The Cloud Adoption Playbook: Proven Strategies for Transforming your Agency

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The promise... and the reality...

Possible?

Why?

Who?

When?

How?
Digital transformation is the change associated with applying digital technology to all aspects of society.

Cloud adoption is how businesses and agencies implement digital transformation.

Outcomes

- Faster to market
  - Accelerated releases
  - Onboarding
  - Increased capacity
  - Enable experimentation

- Higher quality
  - Fewer errors
  - Less rework
  - Faster service requests
  - Resiliency through automation

- Lower cost, more flexibility
  - Transparent/variable structure
  - Affordable infrastructure
  - Provider choice
  - Address technical debt

- Repeatable and scalable
  - Standardization (no snowflakes)
  - Reference implementations
  - Easy skill acquisition/upgrade
  - Expansion consistency

- Secure and compliant
  - Fewer audit exceptions
  - Regulatory requirements
  - Process control structures
  - Client confidence

Cloud adoption is a means to an end...that requires us to transform
1000+ engagements have taught us transformation is more than technology.
1000+ insights have shaped our approach

Even well articulated strategies are failing in some dimensions.

DevOps = “Water-ations”

What shall I do with my data / workloads?

Where to start?

We built it and they did not come

How I handle incidents?

Skills are hard to find

We are improvising

Complex
What is Cloud Adoption and Transformation?

Think. Transform. Thrive

Organizations worldwide have started their cloud adoption journey. They are seeking validation of their approach, wanting to gain the advantages of cloud without exposing their enterprise to additional risk.

Cloud Adoption and Transformation Framework

By working with IBM and following our well-defined, yet flexible methodology, clients receive an actionable roadmap across a holistic model with measurable targets to ensure their business will thrive while on their cloud journey and transformation.
An actionable framework modeled after successful transformations guides your decision-making to avoid common pitfalls.

Validate your approach wherever you are in your journey and continue on a trusted path to help make your transformation thrive.

Envision your transformation to establish the strategic intent. Balance your transformation to what works best for the enterprise. Realize your strategic outcomes at scale over a sustained period.

ibm.com/cloud/garage/adoption
Cloud Adoption and Transformation

Our client’s cloud adoption journey is rooted in the seven dimensions of digital transformation

Understand the current realities so you can design the future.

<table>
<thead>
<tr>
<th>1 Culture + Organization</th>
<th>2 Architecture + Technology</th>
<th>3 Security + Compliance</th>
<th>4 Emerging Innovation Spaces</th>
<th>5 Methodology</th>
<th>6 Service Management + Operations</th>
<th>7 Data Science + Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture that encourages innovation, aligns with business goals, and accelerates execution</td>
<td>Overall cloud technology vision, considering desired state and enterprise goals for workload and data</td>
<td>Key considerations for holistic cloud operations, including risk, security and compliance</td>
<td>Leverage, showcase and validate new and emerging technologies</td>
<td>Agile practices for software planning, development, delivery, and operations</td>
<td>Cloud management framework, process and practice for operational environment</td>
<td>Data science insights, governance frameworks and catalysts for cloud acceleration</td>
</tr>
</tbody>
</table>
Cloud Adoption and Transformation: dimension linkages

How do the dimensions tie together?
Using Methodology as an example starting point

**Emerging Innovation Spaces**
E.g. Access to an innovation technology platform
E.g. Agile / DevOps practices supporting build-measure-learn

**Culture + Organization**
E.g. Freedom to experiment, and fail fast
E.g. Composition of an Agile / DevOps team

**Service Management + Operations**
E.g. Feedback through monitoring
E.g. Ensuring high availability of DevOps toolset

**Architecture + Technology**
E.g. Speed of delivery through flexible architectures
E.g. An integrated tooling architecture

**Security + Compliance**
E.g. Securing development-time assets
E.g. Meeting regulations in a timely manner

**Data Science + Governance**
E.g. Governance of the delivery process
E.g. Insights into the delivery process

**Methodology**
E.g. Agile and lean practices
E.g. Tool chains for continuous delivery
IBM Garage Method for Cloud

The IBM Garage Method for Cloud is IBM's approach to enable business, development, and operations to continuously design, deliver, and validate new solutions.

**Principles**
- Breakdown the program
- Engage the organization
- Holistic but pragmatic
- Deliver incrementally

**Practices**

**Culture**
- Create a high-performance culture

**Discover**
- Understand and prepare what you need for success

**Think**
- Innovate by design, not by accident

**Develop**
- Create quality code through collaboration and automation

**Reason**
- Apply AI techniques in order to make better decisions

**Operate**
- Prepare for problems before they happen

**Learn**
- Learn from your customers and make better decisions

https://www.ibm.com/cloud/garage

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### Spectrum of Adoption Approaches

**A tale of two organizations: What kind of transformation are you ready for?**

<table>
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<tr>
<th>Radial / Disruptive</th>
<th>Evolutionary / Incremental</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GLOBAL AIRLINE</strong></td>
<td><strong>LARGE BANK</strong></td>
</tr>
<tr>
<td><strong>FASTER</strong></td>
<td><strong>SLOWER</strong></td>
</tr>
<tr>
<td><strong>MUCH</strong></td>
<td><strong>LESS</strong></td>
</tr>
<tr>
<td><strong>FAIL FAST</strong></td>
<td><strong>CONTROLLED</strong></td>
</tr>
<tr>
<td><strong>CHEAP</strong></td>
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<tr>
<td><strong>NEW/REFACCTOR</strong></td>
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<tr>
<td><strong>HYBRID</strong></td>
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</table>

### Key Concepts:
- **Speed of Change**: Faster vs. Slower
- **Organizational Change**: Much vs. Less
- **Experimentation Approach**: Fail Fast vs. Controlled
- **Cost of Failure**: Cheap vs. Expensive
- **Adaptability to Technology Changes**: More vs. Less
- **Technology Approach**: New/Refactor vs. New/Integrate
- **Platform/Technology Selection**: Hybrid

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A major global airline needed to quickly respond to market demands and decided to radically transform its key client-facing apps. Using proven techniques to drive results and adopting the IBM Cloud Garage Method were their keys to success.

