Gartner delivers the technology-related insight necessary for our clients to make the right decisions, every day.
An Imperative for Digital Government: 

Key Lessons Learned From Digital Commerce
Key Issues

- What does “Going Digital” Means
- Current State of Digital Commerce and Emerging Trends
- How to Deliver on Customer Expectations
- The Future of Commerce
- What It Means for Government
- Q&A
Agenda

- What “Going Digital” Means
- Current State of Digital Commerce and Emerging Trends
- Understanding and Delivering on Customer Expectations
- The Future of Commerce
- What It Means for Government
- Q&A
Digital is moving to the core of business strategy.
Digital Business Matters

..and digital goes to the core of products and services

“If you went to bed last night as an industrial company, you’re going to wake up in the morning as a software and analytics company” - Jeffrey Immelt, CEO, General Electric

Babolat Connected Racquet

GE Industrial Internet

...every industry will be digitally remastered
Digital Business: The creation of new business designs by blending the digital and physical worlds.
Use Digital Business to Optimize or Transform

Optimization

- Adds significant value without changing business models
  - Improves productivity
  - Delivers better service

Transformation

- Leads to new-new revenue and business models
  - Net new business models
  - Net new products and services
  - Net new revenue
# Digital Business Efficiency Adds Significant Value Without Changing Business Model

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improve existing revenue</td>
<td>2</td>
<td>Reduce COGS</td>
<td>3</td>
<td>Reduce SG&amp;A</td>
<td>4</td>
<td>Improve employee productivity</td>
</tr>
<tr>
<td></td>
<td>e.g., Analytics to optimize price and increase spend</td>
<td></td>
<td>e.g., IoT and 3DP to reduce costs</td>
<td>e.g., Digital channels to optimize sales and marketing</td>
<td></td>
<td>e.g., AI and RPA to take on more volume without increased headcount</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Enhance customer experience</td>
<td>6</td>
<td>Optimize inventory and yield</td>
<td>7</td>
<td>Optimize physical assets</td>
<td>8</td>
<td>Optimize financial assets and cash</td>
</tr>
<tr>
<td></td>
<td>e.g., Digital channels and IoT to provide connected experiences</td>
<td>e.g., Analytics to better forecast and IoT to track inventory</td>
<td>e.g., IoT to maximize uptime, life, yield and reduce energy</td>
<td>e.g., Analytics to better assess risk and raise yield</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Increase Revenue**
- e.g., Analytics to optimize price and increase spend

** Improve Operating Margin**
- e.g., IoT and 3DP to reduce costs

** Improve Workforce**
- e.g., AI and RPA to take on more volume without increased headcount

** Improve Customer Experience**
- e.g., Digital channels and IoT to provide connected experiences

** Increase Asset Utilization**
- e.g., IoT to maximize uptime, life, yield and reduce energy
# Digital Business Transformation Leads to Net-New Revenue and Business Models

<table>
<thead>
<tr>
<th>Transformation Level</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Sell Existing Digital Assets</td>
<td>e.g., Selling data and algorithms</td>
</tr>
<tr>
<td><strong>2</strong> Digitalize Product or Service</td>
<td>e.g., Selling connected machines and services</td>
</tr>
<tr>
<td><strong>3</strong> Sell Metered Revenue</td>
<td>e.g., Selling on pay-as-you-use basis</td>
</tr>
<tr>
<td><strong>4</strong> Contract Based on Shared Risk Outcome</td>
<td>e.g., Price varies based on a shared outcome metric</td>
</tr>
<tr>
<td><strong>5</strong> Run a Platform Business</td>
<td>e.g., A business that has sellers and buyers all working on same platform</td>
</tr>
<tr>
<td><strong>6</strong> Move Into Adjacent and New Industries</td>
<td>e.g., Tesla Powerwall</td>
</tr>
</tbody>
</table>

**Less transformative** | **More transformative**
Excerpts from Gartner Annual CIO Survey 2017

Conducted between 20 April and 26 June 2017
n= 3,160
How Government Views Digital Business

<table>
<thead>
<tr>
<th>3,160 CIOs</th>
<th>98 Countries</th>
<th>15 Main Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Government</td>
<td>Banking and Investment Services</td>
</tr>
<tr>
<td>21%</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Insurance</td>
<td>Retail</td>
<td>Natural Resources</td>
</tr>
<tr>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Energy/Utilities</td>
<td>Media</td>
<td>Telecom</td>
</tr>
<tr>
<td>3%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Government</td>
<td>Services</td>
<td>Education</td>
</tr>
<tr>
<td>11%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>Transportation</td>
<td>Healthcare</td>
</tr>
<tr>
<td>5%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Telecom</td>
<td>Wholesale Trade</td>
<td>Healthcare Payers</td>
</tr>
<tr>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Industry breakdown of all survey participants (n = 3,160)
**Business Priority Rank of Digital business/digital transformation**

Q. Thinking about your organization as a whole, what would you say are its top business objectives for the next two years (2017/2018)? Percentages show frequency of mentions of "digital business/digital transformation" as a top business objective among respondents. Red numbers show relative rank of digital business/digital transformation among business objectives mentioned within that industry. Leftmost numbers are the number of respondents in each industry.
# Heat Map of Digital Progress by Industry

Q: Which of these best describes the stage of your organization’s digital initiative, i.e., your organization’s digitalization efforts?

* Arrow indicates sorting column/row and direction; n varies by segment.

Heat map colors are meant to help find differences. Red means high and blue means low.

<table>
<thead>
<tr>
<th>n</th>
<th>No Digital</th>
<th>Desire</th>
<th>Designing</th>
<th>Delivering</th>
<th>Scaling</th>
<th>Harvesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Media</td>
<td>2%</td>
<td>16%</td>
<td>18%</td>
<td>31%</td>
<td>* 27%</td>
</tr>
<tr>
<td>53</td>
<td>Telecom</td>
<td>4%</td>
<td>8%</td>
<td>23%</td>
<td>38%</td>
<td>23%</td>
</tr>
<tr>
<td>343</td>
<td>Banking and Investment Services</td>
<td>5%</td>
<td>19%</td>
<td>22%</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>317</td>
<td>Services</td>
<td>8%</td>
<td>16%</td>
<td>26%</td>
<td>28%</td>
<td>17%</td>
</tr>
<tr>
<td>117</td>
<td>Healthcare Providers</td>
<td>4%</td>
<td>23%</td>
<td>30%</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>164</td>
<td>Retail</td>
<td>2%</td>
<td>18%</td>
<td>27%</td>
<td>35%</td>
<td>15%</td>
</tr>
<tr>
<td>446</td>
<td>Government</td>
<td>12%</td>
<td>21%</td>
<td>27%</td>
<td>25%</td>
<td>13%</td>
</tr>
<tr>
<td>289</td>
<td>Education</td>
<td>11%</td>
<td>23%</td>
<td>27%</td>
<td>24%</td>
<td>13%</td>
</tr>
<tr>
<td>151</td>
<td>Insurance</td>
<td>8%</td>
<td>16%</td>
<td>30%</td>
<td>29%</td>
<td>13%</td>
</tr>
<tr>
<td>625</td>
<td>Manufacturing</td>
<td>10%</td>
<td>20%</td>
<td>33%</td>
<td>23%</td>
<td>12%</td>
</tr>
<tr>
<td>53</td>
<td>Wholesale Trade</td>
<td>9%</td>
<td>28%</td>
<td>28%</td>
<td>25%</td>
<td>9%</td>
</tr>
<tr>
<td>96</td>
<td>Utilities</td>
<td>7%</td>
<td>21%</td>
<td>29%</td>
<td>29%</td>
<td>9%</td>
</tr>
<tr>
<td>118</td>
<td>Transportation</td>
<td>10%</td>
<td>14%</td>
<td>36%</td>
<td>31%</td>
<td>7%</td>
</tr>
<tr>
<td>145</td>
<td>Natural Resources</td>
<td>12%</td>
<td>28%</td>
<td>31%</td>
<td>21%</td>
<td>6%</td>
</tr>
<tr>
<td>54</td>
<td>Healthcare Payers</td>
<td>13%</td>
<td>28%</td>
<td>24%</td>
<td>30%</td>
<td>4%</td>
</tr>
</tbody>
</table>

