



# Impacts of COVID on VC Investment and the B2B Technology Markets

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OCTOBER 2020

**Carnegie  
Mellon  
University**  
Swartz  
Center for  
Entrepreneurship

# AGENDA

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Which B2B sectors are moving “fast forward” in a post-COVID world?

1 Pre-COVID B2B Markets

2 COVID As An Market Adoption Accelerator

3 VC Investment Shifts During COVID

4 Sneak Preview of MBA Survey Results

# Illuminate Focus and Team

HISTORY OF FINDING AND SCALING COMPANIES WITH A COMBINED TOTAL OF 5 IPOs AND 15 M&A EXITS

- 100% focused on B2B/**ENTERPRISE SOFTWARE**
- Invested at **SEED STAGE** across 30 companies
- **TRUSTED ADVISORS** 18 board roles, 1<sup>st</sup> call from CEOs
- **PLATFORM** 45 world-class B2B execs and >70 MBA intern graduates as **SCOUTS** and additional resources to our portfolio
- Advocates for **DIVERSITY** in entrepreneurship with 70% diverse/40% female founders
- **THOUGHT LEADERSHIP** surveys, white papers and B2B pieces with 100s of media citations



**Cindy Padnos**

15 years VC with 2 IPOs and 7 M&A exits  
12 years enterprise software operator  
Exec team on 1 IPO, 2 M&A exits  
Early SaaS adopter as CEO 2X, founder 1X



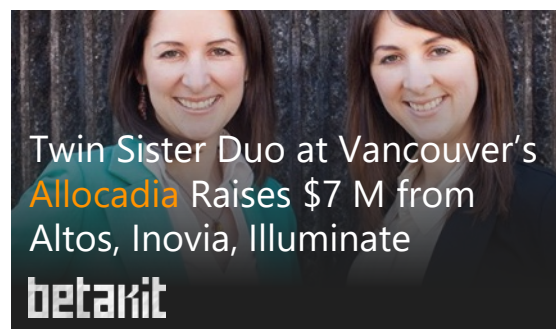
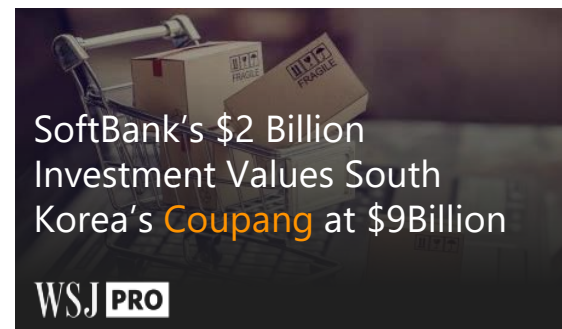
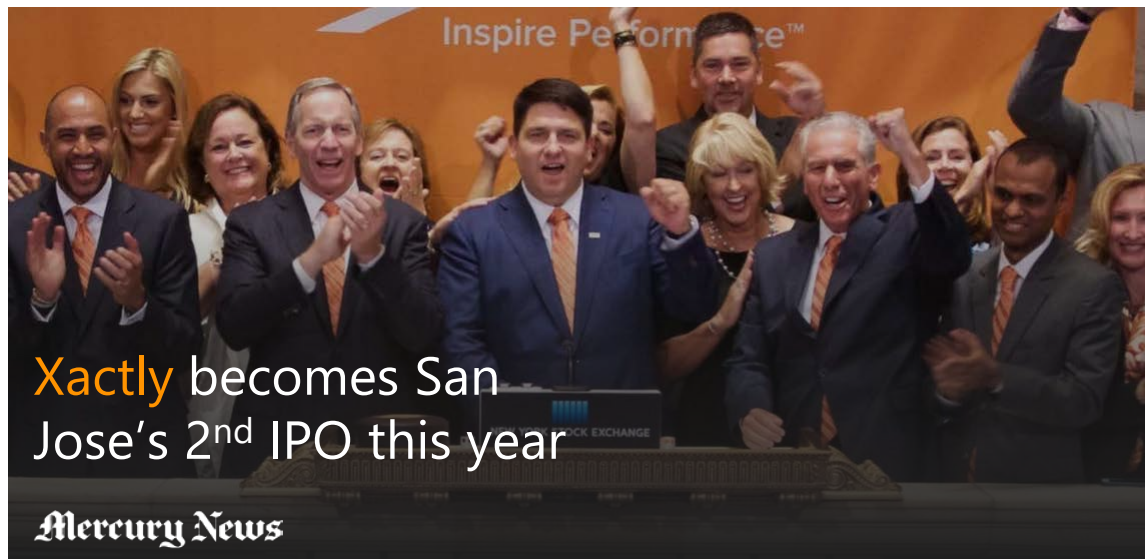
**Jennifer Savage**

VC with Illuminate since 2019  
25 years enterprise software operator  
Exec team on 2 IPOs, 4 M&A exits



