Accelerating Digital Transformation for Socio-Economic Development

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The Digital Conundrum
Where are the moonshots and “giant leaps”? 

- ~50 years ago, we travelled to the moon with far less computing power than our phones today
- More than 400,000 engineers, scientists and technicians to accomplish the moon landings
- It took 8 years for the first human to travel to the moon (1961 – 1969)
We must transform from making incremental gains to Giant Leaps…

Incremental Thinkers
Has innovation become incremental?

From Innovators to Upgraders?
How did we transition from breakthrough innovations to incremental upgrades?

Rise in Digital Divide
Have we reached a point of diminishing socio-economic returns?

Has Technology killed human creativity?
COVID-19 has spurred rapid adoption of Digital Innovation, propelling us into a new age faster than we ever could have imagined.
“COVID-19 has triggered the deepest global recession in eight decades”
– World Bank, June 2020

- Global growth in 2020 to shrink by 5.2%
- Cumulative loss to global GDP over 2020 - 2021 could be $9 trillion
- Global trade would fall by between 13% and 32%
- Global FDI flows to contract between 30% to 40% during 2020/21

Source: World Bank, IMF, WTO, UNCTAD
There has been an unprecedented increase in US Unemployment Rate far surpassing previous crises.

- **Combination of 9/11 and dotcom bust (10%)**
- **Credit Crisis (14.7%)**
- **COVID-19 Pandemic (14.7%)**

Unemployment increase resulting from global disruption/crisis.

- **Steady recovery (~ 4 years)**
- **Prolonged recovery (~ 8 years)**

Over 45 million Americans applied for unemployment insurance over the past 3 months.

Pace of layoffs slowed sharply from its peak of 6.6mn at the start of April to 1.5mn week ending June 13.

# RadarView™ - Coronavirus Impact Index by Industry – March 2020

<table>
<thead>
<tr>
<th>Categories affected by COVID-19</th>
<th>Banking, Financial Services &amp; Insurance</th>
<th>Energy &amp; Resources</th>
<th>Healthcare</th>
<th>High-Tech &amp; Telecoms</th>
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<th>Universities &amp; Colleges</th>
<th>Non-profits</th>
<th>Travel &amp; Transportation</th>
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**Legend**
- ⬜ Minor Impact
- ⬜ Moderate
- ⬜ Significant
- ⬜ Major
- ⬜ Severe

Source: Avasant Research © 2020
## Categories affected by COVID-19

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### Overall Avasant Assessment

- **Minor Impact**
- **Moderate**
- **Significant**
- **Major**
- **Severe**

### Legend

- **Improvement**
- **No Change**
- **Decline**

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Source: Avasant Research © 2020
There are some winners....

Digital Disruptors have dominated the US Stock Market surge amid the global pandemic.

- **Amazon**: 25% increase in Mkt. cap since start of COVID-19, hired 100,000 extra US workers to cope with demand.
- **Netflix**: 30% increase in Mkt. cap since the start of COVID-19.
- **Zoom**: Added over $30 billion in market value this year, tripling its stock price from start of Jan.
- **Microsoft**: 16% increase in Mkt. cap for 2020.
- **Gilead**: 14% increase in Mkt. cap with largest single day gain in 8 years on April 17, 2020.
Winning Organizations are Disruptive

Transforming core business processes
Identification of new customers and value chains
Preparation for new competition
Drive a Culture of Innovation

Tenets of Enterprise Disruptive Experience

Enterprise Disruptive Experience

Value chain reconfiguration
Competitive Differentiation
Business Process Transformation

NETFLIX
TESLA
The Digital Transformation Imperative
How will we apply Digital Singularity to transform?

- **Barrier-free Access**
- **Democratized Egalitarianism**
- **The Sharing Economy**
- **Transboundary Community**

**Digital Singularity Rubric**

- **Four Pillars of Digital Singularity**
- **Technology Prerequisites**
- **Rules of the New Economy**

** Bringing multiple technologies to create something new**

**Multi-sensory, real-time data that enhances experiences**

**A transaction within a transaction**

**A real-time virtual model of your physical self**

**Internet of Things**

**Artificial Intelligence & Analytics**

**Cloud**

**Digital Moments**

**Hyper-Convergence**

**Transboundary Community**

**3D Printing**

**Augmented Reality**

**Digital Twins**

**Blockchain**

**Intelligent Automation**

**Cyber Security**

**5G Networks**

**The Sharing Economy**

**Democratized Egalitarianism**
Components of Digital Transformation

Digital Operating Models
Creating an agile organization with a culture of innovation and end to end digital integration

Digital Business Models
Pivoting the business model to drive digital revenue and proactively address market disruption

Digital Experiences
Driving deeper engagement through intuitive and ubiquitous user experiences that enhance digital entanglement

Digital transformation evolves from three layered models that work in concert to enable an end to end Digital experience for everyone – Customers, Partners, Vendors, Employees, Stakeholders …
The rise of Digital Native companies

To succeed in the digital era, firms will need to become digital enterprises, rethinking every aspect of their business and aligning their operating model in order to create digital experiences.

