

IBM and Oracle/ATG?



Introducing IBM Global Business Services (GBS) Oracle Practice IBM GBS can deliver vision into reality, with leading edge solutions, rapid and robust delivery, proven

IBM GBS can deliver vision into reality, with leading edge solutions, rapid and robust delivery, proven capabilities, all at a cost effective price

Consistently Recognized as the Leading Oracle Systems Integrator

- ••2016 Oracle Excellence Award Applications Partner of the Year SI Japan
- ••2016 Oracle Cloud Rocket Start Award Japan
- ••2015 & 2016 Global Award for JD Edwards License Revenue Production
- ••2015 Oracle Excellence Award Applications Partner of the Year SI APAC
- ••2015 Oracle Denmark: Oracle Excellence Award Specialized Partner – Applications
- Recognized as a Leader by Forrester 2016 and IDC Marketscape AMS 2016

Broadest Base of Successful Engagements and Unparalleled Depth of Industry Expertise

- ••6,500+ successful Oracle engagements
- ••Cross-Industry and Industry-Specific Solutions
- • Project Accelerators leveraged and enhanced over multiple projects
- ••Integration of IBM Research to drive client value on the project

Largest and Most Experienced Team of Resources of Any SI

- ••15,800+ dedicated Oracle consultants globally
- Oracle specific Global Delivery centers in North America, India, China, Philippines, Canada, Brazil, Egypt, Mexico and Eastern Europe

Oracle's most significant partner, with a 30+ year partnership and Diamond and Cloud Elite status

- Broad and deep collaborative relationship from highest level of organizations
- Priority access into Oracle Development
- ••Delivery capability for entire suite of Oracle Applications product families

Globally integrated solutions and delivery

- IBM Oracle Asset Retriever (OAR) integrates industry-leading methods, project optimization tools, industry benchmarks, and 5,000+ delivery accelerating assets to optimize value to our clients.
- Globally integrated delivery leveraging consistent solutioning, estimating, delivery methods, program management and tools all around the globe





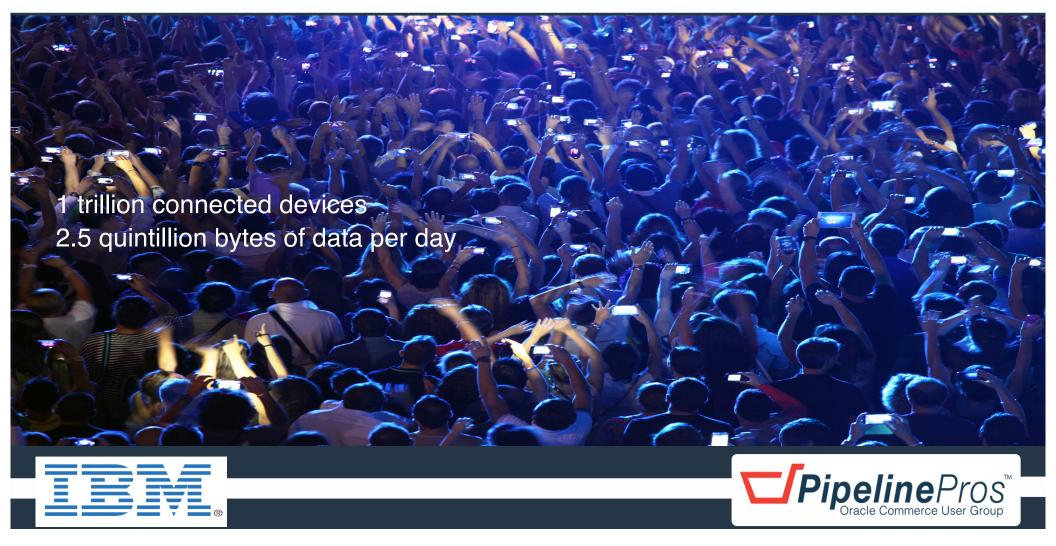
Session Agenda:

- Oracle Commerce Functional Considerations
- Oracle Commerce Technical Considerations
- Industry Trends





Exponential growth in digital consumption



Exponential growth in digital consumption



Design Thinking is technology agnostic

How do we differentiate and build a better mouse trap?

