DIGITAL TRANSFORMATION AND EMERGING TECHNOLOGY TRENDS

February 23, 2017
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AGENDA

1. Digital Transformation for consumer products companies
2. Considerations to launch a digital roadmap
3. How middle market companies are using Digital transformation
4. Summary
5. Questions & Answers
DIGITAL TRANSFORMATION

Is your organization adaptable?
What’s driving the rapid change

• Moore’s Law continues to reduce infrastructure cost and increases speed
  – The number of transistors in an integrated circuit doubles every two years
  – This law demonstrates why technological and social change has been so rapid in recent decades

• The Internet – ‘enough said’

• Mobile technologies are becoming the new PC
  – Today: 90% 2G coverage, 45% 3G coverage
  – By 2017, 85% 4G coverage

• Everything is connecting to the Internet (Internet of Everything)
  – M2M (Machine to Machine) – Machines are talking to one another

• Economic benefits are enormous
  – The Internet of Things has the potential to create economic impact of $2.7 trillion to $6.2 trillion annually by 2025, according to McKinsey Global Institute
Why is this happening

- Changing demographics
- Boomers are retiring
- Millennials are multi-taskers, connected and tech savvy
- Millennials want
  - Mobility
  - Instant gratification
  - Work life balance and flexibility
  - Collaboration
  - Transparency
  - Advancement and success
What is the 3<sup>rd</sup> Platform?

<table>
<thead>
<tr>
<th>Attribute</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Platform</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Platform</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt; Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture</td>
<td>Mainframe</td>
<td>Client server and N-Tier applications (web) distributed</td>
<td>Mobile broadband, social, cloud, big data and the internet of things</td>
</tr>
<tr>
<td># of Apps</td>
<td>Thousands of apps</td>
<td>Tens of thousands of apps</td>
<td>Millions of apps – Trillions of things</td>
</tr>
<tr>
<td>Access</td>
<td>Terminal</td>
<td>PC GUI and/or Browser</td>
<td>Mobile device</td>
</tr>
<tr>
<td>Users</td>
<td>Millions of users</td>
<td>Hundreds of millions of users</td>
<td>Billions of users</td>
</tr>
<tr>
<td>Functionality</td>
<td>Customizable COTS and custom apps</td>
<td>Configurable packaged and custom apps</td>
<td>Intelligent industry solutions</td>
</tr>
<tr>
<td>Ease of Integration</td>
<td>Custom, complex</td>
<td>API (App Prog. Interface)</td>
<td>Integration layers</td>
</tr>
<tr>
<td>Role of IT Leader</td>
<td>Strong technologist and IT org leader</td>
<td>Leader of IT Function</td>
<td>Manage relationships in IT ecosystem</td>
</tr>
<tr>
<td>Focus of IT Leader</td>
<td>Keep systems up</td>
<td>Enable current business processes</td>
<td>Disruptive innovation</td>
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</table>

3<sup>rd</sup> Platform capabilities will transform who provides IT solutions, who applies them and how they're used!
Digital Technology - Third platform

- Mobile
- Cloud
- Internet of Things
- Big Data
- Social
- Apps
- Internet
The cloud and the IT stack

User perspective

- Accessible from anywhere you have internet
- Minimal to no software to install
- Typically OS agnostic
- Work on demand
- No backups to worry about
- Scalable - just add users and modules

Technical perspective

- High availability
- Typically web-based
- Pooled resources
- Data redundancy
- Scalability
Mobile

• Access is pervasive
  - Today 90% of the world has 2G coverage
  - Today 45% of the world has 3G coverage
  - Today, 85% of the world have 4G coverage

• Mobile is the new PC

• Mobile is the future for everything
  - Communication
  - Multimedia
  - Banking and payments
  - Content consumption and creation

According to a recent study* people check their mobile phones over 150 times per day

* Kleiner Perkins Caufield & Byers annual Internet Trends report
Social

- Traditional media worked like a pipe – content creators->TV channels->viewers
- Social media uses the platform model – disintermediation at work again bringing customers closer to the content / product creators
- This new ‘sharing economy’ is disrupting traditional business models

The evolution continues …
Big data

• Term to describe **extraction of actionable intelligence** from **disparate, non-traditional** and often unstructured **data sources**
  • Structured (databases) represents approx. 20% of all data
  • Unstructured (Facebook posts) represents the other 80%
  • Sensors (internet of things)
  • Voice, video and static images