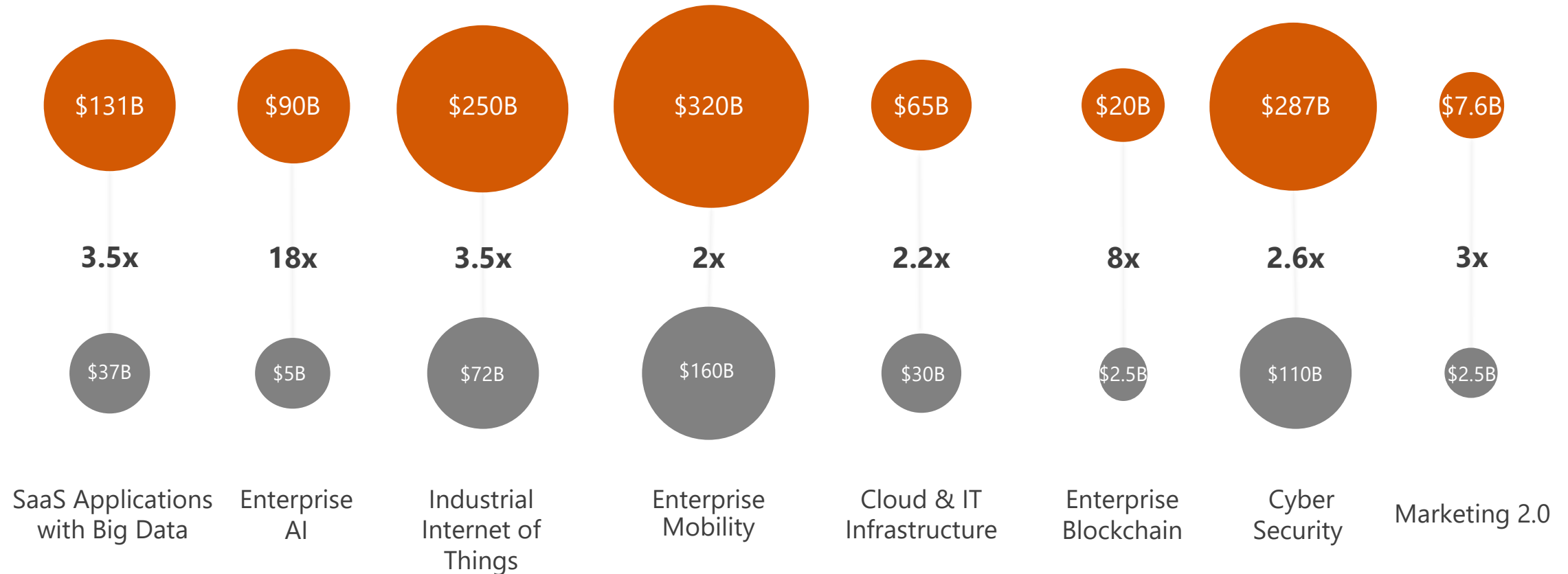
# Illuminate's Companies Become Market Leaders

2 IPO, 7 M&A EXITS AND >\$4B IN FINANCING COMMITMENTS FOLLOWED ILLUMINATE'S \$40M



# 2019 B2B Sectors of Digital Transformation

PROJECTED MARKET GROWTH NEXT 5 YEARS



# And then this happened...

Who led the digital transformation of your company?

A) CEO

B) CTO

C) COVID-19

# We Seek To Invest at the Intersection of Multiple Trends

PROVIDING TAILWINDS TO ACCELERATE GROWTH



# Some Very Rapid Shifts Within Enterprises due to COVID

SOME CHANGES WERE NEARLY IMMEDIATE – OTHERS WILL DISPLAY OVER TIME – AND SOME MAY BE SHORT-LIVED

## Before

- Centralized offices
- Classroom training
- Asynchronous communication
- Professional coders
- Separate parallel channels
- AI “experiments”
- Physical IT infrastructure

## After

- Remote first for white collar workers
- Online training
- Synchronous, collaborative communication
- Low code/no code
- Omni-channel experiences
- Hyper-automation/RPA with instant ROI
- Cloud-based IT infrastructure

# Every Category of IT Spend Forecast to Decline in 2020

BUT SOFTWARE SPEND IMPACTED LESS THAN MOST – AND SOME SUB-SEGMENTS ACCELERATING

**Worldwide IT Spending Forecast (Millions of U.S. Dollars)**

IT Spend Sector	2019 Spending	2019 Growth (%)	2020 Spending	2020 Growth (%)
Data Center Systems	\$210,053	0.6	\$188,365	-10.3
Enterprise Software	\$476,687	11.7	\$449,506	-5.7
Devices	\$711,525	-0.3	\$596,914	-16.1
IT Services	\$1,040,263	4.8	\$969,438	-6.8
Communications Services	\$1,372,236	-0.6	\$1,326,492	-3.3

