networking | Converged Systems

Leadership

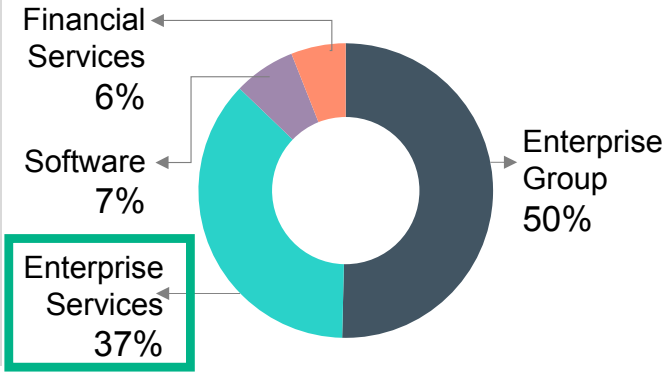
Meg Whitman
President & CEO

Tim Stonesifer
CFO

Trailing Twelve Months (TTM) Financial Metrics[1]

Revenue	Operating Profit[2]	Operating Margin[2]
$52.7B	**$4.9B**	**9.2%**

HPE Revenue Mix[1,3]



Hewlett Packard Enterprise

1. Based on HPE Form 10 filing for the last four quarters from Q4 fiscal 2014 to Q3 fiscal 2015
2. Non-GAAP operating profit excludes restructuring charges of $951M, amortization of intangible assets of $838M, separation costs of $458M, defined benefits plan settlement charges of $178M, impairment of data center assets of $136M, and acquisition-related charges of $72M from GAAP operating profit of $2.2B
3. Revenue mix calculated based on segment revenue, which does not include intercompany eliminations

Infrastructure Services
Overview

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81 **HPE leveraged data centers**
- 5 continents with 7 dual pairs

27 **Total space equals 27 U.S. football fields**
- 972,429 sqft used end of program
- 599,895 sqft available end of program
- 225 PB (Petabytes) online storage
- 700 PB of backed-up data

45,000 application resources with **12,000+** ERP professionals

#1 private cloud provider

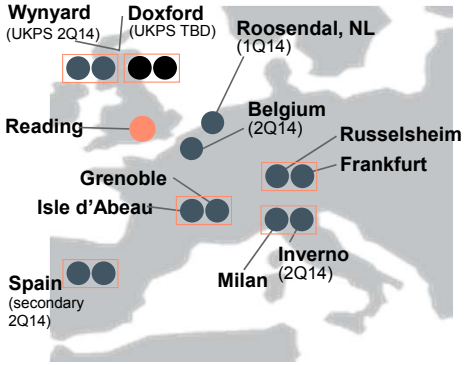
1,200+ private cloud client

40% 40% of Fortune 100 companies run HPE Cloud

1000+ HPE Cloud Journey workshops with **5,600+** attendees

Americas

EMEA



Asia-Pacific

Hewlett Packard Enterprise

Application Services
Overview

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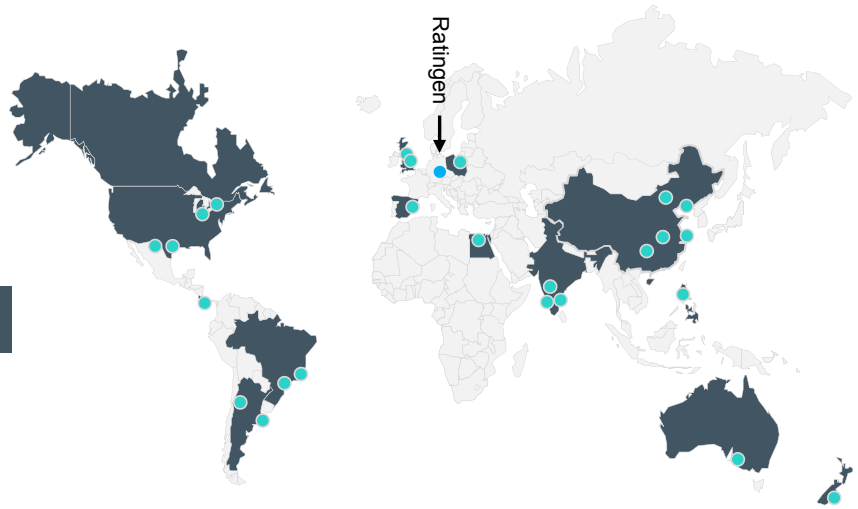
Apps cloud, mobility and transformation

- **10,900** cloud applications services staff
- **1,900** enterprise customers use HPE Cloud
- **~2,500** annual client migrations
- **37 of Fortune 100** run HPE Converged Cloud

Applications development and management

- **600+** clients, incl. Lufthansa, Vodafone, La Caixa
- **1M+** software applications and **2.6B** lines of code
- **95%** of the time service levels met or exceeded
- **6,000+** dedicated testing professionals



Systems Integration Services

SAP

- **500+** SAP Services clients
- **9,200** SAP Services staff
- 2013 **SAP Pinnacle award** winner for technology innovation and for Run SAP Services
- 2012 SAP HANA **impact award winner** in all 3 global regions
- **Most** SAP certifications of all SIs

ORACLE

- **4,200+** Oracle consultants worldwide
- **140+** Oracle Applications services clients
- **2.6 Million** Oracle users globally
- Oracle **Diamond** Partner

Microsoft

- **75** Dynamics customers
- **12,500+** Microsoft certified professionals
- **15** Gold competencies
- 2013 **Inner Circle** award winner

HPE Leading global scale and market presence

Global and regional support for Customer production sites (24x7, 365 days)

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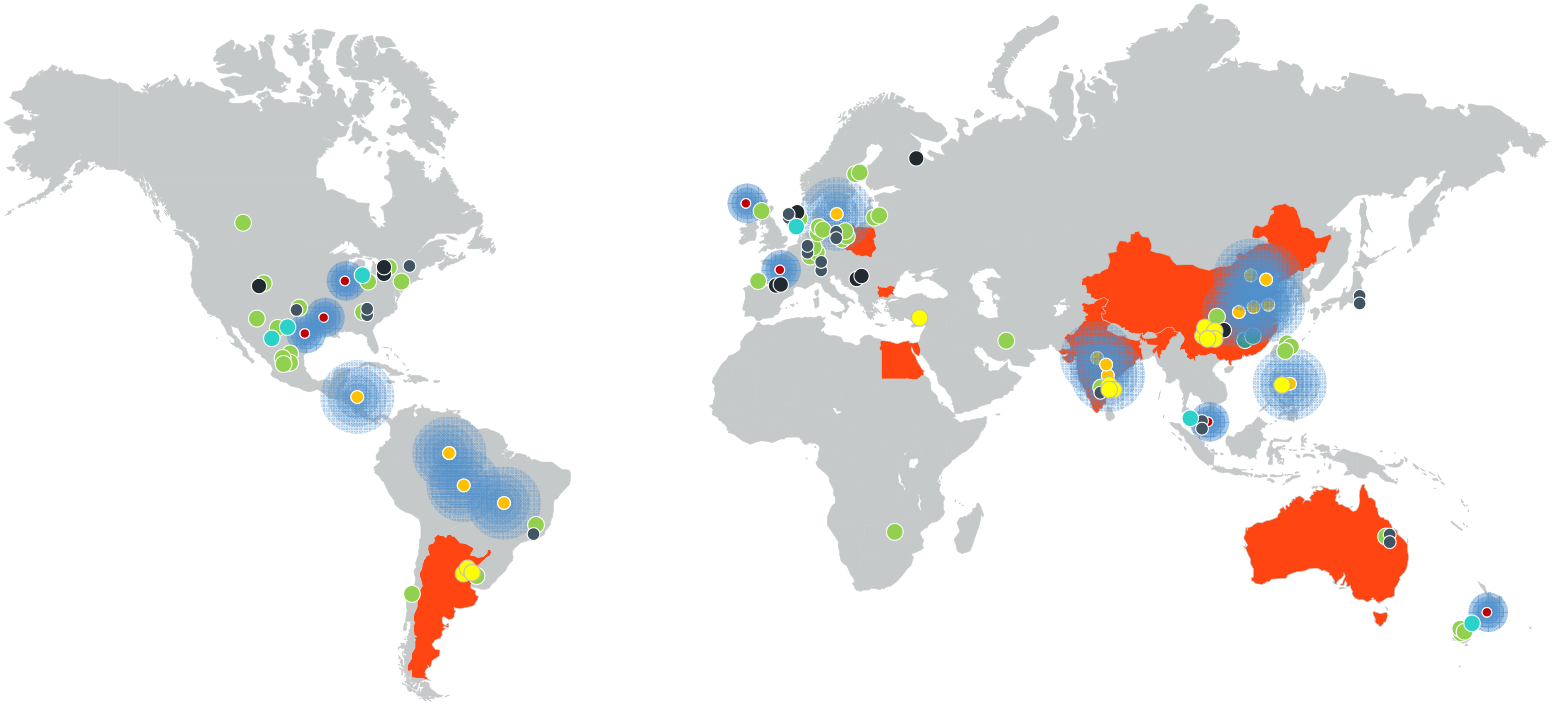

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Solution Key Elements

Information Access Methods

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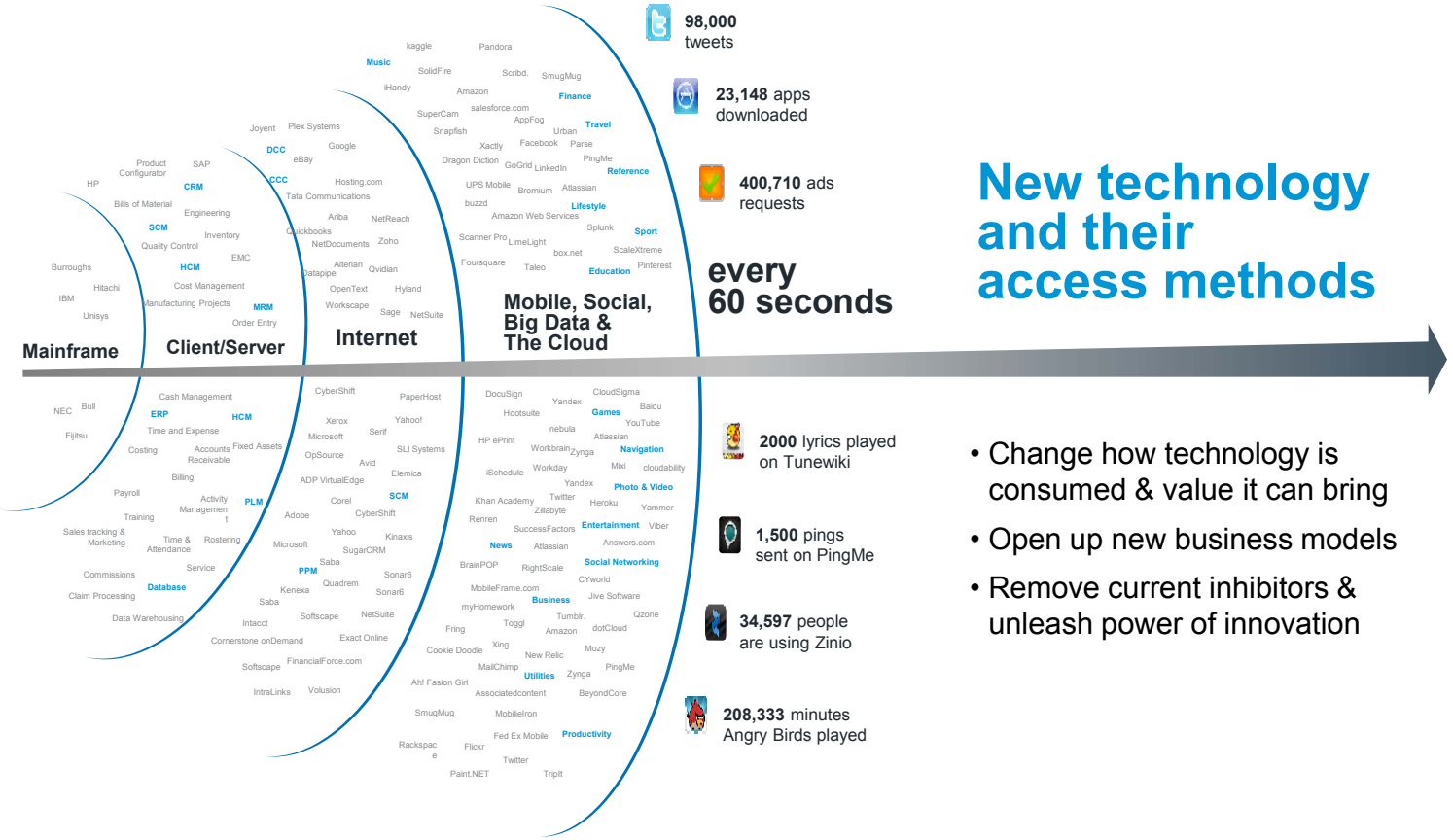

New technology and their access methods

- Change how technology is consumed & value it can bring
- Open up new business models
- Remove current inhibitors & unleash power of innovation