Born Digital

AI at the core

- Largest accommodation provider owns no real estate
- Fastest growing wealth management firm has no financial advisors
- Fastest growing bank has no actual money
- Largest movie house owns no cinemas
- Largest online retailer only makes 10% of its profits on retail
- Most valuable retailer has no inventory
- Most popular media company creates no content
- World’s largest Taxi company owns no cars
- Largest software firm doesn’t create Apps
Digital transformation investment impacts from COVID-19

- **March 2020**: Social distancing and lockdown begins
- **May-June 2020**: Projects in key enablement areas pick up again, but will be driven by continuing uncertainty
  - Unified communication
  - Hybrid cloud
  - Automation
  - Cybersecurity
- **April 2020**: 33% of organizations were cutting new project budgets
- **Pre-COVID**: 57% Organizations were increasing spending on DX
- **+6 to 9 months**
  - Large scale digital projects will restart
  - Digital investments will scale up and lessons learned applied
  - Digital-driven innovation to stay ahead of the competitive curve

**DX adoption pre-COVID-19**

**DX adoption post COVID-19**

- 30% of organizations have cut their IT operational budgets
- 25% of organizations are cutting their outsourcing budgets by 10%-25%

**Source:** Avasant Computer Economics Research 2020
Organizations must accelerate digital transformation to enable rapid Business Stabilization & Recovery.

**Optimize IT spend and shift from “Run” to “Innovate” the business**

**Accelerate agility and efficiency through Cloud and DevOps**

**Expand digital initiatives such as Automation, AI, Analytics, IoT**

**Flexible workforce capacity and execution agility**

**Business Continuity & Contingency Management**

**Stronger Data Privacy & Cybersecurity**
Digital Masters 2020 RadarView™
The Leading System Integrators supporting global enterprises on Digital Transformation

LEADERS
- Accenture
- HCL
- IBM
- TCS

INNOVATORS
- Cognizant
- Infosys
- Wipro

DISRUPTORS
- Atos
- Capgemini
- DXC
- LTI
- NTT DATA
- Tech Mahindra

CHALLENGERS
- Mindtree
- Mphasis
- UST Global
- Zensar
Impact on Socio-Economic Development
Digital Economy is an imperative for Socio-Economic Development

A multiplier effect ...

- **GDP Growth**: 0.5% increase in national GDP with 1% increase in digitalization
- **Unemployment**: 0.86% drop in unemployment from 10% increase in digital
- **International Trade**: 1.9% increase in int’l trade from 1% increase in digitalization
- **Social Welfare**: 3.67% increase in avg. household monthly income from DX initiatives

Source: Impact of e-government strategy on economic growth and social development, SCTE Business School, Department of Economics
COVID-19 will have a lasting Impact on Developing Economies

>5% Average Negative GDP Growth (Developing Economies)

Rapid decrease in foreign and domestic investments will significantly impact developing economies. Large scale borrowings will further negatively impact Debt-GDP balance.

125 Mn Job Losses in Services Sector by 4Q 2020

Over 40% of the job losses will be permanent owing to long recovery cycle. Large scale reskilling effort essential to ensure re-employment and 'new normal' adoption.

1-3 Years for Key Services Sector - Tourism, Airlines, Hospitality to Recover

Travel and Tourism dependent economies will see a precipitous drop in revenue collection effecting spending for nearly 1-3 years. Transition to related services sector can ease long term economic stress.

>40% Negative Global FDI Growth (20-21)

Negative FDI growth/outflow will impact growth. Focusing on domestic investment, entrepreneurship, re-aligning sectoral polices can help economies recover faster and become globally competitive.

*Source: UNCTAD, Avasant Research. Considers only developing economies
COVID-19 Socio-Economic Impact - Response Cycle

- **Crisis Awareness**
  - Normal Economic Growth

- **Public Health Crisis Mitigation**
  - Economic Risk Mitigation

- **Today**
  - Socio-Economic Stabilization
    - COVID Initiatives Rollout
      - Support for critical sectors
        - Public Services, SMEs, Trade, Supply Chain, Health, Education
      - Digitalization in Public/Pvt sector
      - Trade & Investment incentives
      - Support for impacted Services sectors
        - Food, Retail, Tourism, Travel
      - Re-skilling talent, Digital skills

- **6-12 Months**
  - New Normal
  - Shorter Recovery Cycle
  - Stronger Economic Return
  - Longer Recovery Cycle
  - Moderate Economic Return

**Source:** Avasant
The significance of Digital Adoption

Economies with higher degree of Digital Adoption will be able to significantly limit both the social and economic impact while having a shorter recovery cycle.