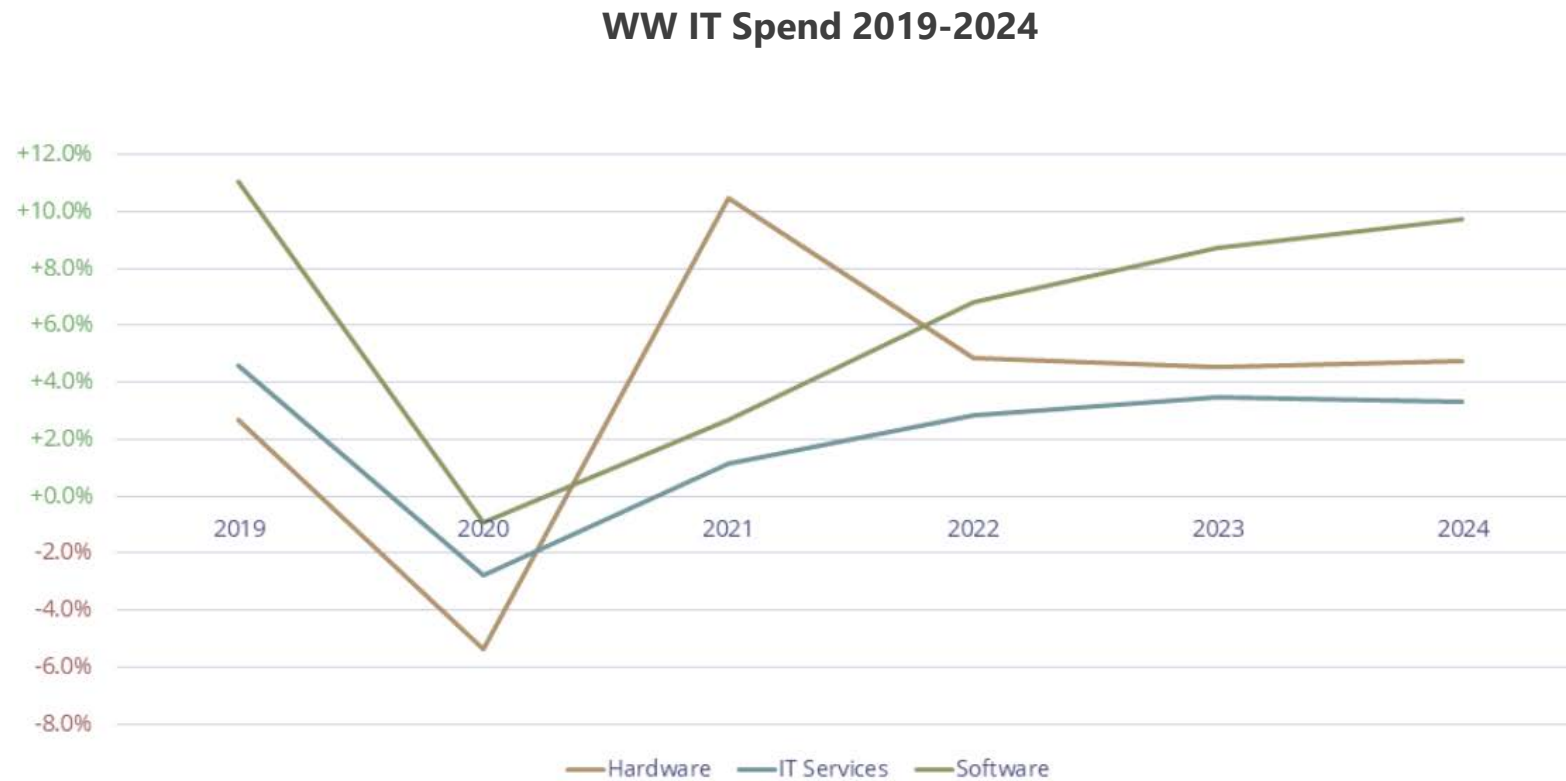
# IT Investment Impact Varies Significantly by Industry

AND UNCERTAINTY REMAINS FOR SOME VERTICALS IN THE LONGER TERM

Industry	Short-Term Impact on Tech. Investment	Long-Term Impact on Tech. Investment
Banking and Securities	Negative ↓	Uncertain ↔
Communications	Positive ↑	Positive ↑
Education	Positive ↑	Positive ↑
Public Sector	Positive ↑	Positive ↑
Healthcare	Positive ↑	Positive ↑
Insurance	Negative ↓	Uncertain ↔
Manufacturing	Negative ↓	Uncertain ↔
Retail	Negative ↓	Uncertain ↔
Transportation	Negative ↓	Negative ↓