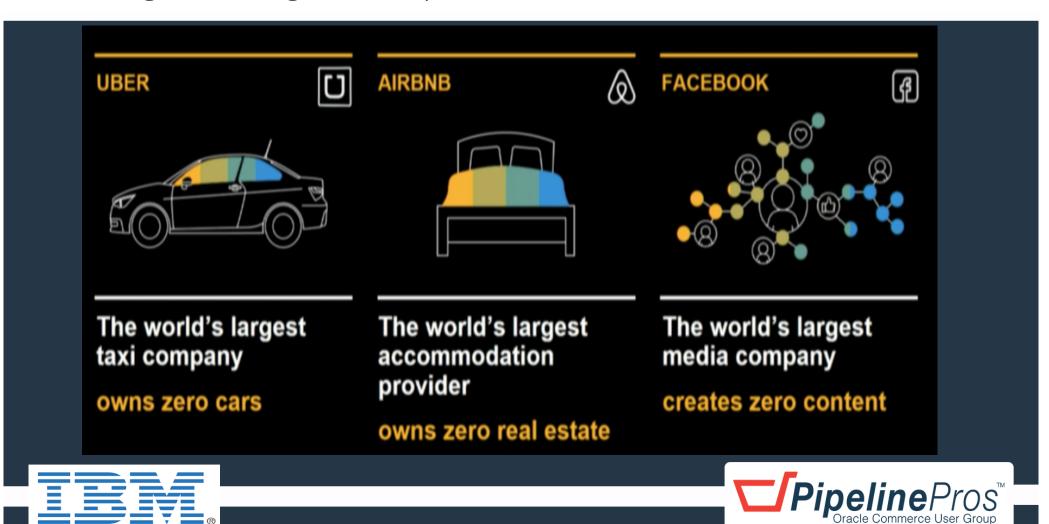
"A digital ordering solution is built on top of an Oracle Commerce platform as the base, and the custom solution including user experience built on top. Bringing both of these together is the secret sauce to a feature rich, easy to use site. Neither a great user experience with poor functionality, or a rich functionality that is not easy to use will get you to where you want to go"



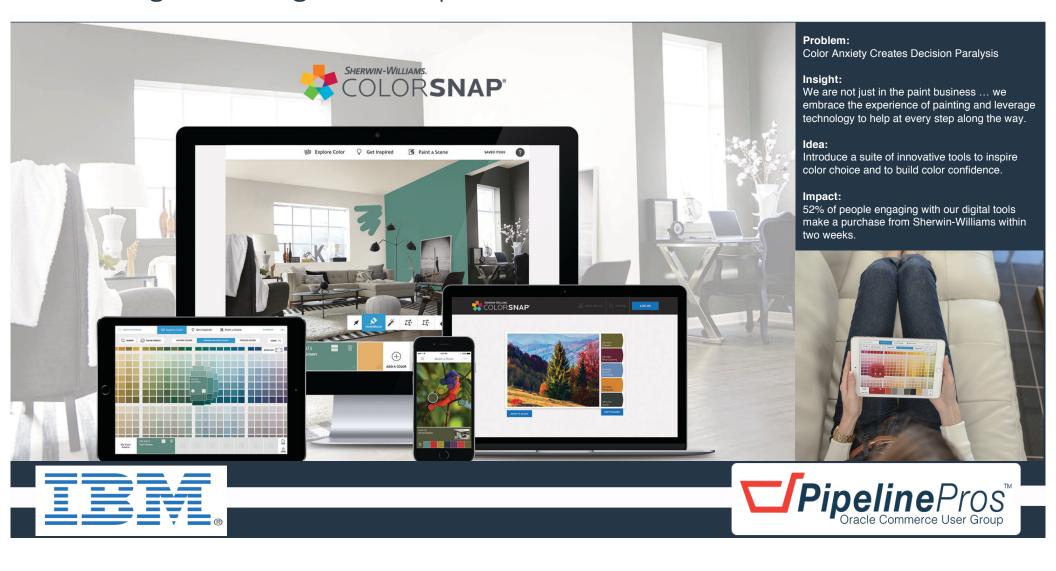




Design Thinking -User experience and innovation combined



Design Thinking - User experience and innovation combined



What makes up a User Experience Platform?