Journey
- Monolith app prohibited dynamic changes
- Too much time and effort for infrastructure updates

Technologies
- Adopt IBM Cloud, cloud native architecture, SoR integration, APIs, IaaS, and modernize core sites

Value
- New customer-facing app delivered in less than half the usual time
- Doubled production capacity in hours
- Migrated core site with new HA/DR, lower cost, improved performance, and eliminated time spent on maintaining infrastructure
- Organic expansion of IBM Cloud Garage Method and cloud adoption
- Established onsite Garage for rapid projects and training

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A large European retail bank evaluated its cloud adoption strategy through the Cloud Evaluation Consultancy. A short term collaboration on key dimensions led to a five-year cloud adoption roadmap based on their business objectives and risk mitigation.

Journey
- Global computing model drives agile operations and culture
- Upgrade talent and culture
- Establish a Cloud Competence Center

Technologies
- Migrate or modernize 4000 apps
- Standardize platform components and industrialize approach
- Integrate hybrid PaaS with multi-vendor clouds and capabilities

Value
- Expected to save 21% over two years
- Developing a Cloud Competency Center to encourage collaboration and a greater focus on the customer
- Adopting an industrialized hybrid cloud across geographies for faster, consistent time to market
- Extends reach into new ecosystems
Think. Transform. Thrive.

Think
Envision. Ideate. Call your shot.
- Assemble your sponsors.
- Instantiate your squad.
- Align business and IT.
- Prepare and learn.
- Assess and evaluate current state.
- Ideate and prioritize to-be state goals.
- Partner with world-class experts to create your plan.

Transform
Get your teams on the path.
- Immerse and transform.
- Define and execute culture, process and technology pivots.
- Test, prove, and pilot.
- Take iterative steps, confirm technical decisions.
- Measure outcomes.
- Validate while scaling.

Thrive
Realize significant outcomes.
- Build on proven successes.
- Embrace and amplify new culture, process and technology foundations.
- Learn from feedback.
- Call your next shot.

Roadmap
Go live
Scale
Innovate like a startup. Scale for the cloud.

Architectures, practices, and toolchains to jump-start your cloud and DevOps transformation.

Maximum control with all benefits of cloud:
Check out IBM Private Cloud
### Consider the big picture
- Involves the right people
- Aligns business and technology, meeting you where you are
- Takes a holistic yet pragmatic approach across dimensions
- Operates from an outside-in, client-centric perspective
- Opens the door to new possibilities
- Establishes success criteria
- Accounts for multi-cloud hybrid model

### Addresses areas of contention
- Decisions on modernization and migration
- Upgrading culture
- Changing tools
- Developing on and operating multi-cloud environment
- Integrating and securing on- and off-premises applications and data

### New practices offer speed and flexibility
- Practice new forms of agile engagement and organization alignment
- Rethink provider relationships
- Establish new foundations for transformation
- Show progress and quick wins
- Collaborate actively
- Balance sustained and disruptive innovation

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Transforming government with cloud technologies

- The cloud is ubiquitous - almost all of us are using cloud services and these examples only hint at the importance and impact of the cloud.

- Cloud technologies are redefining how government information technology organizations develop and deliver solutions to employees and citizens.

- By leveraging the cloud, government can become more efficient in its use of technology, and can innovate more quickly and effectively to advance its mission.

- IBM has helped thousands of organizations securely and successfully leverage cloud capabilities. We know that it’s not easy. Government organizations, especially, are faced with seemingly never-ending budget pressure, legacy systems, and workforce challenges.

- We’ve seen clients struggle to formulate a successful cloud adoption strategy, and we’ve worked with them to overcome the hurdles in implementing that strategy.

- For most agencies, the initial forays into the cloud were ad hoc efforts - the Playbook offers a structured approach based on proven experiences.

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Key takeaways

Government information technology organizations are leveraging cloud to transform across all functions

• Adopt a robust, repeatable method that meets the client where they are
• Reduce transformation journey risk through trusted partnerships
• Innovate through deep agency and domain expertise

A holistic yet pragmatic approach to adoption and transformation is key

• Consider the whole while showing quick wins
• Transformation includes People, Process, Technology, Information, Talent, Culture
• Evaluate periodically and often to course-correct as needed

The power of the hybrid platform – open by design – is the foundation for success

• Modern, agile and open IT infrastructure to unleash developer creativity
• Enterprise-grade management and security to connect data in the multi-cloud environment
• Use your existing investments and skillset to adopt new technologies
Take the next step

Visit
ibm.com/cloud/garage/adoption

Contact
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We wrote the book on cloud adoption – literally

The de facto guide to improving your enterprise with the cloud, created by distinguished members of our Solution Engineering team.

ibm.com/cloud/garage/services/the-cloud-adoption-playbook