• Data is the new oil – if not refined then there is little value
• Data created each minute online

**Google searches**
- Over 4 million

**Facebook**
- Nearly 2.5 million pieces of content

**Twitter**
- Nearly 300,000 times

**Instagram**
- Nearly 220,000 new photos

**YouTube**
- 72 hours of new video content

**Apple users**
- Nearly 50,000 apps

**Email users**
- Over 200 million messages
Internet of things

Ever-growing network of physical objects that feature an IP address for Internet connectivity, enabling communication between these objects and other connected systems

• Connected home
  – Thermostats, appliances, sump pump, HVAC, security, lighting, entertainment systems

• Connected wearables
  – Fitness, watches, glasses, cameras

• Connected industrial internet
  – Real time analytics, factory automation, robotics, supply chain efficiency

• Connected cities
  – Parking meters, traffic tights, traffic, real-time analysis

• Connected cars
  – Safety, navigation, diagnostics
Customer Experience
By 2020, customer experience will overtake price and product as the key brand differentiator.

Productivity
40% of a worker’s productive time is lost when switching tasks. This costs the global economy $450B per year.

Speed of Business
Organizations embracing digital transformation generate an average of $100M more income each year.
Digital Transformation

Engage your customers

Empower your employees

Transform your products

Optimize your operations
Next Generation Intelligent Business Applications

CRM
- Project Service Automation
- Field Service
- Marketing + Adobe
- Sales

ERP
- Customer Service
- Operations, supply chain, production, logistics

HR/Payroll
- Employee self-serve

Operational and financial metrics/ KPIs,
Impact of Digital Transformation on your Ecosystem

• [https://www.youtube.com/watch?v=EswHWn95Yqw](https://www.youtube.com/watch?v=EswHWn95Yqw)

• Did you know your little angel’s in need of a diaper change?
  − No, then maybe you need to spend more time on Twitter.
    • Cute or scary?

• What does this have to do with my business?
  − Documented trending of # and type of ‘movements’ for medical providers?
  − *Increased product usage* because you know your child needs a diaper change?
  − Automatic *reorder points* based on diaper usage locks in supplier?
  − Demand *forecasting for production* by geography?
  − Who from Huggies is involved with this solution? Heavy reliance on the Huggies IT ecosystem?
    • Smartphone
    • Sensor (Bird)
    • PaaS (Amazon)
    • Twitter
    • Amazon for delivery?
Digital Transformation – example

**Health Insurance**

- Activity levels are tracked by Fitbit wearable
- Shared with insurer for discounts up to 15% on life insurance premiums

**Home Automation Gadget**

- Connects to other automation devices (e.g. Roomba, Security system, thermostat)

“We are reinventing the consumer home and health experience and changing the way people think about how they manage their lives”
CONSIDERATIONS FOR A DIGITAL ROADMAP

Where to Start
What is a Digital Strategy? Some Definitions 😊!

1. Large Technology Consulting Firm - **Digital** is the application of information and technology to raise human performance. **Strategy** is setting direction, sequencing resources and making commitments.

2. Wikipedia - A **Digital Strategy** is a form of **strategic management** and a business answer or response to a digital question,[1] often best addressed as part of an overall **business strategy**. A digital strategy is often characterized by the application of new technologies to existing business activity[2] and/or a focus on the enablement of new digital capabilities to a business.

3. Major Technology Publication (3 different definitions)
   1. First, there is a definition of **Digital** that looks back to the past. "Many businesses are looking at the whole e-commerce, e-business area that everyone was talking about in the late 1990s and thinking, we haven't done this as fast as we should,“
   2. Second, the word **Digital** is used to describe current technology trends such as social media, mobile applications and cloud computing.
   3. Third, “use of the term **Digital** is in reference to the near future, in which products and services themselves become digital.“
Digital Strategy – Do I need One?

Gartner – 52% over $250M have a digital strategy in place

The biggest issues in IT leadership will center on business needs related to digital transformation (IDC)
- Two-thirds of CEOs plan to focus on digital transformation strategies for 2017
- Only 25 percent of CIOs report feeling confident in how they are driving new digital revenue streams.