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Agenda

- What “Going Digital” Means
- Current State of Digital Commerce and Emerging Trends
- Understanding and Delivering on Customer Expectations
- The Future of Commerce
- What It Means for Government
- Q&A
## Strategies for Going Digital

Companies invest in digital commerce for different reasons

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
<th>Decision Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TO KEEP THE LIGHTS ON</strong></td>
<td>Is the situation about supporting or improving essential, non-differentiated business functions that do not directly produce revenues or cost savings?</td>
<td>YES</td>
</tr>
<tr>
<td><strong>TO SAVE MONEY or USE INVESTMENTS WISELY</strong></td>
<td>Is the situation about moving customers to self service and automating the ordering process?</td>
<td>YES</td>
</tr>
<tr>
<td><strong>TO MAKE MONEY</strong></td>
<td>Is the situation about enhancing, extending, or differentiating existing business capabilities related to products, services, or markets?</td>
<td>YES</td>
</tr>
<tr>
<td><strong>TO REVOLUTIONIZE</strong></td>
<td>Is there potential for new markets or industries, or displacement or elimination of existing industries?</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>Is there potential to develop unique to industry / ground breaking consumer experiences through cross channel integration (incl. mobile/social) and/or globalization?</td>
<td></td>
</tr>
</tbody>
</table>
Commerce Redefined

E-Commerce

Commercial transactions conducted electronically on the Internet.

Digital commerce

Buying and selling interactions among businesses, people and things for products/services via digitalization technologies.

These interactions result in a valued transaction to the individual, based on a combination of factors, including good customer experience, inexpensive price, timeliness, ease of use, clear policies and others.
What Constitutes Digital Commerce Today

Digital Commerce

- Payment
  - Digital goods and subscriptions
    - Digital subscription management
      - Subscription services
    - Industry specific
      - Service industries and government
        - Grocery
        - Etc.

Digital Commerce Ecosystem

- Mobile commerce
  - Mobile web
  - Mobile app
  - Clienteling

- Social commerce
  - Product reviews and ratings
  - Advocacy (product or brand)
  - Social network selling

- Shopping tools
  - Commerce search
  - Product visualization
  - Product comparisons
  - Configure price and quote
  - Virtual customer assistant

- Marketing
  - Digital marketing hubs
  - Retargeting
  - Digital marketing analytics

- Digital content management
  - Web content management
  - Digital asset management
  - Digital experience platform

- Digital Commerce Platform

- Enterprise Information
  - Product master data
  - Customer master data
  - Customer transactional data

- Multichannel ordering and fulfillment
  - Distributed order management
  - Marketplace integration

- Personalization
  - Digital personalization engine
  - Customer engagement hub

- Insight tools
  - Web analytics
  - AB/MV testing
  - Session replay
  - Customer journey analytics
  - Customer analytics
  - Predictive analytics
  - Prescriptive analytics
Excerpts from P-16033 Digital Commerce Platforms in Digital business

n=561, 30.9.2016,
Created by: Marika Wegelius
Yanna Dharmasthira
Tech & Service Provider Apps, Industries M&C
Software Applications
Key Findings: Gartner Proprietary Research

n=561

- CIO’s and CEO’ s are primarily leading and funding Digital Commerce business activities within organization

- The average size of Digital Commerce IT budget is 6.4 M
  - Retail had the biggest (7.4M) and CPG lowest (4.9M).

- Most of surveyed organizations expect budget to increase by end of 2017 approximately 20%.
Respondent profile – Organizational characteristics

n=561

Region

North America, 27%
Asia/Pacific, 41%
Western Europe, 32%

Industry

- Manufacturing: 21%
- Retail: 20%
- CPG: 16%
- Services: 16%
- Wholesale: 14%
- Education: 7%
- Government: 7%
Respondent profile – Organizational characteristics

n=561

Primary workplace location

- United States, 27%
- China, 18%
- India, 22%
- United Kingdom, 19%
- Germany, 14%

Annual revenue for fiscal year 2015

- $10M to <$250M: 26%
- $250M to <$500M: 28%
- $500M to <$1B: 19%
- $1B or more: 27%

Average=632.2 millions
Q01. What was your organization’s annual Digital Commerce IT budget for fiscal year 2016? in US Dollars (USD)

n=514; Base: Currently using, planning to use Digital Commerce platform by year end 2016 (S06=1-2)

- Less than $500,000 USD: 6%
- $500,000 to less than $1 million USD: 15%
- $1 million to less than $3 million USD: 19%
- $3 million to less than $5 million USD: 24%
- $5 million to less than $10 million USD: 16%
- $10 million to less than $20 million USD: 12%
- $20 million USD or more: 7%
- Don’t know or not applicable: 1%

Average= 6.4 millions

<table>
<thead>
<tr>
<th>Industry</th>
<th>Budget Range</th>
<th>Count</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Less than $500K</td>
<td>109</td>
<td>6.7</td>
</tr>
<tr>
<td>CPG</td>
<td>Less than $1M</td>
<td>85</td>
<td>4.9</td>
</tr>
<tr>
<td>Retail</td>
<td>Less than $3M</td>
<td>103</td>
<td>7.4</td>
</tr>
<tr>
<td>Wholesale</td>
<td>Less than $5M</td>
<td>72</td>
<td>5.9</td>
</tr>
<tr>
<td>Services</td>
<td>Less than $10M</td>
<td>82</td>
<td>6.3</td>
</tr>
<tr>
<td>Government</td>
<td>Less than $3M</td>
<td>30</td>
<td>7.2</td>
</tr>
<tr>
<td>Education</td>
<td>Less than $5M</td>
<td>33</td>
<td>6.4</td>
</tr>
</tbody>
</table>
# Digital Commerce IT budget for 2017

Q01A. Do you expect your organization's Digital Commerce IT budget for 2017 to increase, stay the same, or decrease? Q01B. How much do you estimate your organization's Digital Commerce IT budget for 2017 will increase?