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IT Market Evolution

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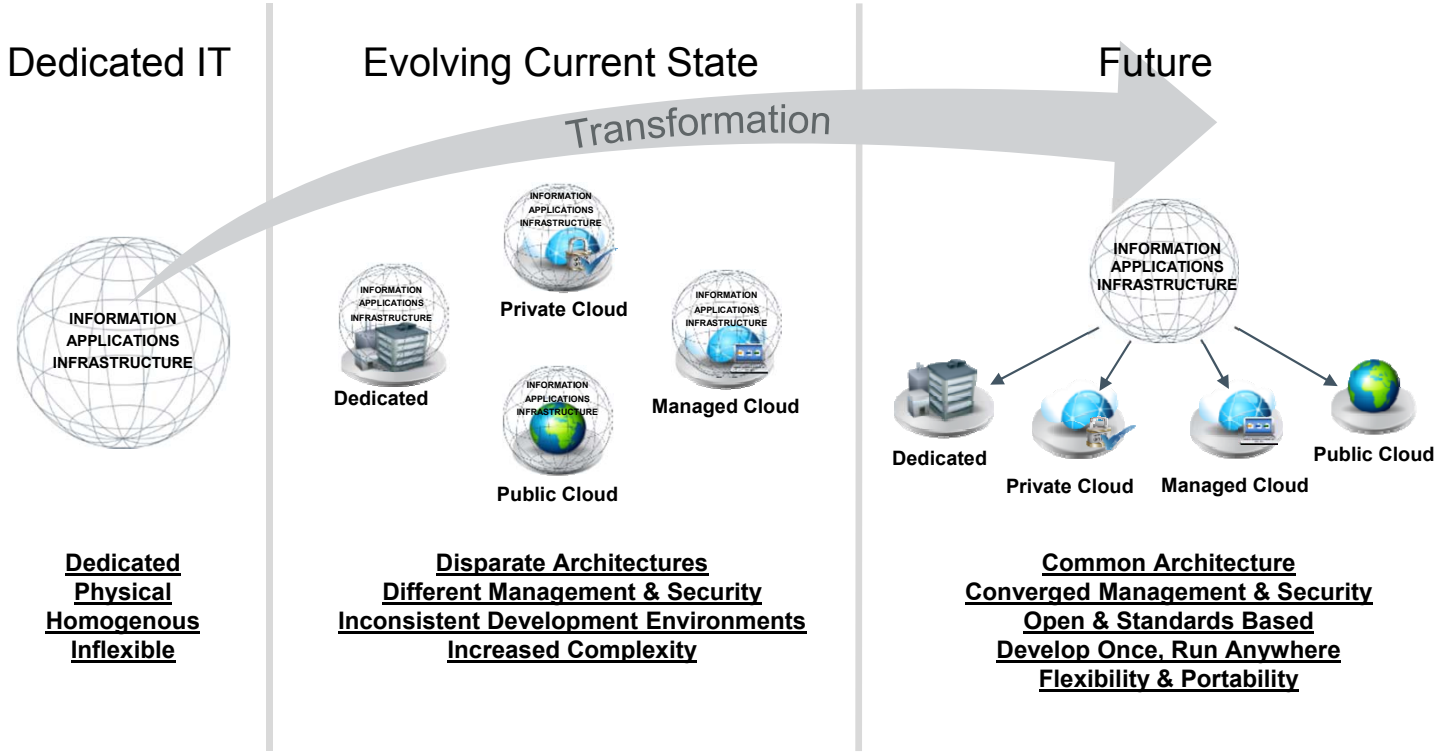

Dedicated
Physical
Homogenous
Inflexible

Disparate Architectures
Different Management & Security
Inconsistent Development Environments
Increased Complexity

Common Architecture
Converged Management & Security
Open & Standards Based
Develop Once, Run Anywhere
Flexibility & Portability

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HPE Seven Layer Model

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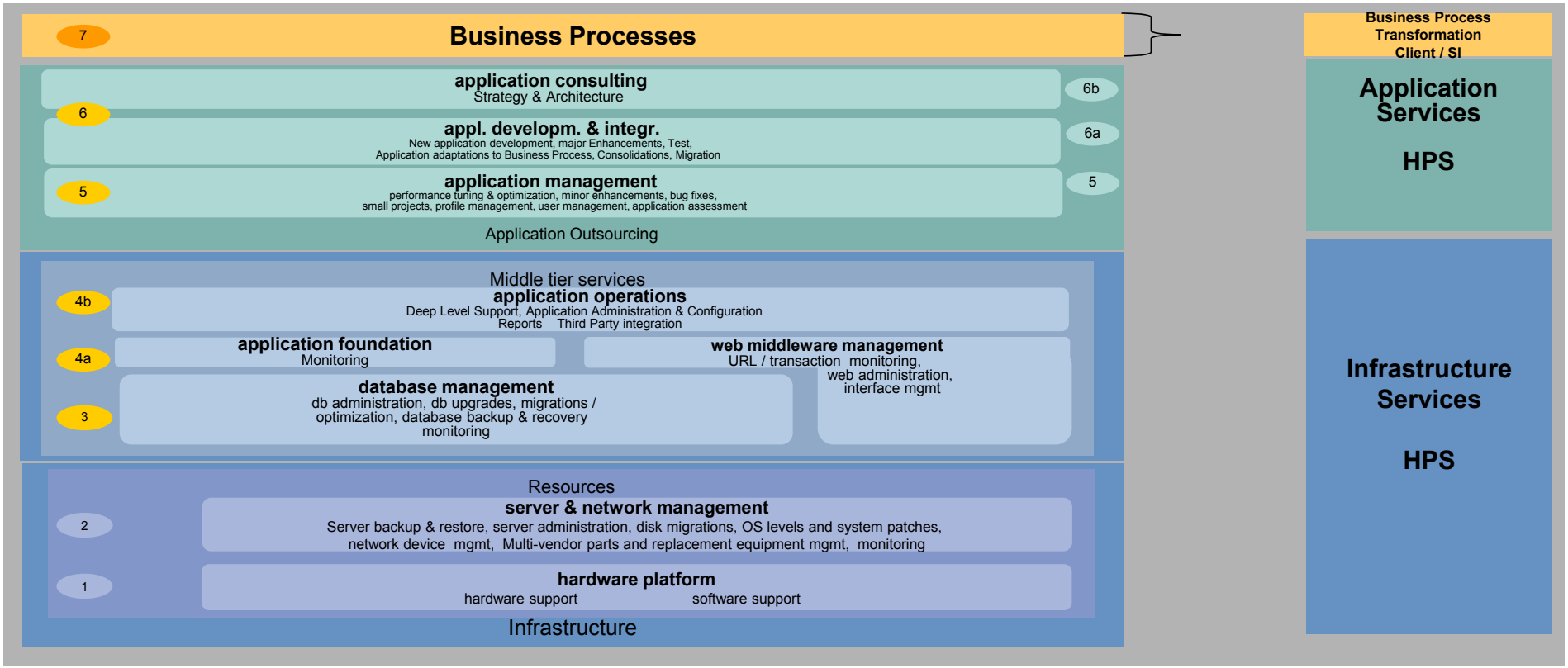

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IT Scope

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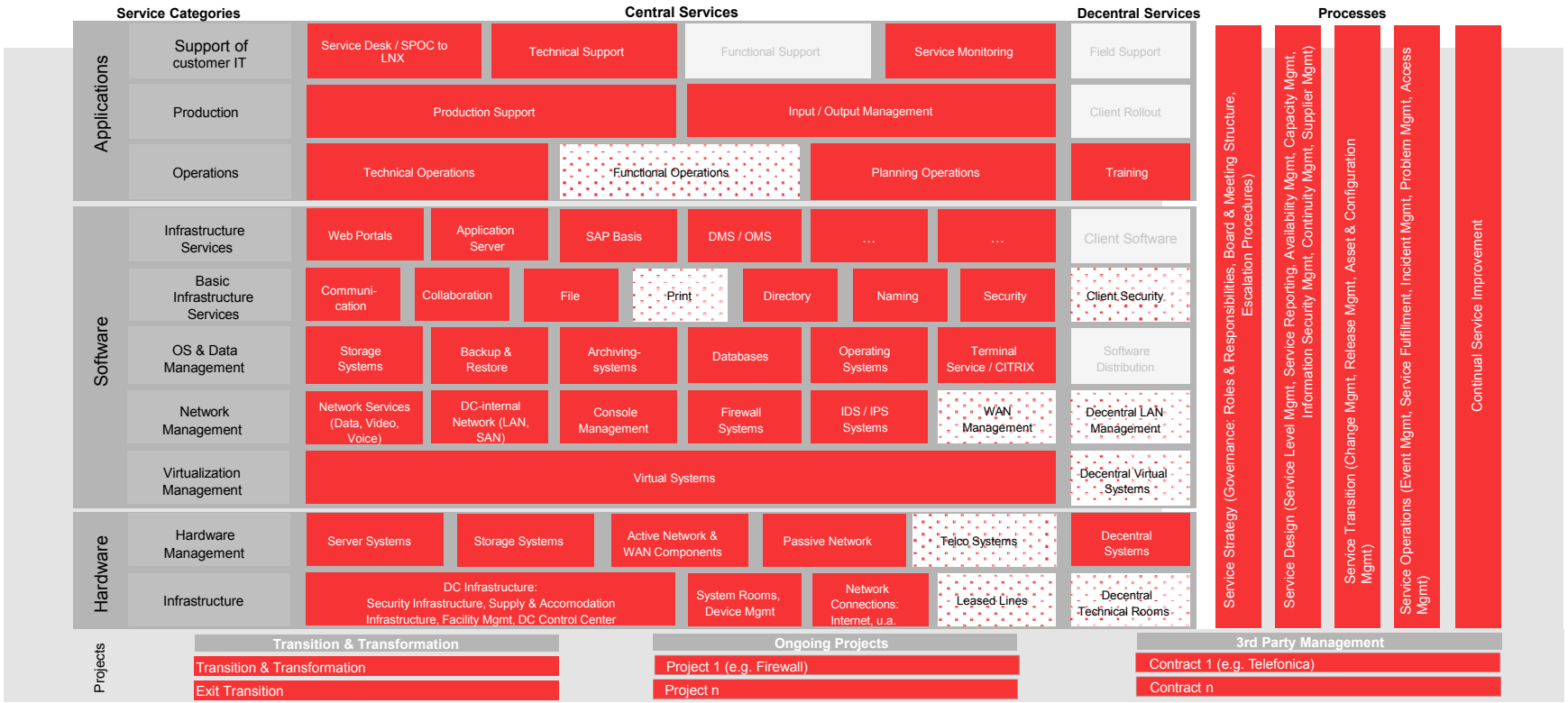

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Capability Requirements to an IT Organisation

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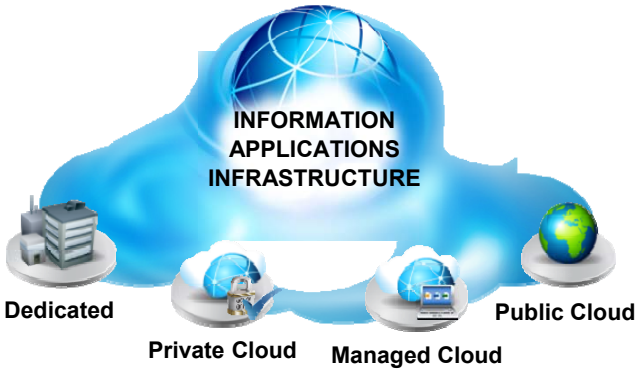
Hybrid delivery based on common architecture across Dedicated & all cloud models



Choice

- **Open**… standards-based across all delivery models
- **Heterogeneous**… hypervisors, development, infrastructure
- **Extensible**… partner ecosystem

Confidence

- **Security**… across info, apps, infrastructure, delivery models
- **Management**… end to end
- **Automation**… for cloud based architectures & processes

Consistency

- **Common architecture**… across all delivery models
- **Portability**… for flexibility & optimization
- **Consumption experience**… one simple model

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Infrastructure Services

Sourcing Options

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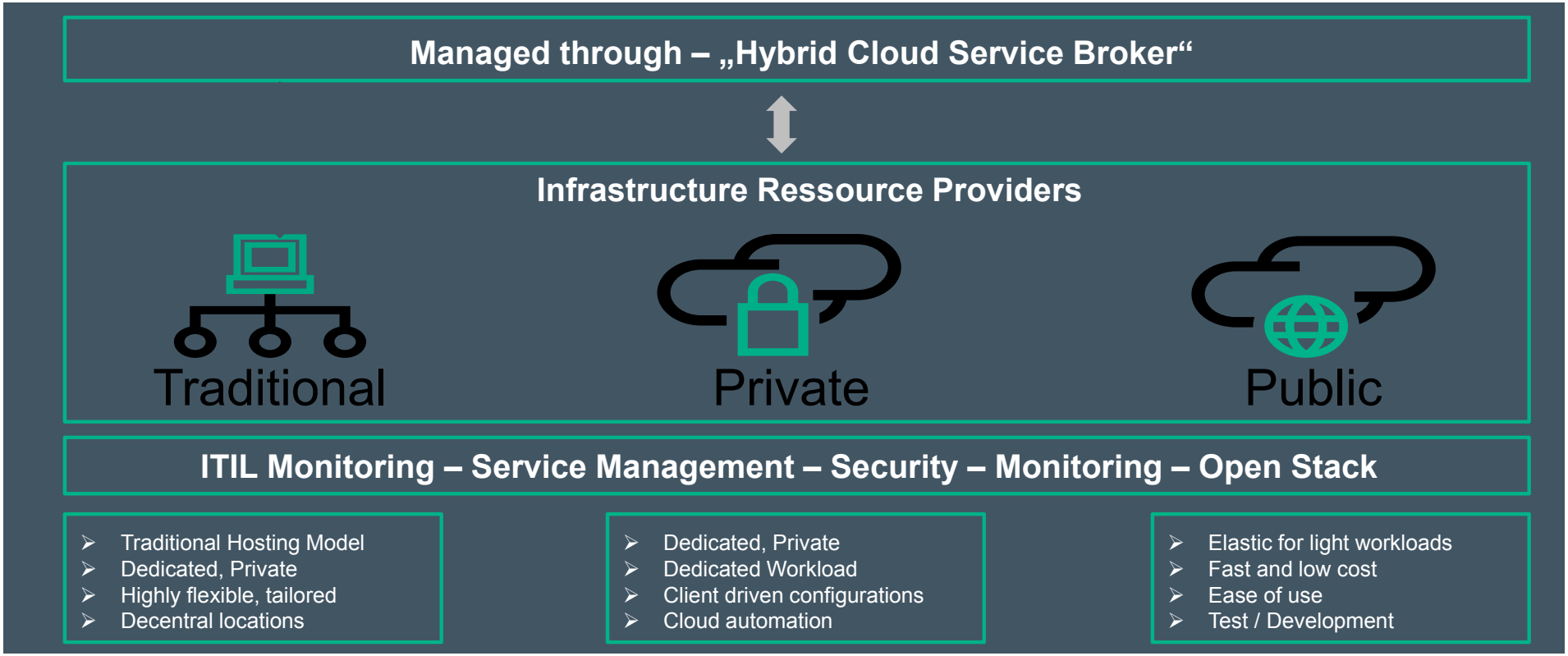