According to *Gartner*, a UXP provides many services including:

- Content
- Context
- Portal
- Collaboration
- Social
- Mobile
- Search
- Analytics
- Orchestration/composition
- Integration and API services
- According to Gartner: ... Without a platform approach, a 'tool de jour' approach is frequently used by developers, leading to a mishmash of one-off tools from a long list of vendors (or open source), and a maintenance nightmare

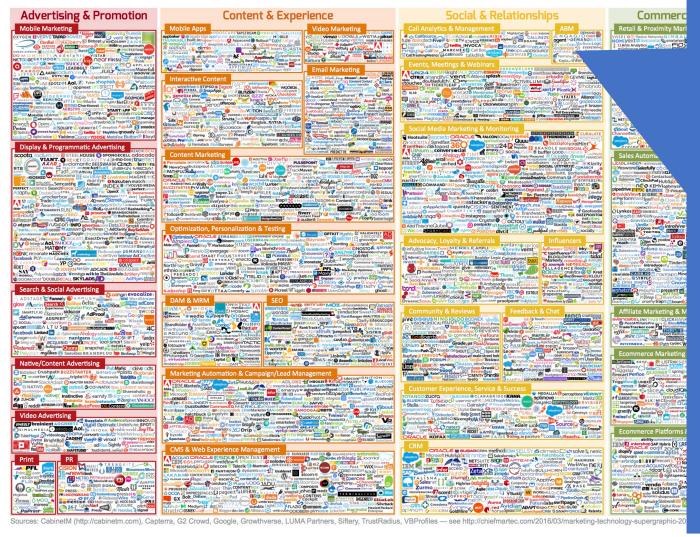
According to *Forrester* you might see some or all of the following types of solutions in a DX platform:

- Digital asset management systems
- eCommerce solutions
- Email service providers
- Forms
- Mobile analytics
- Mobile app platforms
- Online video platforms
- Self-service portals
- Product information management (PIM) systems
- Recommendation engines
- Site search capabilities
- Social depth platforms
- Testing and optimization tools
- Web analytics
- Web chat tools
- Web content management (WCM) systems





chiefmartec.com Marketing Technology Landscape

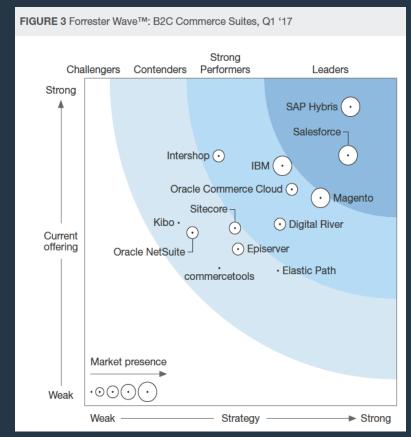


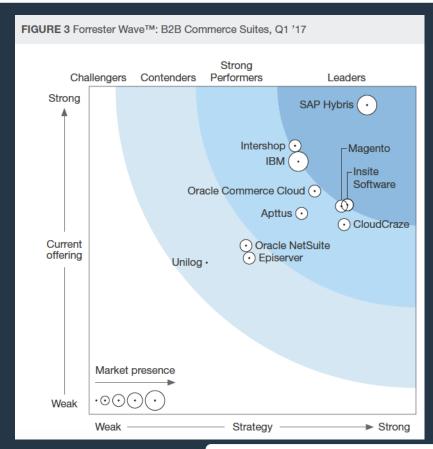
BUT THE
CHOICES ARE
OVERWHELMING, AND
ASSEMBLING
DISPARATE SOLUTIONS
CAN MAKE THINGS
WORSE.

According to Gartner: ... Without a platform approach, a 'tool de jour' approach is frequently used by developers, leading to a mishmash of one-off tools from a long list of vendors (or open source), and a maintenance nightmare

SOURCE: chiefmartech.com

That's the reason for enterprise platforms









User experience and innovation combined

Use of integrated Digital Experience tools may be a life extender:







