Modernizing your Apps and Cloud Transformation

Prepare yourself for the Digital Enterprise
What does “Going Digital” really mean?

The drive to digital is a powerful business transformation, forcing enterprises to reshape the fundamentals of their businesses to extend, defend, create, and disrupt the ecosystem where...

- **The consumer is in charge** and will define your next move
- **Asymmetric competition** from unexpected sources will be the norm
- **Winners** maintain control while they minimize their asset base
Different Starting Points, Different Needs

- Functionality needs to be developed
- No baggage
- Innovate, innovate, innovate
- Use latest technologies
  - Containers
  - Microservices
  - NoSQL databases
  - Etc.
- Look for integrated development environment (CloudFoundry, OpenShift, Azure PaaS…)

Who gets there first?

Existing Enterprise

- A lot of functionality (digital assets)
- A lot of experience
- Transform, transform, transform
- Build on available technologies and evolve them to address the business needs:
  - Virtualization
  - Cloud/Hybrid
  - Etc.
- Look for responsive development environment (Agile, DevOps)

Cloud Native

Cloud Migrant
THE THERE ARE FORCES AT WORK

Creating opportunities and threats

- Unexpected Emerging Competitors
- Plug & Play Business Models
- New Generation of Applications
- Price & Margin Pressures
- Growing Talent Mismatches

Executives evidently see major obstacles

- Large companies report they’ve seen strategic decisions go haywire based on flawed data (80%)
- CEO involvement has gone up since 2012. Board involvement remained stagnant (23%)
- Lack of internal leadership or talent for digital projects is most significant challenge (31%)
- Lack of data and understanding of how digital trends affect industry competitiveness (25%)
- Inability to keep pace with faster speed of business under digital (25%)
- Inability to adopt an experimentation mind-set that is key for best practices (25%)
- Lack of dedicated funding for digital initiatives (24%)

Source: AICPA and McKinsey survey 2016
Re-use existing assets in building new processes and business approaches

Application Portfolio supporting existing Business Processes

Enable existing applications to expose the functionality supporting the new business processes addressing the digital transformation

New Digital Process
Transform your applications
Take advantage of Microservices, but how far do you go?

Business Process Management System

Re-Interface
Externalize functionality

Re-Factor
Modularize functionality

Re-Architect
Make functionality Cloud Native
How important is this application to you?

Does the application have a future?

Yes → Application Type

No → Retire

Application Type

Replace

Re-architect

System of Engagement

Core or Context

Is technology still supportable?

Yes → Re-factor

No → Core

Utilization Pattern

Variable → Re-host

Constant → Re-host/Re-Interface

System of Record

Core or Context

Replace
Deciding where your application belongs

Sys Admin   Enterprise CRM   Mobile Apps   Oracle   Content Management
Non-Production & Q-A App Dev.   Sage   Data Mining & Analytics   Low-performance Media Sharing
Microsoft Dynamics   File Print   Web Services   SharePoint   SAP   Hosted E-mail

Requirements Filter
Availability   Regulatory / compliance   Workload and infrastructure complexity   Demand / seasonality   Workload transformation and cloud stack managed services   Proprietary vs. open architecture

Build to Specification (CAPEX)

Dedicated

Configure to Need (OPEX)

Virtual

AWS, Azure, etc…

(OPEX)
Leading our clients’ digital transformations

DXC Technology Corporate Overview
Thrive on change

DXC Technology is the world’s leading independent, end-to-end IT services company. We guide clients on their digital transformation journeys, multiply their capabilities, and help them harness the power of innovation to thrive on change.

CSC and HPE Enterprise Services brought innovation to clients for 60+ years
Together, we serve nearly 6,000 private and public sector enterprises across 70 countries
Our clients benefit from our technology independence, global talent, expertise and extensive partner network
We are uniquely positioned to lead digital transformations, creating greater value for our people, clients and partners
DXC Technology at a glance

- **$25B**
  - GLOBAL IT SERVICES LEADER

- **250+**
  - PARTNER NETWORK WITH BEST-OF-BREED PARTNERS
    - 14 STRATEGIC PARTNERS

- **~6,000**
  - CLIENTS
    - 200+ Fortune 500 companies

- **60+**
  - YEARS OF INNOVATION

- **170,000+**
  - EMPLOYEES WORLDWIDE

- **91**
  - DATA CENTERS

- **37**
  - STRATEGIC DELIVERY CENTERS

- **70+**
  - COUNTRIES

- **3,600+**
  - CERTIFIED PROJECT MANAGERS

DXC Proprietary and Confidential
DXC was created to lead the digital disruption cycle