- New revenue streams for new products and services you probably haven’t even thought of
- Improved customer service and customer personalization – enables 1 to 1 Marketing
- Address/ respond in real-time to needs, opportunities and threats (Agility to reach customers)
- Cost savings for IT and distribution
- Improved and accelerated process efficiency for internal processes and your customer’s
- Increased revenues for existing products
Why is it important to my business?

• Can you afford to not do this?
  - Remember - IDC says “By 2018, 1/3 of share leaders in virtually all industries will be disrupted and reinvented”

• Destroy your own business:
  - No business model lives forever
  - Continually and actively be on the lookout for new business opportunities that can potentially replace the current model
  - Understand the root cause of ‘why we have to do it like this today!’
“Can my company afford to implement a Digital Roadmap?”

• Overall IT spend across all industries is 3.5% of revenue
  - The 2016 Consumer Products vertical industry average IT spending as a percent of revenue is 2.2%, up from 2.1% in 2015 (Source: Gartner)

• Two distinct buckets of work
  - Work that “keeps the lights” – 65%+
  - Work that is “strategic to the business” – 35%

• If your budget stays the same, how do you get $ to address identify and implement an IT Strategy?
  - Reduction of IT Technology Debt enables a shift from keeping the lights on to strategic projects

How many of you are spending more than 3.5% on IT?
Consumer Products: Run, Grow, Transform spending

IT transformation leads to new business process improvements that enable the business to grow or build new revenue streams

Gartner: Key Industry Measure: Consumer Products

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What is technology debt?

- High technology debt is a *huge friction to innovation*
- Can take years to reverse high technology debt
- *Reducing technology debt* is critical to filling up the strategic project bucket

Components of Technology Debt:

- Expensive to Maintain
- No Confidence in IT Team
- Manage IT as a Cost Center?
- Missing IT Processes?
- No Management – Do you have an ITSC

Old Systems + Wrong People + Lack of Spending + Process Chaos + Lack of Oversight = Technology Debt
How do I create a Digital Strategy?

• Form an ‘IT/Digital Strategy’ team and create a project charter

• Create an Digital Roadmap
  – Start with your business strategy
    • How do you compete in the marketplace? What is your ‘secret sauce’?
      - Lowest cost
      - Best customer service
      - Unique or best product/service offering in the industry
  – Add projects from your team that support the ‘secret sauce’
  – Consider moving to newer technologies when replacing legacy solutions
    • Especially when ideas can be implemented to support your ‘secret sauce’

▪ Prioritize projects and keep it refreshed with an IT Steering Committee (ITSC)
# Sample Digital Roadmap

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1-Q4</th>
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<tbody>
<tr>
<td>2014</td>
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<tr>
<td>2015</td>
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<tr>
<td>2016</td>
<td></td>
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## ONGOING

- **CIO Advisory Services**
- **IT Governance**

## PHASE I: IT Stabilization

- Infrastructure Stabilization / MPLS
- Replace XP Machines
- GP Quick Wins
- Address Immediate Security Needs & PCI Review

### Est. Cost

- **10K initial + 10K / month**
- **20-25K**
- **80K – 90K + 3K / month**
- **20K**
- **5K – 7K**
- **10K – 15K**

## PHASE II: Architecture Definition & Review

- Tetramer Go-Live on Vicinity
- Phase II Vicinity Go-Live
- Business Process Review
- Select New Microsoft VAR
- Infras. Refresh Policy

### Est. Cost

- **Internal**
- **25K – 35K**
- **Internal**
- **Internal**
- **125K - 150K**

## PHASE III: Application Implementation & Optimization

- Website Redesign & Marketing Automation Tool
- GP & CRM Optimization
- Ongoing Desktop Refresh
- SP & Office 365

### Est. Cost

- **40K – 50K**

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*These costs are estimates based on existing knowledge of current environment and the middle of our estimated cost range*
DIGITAL TRANSFORMATION AND THE MIDDLE MARKET

Consumer Products Examples
Finance Optimization
Retail Manufacturer – BlackLine Optimization

Company Profile

- IT department seen as a bottleneck, projects not getting prioritized, need key stakeholders to determine roadmap
- Engage the customer
- Empower your employees
- Transform your products
- Optimize your operations