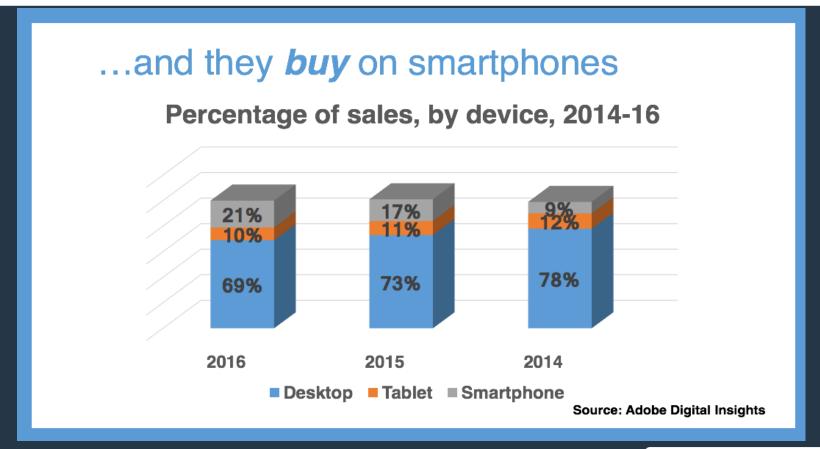




Mobile/responsive is no longer optional



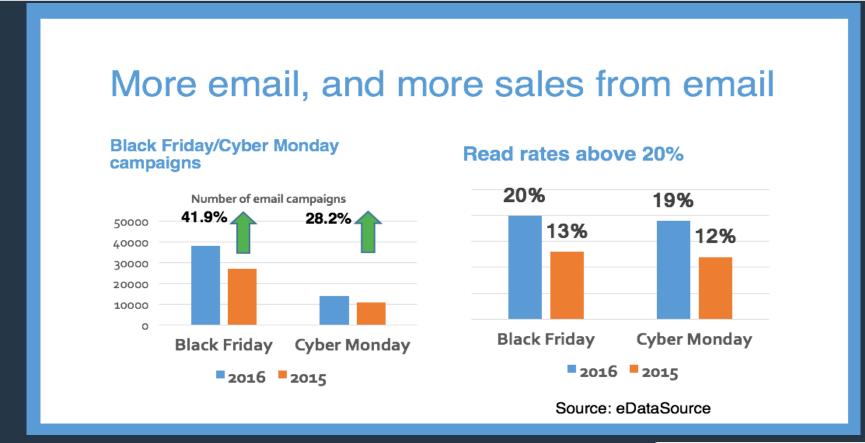
Mobile/responsive is no longer optional







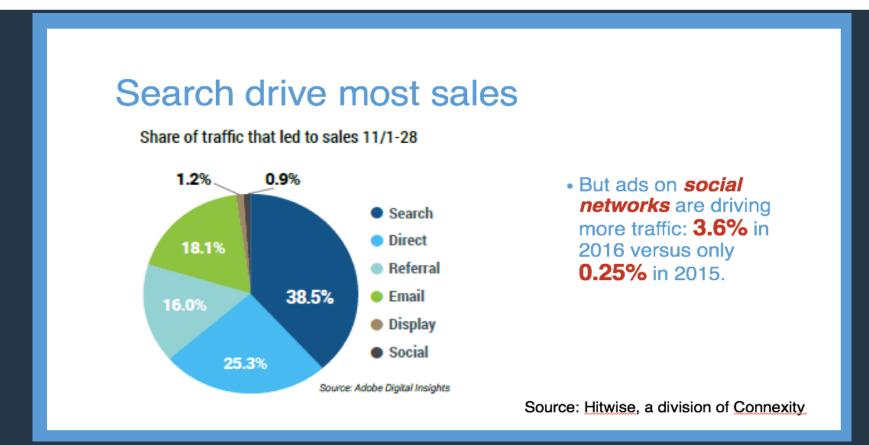
Getting email relevant and motivational







Optimize your attributes, facets and results







Coupons, promotions, configurators

Sophisticated promo engines (especially grocery)





Configure Price Quote (CPQ) for custom products







Cognitive/AI/Analytics/Machine Learning

 Product recommendations/guided navigation





- The more data you have
- The better the analysis (analytics)
- The better the conclusion

Plus

In-memory back-end data access

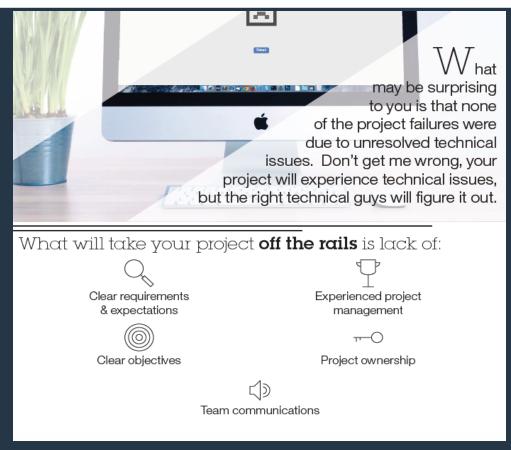
Equals

Embedded analytics/new capabilities





Digital Commerce Top Tips



Be careful with "pure" agile. Some of the most "off the track" eCommerce projects I have ever seen have been pure agile jumping into development without a clear definition of business requirements and how key technical areas such as customizations, integrations and the user experience UI/UX are to be designed and developed Agile is not an excuse for figuring it out later, basic principals of planning, documenting requirements, user experience and architecture still apply. "Watergile" is used to accomplish this for requirements and technical specifications performed in a waterfall approach, then using Agile for development sprints. Your developers need and deserve clear requirements.