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HPE Solution
Server Services

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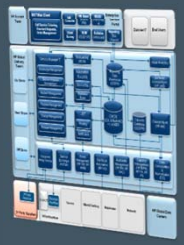
Private Cloud

Will be created based on last generation of HP Blade Server

Traditional

Will support wide range of industry standard servers

HPE Toolset and SRA



- Architecture and designs defined by HPE and approved by customer
- Pure OpEx model
- Flexible in regards of sizing, start small and add capacity if needed
- Ability to remove unneeded capacity
- Adjustments based on monitoring information
- Ability to change amount of systems needed based on velocity of Cloud solution
- Run Time Automation will be used to ensure operational stability and effectivity

- Architecture and designs by customer, Operation by HPE “as is”
- Can be offered as a “sell and lease back” model
- Integration into HPE Management Framework
- Run Time Automation will be used to ensure operational stability and effectivity

HPE Solution
Storage Services

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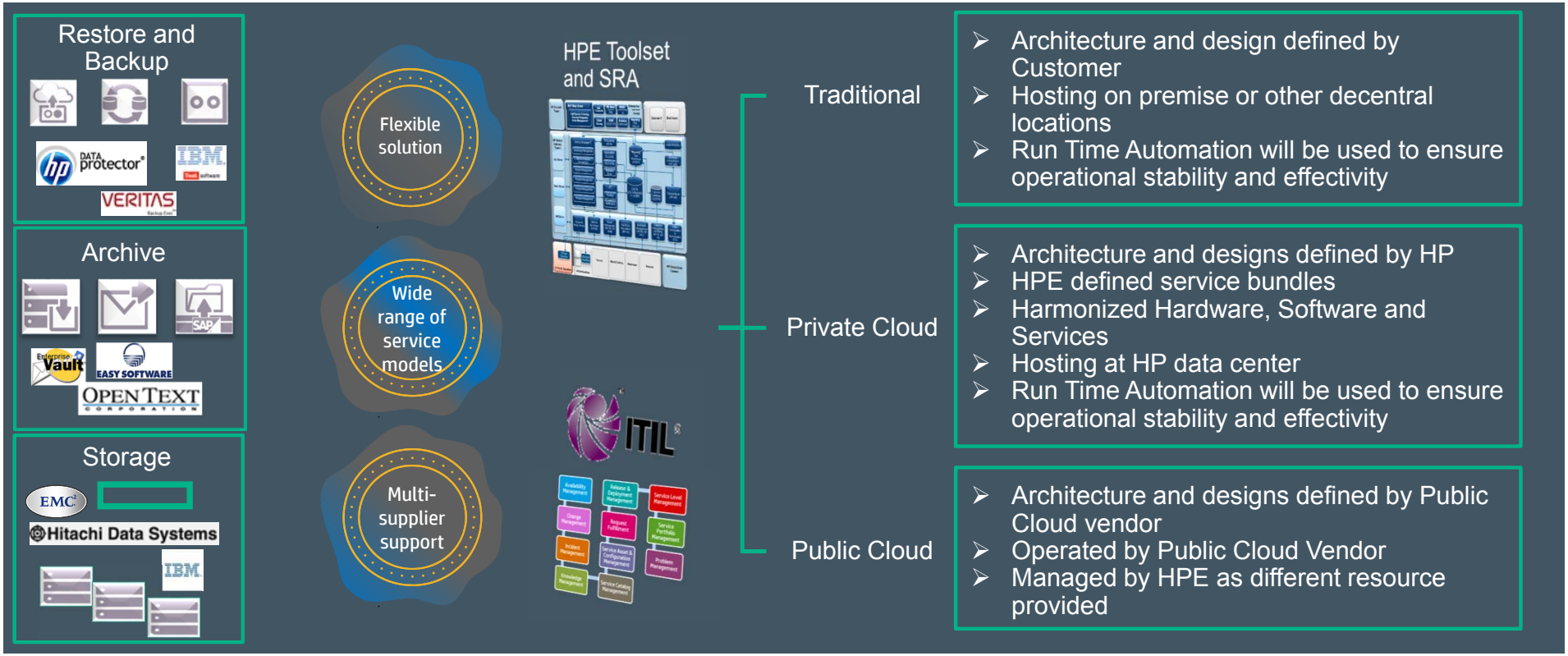

HPE Solution
Network Services

Technology
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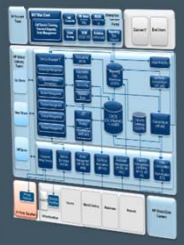
Private Cloud

HP Networking products, logical expansion of existing DC LAN to avoid transformation complexity

- Flexible solution
- Wide range of service models
- Multi-supplier support

HPE Toolset and SRA



- ➢ Architecture and designs defined by HPE and approved by Customer
- ➢ Logical expansion of existing DC LAN, will end up in transparent IP Address mapping, Systems will have after migration to HPE same IP Address and based on this same communication behavior
- ➢ Run Time Automation will be used to ensure operational stability and effectivity
- ➢ Availability can be adjusted to business needs

Traditional

Supports range of industry standard networking components or replaced by HP products

- ✓ Architecture and designs by Customer, Operation by HPE “as is”
- ✓ Run Time Automation will be used to ensure operational stability and effectivity
- ✓ Can be offered as a “sell and lease back” model
- ✓ Integration into HPE Management Framework

Focus: Database and Application Management

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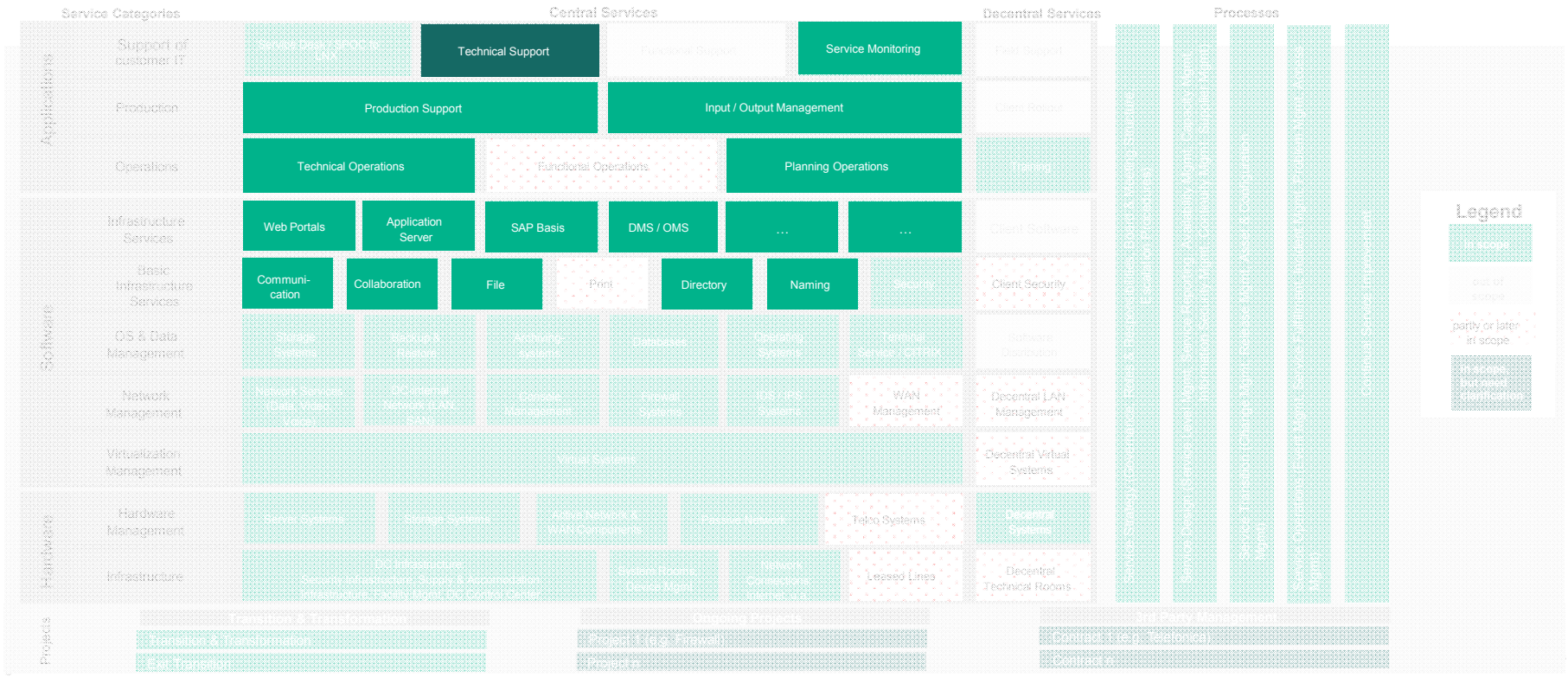

HPE Application Management Services

Production & Technical Support Expertise

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Individual Applications, Customization, Interfaces	
Application Operation	SAP ERP, HR, BI, BW, HANA, MS Dynamics, StreamServe, macro4
Web, Portal & App Server	Apache, Jboss, WebSphere AS, WebSphere Portal Server, Tomcat, CQ, Weblogic
Mail & Collaboration	Exchange, Lotus Notes, Sharepoint
Archive & DMS	OpenText, Filenet, SER, Documentum, EASY
Directory & SSO	Active Directory, Oracle LDAP, OpenLDAP, WebSeal, TAM
Connectivity	WebSphere MQ, Broker, BizTalk, Tibco, WebMethods, ConnectDirect, ESB
Database	Oracle, MS-SQL, DB2, Sybase, MySQL, Postgres, MongoDB, Elasticsearch

HPE Application Management Services

Production & Technical Support Services

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Support & Operation	End2End Monitoring, Event Monitoring, Incident & Problem Management, Patch Management, Deployments, Configuration, Automation, Self-Healing / Runbook Automation
Implementation & Migration	Installation, Data Migration, Application Migration, Move to production
Design & Architecture	Architectural Design, Service Design
Miscellaneous Services	Load & Stress Tests, Proof of Concept, Benchmark, Source Code Review

Application Migration and Operational Readiness

Transfer of client-specific application know-how

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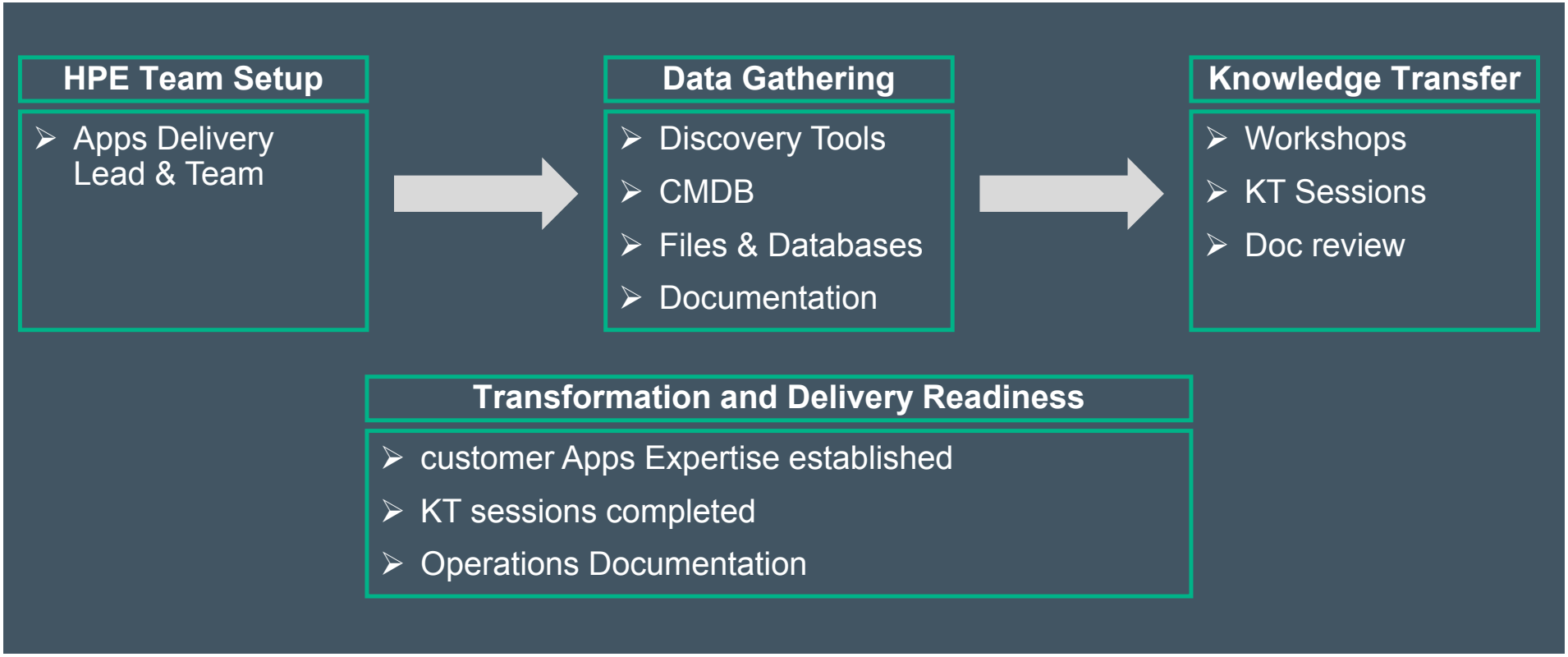

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Focus: Processes (Cross Functional)

