Break down the barriers to digital transformation

Presented by:
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Becoming a Cognitive Business is a journey.

Leaders can capitalize on all the foundational work they’ve done to deploy cloud, analytics, mobile, social, security.
1. A cognitive strategy

Determine what data you need, which experts will train the system; where you must build more human engagement; which products, services, processes and operations should be infused with cognition, and which parts of the unstructured 80% of data you most need to focus on to make discoveries for the future.

2. A foundation of data and analytics

Collect and curate the right data—data you own, data from others, data available to all; both structured and unstructured. Apply cognitive technologies to this data in order to sense, learn and adapt, thereby creating competitive advantage.

3. Cloud services optimized for industry, data and cognitive APIs

The building blocks for products and services are code, APIs and diverse data sets. The platform you choose to develop on, and the agile development culture and methods you embrace, will be critical to your success.

4. IT infrastructure tuned for cognitive workloads

Architect a new kind of IT core—a heterogeneous infrastructure that serves as the backbone of your enterprise. Do this rapidly and affordably by harmonizing technologies from public, private and hybrid cloud with distributed devices, IoT instrumentation and your existing systems.

5. Security for a Cognitive Era

As cognition makes its way into cars, buildings, roadways, business processes, fleets, supply chains—securing every transaction, piece of data, and interaction becomes essential to ensure trust in the entire system—and in your brand and reputation.
Cognitive Business is powered by IBM Watson.

Watson is a cloud-based, open platform of expanding cognitive capabilities. With Watson, you can build cognition into digital applications, products and operations.
The Watson that competed on *Jeopardy!* in 2011 comprised what is now a single API—Q&A—built on five underlying technologies. Since then, Watson has grown to a family of 28 APIs. By the end of 2016, there will be nearly 50 Watson APIs—with more added every year.
Disruptors are reinventing business processes and leading their industries with digital transformations

**Personalized front-line decision making**

New mobile apps are consolidating decision making at the fingertips of people who need to act.

**Real time insight driven processes**

Insight from nontraditional data sources is being infused in business processes to create new business moments.

**Ecosystem-based Innovation**

New innovations are composed leveraging digital services from a broad ecosystem.
Will you disrupt or be disrupted by your industry?

**AIRBUS**
Bringing insight directly to their maintenance engineers via mobile

**DELHAIZE GROUP**
Using weather data to predict real time inventory needs

**CITI**
Sourcing new innovation from mobile developer communities
Digital disruptors break the mold

Performance vs non-digital peers on key metrics

- Share of customer wallet: +10pts
- 3-yr customer retention: +6pts
- % of new product dev initiatives released: +6pts

Reshape the operating model

Value delivery focus vs Value proposition focus

Reshape the customer experience

Sources:
2. “Inside the mind of Generation D”, IBM Center for Applied Insights, October 2014
Digital transformation requires multi-speed IT

- Continuous delivery through agile DevOps
- Seamless workload portability based on need at any point in time
- Collaborative innovation on top of enterprise systems through microservices and APIs
- Secure interactions across on-premise IT, hybrid & public clouds

Core enterprise
Scaling institutional knowledge and processes

Speed & agility to drive innovation and growth
Digital ecosystem
Your technology must be future-proof

- Flexibility in deploying workloads determines your ability to adapt
- Move data to workloads or workloads to data based on what makes sense at a given time
- Use containers to facilitate seamless portability across any IT landscape

Hybrid Cloud

Cloud-native

Cloud-enabled
Barriers to digital transformation

**PEOPLE**

- Organizational siloes and skill gaps
  - Requires collaboration across LoB, IT and ecosystems like never before

**PROCESS**

- Business processes and transactions span multiple environments
  - Demands security, visibility and control at each touch point to mitigate new risks

**TECHNOLOGY**

- Fast, secure, controlled access to data
  - Identifying, integrating, and analyzing the right data across diverse ecosystems

- Flexibility for the future
  - To use any data, applications, services and devices
A hybrid cloud architecture for digital transformation

- Security across every point of interaction
- Built-in monitoring and analytics
- Seamless workload portability
- Fully integrated DevOps

Extends SOA and enterprise integration services across the API Economy
Remake your organization for the future – with IBM

- Optimize decisions with insight from your operations
- Embrace agile to accelerate your transformation
- Reinvent processes for ecosystem participation
- Deliver adaptive personalized experiences

Reshape the customer experience

Reshape the operating model

Transformation

Value delivery focus

Value proposition focus
Business operations that use **complete visibility** and **embedded analytics** to act in **real-time**

<table>
<thead>
<tr>
<th>Collect and monitor events across your ecosystem</th>
<th>Model next best actions and automate decision making</th>
<th>Improve decisions by understanding patterns and trends</th>
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<tbody>
<tr>
<td>IBM captures the largest number and diversity of events, from the broadest range of sources - in real-time</td>
<td>The only decision support based on real-time insight into the systems that run the business</td>
<td>Unique advanced analytics provide greater insights from real-time data across operational sources</td>
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</table>
Optimize decisions with insight from your business operations

- Increase productivity up to 50%
- Adapt to market changes 3X faster

Get started with us today

- Collect and monitor events across your ecosystem
- Model next best actions and automate decision making
- Improve decisions by understanding patterns and trends

Visit ODM for Dummies to learn about event visibility

Explore Bluemix Business Rules

Learn about New Perspectives on Decision Management

Adapt decision logic at the pace of business with aggregation

Access cloud-based tools to improve your decision making

Identify opportunities and risks in real-time – to enable action
Optimize decisions with insight from your IT operations

IT operations that deliver **visibility, control** and **automation** across **any IT landscape**