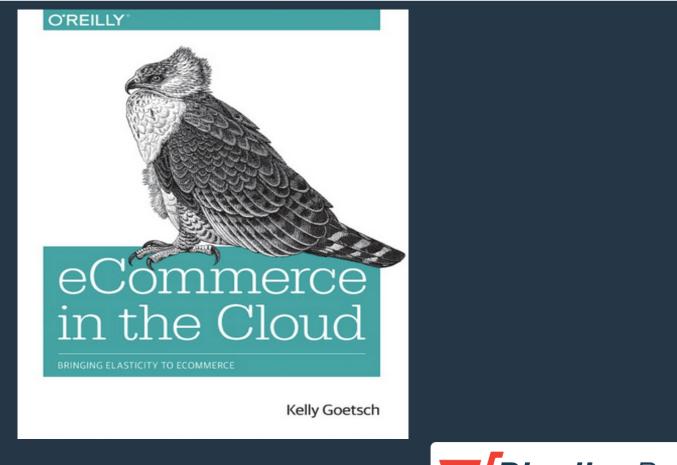
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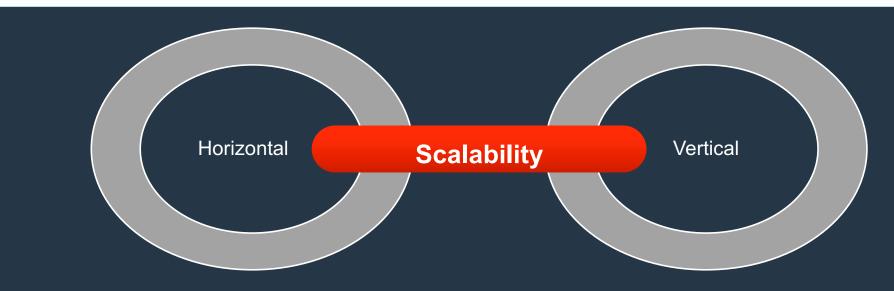
Cloud Deployed Commerce







Scalability - What Is It?



- Input (e.g. hardware) == output (e.g. HTTP requests/sec, etc) at nodes 1…n
- Theoretically limited but practically unlimited

- Input (e.g. hardware) == output (e.g. HTTP requests/sec, etc) within a single node
- Theoretically and practically limited





Oracle's Solution



Function Load Balancer	Oracle Product Traffic Director
Web Server	HTTP Server
Search	Endeca _{Oracle}
eCommerce	ATG _Commerce
Caching	Coherence
App Server	WebLogic
Virtual Machine	JRockit
Operating System	Oracle Linux
Virtualization	Oracle VM
Hardware	Exalogic
Networking	Exabus (InfiniBand)
Storage	ZFS
Database	Oracle on Exadata
Management	Enterprise Manager







Help for performance and scalability



An Oracle White Paper November 1st, 2011

Architecting Oracle ATG Web Commerce for Maximum Availability

ORACLE!

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Engineered Systems	
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Summary	





Help for performance and scalability

ORACLE.

An Oracle White Paper April 3rd, 2013

Building Large-Scale eCommerce Platforms With Oracle

ORACLE!

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Microservices – API based commerce

What Are Microservices?