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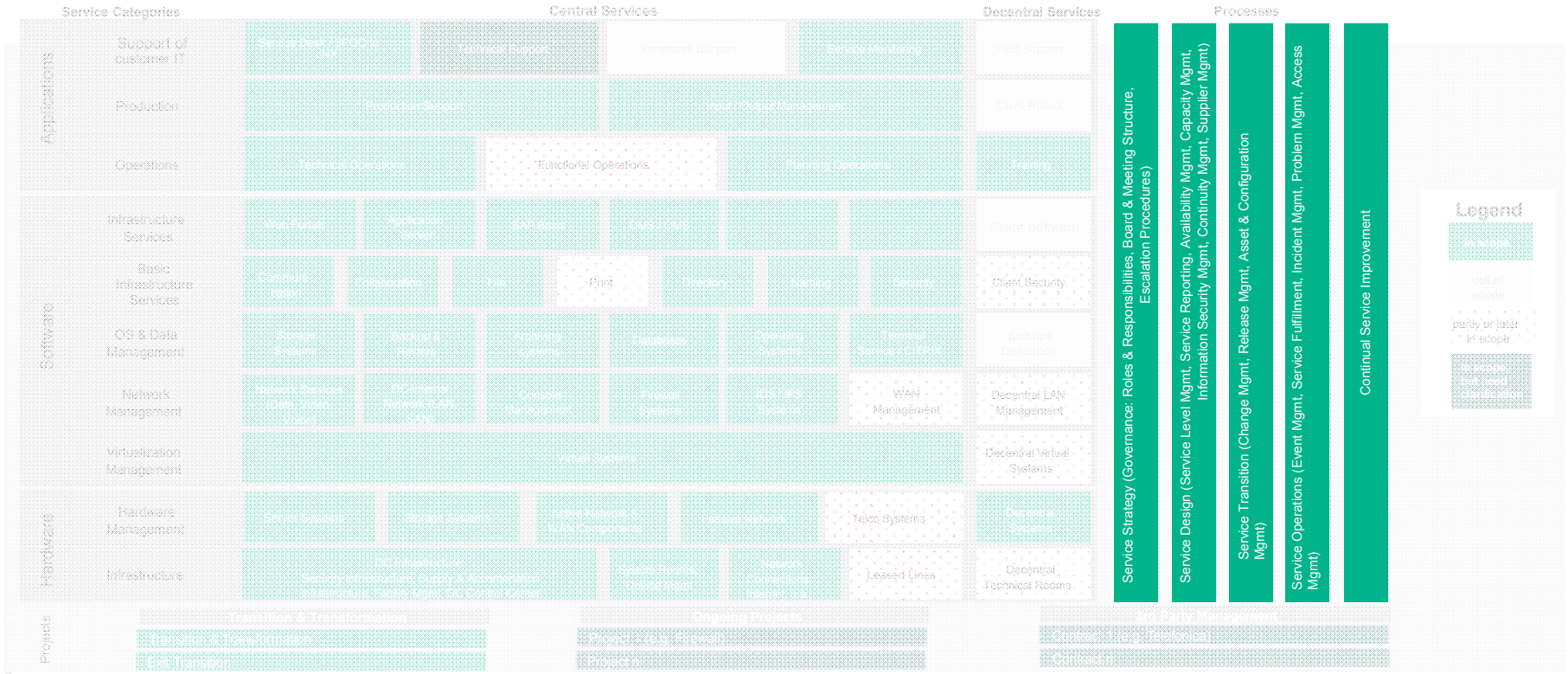

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Cross Functional

People, Processes & Tools

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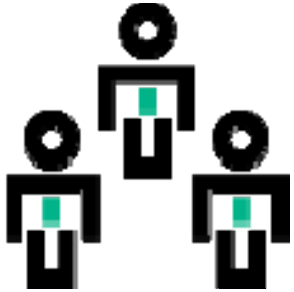
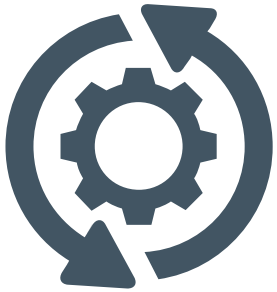
People	Processes	Tools
• Day to Day Collaboration • Governance • Roles & Responsibilities • Escalation points	• ITIL alignment • HP Best Practices • Adaptable • Touchpoints	• customer Tools • HP SRA • Interfaces • End – To – End Services Mgmt.





Cross Functional

Service Areas

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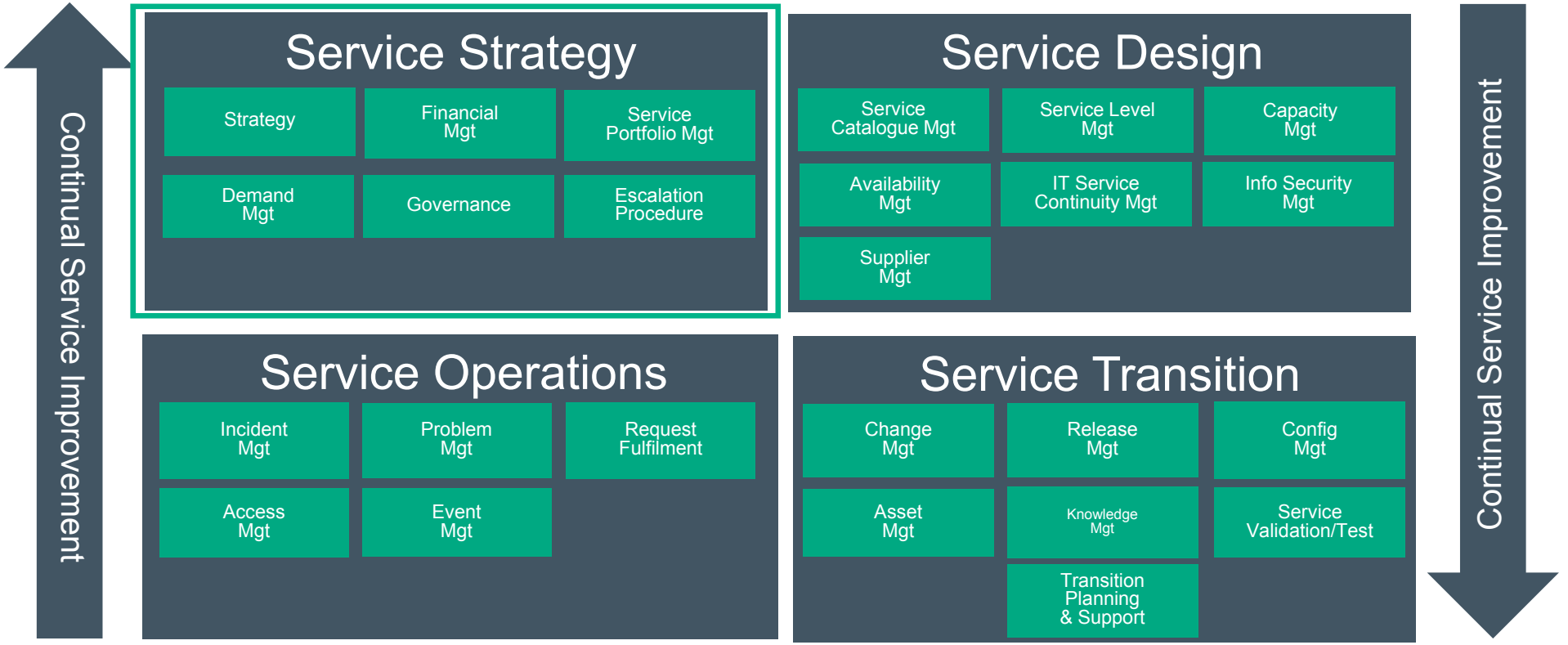

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Service Strategy
HPE Governance Model

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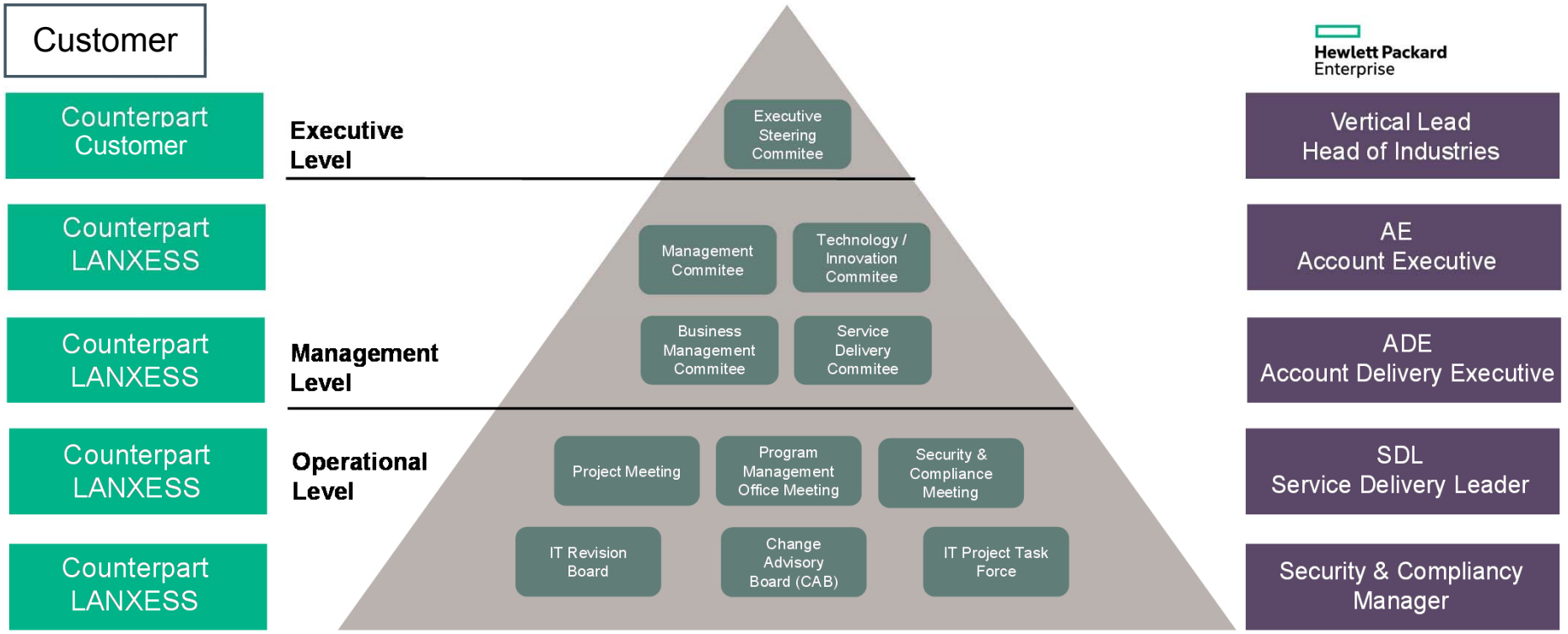

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Cross Functional

Service Areas

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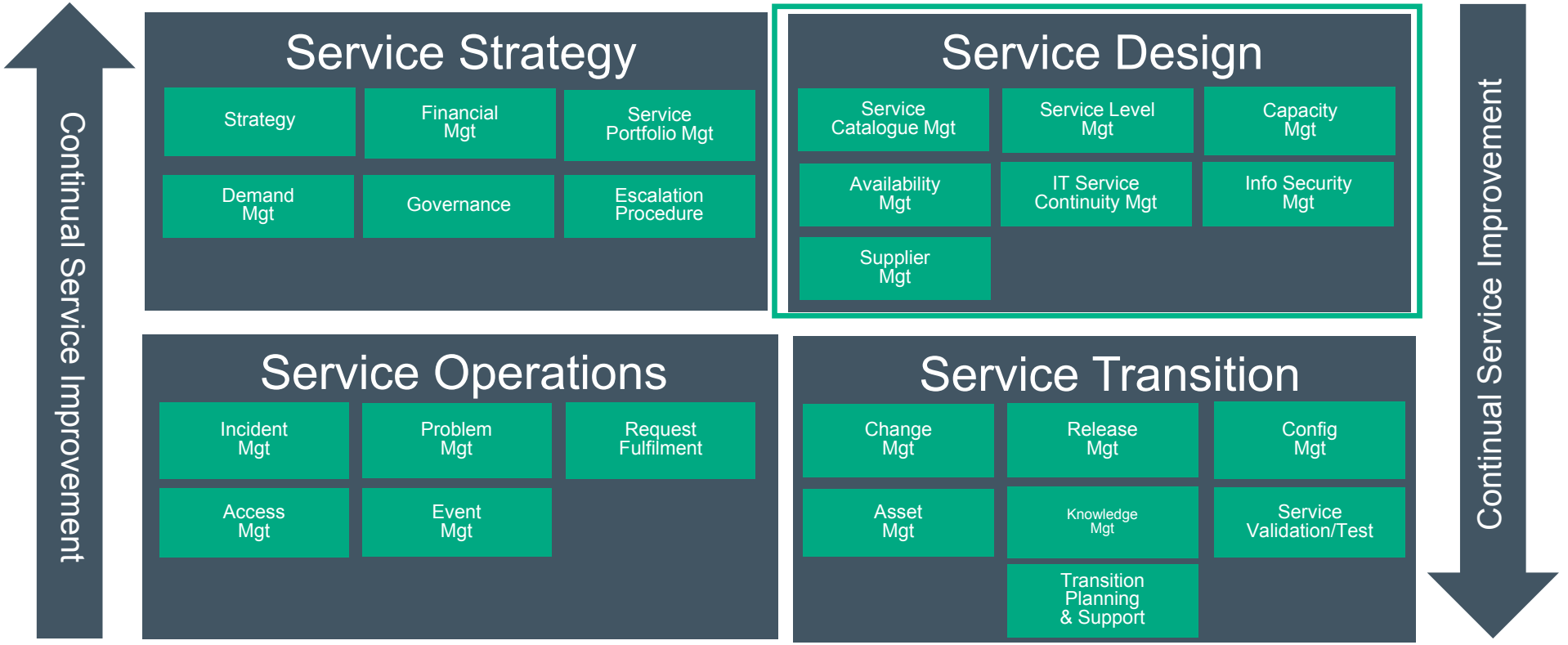

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Service Design
Process and People Interaction