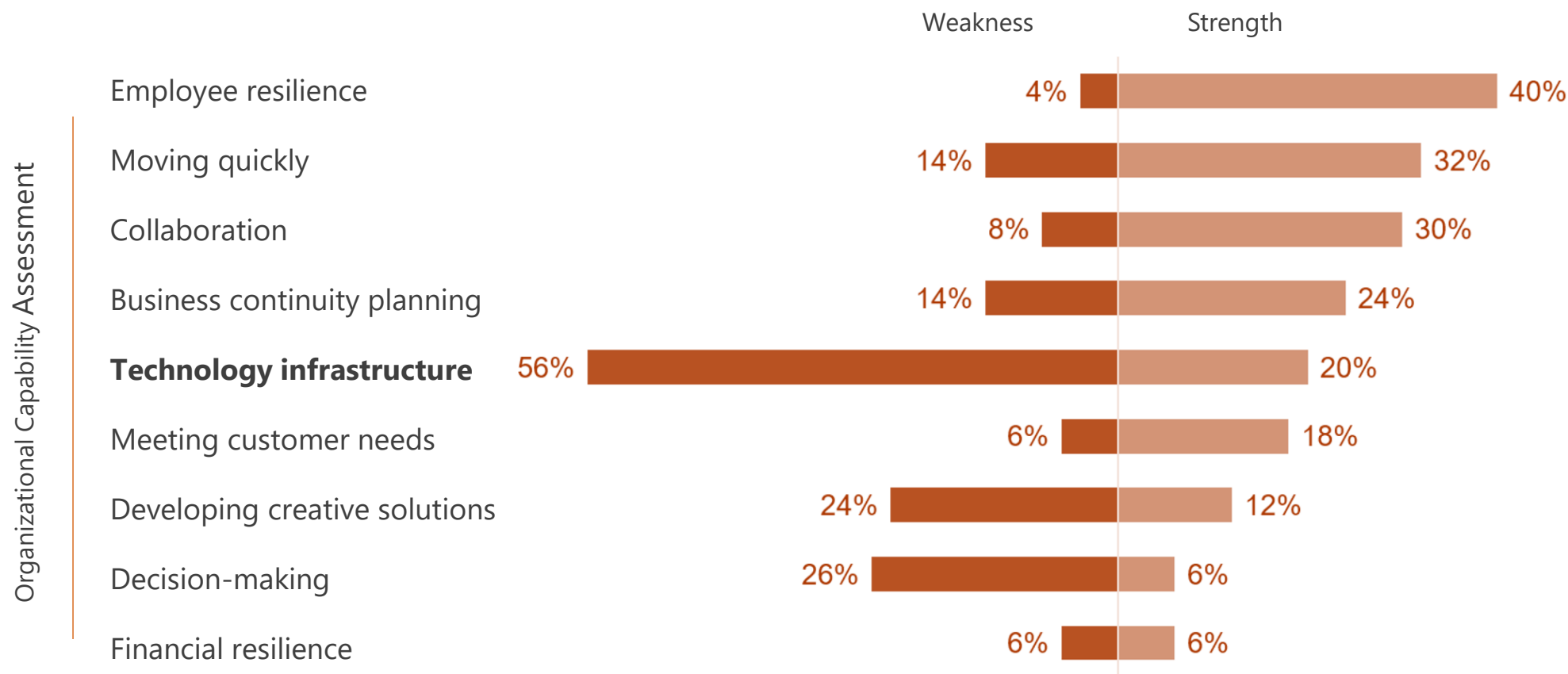
# IT Spending Rebound is Expected Relatively Quickly