Minimal function services that are deployed separately but can interact together to achieve a broader use-case

Monolithic Applications

Single, Monolithic App
Must Deploy Entire App
One Database for Entire App
Organized Around Technology Layers
State In Each Runtime Instance
One Technology Stack for Entire App
In-process Calls Locally, SOAP Externally

Microservices

Many, Smaller Minimal Function Microservices
Can Deploy Each Microservice Independently
Each Microservice Often Has Its Own Datastore
Organized Around Business Capabilities
State is Externalized
Choice of Technology for Each Microservice
REST Calls Over HTTP, Messaging, or Binary





Microservices – API based commerce





Top 5 Signs It's Time To Look at Microservices

- 1. 100+ developers for an app
- 2. 5m lines of code for an app
- 3. Monthly or quarterly releases to production
- 4. > 1 quarter backlog of development work
- 5. > 20% developer turnover





Specific issues we have seen

Developer environment setup

Consider mirror image developer laptops for setup

Server startup & code deployment Issues

Automated scrips for code deploys and environments configs at startup

Staging to production content deployment issues

Performance, caching, CDN's, locking, data source switching

Misc site issues

Check log files, ensure you are on supported environments and current patches





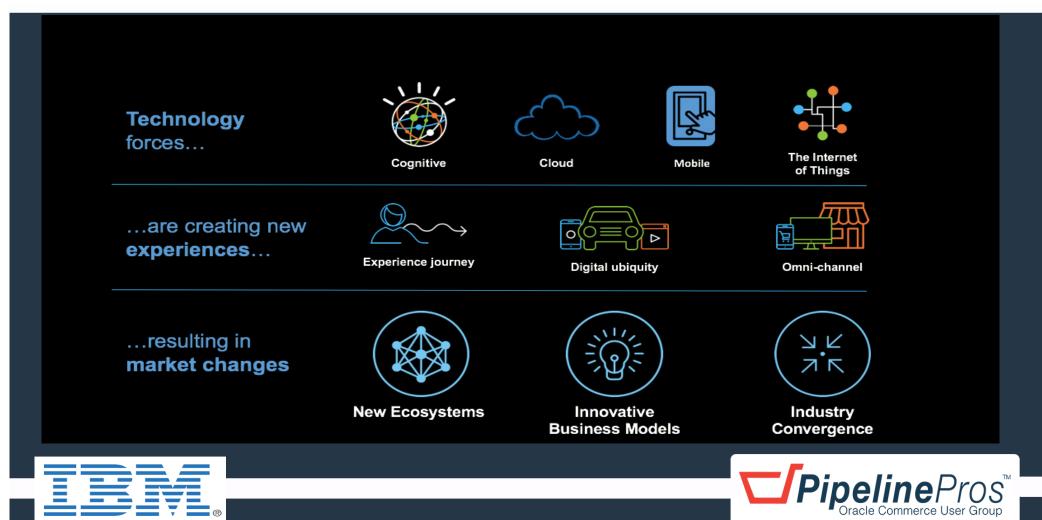
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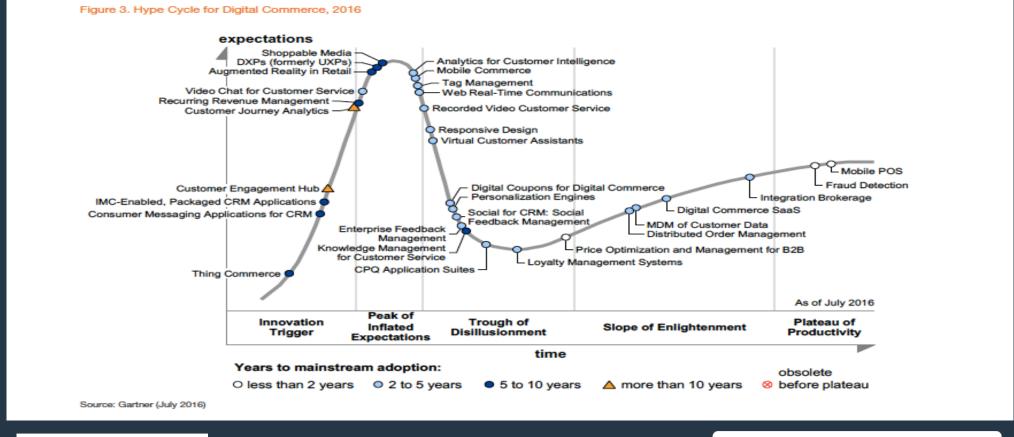