Base: Currently using, planning to use Digital Commerce platform by year end 2016 (S06=1-2)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Increase</th>
<th>Stay the same</th>
<th>Decrease</th>
<th>Average increase%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail (n=103)</td>
<td>93%</td>
<td>7%</td>
<td>0%</td>
<td>21.7</td>
</tr>
<tr>
<td>Services (n=82)</td>
<td>84%</td>
<td>15%</td>
<td>1%</td>
<td>19.9</td>
</tr>
<tr>
<td>Wholesale (n=72)</td>
<td>82%</td>
<td>18%</td>
<td>0%</td>
<td>22.5</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>80%</td>
<td>17%</td>
<td>3%</td>
<td>20.1</td>
</tr>
<tr>
<td>Government</td>
<td>70%</td>
<td>27%</td>
<td>3%</td>
<td>19.8</td>
</tr>
<tr>
<td>CPG (n=85)</td>
<td>66%</td>
<td>32%</td>
<td>1%</td>
<td>21.2</td>
</tr>
<tr>
<td>Education</td>
<td>64%</td>
<td>33%</td>
<td>3%</td>
<td>19.8</td>
</tr>
</tbody>
</table>
### Top Objective in investing in Digital Commerce is to meet customers’ demand to purchase online and expand business

**Q06A. What are your organization’s top 3 objectives in investing in Digital Commerce?** Summary of rankings (1-3)

<table>
<thead>
<tr>
<th>Objective</th>
<th>1st choice</th>
<th>2nd</th>
<th>3rd</th>
<th>SUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>To meet customers’ demand to purchase online</td>
<td>17%</td>
<td>12%</td>
<td>11%</td>
<td>40%</td>
</tr>
<tr>
<td>To reach out to new markets, target more customers, expand current business</td>
<td>14%</td>
<td>13%</td>
<td>12%</td>
<td>39%</td>
</tr>
<tr>
<td>To better serve customers, provide more options, and be more transparent</td>
<td>10%</td>
<td>13%</td>
<td>12%</td>
<td>35%</td>
</tr>
<tr>
<td>To generate incremental revenue</td>
<td>11%</td>
<td>10%</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Mainly to boost brand awareness and marketing purposes only</td>
<td>8%</td>
<td>7%</td>
<td>8%</td>
<td>24%</td>
</tr>
<tr>
<td>To cut cost (i.e. reduce administrative cost, reduce middlemen cost)</td>
<td>6%</td>
<td>9%</td>
<td>7%</td>
<td>23%</td>
</tr>
<tr>
<td>To meet the core requirements for multi-channel experience</td>
<td>6%</td>
<td>8%</td>
<td>8%</td>
<td>23%</td>
</tr>
<tr>
<td>Offer easier customizable products</td>
<td>6%</td>
<td>6%</td>
<td>8%</td>
<td>20%</td>
</tr>
<tr>
<td>Eliminate orders errors caused by manual processing</td>
<td>7%</td>
<td>5%</td>
<td>6%</td>
<td>17%</td>
</tr>
<tr>
<td>To fend off competition</td>
<td>5%</td>
<td>4%</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>Direction from management and stake holder</td>
<td>3%</td>
<td>5%</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>To eliminate phone, fax and email orders</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>Closing down physical stores or eliminating physical interaction</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>9%</td>
</tr>
</tbody>
</table>

n=561
Top Objective in investing in Digital Commerce is to meet customers’ demand to purchase online and expand business

Q06A. What are your organization’s top 3 objectives in investing in Digital Commerce? Summary of rankings (1-3)

- **To meet customers’ demand to purchase online**
  - 1st choice: 17%
  - 2nd: 12%
  - 3rd: 11%
  - SUM: 40%

- **To reach out to new markets, target more customers, expand current business**
  - 1st choice: 14%
  - 2nd: 13%
  - 3rd: 12%
  - SUM: 39%

- **To better serve customers, provide more options, and be more transparent**
  - 1st choice: 10%
  - 2nd: 13%
  - 3rd: 12%
  - SUM: 35%

- **To generate incremental revenue**
  - 1st choice: 11%
  - 2nd: 10%
  - 3rd: 10%
  - SUM: 30%

- **Mainly to boost brand awareness and marketing purposes only**
  - 1st choice: 8%
  - 2nd: 7%
  - 3rd: 8%
  - SUM: 24%

- **To cut cost (i.e. reduce administrative cost, reduce middlemen cost)**
  - 1st choice: 6%
  - 2nd: 9%
  - 3rd: 7%
  - SUM: 23%

- **To meet the core requirements for multi-channel experience**
  - 1st choice: 6%
  - 2nd: 8%
  - 3rd: 8%
  - SUM: 23%

- **Offer easier customizable products**
  - 1st choice: 6%
  - 2nd: 6%
  - 3rd: 8%
  - SUM: 20%

- **Eliminate orders errors caused by manual processing**
  - 1st choice: 7%
  - 2nd: 5%
  - 3rd: 6%
  - SUM: 17%

- **To fend off competition**
  - 1st choice: 5%
  - 2nd: 4%
  - 3rd: 4%
  - SUM: 14%

- **Direction from management and stake holder**
  - 1st choice: 3%
  - 2nd: 5%
  - 3rd: 4%
  - SUM: 12%

- **To eliminate phone, fax and email orders**
  - 1st choice: 4%
  - 2nd: 2%
  - 3rd: 3%
  - SUM: 9%

- **Closing down physical stores or eliminating physical interaction**
  - 1st choice: 2%
  - 2nd: 3%
  - 3rd: 3%
  - SUM: 9%

n=561
Digital Commerce platforms usage – by revenue and industry

SS08. Is your organization currently using/planning to use in-house developed Digital Commerce platform or package Digital Commerce platform within the organization?

- Using/planning to use package Digital Commerce platform
- Using/planning to use in-house developed Digital Commerce platform

### Revenue

- **$100M to <$250M (n=146)**: 38% in-house, 62% package
- **$250M to <$500M (n=155)**: 37% in-house, 63% package
- **$500M to <$1B (n=108)**: 44% in-house, 56% package
- **$1B or more (n=152)**: 53% in-house, 47% package

### Industry

- **Manufacturing (n=117)**: 39% in-house, 61% package
- **CPG (n=91)**: 31% in-house, 69% package
- **Retail (n=111)**: 47% in-house, 53% package
- **Wholesale (n=78)**: 45% in-house, 55% package
- **Services (n=89)**: 57% in-house, 43% package
- **Government (n=37)**: 52% in-house, 48% package
- **Education (n=38)**: 39% in-house, 61% package
Digital Commerce Platform selling

Q07. Is your organization using/planning to use a Digital Commerce platform to enable B2C (business to consumer) selling, B2B (business to business) selling, or both B2C and B2B?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale (n=78)</td>
<td>76%</td>
<td>14%</td>
<td>10%</td>
</tr>
<tr>
<td>CPG (n=91)</td>
<td>75%</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>Manufacturing (n=117)</td>
<td>67%</td>
<td>25%</td>
<td>9%</td>
</tr>
<tr>
<td>Retail (n=111)</td>
<td>66%</td>
<td>11%</td>
<td>23%</td>
</tr>
<tr>
<td>Services (n=89)</td>
<td>58%</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Government (n=37)</td>
<td>49%</td>
<td>22%</td>
<td>30%</td>
</tr>
<tr>
<td>Education (n=38)</td>
<td>42%</td>
<td>39%</td>
<td>18%</td>
</tr>
</tbody>
</table>
Q01A. Do you expect your organization's Digital Commerce IT budget for 2017 to increase, stay the same, or decrease? Q01B. How much do you estimate your organization's Digital Commerce IT budget for 2017 will increase?