WITH SOFTWARE INVESTMENT SEEING CONTINUED GROWTH OVER TIME



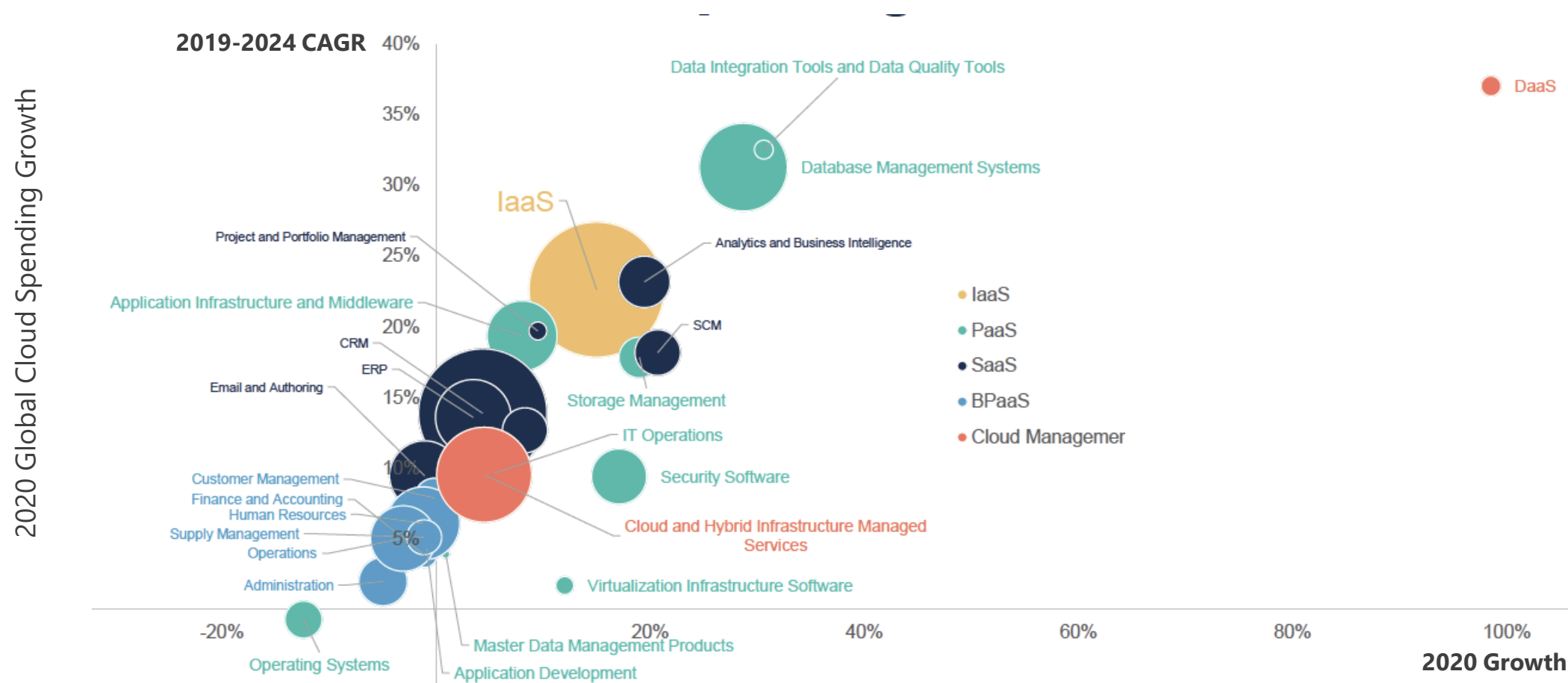
# Tech Infrastructure Viewed as Critical Weakness

WHILE MANY OF THE MORE 'HUMAN' FACTORS PERCEIVED AS A STRENGTH OF THE BUSINESS



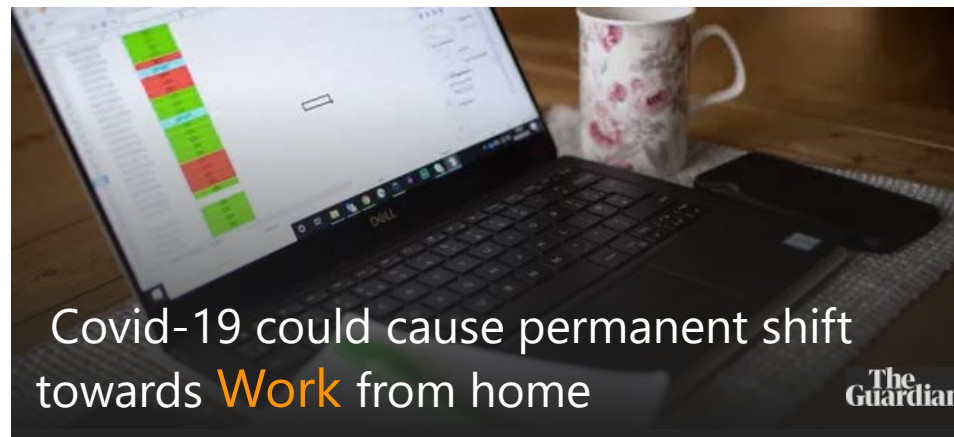
# Cloud Software Far Outpaces Overall Software Growth

CIOs GRAVITATE TOWARD SPENDING ON SUBSCRIPTION AND CLOUD SERVICES TO LOWER UPFRONT COSTS



# Assessed COVID Shifts in 5 Areas Initially

SOUGHT TO IDENTIFY KEY TRENDS AND WHERE THEY INTERSECTED



# Agility

DEMAND EXPLODES FOR EVOLVING BUSINESS MODELS AND PROCESSES FASTER

## Rising Trends

### Market

- Freelance/Crowd-economy use up
- Globalization – Geo diversity to survive local/single-source impacts

### Business

- Borderless workforce – To avoid layoffs, ramp quickly, change location
- Decentralized decisions – Speed a must

### Tech

- Cloud/SaaS - Everything goes online
- AI and Analytics - For transparency

## Accelerating Segments

- Cloud/SaaS Apps
- DevOps
- Supply Chain
- Collaboration
- AI-assisted Humans / analytics / RPA and Hyper-automation

# Work

SUDDEN SURGE IN REMOTE WORK CHANGES BEHAVIOR, STRESSES SYSTEMS AND PROCESSES

## Rising Trends

### Market

- Talent Shortages – Access to broader talent pools
- Lifelong Learning – Creating an adaptive, resilient workforce

