Digital Transformation in the New Normal

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Speaker

Rachel Mushahwar
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US Sales Enterprise, Government,
Next Wave Cloud Providers
Responding in Crisis: Unprecedented Actions

Economic Health
Anchor Institutions
Household Finances
Supply Chain
Health Infrastructure
Education System
States and Localities
Government Agencies

Waves of Change, Innovation, and Adaptation

Ramp
Recover
Resilience
Recede

Surge Buying to meet the moment
Rapid Innovation
New Solutions to meet conditions
Normalize

The US is still here
Still to happen
Macro Forces for US Pub Sector (21 to 24)

This is a once in a century moment for the United States.

National Security
- NDAA (National Defense)
- CYBER
- TRUSTED SUPPLY CHAIN
- IT MODERNIZATION
- US SOURCING – BUY AMERICA

Health & Education
- CVD19 RESPONSE
- SCIENCE AND RESEARCH
- TELEHEALTH
- DISTANT LEARNING
- NSF: ENDLESS FRONTIER

Economic and Social Transformation
- BROADBAND & 5G
- NATIONAL INFRASTRUCTURE (SMART)
- ECONOMIC ACCELERATORS
- ECONOMIC SOCIAL JUSTICE AGENDA

Net new investment by government will expand spending in the public sector (GEH: government, education, and health) due to COVID-19 by $100b annually from 21 to 24. $300b net new IT spend.
Public Sector Outlook: A Key Pillar in Recovery

Policy and decision makers seeing the power of Information Technology in this moment.

1. Response will play out over **several years**
2. **On Track for Forecasted $200B** in IT spending for 2020
3. **New solutions** needed to help US go from ramp to recede
4. **Rapid acceleration** of long-term aspirational areas: eLearning, telehealth, WFH, and automation
5. IT needs will grow and shift as the **fiscal situation** unfolds at the State and Local levels

**Public Sector Solution Needs**

- Cyber
- Surveillance
- Telehealth
- Remote Workforce
- Automation
- Facility Modernization
- IT Modernization
- Distance Learning
- Supply Chain Resilience
- Data Solutions
Pandemic Response Accelerates Key Trends in Public Sector

The Network Becomes the Mission-Critical Public Sector Infrastructure

<table>
<thead>
<tr>
<th>Trends</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing and Biometrics</td>
<td>FY20-FY22</td>
</tr>
<tr>
<td>Connectivity and Distance-Learning (rural and Low-Income)</td>
<td>FY20-FY26</td>
</tr>
<tr>
<td>Integrated Health Networks and Telehealth</td>
<td>FY20-FY26</td>
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<tr>
<td>Infrastructure Security/Resilience</td>
<td>FY21-FY26</td>
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<tr>
<td>Telework and eGovernment</td>
<td>FY20-FY23</td>
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</tbody>
</table>

**FORECAST**

Regardless of the 2020 election results, federal spending on these five initiatives “alone” tops $750 billion over the next 6 years (FY21-26).

A Biden win with a Democrat-controlled Congress pushes that total over $1 trillion.
## Pandemic’s Immediate and Forecasted IT Buying Impact by Enterprise Segment

<table>
<thead>
<tr>
<th>Archetype</th>
<th>IT Segment</th>
<th>Immediate impact</th>
<th>Rest of 2020 impact</th>
<th>2021 Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - Hit in short-term, recovery/improvement in long-term</td>
<td>Core SaaS</td>
<td>-1%</td>
<td>-3%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>Edge infrastructure</td>
<td>-2%</td>
<td>-2%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>BPO and IT modernization</td>
<td>-5%</td>
<td>-6%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Network and long-term ITO svcs</td>
<td>-3%</td>
<td>-4%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>SD-WAN</td>
<td>-2%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>On prem software</td>
<td>-5%</td>
<td>-7%</td>
<td>-4%</td>
</tr>
<tr>
<td></td>
<td>Software maint. contracts</td>
<td>-3%</td>
<td>-4%</td>
<td>-1%</td>
</tr>
<tr>
<td></td>
<td>On prem storage hardware</td>
<td>-5%</td>
<td>-6%</td>
<td>-4%</td>
</tr>
<tr>
<td></td>
<td>On prem server hardware</td>
<td>-6%</td>
<td>-7%</td>
<td>-4%</td>
</tr>
<tr>
<td>3 - Spike in short-term, stabilize in long-term</td>
<td>PC hardware and peripherals</td>
<td>5%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Other SaaS for remote work</td>
<td>7%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>4 - Spike in short-term, keep growth momentum in long-term</td>
<td>Cloud-based security</td>
<td>6%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Public cloud infrastructure</td>
<td>5%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>Networking infrastructure</td>
<td>4%</td>
<td>4%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Note: Percentages are straight average of survey responses, not weighted by company size or spend
Source: Bain Covid-19 IT Buyer Survey (N=200, April 6-8, 2020)

~45% of SMB vs 15% of Large businesses made IT budget cuts

~25% of SMB having reduced IT budgets by >20%

15% of large businesses have increased their IT budgets
Analyst Perspective: Premium on Agility and Cloud

As a result of Covid-19 there’s a premium on agility, and the cloud and associated services can give enterprises a high degree of agility

*Crawford Del Prete, IDC CEO*

When people in corporations see uncertainty, they hold back on spending

*John-David Lovelock, Gartner Chief Forecaster*

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Technologies Trending Up²

- Everything WFH & collaborative
- Hybrid and Multi-cloud
- Smart Cities, 5G, Edge, IoT, Networking
- Supercomputing and Quantum
- VDI, Streaming and SaaS apps
- Changes in supply chain and manufacturing

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1. IDC 2 Forbes
Enterprise Sector Outlook: Fast to Follow in Recovery

Technology is a force multiplier.