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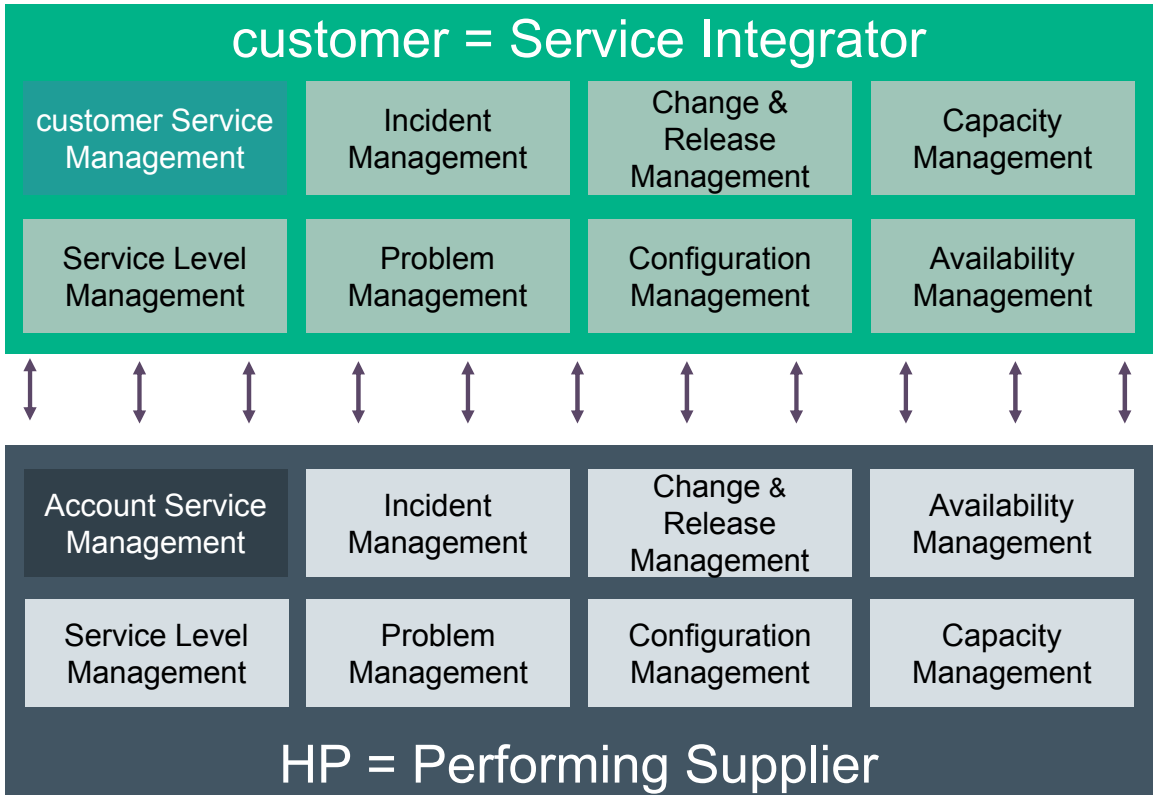

Key Attributes

- End To End Service View
- Service Scope split
- Clear Roles & Responsibilities
- Escalation points

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Cross Functional

Service Areas

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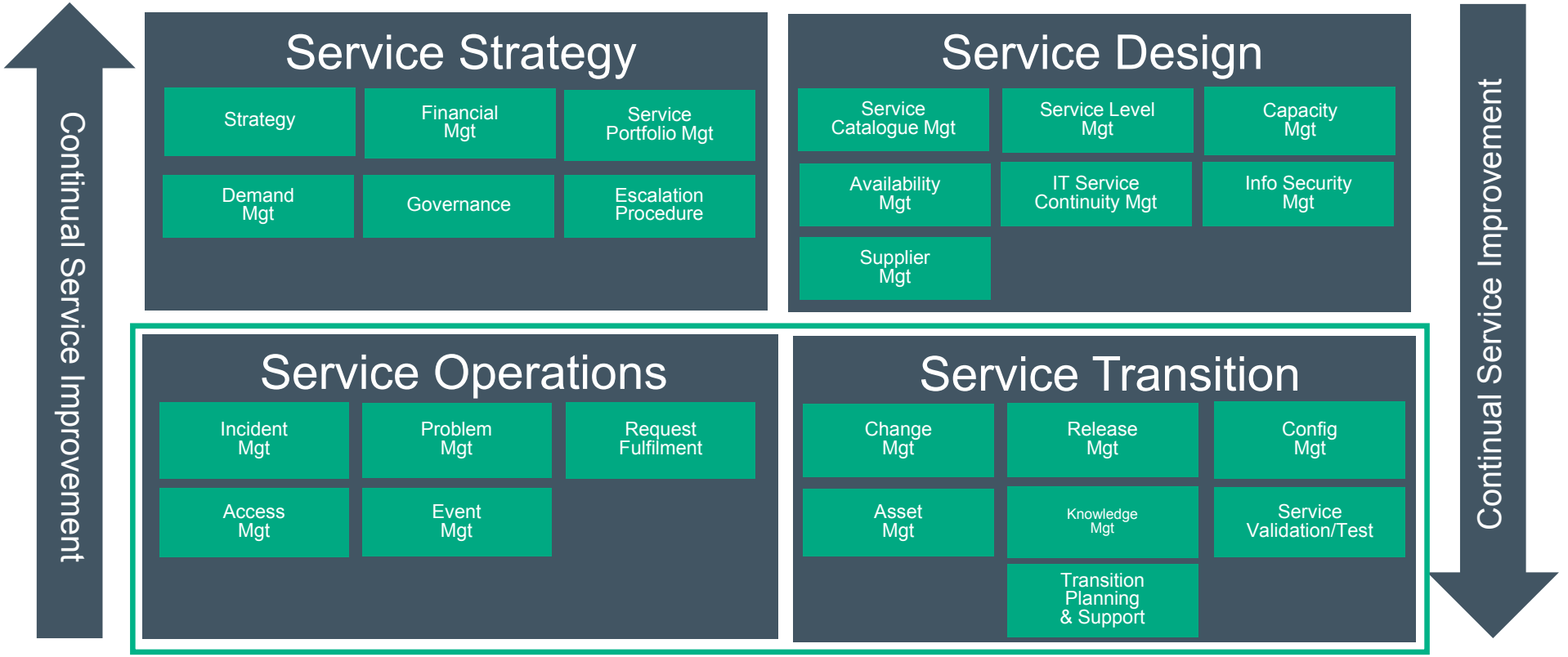

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Service Operations & Service Transition

Tools and Processes

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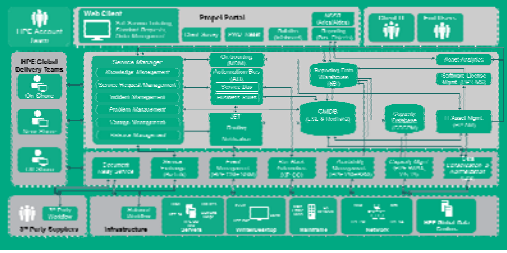
customer Service Desk (1st level)

customer
End-users
IT Users

Incident
Problem
Change
Release
Capacity
Availability
Service Level
Configuration

ITIL v3

Standard Reference Architecture (SRA)



Web Portal
PWD Reset, Remote Control, Chat
Reports, etc.

Incident Case Exchange

MPS

Workplace

Citrix

LAN

Data Center

WAN

3rd party provider

customer

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Focus: Security

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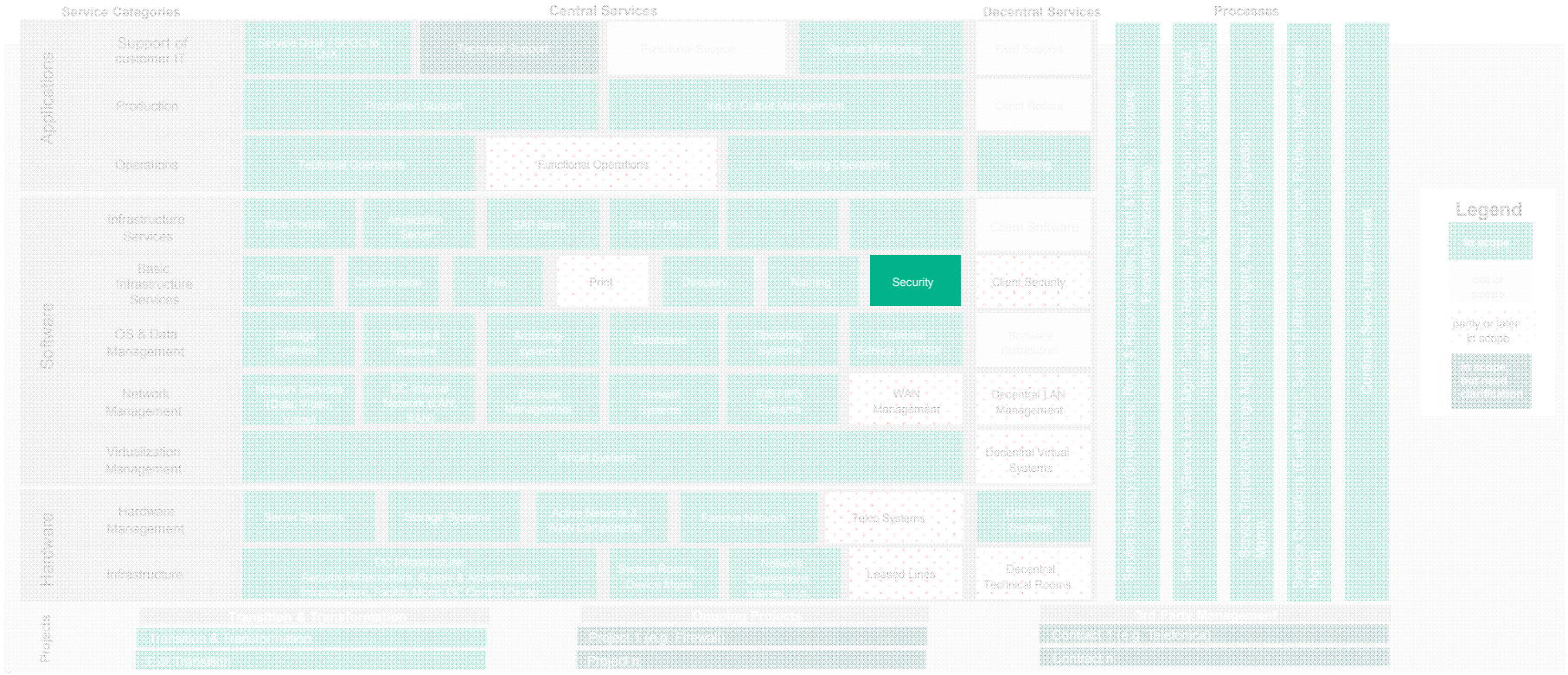

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HP Security DNA Framework

Security is present in everything we do

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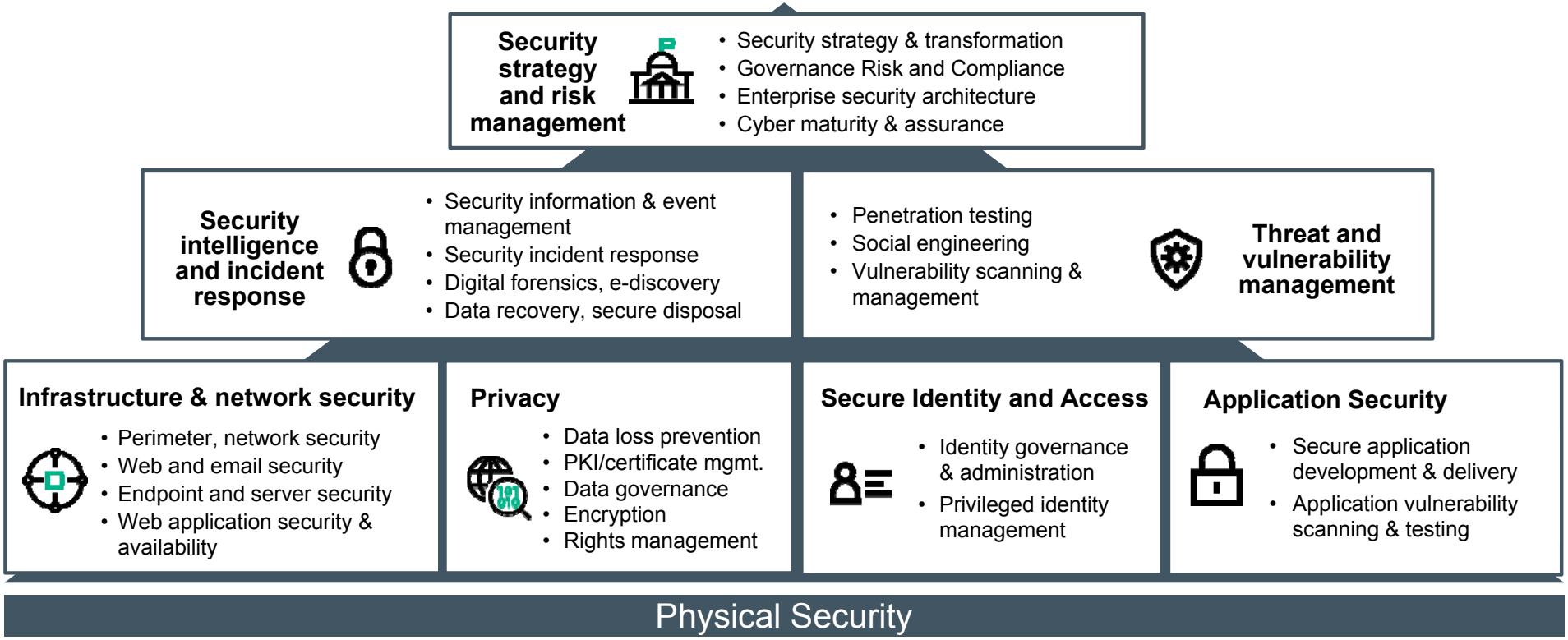

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Security & Compliance Framework