### Business

- Borderless Workforce
- Collaborative Engagement

### Tech

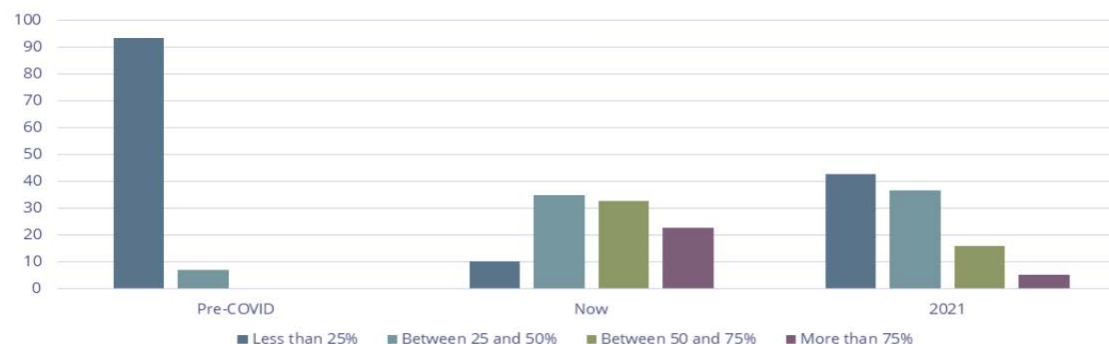
- Cloud/SaaS – Anywhere access for distributed teams

## Accelerating Segments

- Collaboration and Communication Tools
- Corporate eLearning
- Employee Performance Management
- Network Security

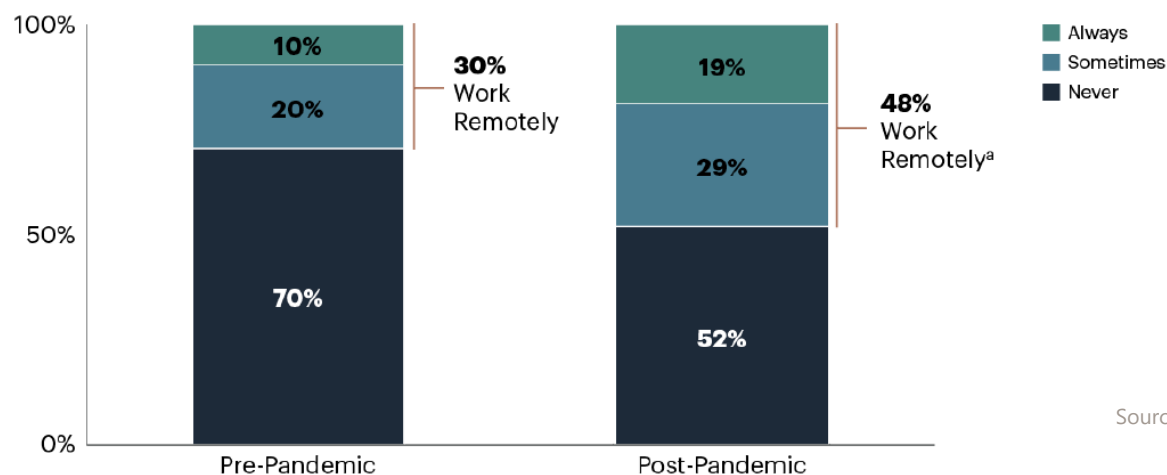
# Work From Home Rates May Shift Somewhat Over Time

While there is a big leap in the % of time employees WFH today, it is expected to mitigate somewhat over time



Source: IDC Survey, 2020

Another view suggests that nearly 20% will always WFH enough more part-time to have eh total represent nearly half of all workers



Source: Gartner Survey, 2020

# E-learning Platforms are Accelerating

THE FUNDAMENTS WERE ALREADY IN PLACE

But many new entrants are creating more immersive and engaging approaches



# Omni-channel & Experience Customer Engagement

CUSTOMER AND SELLING EXPERIENCES GO EVEN MORE VIRTUAL

## Rising Trends

### Market

- Informed On-demand, and
- Anywhere Access

### Business

- eCommerce – Unprecedented uptake
- Omni-channel – One channel not enough

### Tech

- AI/Analytics – Higher volumes of data
- Many new modalities, all integrated

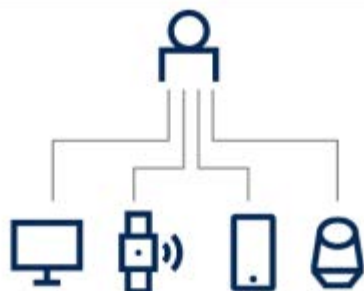
## Accelerating Segments

- Conversational AI
- Customer Analytics
- AR/VR
- Cloud Contact Centers
- Omni-experiences