1. Recovery will play out over several years
2. Massive consolidation of retailers
3. First IT investments in Supply Chain
4. IT Spent is directly correlated to Sales
5. Synergy between Enterprise and Public sectors’ needs

Enterprise Sector Solution Needs

- Cyber
- Network
- Telehealth
- Remote Workforce
- Automation
- Facility Modernization
- IT Modernization
- VDI
- Supply Chain Resilience
- Data Solutions

IDC Worldwide IT Spending 2020-2023 Forecast

1. IDC
How Has the World Changed?

- **60%** believe the recession will be U-shaped\(^1\)
- **22%** believe it could be a 'double dip' recession\(^1\)

> “Our digital sales are **up 4X** in April. But going forward it is all about focusing on our team, taking care of our guests and we adjust to the marketing conditions”\(^2\)

Brian Cornell, Target CEO

> COVID-19 is like nothing we’ve ever seen before. For a company that’s 92-years-old—that's borne witness to the Great Depression, World War II, and many other economic and global crises—that's saying something.”

Arne Sorenson, Marriott International CEO

> Warren Buffett says Berkshire sold all its airline stocks because of the coronavirus.\(^3\)

$4B

> In Q1 2020, Netflix added **15.8 million** new subscribers worldwide (a company record) and **2.31 million** North American users.\(^5\)

“We’ve seen a **500%** increase in telehealth visits”\(^4\)

John M. Kravitz, Chief Information Officer

Geisinger Health System

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Pandemic Has Created More Responsibilities

For many of us, the Sandwich Generation, we are juggling both the needs of our children and our elderly parents, trying our best while also working full-time.

65 million

Americans are caregivers for relatives who might need help due to aging, sickness, or disability.

47%

of adults in their 40s and 50s

have a parent 65 or older and are also either raising young children or financially supporting a child age 18+

15%

of Americans are providing financial support to both an aging parent and a child, per Pew Research Center

https://www.apa.org/pi/about/publications/caregivers/faq/statistics
https://www.pewsocialtrends.org/2013/01/30/the-sandwich-generation/
https://aging.com/what-is-a-caregiver/

https://www.execunet.com/
Everything-as-a-Service is Posed for Growth

More than half of online grocery shoppers surveyed said COVID-19 is “leading them to permanently boost their willingness to buy groceries online.”

350%> of people surveyed by RBC, said they made their first online grocery purchase in the March.

33% of people surveyed by RBC, said they made their first online grocery purchase in the March.

$70B Amazon’s online grocery estimated to produce $70B in gross merchandise volume by 2023 --- more than 3X growth from 2019.

Shipt, a company that specializes in grocery delivery for stores like Target and Costco, saw a more than 350% YoY growth in Q2 2020.

https://www.startribune.com/target-owned-shipt-delivery-service-makes-changes-to-keep-forward-momentum/572538781/?refresh=true
Virtual Subscriptions Enabling Connection

From virtual family game nights to birthday parties with loved ones, happy hours, and even yoga classes, people are coming together creatively via technology.

32%
Of U.S. Adults had a virtual party or social gathering online with friends and family. (Pew Research Center)

1.4x
Communication SaaS offerings, such as video conferencing or online collaboration tools, have seen a spike in subscription growth rate by 1.4x.

$350B>
Pre-pandemic, Research & Markets forecasted the online education market to grow by $350 Billion by 2025.
Future of Digital Entertainment Changing

The pandemic has **accelerated changes in content consumption**. While traditional cable TV has lost popularity, demand for increased broadband has steadily grown.

**OTT video subscriptions** grew 7x in March 2020 compared to the previous 12 months.

Of U.S Consumers have participated in some form of **video gaming activity** – with younger generations over indexing (Gen Z, 75%)

Of consumers said they will **not be comfortable attending live events** for the next 6 months per Deloitte (June ’20)

Emphasis on the Digital Divide

The pandemic has brought about new questions on how we can reimagine our resources to better serve our communities and modernize K-12 education.

1 in 4
American households have at least one child age 14 years or younger at home.

25%
Of U.S. students from disadvantaged backgrounds noted they had no computer to work on, in survey from World Economic Forum.

33%
Of students in rural communities have little to no access to Internet, which is fundamental to distanced learning.

https://www.npr.org/2020/04/24/843411430/even-in-crisis-times-there-is-a-push-to-wire-rural-America
Intel’s Covid-19 Response

- **>1M** PPE for healthcare workers
- Granting **Free access to IP** for COVID-19 researchers and scientists
- Investing more than **$100M** to support our employees
- **$50M** Intel Pandemic Response Technology Initiative
- Tech collaborations: **TELEMEDICINE, CRITICAL CARE, RESEARCH**
- **$10M** relief efforts in communities around the globe
- Factory operations: **>90%** on-time deliveries*

* Factory operations >90% on-time deliveries is a percentage value and should be converted to a suitable format for display.
“Don’t be encumbered by history. Go off and do something wonderful.”

- Robert Noyce, Co-Founder of Intel

Let’s Explore the Possibilities Together.