Base: Currently using, planning to use Digital Commerce platform by year end 2016 (S06=1-2)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Increase</th>
<th>Stay the same</th>
<th>Decrease</th>
<th>Average increase%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail (n=103)</td>
<td>93%</td>
<td>7%</td>
<td>0%</td>
<td>21.7</td>
</tr>
<tr>
<td>Services (n=82)</td>
<td>84%</td>
<td>15%</td>
<td>1%</td>
<td>19.9</td>
</tr>
<tr>
<td>Wholesale (n=72)</td>
<td>82%</td>
<td>18%</td>
<td>0%</td>
<td>22.5</td>
</tr>
<tr>
<td>Manufacturing (n=109)</td>
<td>80%</td>
<td>17%</td>
<td>3%</td>
<td>20.1</td>
</tr>
<tr>
<td>Government (n=50)</td>
<td>70%</td>
<td>27%</td>
<td>3%</td>
<td>19.8</td>
</tr>
<tr>
<td>CPG (n=85)</td>
<td>66%</td>
<td>32%</td>
<td>1%</td>
<td>21.2</td>
</tr>
<tr>
<td>Education (n=33)</td>
<td>64%</td>
<td>33%</td>
<td>3%</td>
<td>19.8</td>
</tr>
</tbody>
</table>

Average increase%
Primary responsibilities for Digital Commerce business activities – by Industry

Q04A. Who is the primary leader responsible for Digital Commerce business activities within your organization?

<table>
<thead>
<tr>
<th>Leading</th>
<th>Manufacturing (n=117)</th>
<th>CPG (n=91)</th>
<th>Retail (n=111)</th>
<th>Wholesale (n=111)</th>
<th>Services (n=78)</th>
<th>Government (n=37)</th>
<th>Education (n=38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIO and/or CTO</td>
<td>40%</td>
<td>32%</td>
<td>37%</td>
<td>29%</td>
<td>28%</td>
<td>30%</td>
<td>13%</td>
</tr>
<tr>
<td>CEO or Company's owner</td>
<td>25%</td>
<td>20%</td>
<td>25%</td>
<td>31%</td>
<td>25%</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>EVP, SVP, VP of E-business or E-commerce</td>
<td>6%</td>
<td>22%</td>
<td>11%</td>
<td>10%</td>
<td>15%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Chief Digital Officer</td>
<td>18%</td>
<td>9%</td>
<td>11%</td>
<td>14%</td>
<td>16%</td>
<td>11%</td>
<td>21%</td>
</tr>
<tr>
<td>Chief Marketing Officer</td>
<td>4%</td>
<td>10%</td>
<td>5%</td>
<td>8%</td>
<td>4%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Chief Digital Marketing Officer</td>
<td>5%</td>
<td>5%</td>
<td>9%</td>
<td>3%</td>
<td>12%</td>
<td>3%</td>
<td>13%</td>
</tr>
<tr>
<td>Chief Innovation or Customer Excellence Lead</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Chief Customer Experience Officer</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>5%</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>
**Primary responsibilities for Digital Commerce business activities – by Industry**

Q04B. Who is primarily responsible for funding Digital Commerce business activities within your organization?

<table>
<thead>
<tr>
<th>Industry</th>
<th>Manufacturing (n=117)</th>
<th>CPG (n=91)</th>
<th>Retail (n=111)</th>
<th>Wholesale (n=78)</th>
<th>Services (n=89)</th>
<th>Government (n=37)</th>
<th>Education (n=38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIO and/or CTO</td>
<td>26%</td>
<td>32%</td>
<td>29%</td>
<td>47%</td>
<td>30%</td>
<td>22%</td>
<td>26%</td>
</tr>
<tr>
<td>CEO or Company's owner</td>
<td>38%</td>
<td>32%</td>
<td>29%</td>
<td>10%</td>
<td>42%</td>
<td>43%</td>
<td>32%</td>
</tr>
<tr>
<td>EVP, SVP, VP of E-business or E-commerce</td>
<td>10%</td>
<td>29%</td>
<td>15%</td>
<td>10%</td>
<td>16%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>Chief Digital Officer</td>
<td>15%</td>
<td>5%</td>
<td>8%</td>
<td>12%</td>
<td>7%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Chief Marketing Officer</td>
<td>6%</td>
<td>5%</td>
<td>4%</td>
<td>1%</td>
<td>2%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Chief Digital Marketing Officer</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Chief Innovation or Customer Excellence Lead</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Chief Customer Experience Officer</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Trending Now

- Multichannel
- Customer Experience
- Straight Through Processing
- Merchant Change of Status
Buy Online Pick Up in Store (BOPIS) and Pop-Up Stores Are a Good Start on Multichannel

Shift in Focus from Transactions to Customer Experience

It's all about the customer

- Recognize me
- Know me
- Serve me
- Value me
- Solve my problem
- Be efficient
- Make my life easier
- Anytime, anywhere

Sources: http://www.criticalcommons.org/Members/ccManager/clips/cisco_futureofshoppinginterfacegesture.flv/thumbnailImage
Digital Commerce Becomes Straight Through Processing*

<table>
<thead>
<tr>
<th>Availability:</th>
<th>The “store” is always open; no down time allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency:</td>
<td>Processes, navigation and personalization matter</td>
</tr>
<tr>
<td>Self Service:</td>
<td>Customers must be armed with critical information to make their buy decisions</td>
</tr>
<tr>
<td>Engaged:</td>
<td>Customer experience matters; product and price are no longer competitive differentiators</td>
</tr>
<tr>
<td>Connected:</td>
<td>Trustworthiness now applies to brands and technologies</td>
</tr>
</tbody>
</table>

* Note: Straight through processing is automated processing without human intervention while simultaneously improving the customer experience.
Merchant Status Shifts From Hostage to Customer

Payment ecosystem vendors add new functionality to improve merchant costs and revenues

- Lowest cost routing
- Local authorization request
- One-click merchant acquirer rerouting
- Traffic monitoring
10 Trends Shaping Tomorrow's Digital Commerce

- Commerce Is Anywhere and Anyway the Customer Wants It
- Commerce Is Contextually Personal but Not Invasive
- Commerce Is Visual
- Commerce Is Social Commerce and Can Be Fun
- Everyone Can Sell, Share, 3D-Print and Deliver
- Things Can Measure, Alert, Personalize and Buy
- Commerce Can Talk, Help, Do and Inform
- Subscriptions lead to Lights-Out Commerce
- Payment Drives Sales
- Businesses Adopt Intentional Innovation
1. Commerce Is Anywhere and Anyway the Customer Wants It

Smart shopping app alerts users when wanted items are nearby.

**Location and Push Notification**

On-demand SMS service supplies anything customers need.

**Request and Receive**

By 2020, Anywhere, Anyway, Any Time Customer Interaction Models Will Dominate the Digital Commerce Market

Sources: https://www.booodl.com/, http://www.getmagicnow.com/
2. Commerce Is Contextually Personal but Not Invasive

- Personalized Applications
- Personalized Interactions
- Location-Aware
- Customer Choice
- Personalized 3D Printing
- Customer Configuration
- Privacy Still a Challenge: – Creepy or Not?