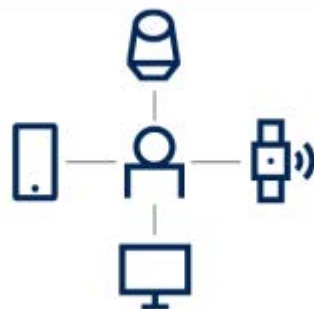
# Omni-Experience

AUGMENTED, MULTI-SENSORY INTERACTION WITH TECHNOLOGY EMBEDDED IN DEVICES AND PHYSICAL WORLD

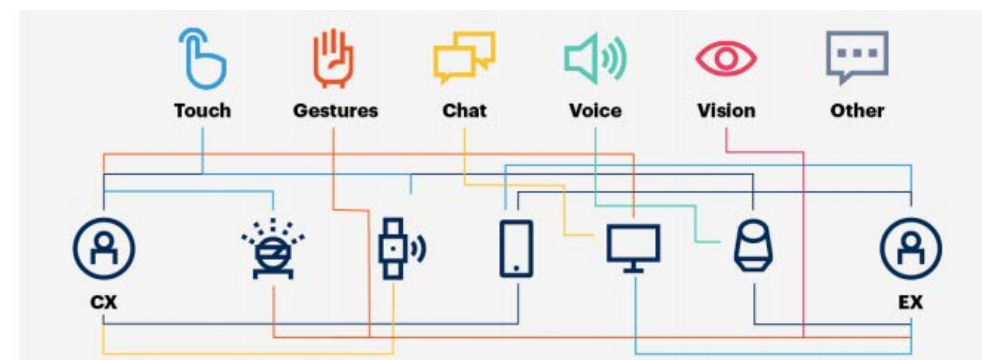
## Multichannel



## Omnichannel



## Omni-Experience



**By 2023...**

**65%**  
**Consumers**

will be using voice, images and AR for interacting with brands with their mobile device, extending physical and digital experiences

**45%**  
**Enterprises**

will exploit Smart Personalization for context-based customer engagement, utilizing AI, Big data and conversational computing

# Security & Privacy

MORE PEOPLE ONLINE MORE OF THE TIME INCREASES RISK

## Rising Trends

### Market

- Anywhere Access – Shift to ecommerce
- Consumer Privacy - Regulation coupled with conf/video/surveillance way up

### Business

- Customer Experience
- Ethics & Trust - Part of brand pushed by COVID communications

### Tech

- AI/Analytics - More complex, higher volume of data

## Accelerating Segments

- Data Privacy Management
- Integrated Risk Management
- Network Security

# Supply Chain

JOLT TO SYSTEMS CREATES RUSH FOR IMMEDIATE VISIBILITY AND FLEXIBILITY

## Rising Trends

### Market

- Globalization, the world in pandemic
- Anywhere access , everyone remote

### Business

- Agility, flexibility and visibility
- Borderless workforce, distributed teams

### Tech

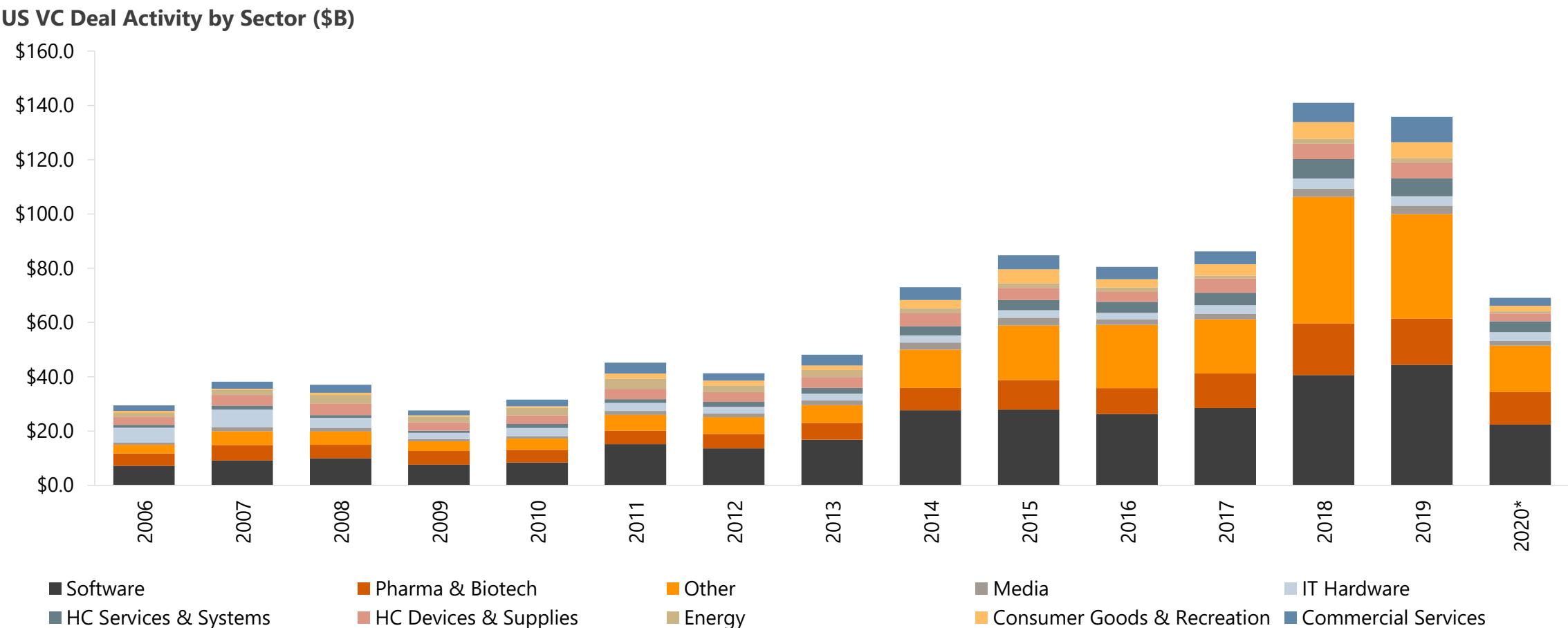
- IoT/Edge, process/manage the supply chain
- Robotics automate and augment for efficiency, safety, business continuity