**Scale & skills**
- $25B Annual revenue
- 170k+ Employees
- 25% Skilled in next-gen
- 16 Global security operations centers
- DXC dynamic talent cloud
- 70+ Countries

**Agility & cost efficiency**
- **Integrated delivery model**
  - 55% low-cost center mix for delivery
  - 21 in-country low-cost centers
- **Operational data mining**
  - 50% incident volume reduction potential through ODM
- **Automation targets**
  - 80% priority service requests auto-resolved
  - 50% tickets auto-processed

**Technology-driven innovation**
- **Differentiated IP**
  - $4B Digital revenue
  - 11 largest offerings rated as differentiated leader
  - 250+ global partners
  - 14 strategic co-investing partners

**Customer intimacy**
- Excellent client coverage across the globe...
- ~6,000 Clients
- 200+ F500 clients
- 36 NPS

...enhanced through world-class partner network

**Deep industry expertise**
- U.S. Public Sector 11%
- Healthcare 12%
- Insurance 11%
- Banking 7%
- Travel & Transportation 14%
- Energy 8%
- Retail 6%
- Other 3%
DXC leadership positions

1. ServiceNow deployments
2. AWS certified architects
3. HDS integrator by sales revenue
4. Symantec GSI Partner by sales revenue
5. RedHat Premier Infrastructure, Applications & Cloud SI Partner by sales revenue
6. Oracle engineered systems support capability
Industry-focused services and solutions

Insurance
We’re the No. 1 provider of core insurance software and services globally. We support growth, speed to market and efficiency through digital insurance solutions and business process services.

Healthcare & Life Sciences
We provide industry-leading software and business process services to providers, payers, government health and life sciences firms. We focus on clinical care and operational efficiency with digital care transformation solutions.

Travel & Transportation
With 40+ years of industry experience, we support mission-critical systems for top airline, consumer travel, freight and logistics, and railway firms. Our services help clients support growth and transform operations.

Public Sector
We’re one of the world’s leading independent IT services providers to all levels of government agencies. We provide secure, 24x7 support to mission-critical systems and operations.

Energy
We’ve supported more than 400 energy businesses worldwide over 20+ years. Our solutions help clients rapidly seize market opportunities, gain competitive advantage and evolve with new business models.

Banking & Capital Markets
A leading provider of banking software and front-office managed trading solutions, we support banking and capital markets clients with 30+ years of industry experience, specialized services and resources to make transformation happen.

Manufacturing
A leading IT services provider to automotive, aerospace and defense, industrial, high tech and chemical firms, we combine deep expertise in manufacturing, connected products, analytics and security to help clients drive innovation.

Consumer Products & Retail
We help the world’s leading consumer packaged goods and retail firms focus on consumer experience and help clients seize opportunities in the face of disruptive digital trends.

Communications, Media & Entertainment
We provide innovative business solutions to the world’s leading communications, media and entertainment firms to transform their business, redefine the customer experience and capitalize on digital convergence.

Aerospace & Defense
A leading IT services provider to A&D firms, we help clients shorten time to market, gain insight from data and adopt digital technologies to accelerate innovation across manufacturing and supply chains.
9 global offering families

Cloud, Workload, Platforms & ITO
We help clients maximize their private cloud, public cloud and legacy infrastructure, as well as securely manage their hybrid environments.

Workplace & Mobility
Our workplace, mobility and IoT services help clients embrace new ways of working and build a secure, user-centric, digital workplace.

Analytics
Our portfolio of analytics services and robust partner ecosystem help clients gain rapid insights and accelerate their digital transformation journeys.

Security
Our security solutions help predict attacks, proactively respond to threats, ensure compliance and protect data, applications, infrastructure and endpoints.

Application Services
Our comprehensive services help clients develop, manage and modernize their apps.

Business Process Services
We provide seamless digital integration of front and back offices. The result: unlimited business outcomes.

Enterprise & Cloud Apps
We provide industry, business process, systems integration and technical delivery experience to maximize value from enterprise application portfolios.

Consulting
We help clients accelerate their digital transformations and business results with industry, business, technology and complex integration services.