Driven by customer requirements

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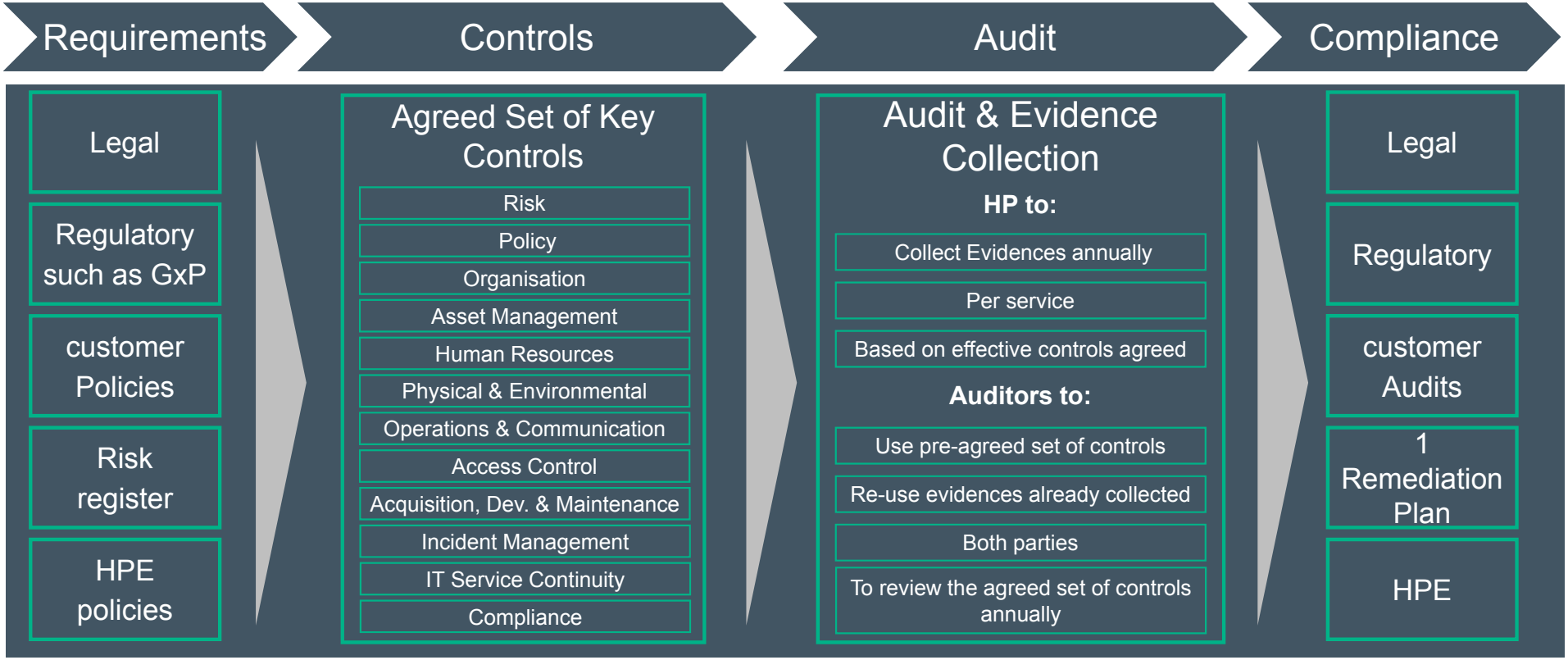

Hewlett Packard Enterprise

Privacy – Technical and Organisational Measures

Pursuant to § 9 of the German Federal Privacy Law

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Entry Control	Restrict entry to facilities to authorized individuals, access control, surveillance HPE's data centres are certified to ISO 27001 and audited to ISAE3402 SOC1
Access Control	Confidentiality, Integrity, Availability, password policies and protection, encryption, screen saver. Approval, revocation workflow, re-authentication after threshold, protection of vulnerable systems
Authorisation Control	Prevention of illegal processing, access on a need-to-know basis and role-based, clear responsibilities for accounts, decommissioning upon role-change or leave
Disclosure Control	Defined disclosure, technical protection, maintain integrity, encryption when transmitted over public perimeter, firewalls, traceable hand-over, documentation of automatic exchange
Input Control	Traceability of data entry and processing, archiving as long as required
Subcontracting Control	Commissioned data processing, contractually agreed instructions
Availability Control	Protect against accidental loss or alteration, backup and reliable recovery, protection against potential attacks, sabotage. Use UPS, regular DR drills, archiving
Separation Control	Separation of data of different customers, purpose-specific processing, separate test from production.Consultation and anonymization of production data for test purposes

Security Questions

Fast Facts

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ISO Certifications	Global certification to ISO27001, 20000, 9001 and in EMEA 14000
IS Policy	Content maintained in a data base management system. 8 policies, 40 requirements, 300+ controls, 500+ implementation procedures
Incident Response	Incident Response service is standard, 10 SOCs globally (Boeblingen) to evaluate Security events. Default reporting interval is monthly
Physical Security	Global DCs are certified 27001 and audited ISAE3402. Data Centre specification sent separately.
Roles & Rights	Roles tailored to governance model and agreed with customer. Access rights driven by roles, not by individuals
Audits	HPE internal audits: once p.a. minimum; ISAE3402: annual Customer-requested audits: upon demand, typically 10..30 days per annum.

Focus: Transition & Transformation

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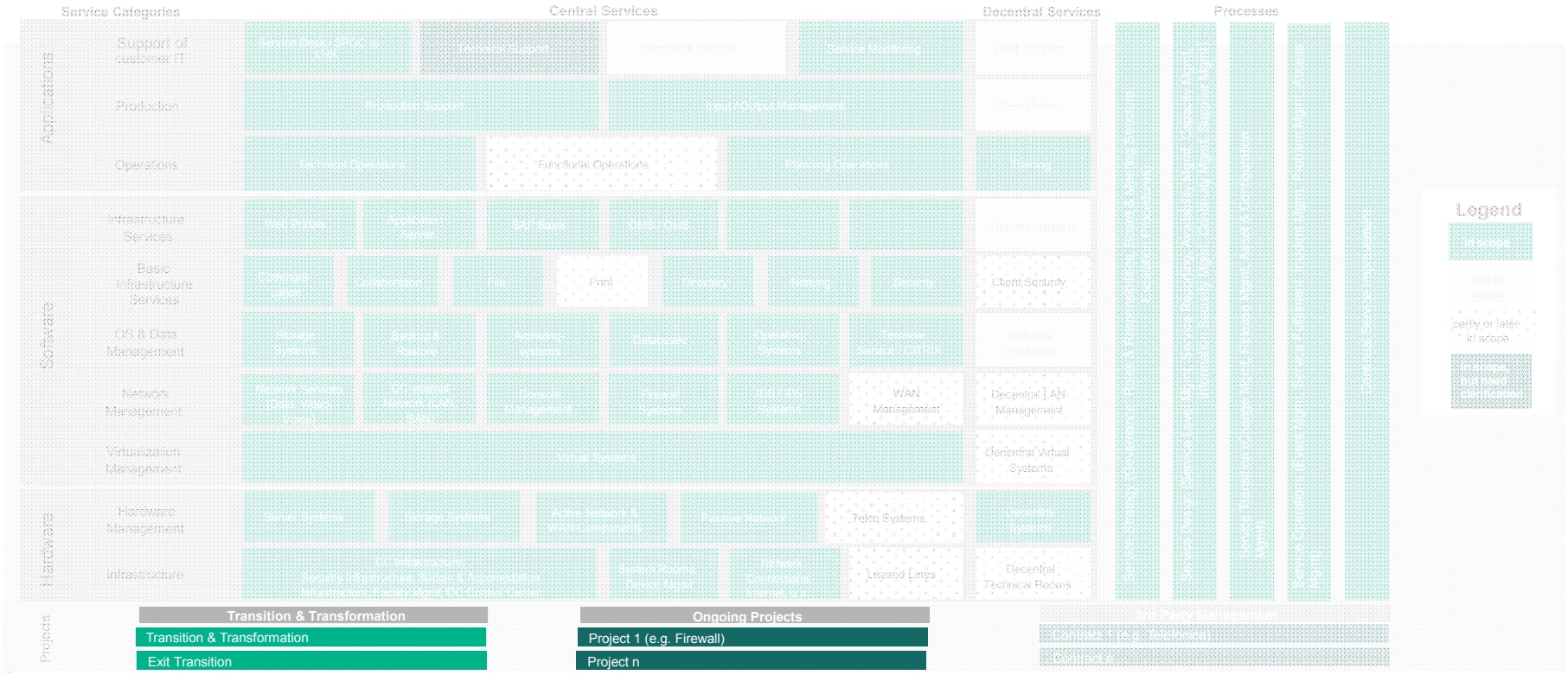

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T&T Strategy for customer

A clear T&T Strategy as key requirement for a successful outsourcing project

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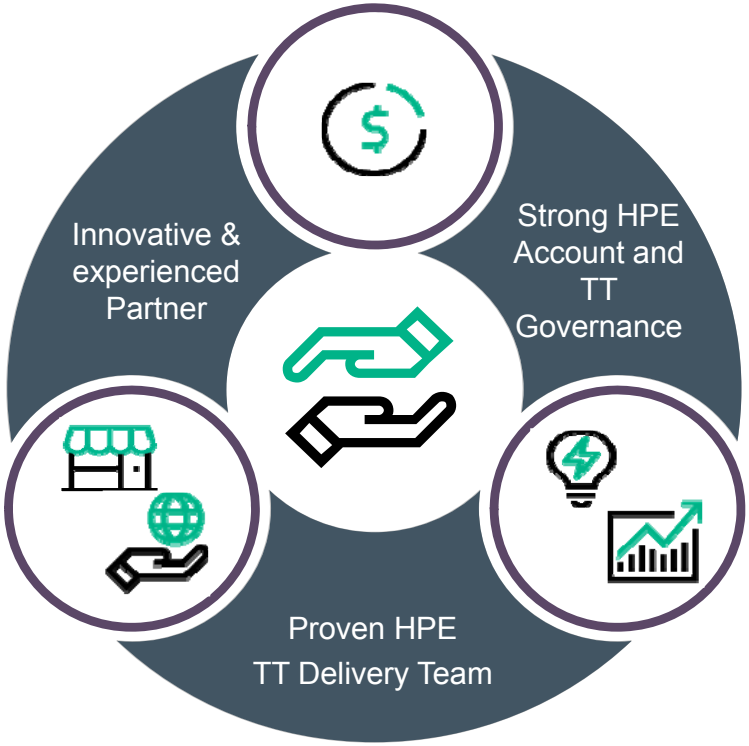

- Maintain business continuity
- Aligned migration approach
- Balance between risks & benefits
- Management of Change, extensive planning & governance structure, involve all affected parties as a major success factor

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Approach for Service Migration

Workload Migration

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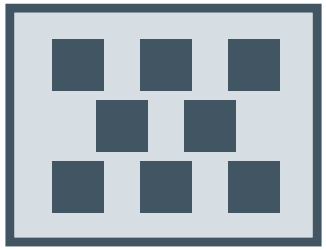
CMO->FMO

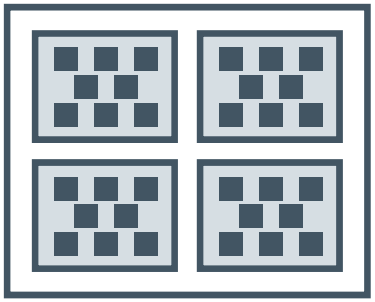
- Migration of application workload from CMO to FMO platform

Move Groups



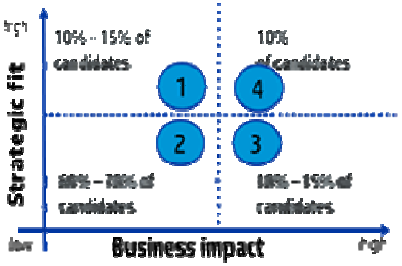
- Application will be grouped based on communication behavior

Wave Planning



- Builds cutover waves based on defined groups

Volumetric Planning



- Generates a forecast for migration

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Migration scenario

Decision tree

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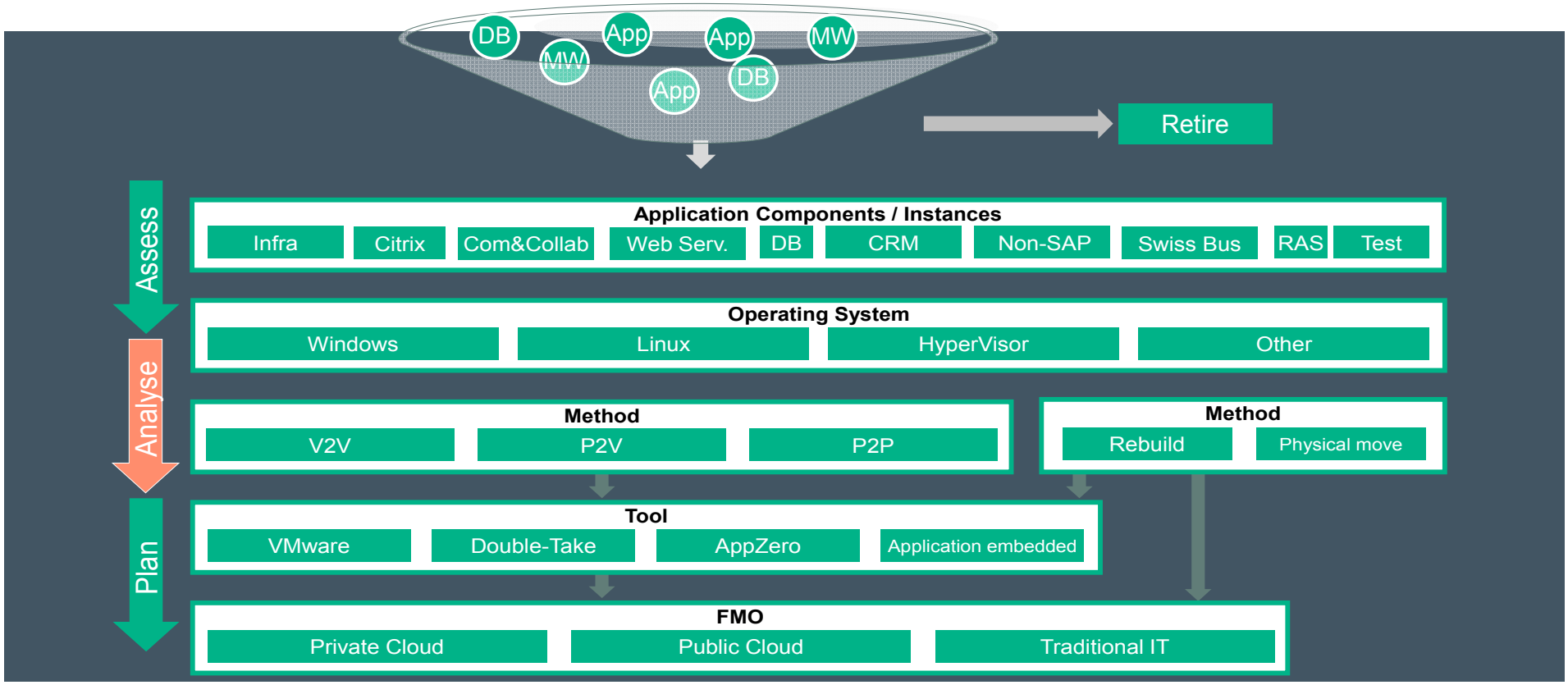