Client Challenge / Issues

- Minimal accountability for timely completion of Balance Sheet reconciliations, month-end close activities and audit processes
- Lack of internal reporting and tracking of compliance and reconciling items
- Heavy workload during month-end cycle due to common reconciliation due dates
- No standardization in account reconciliation procedures and methods across multiple entities

Key Activities Performed

- Developed Key Performance Indicators (KPIs) to monitor the completion of account reconciliations and month-end/audit activities
- Created enhanced dashboards to enable point-in-time reporting and analysis
- Adjusted reconciliation frequencies to balance workload throughout the month-end close cycle through risk rating assignments and custom frequencies to drive due dates
- Utilized standard templates and role-based assignments to facilitate consistency in account reconciliation preparation and approval processes

Outcomes and Realized Benefits

- Increased status and risk transparency with audit trail of account reconciliation activities
- Balanced user workload with key and non-key accounts due dates established at various times in the close cycle, allowing for timely identification of risks and potential issues
- Decreased focus on account reconciliation preparation/transaction processing, allowing more time for analytics, exceptions, business trending and benchmarking
- Standardized reconciliation process for consistency, visibility and ease of reviewing for accuracy and completeness
**Objective**
The overall goal was to generate an increase in acceptance of offers related to a given marketing campaign.

**Key inputs**
Demographic data, customer profiles, custom lists, etc.

**Predictive model**
Based on correlation analysis, calculated the likelihood of acceptance of different offer components.

**Outputs**
Targeted offers (specific offer details) based on prospect profile and model projections.

**Results**
Range of increase on offer acceptance between 1% and 5% was considered success.

**Business Impact**
- Engage the customer
- Empower your employees
- Transform your products
- Optimize your operations

**Marketing campaigns**
## Company Profile

- Global promotional product and sourcing company
- Additional offices in New York, China, India, Brazil and the United Kingdom
- Capabilities with Cut & Sew, Glass, Plastics, Metals, Packaging and Promotional

### Client Challenge / Issues

- Experienced rapid growth and outgrew QuickBooks
- Difficulty consolidating its six subsidiaries
- Inefficient systems caused for significant re-billings and intercompany billings
- Existing platform became unstable with the amount of data in the system
- Lacked real time data between countries

### Key Activities Performed

- Implemented cloud-based solution with multi-currency and multi-language
- Conducted process improvement
- Rapid deployment – went live 3 months ahead of schedule and under budget

### Outcomes and Realized Benefits

- Real time *access to data via the internet* to global locations in China, India, Brazil / the U.K.
- *Reduced time re-billing and re-classing* data from China to the United States
- Increased *system stability* and data consistency
- *Ease of use* – intuitive and user-friendly interface easy to understand for internationally based employees
- *Scalability* – cloud ERP gives company the ability to scale and grow with the company; integrated business functionality with single database
DIGITAL TRANSFORMATION

Summary
Summary

Digital Transformation *re-envisions the existing business model* and embrace a different *way of bringing together people, data, and processes* to *create value* for their *customers* and *capture new opportunities* for their organizations.

- These trends address the ultimate goal of connecting with today’s “always-on” consumer in a seamless, comprehensive, stand-out way.
- Updating legacy technology platforms to optimize core enterprise processes is the first step in being able to truly leverage intelligence from IoT technologies.
- Siloed, best-of-breed technologies fall severely short in driving enterprise-wide connectivity and visibility.
Where to start?

• Step back and think through your business strategy rethinking the value chain!

• Perform an assessment and identify opportunities

• Identify short term quick wins and longer term strategic initiatives

• Update your overall IT Strategy and Roadmap with Digital Projects

• Stop thinking about doing things differently

  ... 

• And start thinking about doing different things
In summary

• RSM US LLP provides comprehensive, end-to-end solutions and services for the Consumer Products industry. Our solutions are delivered by consultants with deep industry expertise and a focus on helping clients meet their growth & business goals.

• Contact us for more information about how we can help your organization reach its goals in 2017:

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Ask the presenters

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Before we conclude

• Register for RSM’s next event:

Security trends and considerations for consumer products companies
  – **Date:** Wednesday, April 19, 2017
  – **Time:** 2:00 pm EDT | 1 p.m. CDT
  – **Duration:** 60 minutes
  – **CPE credit:** Up to 1.0 CPE credits will be issued
  – **Register:** rsmus.com/events
THANK YOU FOR YOUR TIME AND ATTENTION