3. Commerce Is Visual

- See the product without it being there
- Try the product
- Like the product
- Interact with a service or product
- Holograms
- Explore remotely
- Post the product
- And more …

4. Commerce Is Social Commerce and Can Be Fun

Social enables customers to:

- Share deals
- Tell us what they want
- Interact with us
- Build trusted relationships at scale
- Build relationships prior to purchase and influence the purchase decision
- Interact with a people-personal brand and network

5. Everyone Can Sell, Share, 3D-Print and Deliver

6. Things Can Measure, Alert, Personalize and Buy

- Quantified self.
- Quantified products.
- Quantified home.
- Information everywhere.
- Collected by organizations or the customer.
- Quantified next?

7. Commerce Can Talk, Help, Do and Inform

8. Subscriptions Lead to Lights-Out Commerce

- **Subscriptions:**
  - Are no longer just for magazines
  - Can apply to any consumables
  - Lead to better supply planning

- **Lights-out commerce:**
  - Automates the buying process
  - Uses rules to set up continual replenishment
  - Enables continual supply with minimum effort

- **Amazon patent:**
  - "Anticipatory shipping" and its Dash Button

9. Payment Drives Sales

Make payment easy!

- One click, safe and secure
- Localized payment methods
- New, popular payment methods
- Financing, if applicable
- Incorporate fraud protection

Amazon:  https://pay.amazon.com/us

Pay now
Pay later
Slice it

Klarna: https://www.klarna.com/us/smoooth/#section-6

Klarna

Stripe: https://stripe.com/

Braintree
A PayPal Company

https://www.braintreepayments.com/
10. Businesses Adopt Intentional Innovation

- Amazon
- Google
- Staples (Velocity Lab)
- Apple
- Walmart (@WalmartLabs)
- Chick-fil-A (Hatch)
- The Home Depot:
  - BlackLocus (Price Optimization)
  - Pro Referral (Innovative Projects)
- Lowe's Innovation Labs
- Nike
- BBVA Innovation Center
- Capital One Labs
- Harvard University
- And Many More

"Commerce has entered the age of intentional innovation."

Sources: https://s-lab.sparkasse.at/, https://www.proreferral.com/about/us/
Agenda

- What “Going Digital” Means
- Current State of Digital Commerce and Emerging Trends
- Understanding and Delivering on Customer Expectations
- The Future of Commerce
- What It Means to Government
- Q&A
Successful Selling Requires a Focus on the Customer: Make it Easy!
Internet-enabled price visibility has made the digital customer experience a key differentiator of your organization.
Internet-enabled price visibility has made the digital customer experience a the key differentiator of your organization.

Organizations that have fully vested in all types of online personalization by 2018 will outsell companies that have not
Why it Matters

Internet-enabled price visibility has made the digital customer experience a the key differentiator of your organization.

Organizations that have fully vested in all types of online personalization by 2018 will outsell companies that have not

Companies that consumerize their B2B digital commerce sites by 2018 will gain market share and see revenue increase
Customer Experience Matters

88%

consumers less likely to return to a site after a poor experience*

And Customers Have High Expectations

- Value
- Understanding
- Efficiency
- Ease
- Transparency
- Privacy

*Source: "Why Web Performance Matters," Dynatrace (formerly Gomez)
Hierarchy of Customer Need for a Positive Experience

- Competence
- Recognition
- Assistance
- Fulfilment
Hierarchy of Customer Need for a Positive Experience

- Competence
- Recognition
- Assistance
- Fulfilment

Personalization
Personalization Defined

Personalization is a **process** that creates a relevant, individualized interaction between two parties designed to enhance the experience of the recipient.
Personalization Is Becoming Mainstream
The Six Ways to Achieve Personalization

- **Customer Knowledge**
  - Content
    - All Customers
    - Similar Customers
    - This Customer
  - Transactions
    - Browse
    - Service
    - Orders
    - Returns
    - Spend
  - Intent
    - Need
    - Want

- **Preferences**
  - Brands
  - Events
  - Associates
  - Products

- **IoT**
  - Consumption
  - Product performance

- **Demographics**
  - Location
    - IP Address
    - GEO
    - In Store
  - Personal
    - Interests
    - Family
    - Social Circle
  - Affiliations
    - Dependencies
    - Purchased together
  - Digital Commerce Platform Buyer Preferences
    - Payment Methods
    - Ship to Address
    - Language
    - Currency
    - Favorites
    - Frequent Purchases

- **Channel and Communication Preferences**
  - Promotions
  - Account updates
  - Payments Due
  - Email
  - Text
  - Phone
  - Other
The Personalization Journey

- **Progression**
  - One to One
  - One to Few
  - One to Many
  - Foundational (One-to-all)

- **Personalization**
  - Effective Processes and Intuitive Navigational Design
  - Channel Consistency
  - Preferences
  - Product Relationship
  - Customer Similarities
  - Behavior Patterns
  - Location
  - Customer Knowledge
  - Journey
  - Intent

- **Effort**

- **Value**
The Personalization Journey

Personalization enriches the customer experience by knowing the customer’s interest, history and intent.

- Effective Processes and Intuitive Navigational Design
- Channel Consistency
- Preferences
- Product Relationship
- Customer Similarities
- Behavior Patterns
- Location
- Customer Knowledge
- Journey
- Intent

Progression:
- One to One
- One to Few
- One to Many
- Foundational (One-to-all)
Personalization enriches the customer experience by knowing the customer’s interest, history and intent.

Where Digital Personalization Engines Can Assist

Progression
- One to One
- One to Few
- One to Many
- Foundational (One-to-all)
Personalization Engines Defined

Digital personalization engines are technology solutions that identify the optimum experience for an individual and will alter the online presentation layer, trigger an automated response or pass analysis to the seller or service personnel to act upon as deemed fit.
Personalization Engines

Data Capture:
All Engines:
- On-site session data
- Explicit profile data
- Historical browsing data

Analysis:
All Engines:
- Proprietary algorithms
- Batch processing
- Real-time analytics:
  - Rule-based
  - Predictive lifetime value
  - Likelihood to engage/buy

Customer Experience:
All Engines:
Recommendations
Personalization Engines

Data Capture:

All Engines:
- On-site session data
- Explicit profile data
- Historical browsing data

SOME Engines:
- Geolocation data
- Transaction history
- Customer data
- Social
- External data (open APIs)

Analysis:

All Engines:
- Proprietary algorithms
- Batch processing
- Real-time analytics:
  - Rule-based
  - Predictive lifetime value
  - Likelihood to engage/buy

SOME Engines:
- Additional analytics:
  - Machine learning
  - Customer journey
  - Propensity to churn
  - Margin optimizing

Customer Experience:

All Engines:
- Recommendations

SOME Engines:
- Landing pages
- Search
- Mobile content
- Social content
- Email content
- Cart abandon
- Ad retargeting
### Personalization Engines

#### Data Capture:
- **All Engines:**
  - On-site session data
  - Explicit profile data
  - Historical browsing data
- **SOME Engines:**
  - Geolocation data
  - Transaction history
  - Customer data
  - Social
  - External data (open APIs)
- **Engines for commerce add:**
  - Customer data hub