Technology Convergence



New Innovations for Commerce







Adoption of new innovations

benefit	years to mainstream adoption				
	less than 2 years	2 to 5 years	5 to 10 years	more than 10 years	
transformational		Web Real-Time Communications	API-Based Digital Commerce Conversational Commerce Thing Commerce		
high	CPQ Application Suites Fraud Detection Loyalty Management Systems	Analytics for Customer Intelligence Consumer Messaging Applications for CRM Digital Commerce SaaS Digital Wallet DOM Dynamic Pricing Enterprise Feedback Management Knowledge Management for Customer Service MDM of Customer Data Mobile Commerce Price Optimization and Management for B2B Video Chat for Customer Service Virtual Customer Assistants	Customer Engagement Hub Digital Experience Platforms Marketplace Operation Applications Personalization Engines Recurring Revenue Management Shoppable Media	Customer Journey Analytics	
moderate	Mobile POS Tag Management	Digital Coupons for Digital Commerce Integration Brokerage Responsive Design Social for CRM: Social Feedback Management	Augmented and Virtual Reality Commerce		
IOW					
	As of July 2017			© 2017 Gartner, Inc.	





Embedded Commerce

Like and "buy" buttons (social commerce)





Non-catalogue & Geo based purchases

Web/mobile based checkout/POS





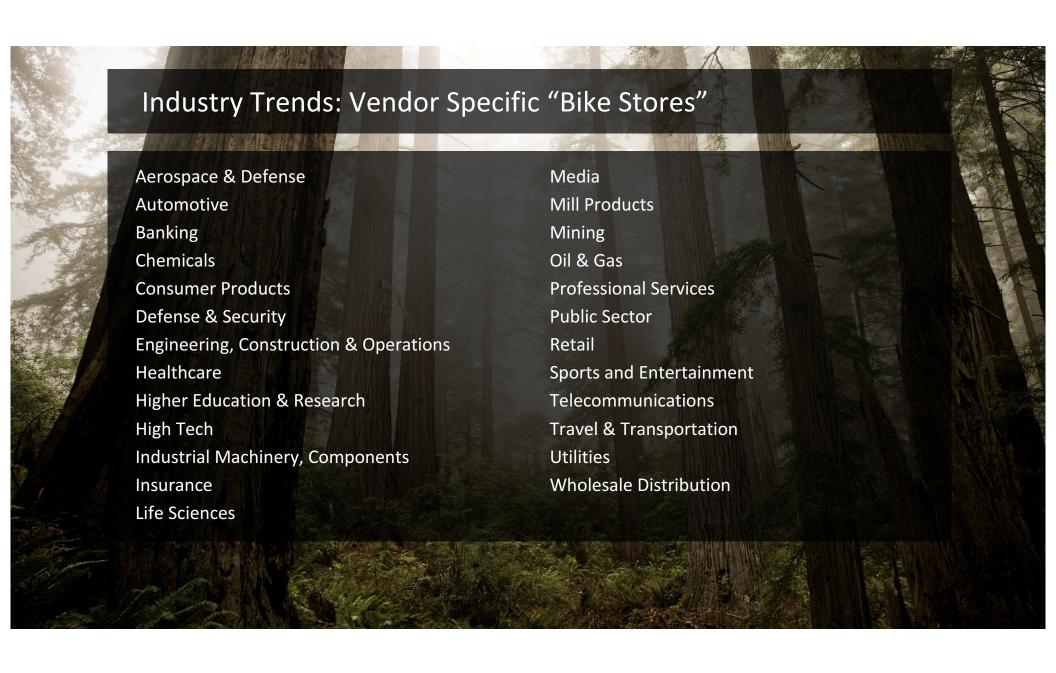
Order online Pick up "out" store (especially grocery)











Industry Trends, What to Think About

- Cloud platforms will continue to increase agility and scalability
- Microservices can provide plug and play solutions
- Death of passwords (finger, retinal, face recognition)
- Consistent digital experiences (i.e AEM)
- Artificial Intelligence is becoming useful
- More data exposed from the backend (in memory queries)
- Complex product configurators
- Watch for the next generation ecommerce leader to combine cloud based microservices based architecture with a great content management experience





Useful Reference Material

Digital Commerce Top Tips – Doug Gaffney IBM Global Services

eCommerce in the Cloud - O'Rielly Publishing, Kelly Goetsch

Architecting Oracle ATG Web Sites for Maximum Availability - Oracle whitepaper

Building Large Scale eCommerce Platforms with Oracle – Oracle whitepaper

Forrester Wave B2B and B2C Commerce Suites 2017 – Forrester

Design Thinking Workshops—IBM www.ibm/designthinking

Gartner – Hype Cycle for Digital Commerce