- Gain complete visibility and control over apps and infrastructure
- Use embedded analytics to solve problems faster or avoid them altogether
- Automate and collaborate to focus teams on innovation initiatives

The industry’s most complete visibility – capturing 100% of transactions across the largest number and diversity of things

Advanced analytics for predictive and historic insight across all IT Operations data

DevOps built for hybrid IT with built-in workload automation and performance management
Optimize decisions with insight from your IT operations

- Predict 100% of major incidents
- Reduce outages up to 40%
- Improve app availability up to 98%

Get started with us today

- Gain complete visibility and control over apps and infrastructure
- Use embedded analytics to solve problems faster or avoid them altogether
- Automate and collaborate to focus teams on innovation initiatives

Start now with Application Performance Management
Gain visibility and control across all IT operations, wherever they reside

Try out IT Operations Management & Analytics
Apply actionable insights to make the right decision at the right time

Take free trials of Workload Automation and Collaborative Ops
Automate key tasks to spend less time on routine maintenance, more on innovation

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Embrace agile to accelerate your transformation

Application delivery that is **fast, seamless** and **repeatable across any infrastructure**

- **Accelerate app delivery with agile DevOps**
- **Choose the best runtime for your application**
- **Write apps once, deploy anywhere with enterprise containers**

**The only application platform that accelerates the entire application delivery lifecycle**

**The simplest, fastest, lightest dev and production environments for Java, node.js and more.**

**Fast pattern-based deployment and movement of apps via enterprise containers**
Embrace agile to accelerate your transformation

- Deliver apps **60% faster** with **50% better quality**
- Save **3 weeks** per developer per year
- Move apps to the cloud in **minutes** without change

Get started with us **today**

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**Take a DevOps practices self assessment**

Transform your software delivery process with an IBM DevOps approach

**Access free developer tools and runtimes**

Build and run apps with WAS Liberty, a fast flexible and lightweight platform for Java and node.js apps

**Try out PureApplication Service free for 30 days**

Use pre-built patterns and Docker containers to quickly and easily deploy apps on-prem or off-prem

**App development cycle**

6wks → 2 wks

**Test configuration**

Days → 30mins
Reinvent processes for ecosystem engagement

Business processes **adapt** and **extend** into the API economy - securely

- Integrate processes across your ecosystem using APIs
- Use hybrid cloud integration to extend your IT infrastructure
- Understand and transform processes for new business models

**The only API platform** with built-in governance and security – achieve scale without sacrificing control

**The most comprehensive** integration platform couples lightning-fast innovation with industrial strength security and scalability

**The only analytics-based** BPM suite enables rapid reinvention of business processes across ecosystems
Reinvent processes for ecosystem engagement

- Accelerate innovation up to 80%
- Unleash innovation securely

Get started with us today

Integrate processes across your ecosystem using APIs

Use hybrid cloud integration to extend your IT infrastructure

Understand and transform processes for new business models

Take a free trial of API Management

Define your strategy and securely expose your APIs to the developer community

Take a free trial of IBM BlueMix Hybrid Integration

Connect on-premises and cloud-based applications to get to market faster

Explore trials of Blueworks Live and BPM on Cloud

Design processes that enhance collaboration and create new models
Digital experiences that effortlessly deliver authenticity in every interaction

Deliver adaptive personalized experiences

Adopt a secure content delivery platform that is right for your needs

Build and manage persuasive and adaptive content

Deliver the ideal omni-channel experience for every interaction

Unmatched flexibility - choose SaaS, On-Prem or hybrid without compromising security

Unique user and content analytics deliver the most adaptive user experiences

The only solution to deliver authentic brand experience across all channels
Deliver adaptive personalized experiences

- Boost conversion by 20%
- Scale transactions 100x

Get started with us today

Adopt a secure content delivery platform that is right for your needs

Build and manage persuasive and adaptive content

Deliver the ideal omni-channel experience for every interaction

Read the analyst papers to learn how you can achieve ROI like our clients

See how content can be dynamically managed in our Day in the Life videos

Explore a trial of IBM Digital Experience on Cloud
A hybrid cloud architecture for digital transformation

- Security across every point of interaction
- Built-in monitoring and analytics
- Seamless workload portability
- Fully integrated DevOps

Extends SOA and enterprise integration services across the API Economy
StrongLoop Solutions for the API Lifecycle for Node

StrongLoop Arc

API Composer
Visual modeling

Profiler
Root cause CPU & Memory

Performance Metrics
Real-time production monitoring

Build and Deploy
Automate Lifecycle

Process Manager
Scale APIs

Security
API Services Gateway

express
LoopBack
node.js
Open source

IBM Internal Use
…that only IBM can deliver

- Security across every point of interaction
- Built-in monitoring and analytics
- Seamless workload portability
- Fully integrated DevOps

The only platform with built-in intelligent scaling, workload placement and DevOps

52% better performance than the next best ESB

Secure by design

Unique pattern-based runtimes deliver seamless portability

Scales to billions of concurrent messages and transactions

The largest range of supported open standards in the industry

Extends SOA and enterprise integration services across the API Economy

Partners

Apps

Access

Enterprise Infrastructure

Digital Innovation
## Remake your organization for the future – with IBM

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<td><strong>Optimize decisions with insight from your operations</strong></td>
<td>Unique analytics-based visibility across all operational data</td>
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<td><strong>Embrace agile to accelerate your transformation</strong></td>
<td>The only application platform with pattern-based enterprise containers and DevOps</td>
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<td><strong>Reinvent processes for ecosystem participation</strong></td>
<td>The only integration &amp; process management tools designed for the API economy</td>
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<td><strong>Deliver adaptive personalized experiences</strong></td>
<td>The only vendor to apply advanced analytics to deliver adaptive personalized experiences</td>
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