Industry Solutions & Services
Our industry-specific solutions enable businesses to quickly integrate technology, transform their operations and develop new ways of doing business.
### The industry-leading DXC Partner Network

<table>
<thead>
<tr>
<th><strong>Strategic Partners</strong></th>
<th><strong>Solution Partners</strong></th>
<th><strong>Channel Sales Partners</strong></th>
<th><strong>Supplier/Reseller Partners</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep, comprehensive, global partnerships with joint business objectives and a drive to continuously solve complex, critical client challenges</td>
<td>Regional, industry, offering or frontier relationships with specialized expertise to exceed our clients’ expectations</td>
<td>Ability to scale globally and market and resell DXC offerings and services through experienced sales teams</td>
<td>The essential components that complete DXC solution offerings with consistent and replicatable outcomes for each client</td>
</tr>
</tbody>
</table>

Note: Partner list not exhaustive
“Our clients are facing major disruptive changes. We’re meeting these challenges with highly talented people, an experienced hand and an independent view of technology solutions — so our clients can seize new opportunities and thrive on change.”

Mike Lawrie
Chairman, President and CEO of DXC Technology
Transform your application

How does this work?
Transformation is a journey

General principles

**Phase 1: Strategic direction & business architecture**
- Establish strategic outcomes & operating model
- **Assess** applications supporting business architecture
- **Define** current and future business architecture

**Phase 2: App analysis & gap/fit analysis**
- **Assess** champion applications
- **Validate** business taxonomy for future operating model
- **Recommend** and align future application and business architecture

**Phase 3: Develop rationalization strategy & roadmap**
- **Develop** modernization strategy & APM Structure / Governance
- **Plan** transformation roadmap
- Set **governance** for execution
- **Manage** integration

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### Some clients ...

... Are thinking about transformation but are unsure where to start
- Want to know all the roles that would be involved
- Interested in reducing program risk
- Need a better understanding all the phases

... Have tried (and failed) at transformation before
- Need to understand what they missed, or
- Want to complete the transformation they started
- Were unable to develop a business plan … or get it approved

... Are stuck
- And need a **roadmap** to get them back on track
A proven approach to moving apps to the cloud while overcoming challenges and meeting business objectives

1. Right treatment of Apps
   - Align on business outcomes
   - Assess suitability to cloud: Online assessments
   - Rationalize portfolio: Analysis tools
   - Migration strategy: Replace, Re-Architect, Re-Host, Re-Factor
   - Business outcome #1
   - Business Process 1a
   - Business Process 1b
   - Apps Group 1
   - Apps Group 2
   - Apps Group 3

2. Hybrid IT migration
   - Automate migrations tools
   - Brokering solutions
   - DevOps
   - PC delivery
   - DXC can provide managed services, build and consumption models
   - ESO
   - Traditional
   - Private Cloud
   - VPC
   - Public Cloud (e.g., Azure, AWS)

3. Right end state target infrastructure
   - Pick the right landing zone
   - Reduce costs: 15-30%
     - Pick the right apps that has the greatest value in moving
   - Reduce risks: 360°
     - Capex to Opex models, smooth transition through automation and without re-platforming for VPC
   - Speed to market: 15-20%
     - Move from traditional to digital
   - Improve top line: 4x rev over cost
     - Fund innovation vs. ‘keeping the lights on IT’
Prepare your transformation
Proven methodology, experienced consultants and robust tools

**Assess Suitability to Cloud**
- On-line assessments

**Align Business Needs**
- Questionnaires/Interviews

**Rationalize Portfolio**
- Analysis Tools

**Migration Strategy**
- Transformation Strategies
  - Replace
  - Re-architect
  - Re-host
  - Re-factor

**Target Platform**
- Decision Tree

- **Hybrid IT**
  - Container
  - Private Cloud
  - Managed Cloud
  - Virtual
  - Public Cloud (AWS/Azure...)
  - Traditional

**4 Migration Strategies**
- 10 Treatments

- **DXC Proprietary and Confidential**
Execute the Transformation

Assess
- Future Application Landscape
- Business Requirements
- Technologies
- Wave Planning
- Etc.

Transform Infrastructure
- Build new environment
- Set-up new identity management
- Configure network & switches
- Establish security perimeters
- Etc.

Design
- Review Application
- Define required activities
- Identify change patterns

Governance
- IP-Address update
- Firewall rules request
- Domain connectivity
- Check App Integration
- Agents installation
- Etc.

Migrate Data
- “Re-learn” application
- Perform appropriate treatment
- Update Operations Documentation
- Etc.