#### Analysis:
- **All Engines:**
  - Proprietary algorithms
  - Batch processing
  - Real-time analytics:
    - Rule-based
    - Predictive lifetime value
    - Likelihood to engage/buy
- **SOME Engines:**
  - Additional analytics:
    - Machine learning
    - Customer journey
    - Propensity to churn
    - Margin optimizing
- **Engines for commerce add:**
  - Additional analytics:
    - Machine learning
    - Customer journey
    - Attribution

#### Customer Experience:
- **All Engines:**
  - Recommendations
- **SOME Engines:**
  - Landing pages
  - Search
  - Mobile content
  - Social content
  - Email content
  - Cart abandon
  - Ad retargeting
- **Engines for commerce add:**
  - Real-time customer profile creation and updates
  - Follows the customer's journey
  - Multichannel consistency
  - Customer experience changes with every "click"
Digital Personalization Engines Used for Commerce Defined

Digital personalization engines used for commerce are technology solutions that integrate to digital commerce platforms or alternative technologies that make continuous, real-time changes for an individual based on digital interaction and make presentation-layer changes for the specific individual.
What Constitutes a Personalization Engine

A Personalization Engine

The Customer Journey

Digital
- Social
- Mobile
- Web

POS
- Store
- Sales Associates

Kiosk

Email/Mail/SMS/Virtual Assistant
- Customer Engagement Center

Agent
- IVR

Sales Representative

Email/Mail

IoT

Digital Commerce

POS Commerce

Customer Service

Sales

Prepackaged Analytics
- Rules engines
- Behavior analysis
- Predictive lifetime value
- Prescriptive analytics
- Predictive analytics
- Collaborative filtering
- Text analytics
- Machine learning
- etc.

Customer Personalization Data Hub
- Transactions
- History
- Preferences
- Problems
- Interests
- Behaviors
- Communications
- Encounters
- etc.

Operational Systems and Data
- Product information management
- Order/distributive order management
- Warehousing, logistics and fulfillment
- Finance and treasury
- Accounts payable
- Accounts receivable

ID: 331880

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## Digital Personalization Engines Increase Engagement

<table>
<thead>
<tr>
<th>Engagement</th>
<th>Result Highlights</th>
</tr>
</thead>
</table>
| More views, time and clicks per page    | **Lukie Games** *(4-Tell recommendations on web)*:  
- 5x more pages viewed  
- 4.5x more time shopping on site  
- 5.3x increase in conversion  

**Staples** *(BloomReach Commerce Search)*:  
- 3.5% increase in revenue per visit on Staples Advantage (B2B) with annual; revenue lift of $100M+ USD  
- Ability to scale B2B SKU catalog 10 times without adding staff and reducing work load by 80%  
- 4.4% increase in revenue per visit on Staples.com (B2C)  

**Mazda** *(IgnitionOne personalization platform with floating forms and performance metrics)*:  
- 133% more brochure requests made online  
- 200% more test drive appointments made  

**Essent, Belgium** *(NGDATA’s Lily Enterprise)*:  
- 49% call reduction with personalized videos  
- 30% overall call reduction  |
| Decreased bounce rates                  | **Lukie Games** *(4-Tell recommendations on web)*:  
- 5x more pages viewed  
- 4.5x more time shopping on site  
- 5.3x increase in conversion  

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- 30% overall call reduction  |
| Higher email open rate                  | **Lukie Games** *(4-Tell recommendations on web)*:  
- 5x more pages viewed  
- 4.5x more time shopping on site  
- 5.3x increase in conversion  

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- 200% more test drive appointments made  

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- 49% call reduction with personalized videos  
- 30% overall call reduction  |
| Higher usage of self-service features   | **Lukie Games** *(4-Tell recommendations on web)*:  
- 5x more pages viewed  
- 4.5x more time shopping on site  
- 5.3x increase in conversion  

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- 3.5% increase in revenue per visit on Staples Advantage (B2B) with annual; revenue lift of $100M+ USD  
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- 30% overall call reduction  |
| Better service                          | **Lukie Games** *(4-Tell recommendations on web)*:  
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- 4.5x more time shopping on site  
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- 49% call reduction with personalized videos  
- 30% overall call reduction  |
## Digital Personalization Engines for Commerce Drive Profit

### Engagement

<table>
<thead>
<tr>
<th>Higher average order value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater conversion rates</td>
</tr>
<tr>
<td>Increased revenue</td>
</tr>
<tr>
<td>Decreased costs</td>
</tr>
<tr>
<td>Reduced cart abandonment</td>
</tr>
</tbody>
</table>

### Result Highlights

**Icebreaker, New Zealand** (Salesforce Commerce Cloud product recommendations):
- 40% more often clicks on product recommendations, leading to 28% more revenue
- 11% overall increase in average order value

**Endurance International Group, Burlington, MA** (Evergage platform targeted surveys, product usage and customer behavior data):
- 71% increase in conversion rates with targeted upselling
- Additional cost savings through elimination of thousands of support calls

**MakerBot, Brooklyn, NY** (Dynamic Yield Unified Customer Engagement Platform):
- 5x return on investment
- 18% increase in home page module engagement
- 5% reduction in cart abandonment
## Compelling Examples: GameStop

GameStop is a large, global, multichannel video game, consumer electronics and wireless services company with over 6,600 stores in 14 countries.

### Objective
- Effectively create great customer experiences across all channels that in turn would increase revenue
- Increase catalog exposure by providing relevant product discovery of not only gaming items, but electronics, collectibles and other nongaming products

### Strategy
- Partnered with **Certona** for data-driven hyperpersonalization:
  - **Web**: Tagged and began personalizing the web experience; set up and tested a variety of personalization strategies across websites including home, product, no search results and cart pages
  - **In-store**: Added integrated store data, including loyalty activity
  - **Mobile**: Added mobile channel, and all three channels shared cross-session and cross-device information

### Results

#### Web:
- 22% increase in conversions
- 20% increase in items per order
- 41% increase in average order value (AOV)
- 14% of total online web revenue was from personalized recommendations

#### In-store:
- 2x lift in responder demand

#### Mobile:
- 29% increase in conversions
- 35% increase in AOV
- 14% of total online mobile revenue from personalized recommendations
Compelling Examples: Time Warner Cable

Time Warner Cable is the second largest cable television operator in the U.S., providing video, high-speed data and voice services to more than 15 million customers

<table>
<thead>
<tr>
<th>Objective</th>
<th>Strategy</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better acquire, develop, retain and serve customers with optimized digital experiences</td>
<td>Retire disparate digital marketing technologies and implement one platform: Adobe Marketing Cloud:</td>
<td>+49% new customer conversions</td>
</tr>
<tr>
<td>Create the best first impression possible for the broadcast audience</td>
<td>• Create a unified customer profile taking into account all known first-party data including visitor and customer CRM database info as well as from second and third partners and paid providers</td>
<td>+20% conversion rate by providing multichannel offers based on audience affinity for services</td>
</tr>
<tr>
<td>Create personalized experiences so customers could understand how important they are</td>
<td>• Integrate over 100 first-party CRM data elements into visitor profiles to improve relevancy of content, messaging and offers</td>
<td>Further refinements resulted in a 30% increase in conversion rate and a 47% increase in revenue per visitor, which generated a $14M increase in annualized revenue</td>
</tr>
<tr>
<td>Gain deeper visibility into customer behaviors and preferences and be able to act on those insights</td>
<td>• Establish a strategy and process to test and target personalized content</td>
<td>Further refinements drove a 9% increase in the existing customer conversion rate for new products by targeting customers with &quot;Add Service&quot; messaging based on their current package</td>
</tr>
</tbody>
</table>