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Backup Slides

HPE‘s Information Security Management System (ISMS 1)

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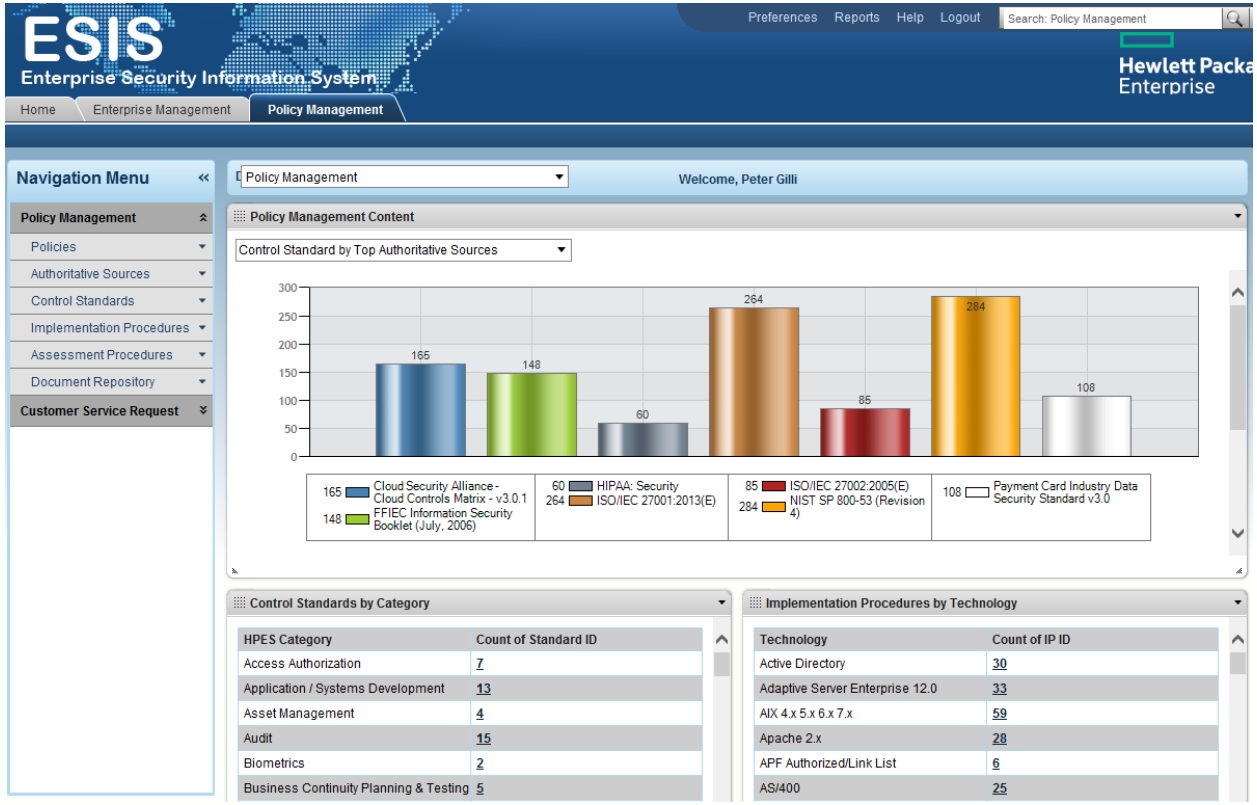

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HPE‘s Information Security Management System (ISMS 2)

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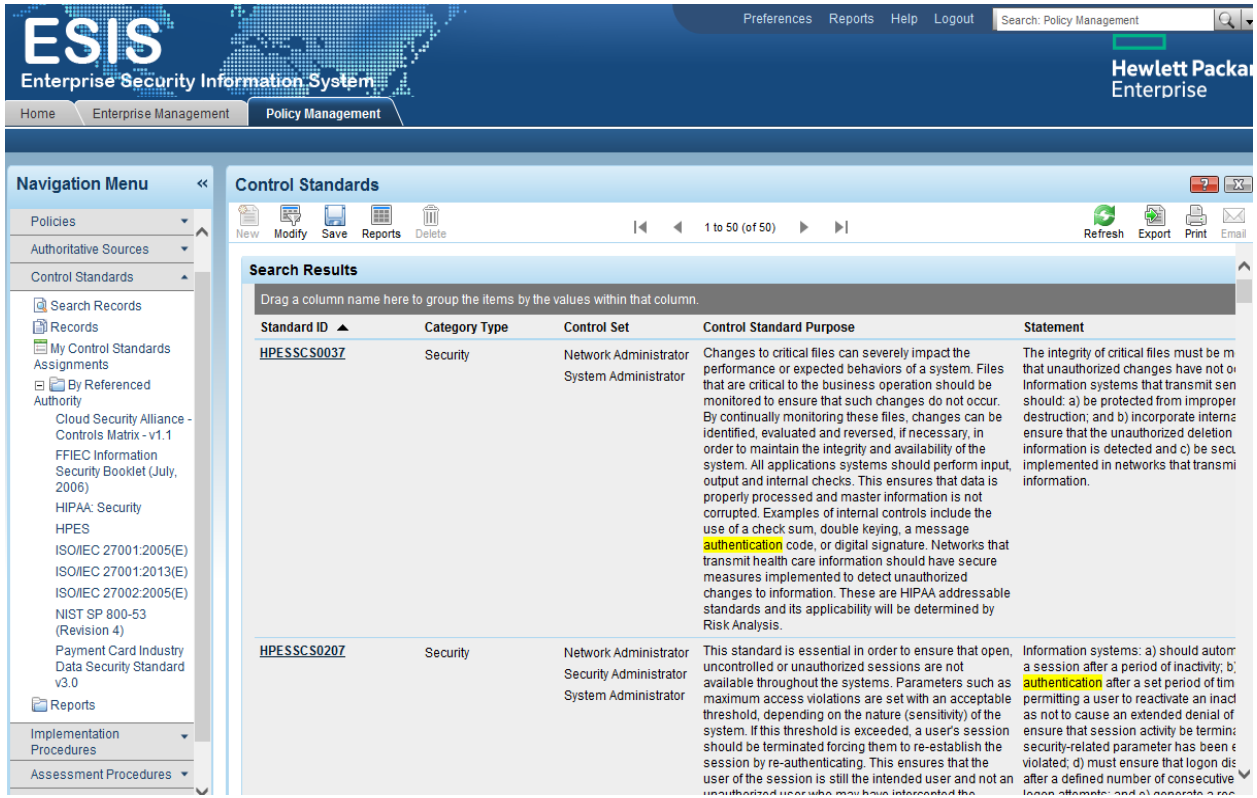

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HPE Standard Reference Architecture

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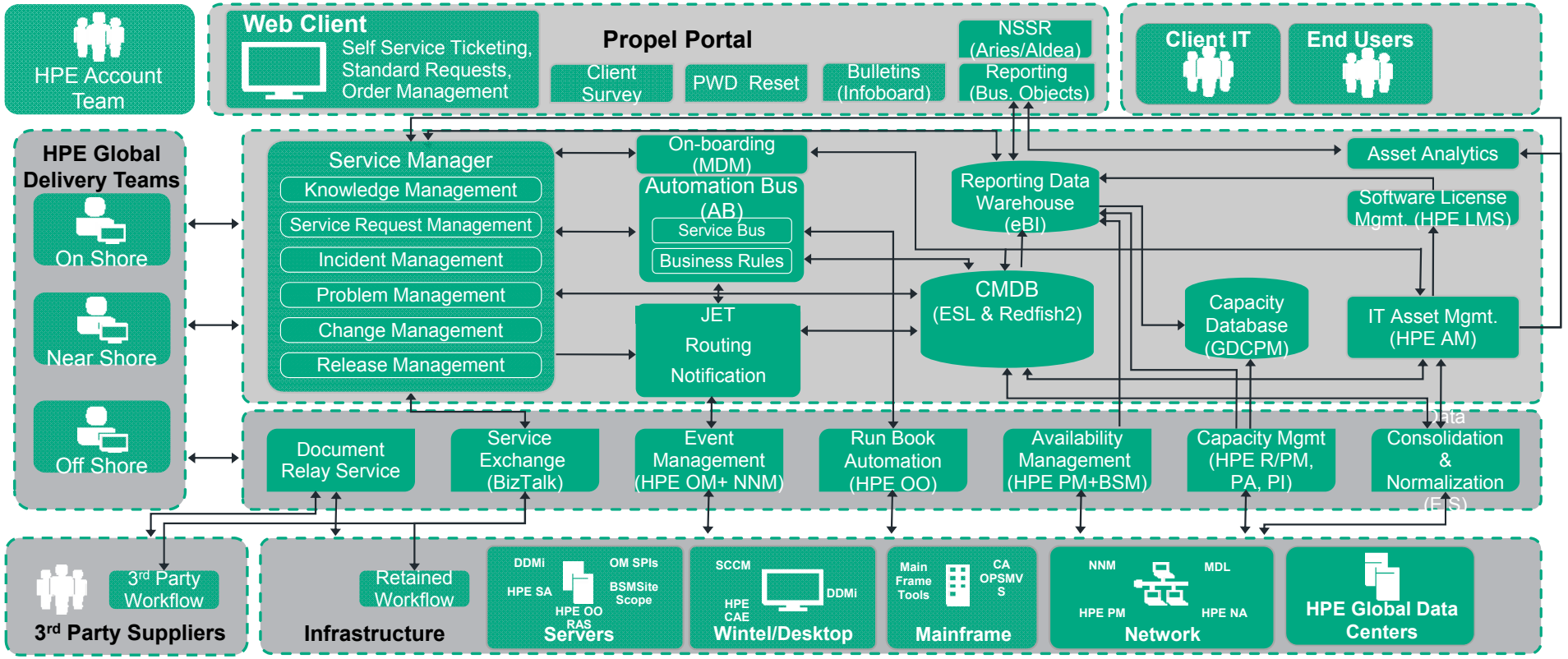

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Incident Management

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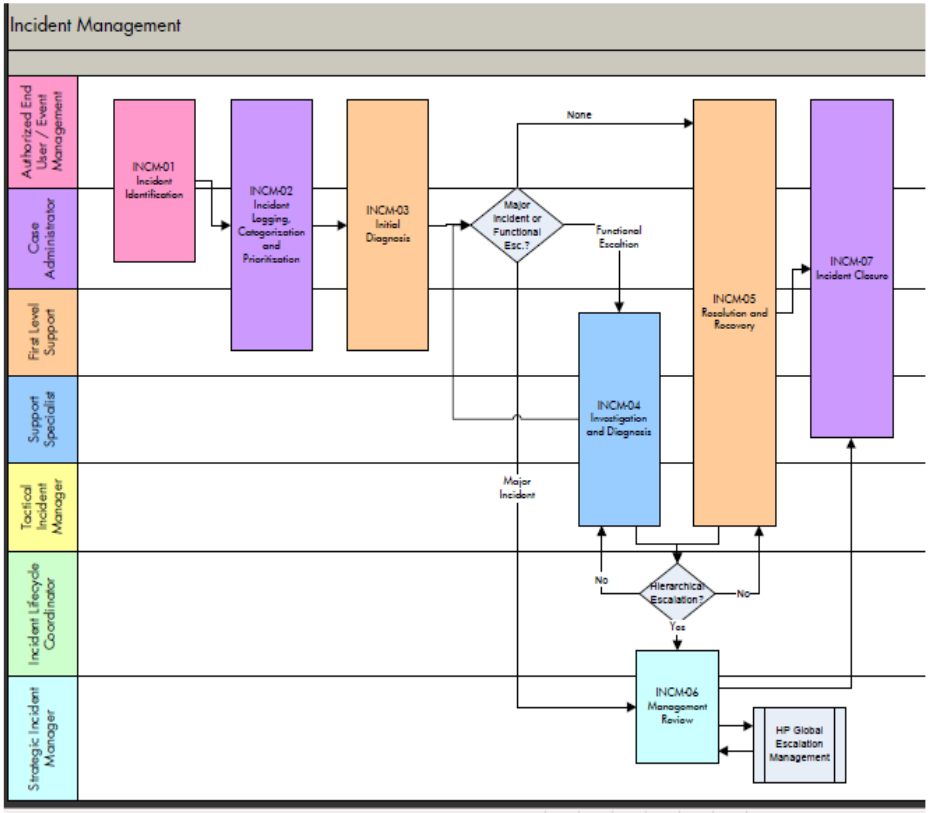
- Incident identification via CISM raised incident or event alert (integration layer)
- HP Service Desk agent logs, categorizes and prioritize incidents
- Initial diagnosis to determine major / non-major incident
- Major incident follows RtOP process (slide above)
- Non-major incident proceeds to diagnosis and resolution by HP Support Specialists groups
- Incident closure in CISM