Integrate
- Hand-over to Operations for actual deployment in release process

Test
- Smoke Test
- UAT and Integration tests performed by client

Deploy

Establish and use automation
Beyond Transformation, Automation

Improve responsiveness while reducing cost
What if…

- Source code management
- Continuous integration service
- Build service
- Artefact repository
- Continuous deployment
- Deployer
  - Version 58
- Unit Testing
- Acceptance Test
- Integration Test
- Production

Diagram:

1. Code Commit → Code
2. Source code management → Continuous integration service
3. Continuous integration service → Build service
4. Build service → Artefact repository
5. Continuous deployment → Deployer
  - Version 58
6. Public Cloud:
   - App Server
   - DB
   - OS
7. Managed Cloud:
   - Promote
   - Reject
   - Delete
   - App Server
   - DB
   - OS
8. Private Cloud:
   - Promote
   - Reject
   - Delete
   - App Server
   - DB
   - OS
The purpose of application transformation
Achieve desired business outcomes

**Customer outcomes**

<table>
<thead>
<tr>
<th>Improved time to value</th>
<th>Increased application velocity &amp; volume</th>
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<tbody>
<tr>
<td>Reduced risk &amp; costs by &gt;30%</td>
<td>$4 Business growth for $1 saved</td>
</tr>
<tr>
<td>Aligned to business best practice</td>
<td>Improve customer &amp; employee satisfaction</td>
</tr>
<tr>
<td>Empowered users leveraging legacy &amp; new as a service</td>
<td>Accelerate with proven process, tools, people</td>
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**Challenges**

<table>
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<th>Customer experience</th>
<th>Leverage legacy investments</th>
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<tbody>
<tr>
<td>Time to value</td>
<td>Improve decision making</td>
</tr>
<tr>
<td>Optimise costs</td>
<td>Grow revenue</td>
</tr>
<tr>
<td>Services anytime anywhere</td>
<td>Competitive position</td>
</tr>
</tbody>
</table>

**Solutions**

- Align to industry best practice
- Digital platforms & business models

- Optimise existing apps / infra
- Differentiate value of legacy
- Industrialise, automate & standardise

- New IT operating model
- Align org, tools & culture

- Seamless access to apps services
- Broker model & enterprise apps store

**Processes**

**Apps / Infra**

**Operations**

**Services**
## APPLICATION AND INFRASTRUCTURE MIGRATION

### Different options - Levers

<table>
<thead>
<tr>
<th>Area</th>
<th>Benefit Attainment (Return on Effort and Speed to Value)</th>
<th>Key Highlights</th>
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</table>
| “Pure” Lift and Shift (physical move)                                | Return on effort 0% | Speed to value 0%                                                   | • Quick  
• “Easy” to plan  
• Simplified Execution                                                                                                                                  |
| Simple Application Migration to FMO infrastructure (MPC) (Re-host Image Migration) | Return on effort 0% | Speed to value 0%                                                   | • Requires consistent environments  
• Dependent on relative integration references (no hard-coded IP addresses)  
• Rebuilds DC in MPC environment                                                                                                                            |
| Full Application Migration (Re-host)                                 | Return on effort 0% | Speed to value 0%                                                   | • Needs application analysis  
• Caters for environment upgrades and standardization  
• Runs native on the new environment – more efficient use of infrastructure                                                                                      |
| Application Transformation (including Automation) (Re-host, Re-factor & Re-Architect) | Return on effort 0% | Speed to value 0%                                                   | • Addresses business strategies and requirements  
• Automates provisioning and deployment  
• Enables to take full advantage of cloud capabilities for applications where it makes sense                                                                 |
| Portfolio Rationalization (Including DevOps) (Re-host, Re-factor, Re-Architect, Retire, Replace) | Return on effort 0% | Speed to value 0%                                                   | • Simplifies application landscape  
• Reduces number of applications  
• Enables automated provisioning and deployment  
• Addresses business needs for responsiveness and agility                                                                                                     |
**Potential Benefits**

**Infrastructure Utilization**
- **35-40%**
  - Reduction in hardware cost due to increase in utilization
  - Low 10's%

**Application Transformation, Development, Testing & Deployment**
- **200x**
  - More frequent deployments
- **200x**
  - Faster failure recovery

**Application Operations**
- **10%**
  - Reduction in operations due to standardization of platforms
- **5%**
  - Reduction in licenses and support due to modern platforms

**Application Management**
- **10%**
  - Reduction in remediation effort due to automation of testing
- **15%**
  - Reduction in number of tickets and incidents
- **24x**
  - Faster failure recovery

**Agile**
- **3x**
  - Lower change failure rate

**DevOps**
- **22%**
  - Less time on unplanned work & re-work
- **40%**
  - Reduction in cost to run tests due to automation
- **60x**
  - Reduction in deployment costs
Thank you.