- Digital Services to Emerge as a recession proof and growth sector
- Digital Re-skilling essential to prepare Services Sector Workforce for the ‘New Normal’
- Socio-economic Development
- Growth in Digital Services
- Public/Pvt Sector Digital Adoption
- Digital Reskilling
- Localization of Globalization will be Realigned in favour of Domestic/Regional focus
- Digitalization of Business in Govt and Private sector to accelerate

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Prerequisites for building a Digital Economy

- **Digital broadband infrastructure for executing digital services**
- **Open government platform, that enables local firms to leverage APIs and Open Data to deliver digital services**
- **Digital platforms to improve the ease of doing business and expedite the execution of key business processes.**
- **Accessible, efficient and transparent administration of public sector services**
- **Regulatory environment which facilitates digital business models and emerging technology**
- **Digital Platforms to connect local talent to investors and employers**
- **Develop training with emerging trends and future needs of organizations**
- **Access to Capital and Ease of Loans**
- **COEs to facilitate partnerships and accelerate time-to-market for startups and investors.**
- **Angel Investors and Investor Network**
Digital Technologies in Public Services – A Game Changer

Adopting Cloud, Digitization, AI, Automation and Advanced Analytics in Public Services and Government can significantly improve citizen services and transparency.

**BENEFITS**

- **Cloud IoT**
- **Wireless/5G**
- **Blockchain**

- **Connected Citizens**
  - Improve Revenue Collection
  - Fosters innovation & entrepreneurship

- **Government Transparency**
  - Proactive Risk Management (Natural Disaster, Compliance)
  - Reduce Paperwork
  - Improve Competitiveness
  - Improve Governance Backlog

- **Reduce Corruption**
- **Policy and Legislative Guidance**

- **Investment Attraction**
  - Better Law Enforcement
  - Improve Public Workforce Efficiency

- **Connected Citizens**
  - Community Pulse (Instant Feedback Loop)

- **Overcome Resource Constraints** (Physical & Human)
- **Improve Government Services (G2C)**

**Digitization Automation Cognitive/AI Big Data/Analytics**
Three Development Pillars for Mitigating and Recovering from COVID Impact

**DEVELOPMENT PILLARS**

01. **DIGITAL ECOSYSTEM ENABLEMENT**
   - Digital Data Policies & Standards
   - Bandwidth/Network Upgrade (Last Mile, WANs, 5G)
   - Risk Mitigation (Cyber Security, Data Privacy, Compliance)
   - Public and Private Sector Digitalization (Egov, e-Procurement, Virtual Marketplaces, B2B Exchange)
   - IT Infrastructure Virtualization (Cloud, 5G, SD-WAN)
   - Acceleration of Digital Services Adoption

02. **WORKFORCE STABILIZATION**
   - Mobility Solutions
   - Work From Home
   - Remote Communication & Collaboration
   - Digital Skills/Re-skilling
   - Online/Virtual Training For Vocational/Essential Skills
   - Enabling Gig Economy & Virtual Jobs

03. **SOCIO-ECONOMIC REINFORCEMENT**
   - SBE Financial Support
   - Public Health System Strengthening
   - Essential Supply Chain Business Continuity
   - Trade value chain digitalization (RFID, IoT, AI, Automation, Blockchain)
   - Investment Facilitation through Digital Marketplaces
Avasant’s Digital Competitiveness Index (DCI™)
Ranking the top 80 countries that lead in the digital economy

Global Equations Digital Competitiveness 2020

- Leader (>65)
- Innovator (>55)
- Challenger (>45)
- Emerging (<45)
DCI™ provides a barometer for a country’s growth potential in the digital economy

- DCI™ helps nations position themselves to attract knowledge and technology enabled investments and create jobs that are suitable for the digital economy
- The Index enables locations to identify existing gaps and comparative advantages, in turn enabling better policy decisions and preparedness for a technology driven global ecosystem
Enabling Socio-Economic Growth through Digital Innovation

The 2020’s will usher in an era where technology becomes ubiquitous and seamless integration of global economies will enable growth opportunities across emerging regions

**Drives**
- Digital Consumerism
- Ubiquitous Information
- Exponential Increase in Computing Capacity
- Lower Communication Costs
- Borderless Services Sector
- Growth of Digital Skills

**Technology Prerequisites**
- Automation, RPA
- IoT, Cyber, 5G
- Blockchain, DLT
- Cloud, Microservices
- Big Data & Analytics
- Cognitive, AI/ML

**Potential Impact**
- Rapid Innovation
- Borderless Economies
- Better Governance
- Higher Competitiveness
- Enhanced Creativity
- Social Equality
- Better Resource Allocation
- Lower Corruption
- Increased Productivity
- Efficient Public Services

**Enabling Socio-Economic Growth through Digital Innovation**

The 2020’s will usher in an era where technology becomes ubiquitous and seamless integration of global economies will enable growth opportunities across emerging regions.
Final takeaways...

- There will be real human impacts, far beyond the virus itself.
- Digital innovation will lead the way to business and financial recovery.
- Technology will bridge the gap between economic growth and social progress.
We will recover from COVID-19. . .

but we will never be the same