You are focused on growth beyond the foundation/basics.
Presenters

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After This Session You Can…

1. Envision the innovations occurring in our business over next 5 years, 
2. Understand the technology platform enhancements that must be considered
3. Understand the cultural changes that must support innovation & technology

[WE CAN NACSSHOW 2019]
Key Future Concepts

• Technology will continue to shift power to the consumer
• Disruptors see legacy markets as an opportunity
• Every business *is* in “convenience” business
• Every business *will* be in data business
• Scale is now rentable, moats increasingly mercenary
• IR4 will erode location and immediacy as moats
“Another effect of digitization: consumers now have sky-high expectations when it comes to convenience. They’ve become accustomed to near-instant gratification: on-demand movies and music, speedy delivery of online orders, and even smart devices that can purchase items automatically. For all retailers, this means having to ensure a convenient, frictionless shopping experience both offline and online. A retailer’s accessibility and relevance are no longer just about physical location but also about digital presence, whether through mobile sites and apps (their own or others’) or smart devices in cars and homes.”

McKinsey, 1/19
Digital Disruptor Advantage: Alibaba Strategy

“Automate all operating decisions”

1. “Datafy” every customer exchange
2. “Software” every activity
3. Get data flowing
4. Apply the algorithms
CEO Feedback

- Technology is a given
- How do we keep pace?
  - Agility out of legacy systems
  - Add life to sunk systems costs
- Reduce disruption risk
  - Evaluate and adopt 4IR
  - Develop digital culture & organizations
  - Out innovate potential competitors
APIs

Forecourt Payments Checkout Back Office HQ/Admin
Transaction Segment Payments Mobile Segment Promotion Loyalty Cloud AI Checkout Augmented Employees Blockchain
Order to $ Vendor Data Exchange Advanced Analytics RPA RPA Digital CRM IOT Tracking IOT Media IOT Plant Mgt. IOT Food Safety IOT Web Events POS in Cloud Back Office APIs

Baseline Now 2 to 5 years
1 to 3 years 4 years +

AV Delivery Integration

Home Shop/Deliver Digital CRM In-app web Shop/Deliver
Our Challenges...

**Brand-based Store Systems**
- Designed for oil/franchise brand operations
- Highly inflexible (security, brand objectives)
- Legacy systems of interaction (e.g. pumps, EPS)
- Disparate functionality, data structure and flows
- Designed for today’s “normal”

**Legacy Systems of Record**
- Designed for “normal” business today
- Inflexible data flows
- Inconsistent data structures
- Enterprise data visibility limited
- But they do a good job! (today)
- Culturally & financially, expensive to replace!

Our current state is dire:
- Innovation is expensive and laborious
- “Test & Learn” is severely restrained
- Response to disruption will be feeble
- Digital culture is hard to establish
- Tech stack is expensive to maintain
- AI benefits will remain elusive
Key Trends:  
Get your data house in order

The future loves history’s data…

• Keep it all – storage is cheap investment
  • All data that is generated by the enterprise
  • Constantly look for more!

• Get it structured
  • Define data around dictionaries (working on it)
  • Near real-time conversion to your enterprise data structure
  • Your future self will thank you…

• Make it accessible
  • Associates, vendors, customers
Key Trends:
The store, digitally projected

- Unlimited “POS” devices connected
  - Mobile, kiosk, dispenser, car, desktop
  - Seeking (ad hoc) price book connections
  - Accurate inventory is a must
  - Virtualizing store in screen mode
- Food orders injected directly to kitchen production
- Payment “pushed” to store
- Delivery integration
Key Trends:
Visual IOT future is here

- Cameras to be standard store equipment
  - Hi-res becomes dirt cheap
- Inventory management
  - Cycle counts
  - Planogram compliance
  - Promotion compliance
- Advanced use added later
- Design into the store now
Key Trends:
Continuous integration/deployment

- The pace of innovation is stressing the traditional IT method
  - Test and learn innovation the driver
  - Nimble is new “strategy”
- “Big upgrades” run at a slower clock speed – we need to adjust
- Change the way we work…
  - Abstraction of stack to microservices
  - Agile teams constant develop/deploy
Key Trends:
Explore “next level” tools

- Robotic Process Automation (RPA)
  - Automate repetitive tasks with consistent data sources (fuels BOLs, financial close, chargebacks, DSD orders)
  - Improves data flow & accuracy – labor savings too
  - Allows “test & learn” evaluation of data integrations

- Natural Language Processing (NLP)
  - High-accuracy tools readily available (GOOG, AWS, IBM)
  - Can be used as factor of authentication
  - NLP query can be accretive to building digital culture
  - Simple escalating to complex applications
Key Trends: Blockchain has promise...

- Portable system of records
  - Track and trace (recalls, chain of possession)
  - Loyalty programs
- Executable contracts
  - Order to cash replacement of paper/EDI
  - Payments/settlement
Thought Leadership: Are we organized for digital?

- Can an organization truly be digital with siloed technologists?
- How do we increase digital skill sets across organization?
- How do we embed technology road map across our cultures?
Key initiative: Conexxus API Sprint

Provide a standard microservices suite, that…

• Extends legacy tech stack life
• Abstracts functionality to certified APIs
• Provides flexibility for innovation & CI/CD
• Is actual code, with standard interfaces
• Is prioritized by retailers, partnered with suppliers
• Is delivered in 1/10\textsuperscript{th} the time, 1/10\textsuperscript{th} the cost
Rewiring the Enterprise

- Machine Learning
- Predictive analytics

NEW Analytics Data APIs

Central Nervous System & Memory (amorphous)

NEW Partner Data Exchange APIs

NEW Structured Data APIs

NEW Innovation APIs

Structured legacy data exchange APIs

E.g. delivery service, payment innovation, etc.

NEW Partner Data Exchange APIs

E.g. IOT, consumer data feeds, weather, news, forecasts

In-store system APIs

- Associates
- Suppliers
- Customers
The Cost of Chaos

Retailer cost for 1 API

Conexxus is investing >$1M to drive that cost to this Conexxus vendor-member adoption will further reduce cost to this

We believe we can save 90% of the cost and time to market of API migration
Where is your company?

You want to be here...

THE DIGITAL HELIX ZONE

INNOVATION

DRIVER(S)

EXCITED BUT PARALYZED

SMART BUT NO ACTION

BLINDLY INVEST

CHALLENGE(S)

ANXIOUS AND PARALYZED

PSYCHOLOGY OF DIGITAL TRANSFORMATION.

INVESTMENT(S)

BLIND TO THE OPPORTUNITIES

PANIC SPENDING

Disruptors

Michael Gale Contributor, Thought Leaders Contributor Group, Forbes, September 26, 2019
Key Takeaways

1. The pace of technology change is approaching lightspeed
2. Legacy IT strategies no longer work at the right clock speed
3. To thrive, we need to get our tech stack in order
4. Microservices offer a bridge from legacy to future
5. We need to collect, order and store ALL data
6. “Digital” should be a common cultural mentality & skillset
7. We need to “test & learn” ROI of new technologies
You have a partner…

We are independent & non-profit…
• Expert volunteers, shaping the industry

We set standards…
• Data exchange, security, payments

We provide clarity…
• Emerging tech/trends; identifying & educating

We advocate for our industry…
• Open standards, innovation & competition

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