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Agenda

- What “Going Digital” Means
- Current State of Digital Commerce and Emerging Trends
- Understanding and Delivering on Customer Expectations
- The Future of Commerce
- What It Means to Government
- Q&A
So Where Are We Going?
Today, the Customer Must Go to Commerce

Tomorrow, Commerce Will Go to The Customer

Commerce to You (C2U) Defined

- Commerce is any time, any place, any where
  - Connected
  - Unified
  - Trusted

- Commerce is personalized
  - Effective
  - Efficient
Unified Experience

Solution Oriented

Anticipatory

Relationship Driven

Continual

Trusted and Connected

Commerce to You

Anytime        •        Anywhere        •        Anyway
## Principles of Commerce to You

<table>
<thead>
<tr>
<th>Relationship Driven</th>
<th>Solution Oriented</th>
<th>Anticipatory</th>
<th>Continual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizes individual</td>
<td>Turns products and services into solutions</td>
<td>Identifies when customer need may arise</td>
<td>Improvement</td>
</tr>
<tr>
<td>Knows individual</td>
<td>Solves customer problems</td>
<td>Provides solution to problem before problem occurs</td>
<td>Product &amp; services</td>
</tr>
<tr>
<td>Understands individual</td>
<td>Single supplier</td>
<td>Purposes ideas for products and services</td>
<td>Processes</td>
</tr>
<tr>
<td>Simplifies life of individual</td>
<td>Multi supplier</td>
<td></td>
<td>CX</td>
</tr>
<tr>
<td>Collaborates with individual</td>
<td>Makes customers’ processes more efficient</td>
<td></td>
<td>Technology</td>
</tr>
<tr>
<td>Instills trust</td>
<td>Makes the customer more productive</td>
<td></td>
<td>Relationship</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Partners</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>suppliers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Constant connections</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Customers</td>
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<td></td>
<td></td>
<td></td>
<td>Constituents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Partners</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>suppliers</td>
</tr>
</tbody>
</table>
Advantages of C2U

• Unlimited distribution points bring planned and unplanned opportunities
• Lower cost of sales/doing business
• Better efficiency
• Higher revenue
• More profitability
• Greater customer satisfaction
Scenarios of C2U

- **Problem driven**
  - Customer has a specific to solve (i.e., contractor who needs something on a job. Chat with pro who advises extra stuff needed, and then delivers from store.
  - Supplier wants to prevent a problem for the customer

- **Event driven**
  - Start with last step of the event (i.e., the destination (hotel) or activity (diving trip) and work back from there--assembling the experience (products and services) to get there
  - Start with the objective (birthday party) and assemble the products and services to create it

- **Usage driven**
  - Replenishment
Scheduling the Next Family Trip
Apply C2U Principles : Public Safety and Justice

Source: http://www.economist.com/node/21556970
What C2U Means to Sellers

- **New Mindset and the right connections**
  - Understanding customers is more important than “owning” the customer relationship

- **Be an SME**
  - Compete against marketplaces by using SME to ensure customer makes right buy decision to solve problem being solved
  - In B2B, no one buys anything without Joe the sales guy who knows the customer through questions and then turns the seller’s products into a solution. Capture Joe’s knowledge which enables companies to compete against marketplaces

- **Use Intelligence for the unpredicted**
  - Something that happens that is unpredicted, where the customer is anonymous and not IoT connected. Ex take picture of fence post and get new one automatically. Be an SME with intelligence there, but not necessarily anticipatory.

- **Anticipate and Act**
  - Shift from customer initiated transactions to seller/supplier-initiated transactions. Suppliers become anticipatory because of the data points they have.
What C2U Means to IT

- New architecture approaches
  - API oriented and microservices
  - Federated view of customers and constituents

- Emerging commerce technologies
  - Visual, Thing and Conversational commerce

- Emerging technologies
  - AI, robots, drones

- New ways to pay and management payments
  - Apple Pay, WeChat, Alipay, Klarna and blockchain

Source: https://www.pexels.com/photo/drone-flying-against-blue-sky-336232/
What C2U Means for Customer Experience

Digitally humanized
- Recognized
- Trusted
- Empathetic

Super personalized
- Recognized
- Relevant
- Contextual

Anticipatory
- Intelligence
- Initiative
- Communicative

Product facilitated
- Embedded
- Connected
- Innovative things
When Will C2U Become Mainstream?

| Year | Category
|------|----------|
| 2000 | Web
| 2005 | E-Business
| 2017 | Digital Marketing
| 2025 | Digital Business

Source: "Digital Business Is Here Now" (G00269535)
"Get Ready for Digital Business With the Digital Business Development Path" (G00263766)
Agenda

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Key Considerations for Government

What to Do

• Use mobile to reach constituents
• Enable connections
• Leverage digital commerce
• Make services easy to access and seamless to use
• Be transparent to develop trust

How to Do It

• Recognize that constituents are customers with similar expectations
• Incorporate straight through processing (STP) into your services
• Embrace technology to make it happen
The What
Mobile: The New Connector to Constituents

% of U.S. adults who own the following devices

<table>
<thead>
<tr>
<th></th>
<th>Any cellphone</th>
<th>Smartphone</th>
<th>Cellphone, but not smartphone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>95%</td>
<td>77%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>By Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>100%</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>30-49</td>
<td>98%</td>
<td>89%</td>
<td>9%</td>
</tr>
<tr>
<td>50-64</td>
<td>94%</td>
<td>73%</td>
<td>21%</td>
</tr>
<tr>
<td>65%</td>
<td>85%</td>
<td>45%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>By Area</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>96%</td>
<td>83%</td>
<td>13%</td>
</tr>
<tr>
<td>Suburban</td>
<td>94%</td>
<td>78%</td>
<td>26%</td>
</tr>
<tr>
<td>Rural</td>
<td>91%</td>
<td>65%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: Surveys conducted 2002-2018
PEW RESEARCH CENTER

Source: http://www.pewinternet.org/fact-sheet/mobile/
Mobile: Use Apps to Teach, Find, Serve and Report

- PTSD Coach Mobile App
- Free DC WiFi Hotspot Finder
- LA County DPSS
- County of San Diego Tell Us Now
Connections: Enable Them
Commerce: Create a vision

VISION

Deliver an Amazon.com like experience for all government agencies through a centralized purchasing portal
Commerce: Shopping Cart Look and Feel

[Image of a shopping cart interface]

- **Top Item Categories**
  - Acoustical Tile, Insulating Materials, And Supplies
  - Air Compressors And Accessories
  - Computer Accessories And Supplies
  - Fuel, Oil, Grease And Lubricants
  - Machinery And Hardware, Industrial
  - Office Supplies, Carbon Paper And Ribbons, All Types
  - Paper And Plastic Products, Disposable
  - Rental Or Lease Services Of Office, Photographic, Printing, Radio/Television/Telephone Equipment
  - Telecommunication Equipment, Accessories And Supplies
  - Trucks (Including, Diesel, Gasoline, Electric, Hybrid, And Alternative Fuel Units)