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Problem Management

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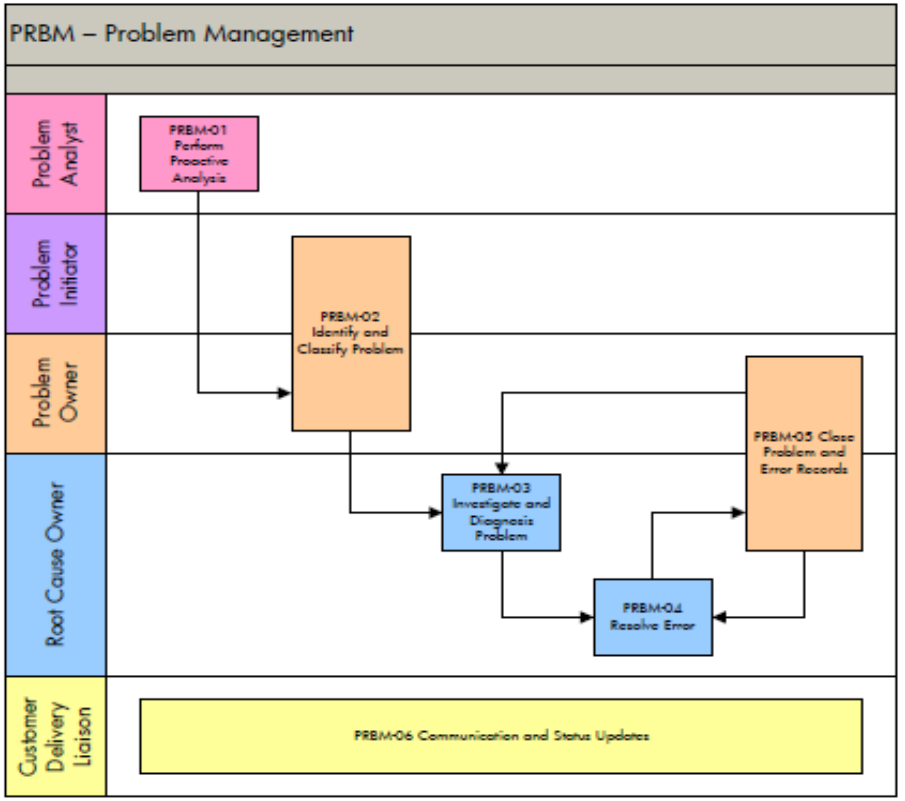
- Root cause analysis for major incidents is documented within 5 days
- Identified corrective actions are assigned to workgroups and tracked until completion
- Preventive action is taken to reduce problems, e.g. after trend analysis
- Problem resolution is monitored, reviewed and reported for effectiveness
- Process flow and workgroup assignments for corrective actions routed in CISM
- Known errors passed onto HP Service Desk to update in CISM



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Change Management

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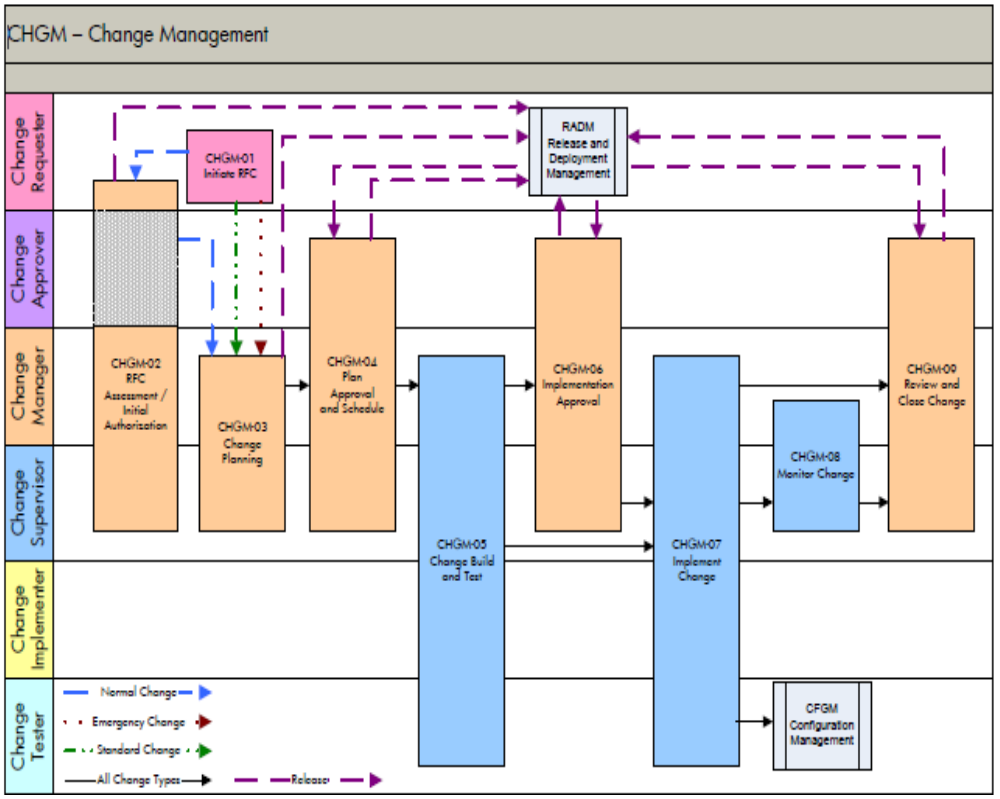
- Every Change Request will be documented, assigned, tracked, classified and categorized
- All Changes are approved via CAB or Emergency CAB, including Daimler Service support team representatives
- Change Manager takes actions to minimize Emergency and Urgent Changes
- Approved Change windows will not conflict with Customer production hours



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Configuration Management

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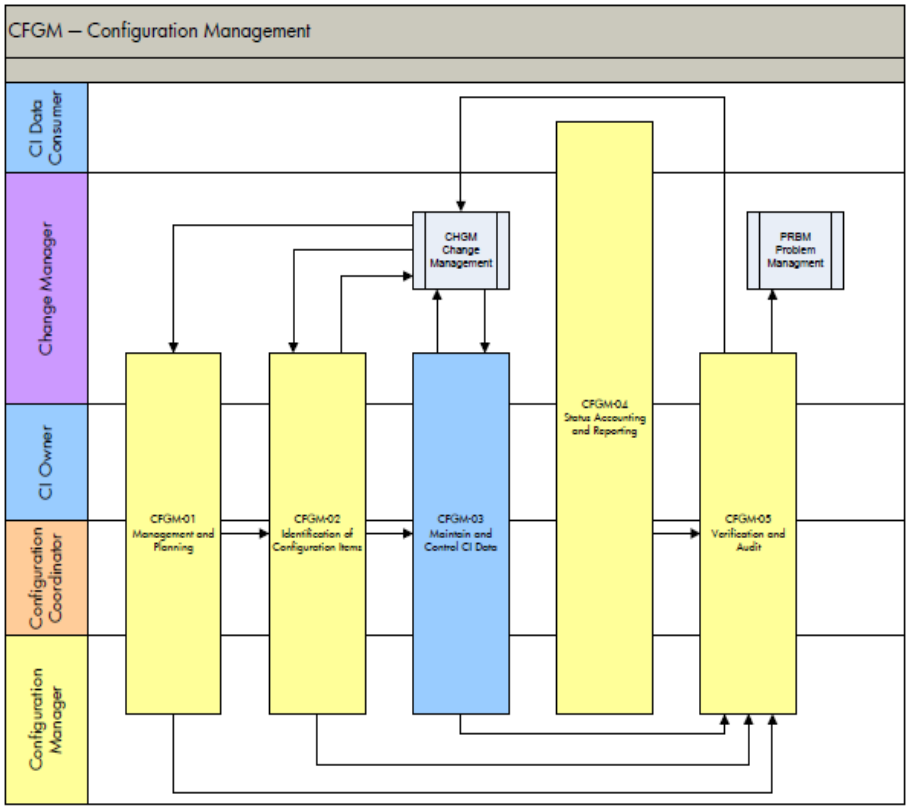
- HP will investigate, develop and deploy an automated Configuration Management Database (CMDB)
- Upload of CIs
- HP Configuration Manager will execute procedures to track and maintain the CMDB
- All HP support groups and CI owners are responsible to keep record of changes to CIs
- Scheduled data audits to verify completeness and up-to-date status



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Capacity Management

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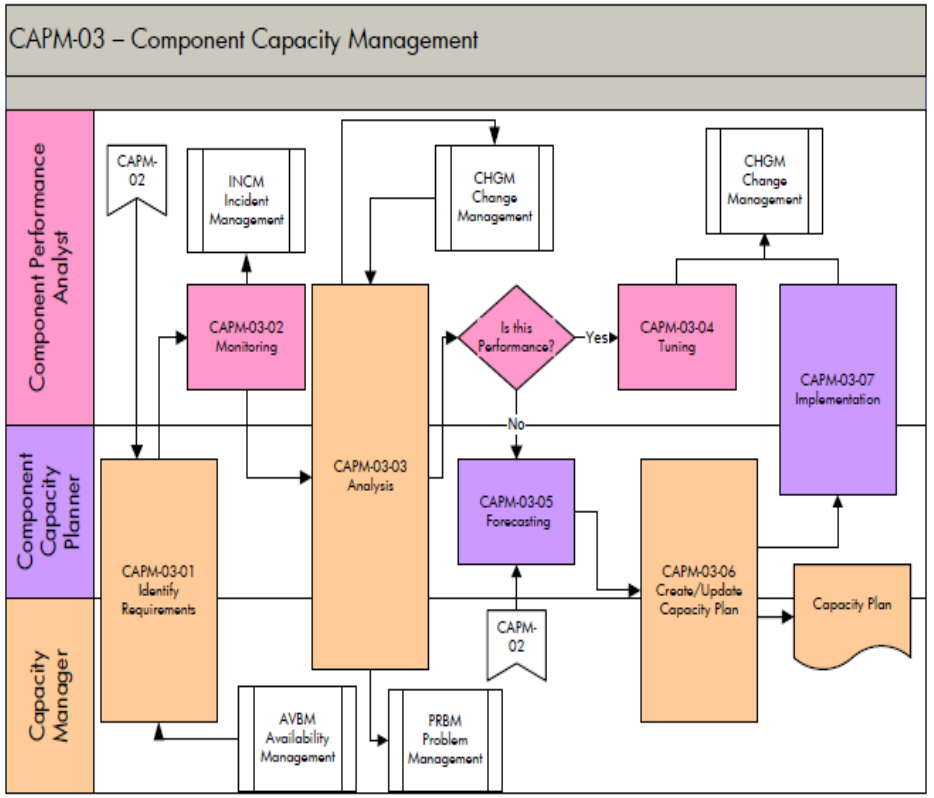
- After investigation HP will deploy SW to monitor capacity
- Components are monitored for capacity and alerts are raised as needed to trigger appropriate corrective actions by support specialists
- Utilization reporting is available for all predefined components
- Forecasts are reviewed regularly with SDE and Daimler counterpart for proactive recommendation
- An up to date Capacity Plan will be available and will trigger actions



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Availability Management

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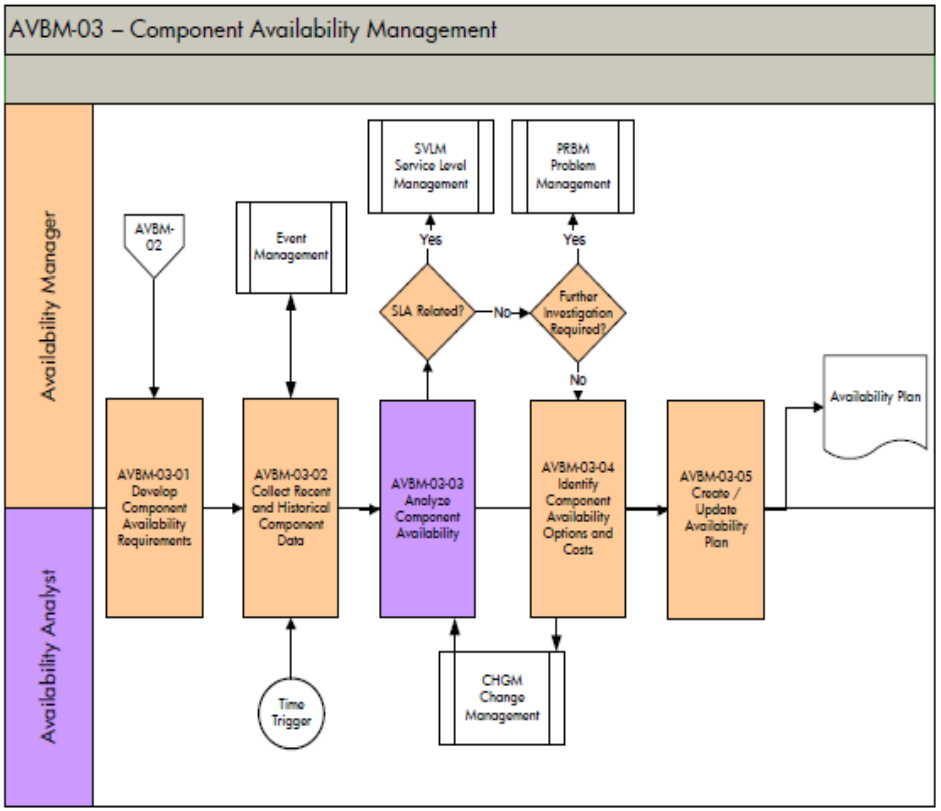
- After investigation HP will deploy SW to monitor availability
- Components are monitored for availability and alerts are raised as needed to trigger appropriate corrective actions by support specialists
- Availability reporting is available for all predefined components
- An up-to-date Availability Plan will be made available covering all agreed levels
- Data on reliability, maintainability, resiliency and serviceability is monitored and managed



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