- **Procurement News Feed**
  - State Purchasing Updates
    - TPASS Contract Updates: 201-A1, 390-GS, 801-M2
    - TPASS Contract Updates Contract No.: 251-A1 Clothing Accessories Effective Date: March 1, 2014 Scope of Change Contract
  - Other RSS Feeds
    - HUB
    - Travel
Commerce: Search and Purchase at Click

Window on State Government

TxSmartBuy

Search for Contract Number, Category, Supplier or Items

Search

Contracts | Reports | Help

Filter Your Search:

Clear all Filters

- Contract Number: 745-A1
- Contractor: American Materials
- Type: Type B
- Grade: Grade 1

521 Results Found for "hot-mix"

Sort By: Preferred Term

- Narrowed By: Contractor: Longview-Asphalt-Inc

Dense-Graded Hot-Mix Asphalt

Commodity Code: 745215655722

- Price: $76.50
- UOM: TON

- Add to cart

Dense-Graded Hot-Mix Asphalt

Commodity Code: 745215655722

- Price: $80.50
- UOM: TON

Add to cart
### Commerce: Benefits of TX SmartBuy

<table>
<thead>
<tr>
<th></th>
<th>TXSMARTBUY 1.0</th>
<th>TXSMARTBUY 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Costs</strong></td>
<td>Over $11.5 million</td>
<td>Less than $3 million</td>
</tr>
<tr>
<td><strong>Annual Purchase Order Count</strong></td>
<td>142,359</td>
<td>169,385</td>
</tr>
<tr>
<td><strong>Annual Order Dollar Amount</strong></td>
<td>$663,133,680.51</td>
<td>$919,637,058.32</td>
</tr>
<tr>
<td><strong>Average Search Time</strong></td>
<td>13 seconds average</td>
<td>Less than 1 second (0.616 seconds average)</td>
</tr>
<tr>
<td><strong>Average Duration of Support Calls</strong></td>
<td>30-45 minutes</td>
<td>Five minutes or less</td>
</tr>
<tr>
<td><strong>Help Desk Staff Count</strong></td>
<td>Three full-time staff with part-time contributions from eight to 10 other employees</td>
<td>Two full-time staff</td>
</tr>
<tr>
<td><strong>Time Required for Order Processing (Search, Add to Cart, Issue PO)</strong></td>
<td>Five to 30 minutes with an average of 10 minutes</td>
<td>Three to five minutes</td>
</tr>
<tr>
<td><strong>User Account Edits</strong></td>
<td>Average 10 minutes</td>
<td>10-30 seconds</td>
</tr>
</tbody>
</table>
Access: Easy and Seamless

The San Diego County Treasurer-Tax Collector’s mobile website allows you to pay your property taxes anytime, anywhere. Watch helpful videos with tips on how to pay your taxes, and stay current on the latest TTC news.

At home and want to know the zoning for your address or one that you’re interested in? Out in the field and looking at property and want to know the zoning? With Planning & Development Services (PDS) new mobile application the information is literally at your fingertips and provides zoning and land use information for the unincorporated area of San Diego County.

The app that uses facial recognition for dogs to help owners find lost dogs. Help us make sure that every lost dog is found.

LA County Fire Depart PulsePoint empowers individuals, within covered communities, with the ability to provide life-saving assistance to victims of cardiac arrest. Application users who have indicated they are trained in cardiopulmonary resuscitation (CPR) are notified if someone nearby is having a cardiac emergency and may require CPR. If the medical emergency is in a public place, the application uses sophisticated location-based services to alert trained citizens in the immediate vicinity of the need for CPR.

Search "San Diego" in the app to watch Planning Commission meetings as well as view agendas and attachments. Wi-Fi required.
Transparent: Become It

Open Government Financial Reporting

Other Shared Digital Information
- Financial, Taxes and Budget Analysis
- Enterprise Systems Catalog - SB272
- Boards, Committees and Commissions
- Procurement
- Elected and Appointed Officials
- County Code, Charter and Legislative Platform
- Permits, Land Sales and Electronic Documents
- Public Records Request
- Jobs and Salaries
- Placer County Health Database

Source: https://placer.ca.gov/government/transparency
The How
Customers and Citizens: Nuances

What is a customer?

A person or organization
- That buys goods or services from a business
- Has a choice of products and suppliers
- Of a specified kind that one has to deal with

Source: Google, Investopedia, and Business dictionary

What is a citizen?

A person
- legally recognized as a subject or national of a state or commonwealth
- entitled to enjoy all the legal rights and privileges granted by a state to the people comprising its constituency...

Source: Google, and Business dictionary
Customers and Citizens: “Experience” is Similar for Both

An experience is the sum total of conscious events

Customer Experience
- The customer's perceptions and related feelings caused by the one-off and cumulative effect of interactions with a supplier's employees, channels, systems

Citizen Experience
- The citizen’s perceptions and related feelings caused by the one-off and cumulative effect of interactions with a government’s employees, channels, systems or contractors
Customers and Citizens: Differences Are Not as Great As You May Think

Similarities
• Both Pay
• Both expect value in return
• Both have influence
• Both can make or break you

Distinctions
• Customers have many choices whereas citizens are limited by their geography and affiliation
• Customers can easily switch suppliers whereas citizens cannot easily switch governments
In Both Cases

It Should be Easy!
STP: Use it To Become Efficient

- Identify cumbersome and tedious tasks
- Talk to front line staff and constituents; check social media
- Embrace self-help
- Streamline processes

STP is the automation of processes and the removal of human intervention while simultaneously improving the recipient’s experience.
Technology: Use It to Solve Problems

Nearly 90% of citizens say interacting with government online saves time and energy.

Technology: Leverage Digital Commerce and Its Ecosystem to Improve Citizen’s Experiences
Technology: Use the Gartner Hype Cycle for Digital Government Technology, 2017 to Identify Innovation
Are YOU Up to Speed Of Commerce?
Recommended Gartner Research

- **Industry Vision: Commerce That Comes to You**
  Gene Alvarez, Penny Gillespie (G00304025)

- **Predicts 2017: Trustworthiness and 'Commerce That Comes to You' Present New Opportunities for Digital Commerce**
  Jason Daigler, et al. (G00300084)

- **Be Trustworthy in Every Customer Digital Interaction to Drive Business Results**
  Penny Gillespie (G00329086)

- **Digital Business Ambition: Transform or Optimize?**
  Hung LeHong, Graham P. Waller (G00333254)
Recommended Gartner Research: Government

- **Industry Vision: The Local Government Data Marketplace Will Be an Engine of Community Innovation**
  Bettina Tratz-Ryan, Rick Howard (G00307944)

- **Hype Cycle for Digital Government Technology, 2017**
  Rick Holgate (G00332564)

- **Government CIOs Need to Prepare Their Organizations to Take Advantage of Civic Tech**
  Bill Finnerty, Mark O’Neill (G00328195)

- **Digital Government 2030: Predictive Government Anticipates Citizen Needs With Autonomous Services**
  Dean Lacheca et al. (G00347839)
Thank you
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Penny.Gillespie@gartner.com