## Accelerating Segments

- Supply Chain Management
- IoT Software (Asset Management, Fleet Management)
- AI-assisted Humans / analytics / RPA

# How COVID is Impacting Venture Capital Investing

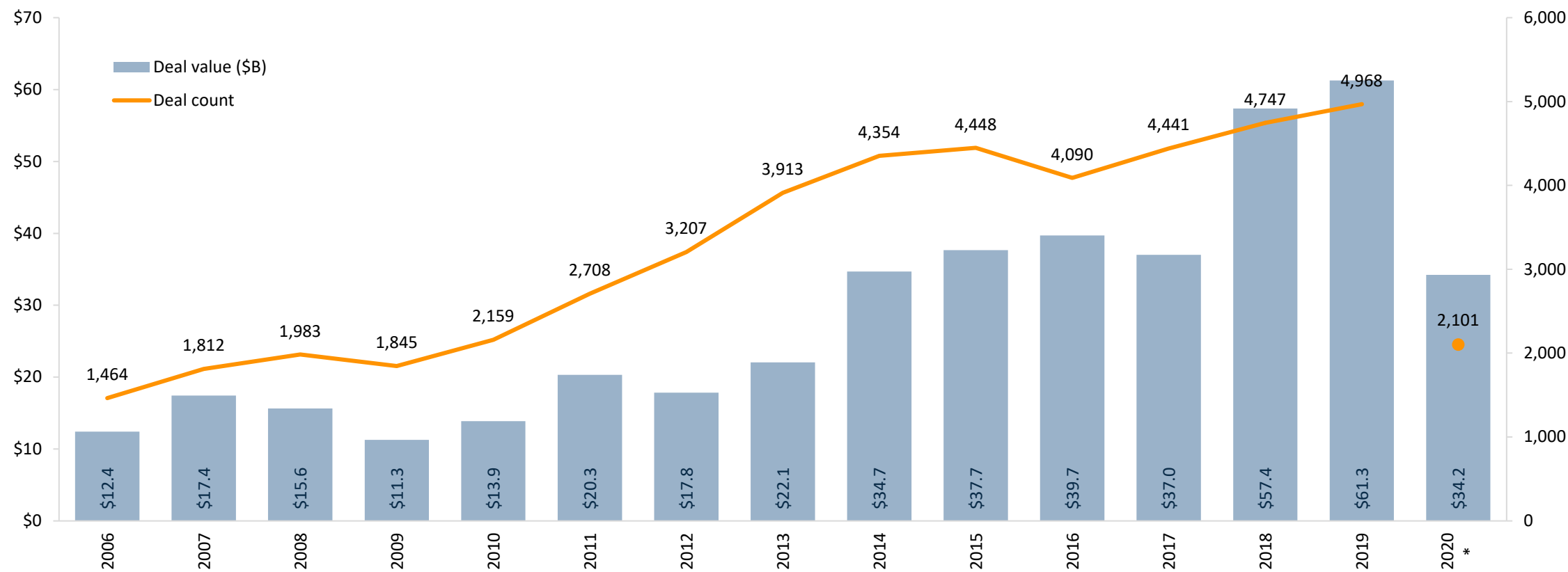
CAPITAL INVESTED ON PACE WITH 2019, EVEN AS DEAL COUNT FALLS – BIO/PHARMA TAKING LARGER SHARE



# B2B Tech Deal Volume Down Slightly During Pandemic

BUT VALUATIONS HAVE INCREASED – POSSIBLE NEW PEAK IN 2020

US VC B2B Tech Deals by Year

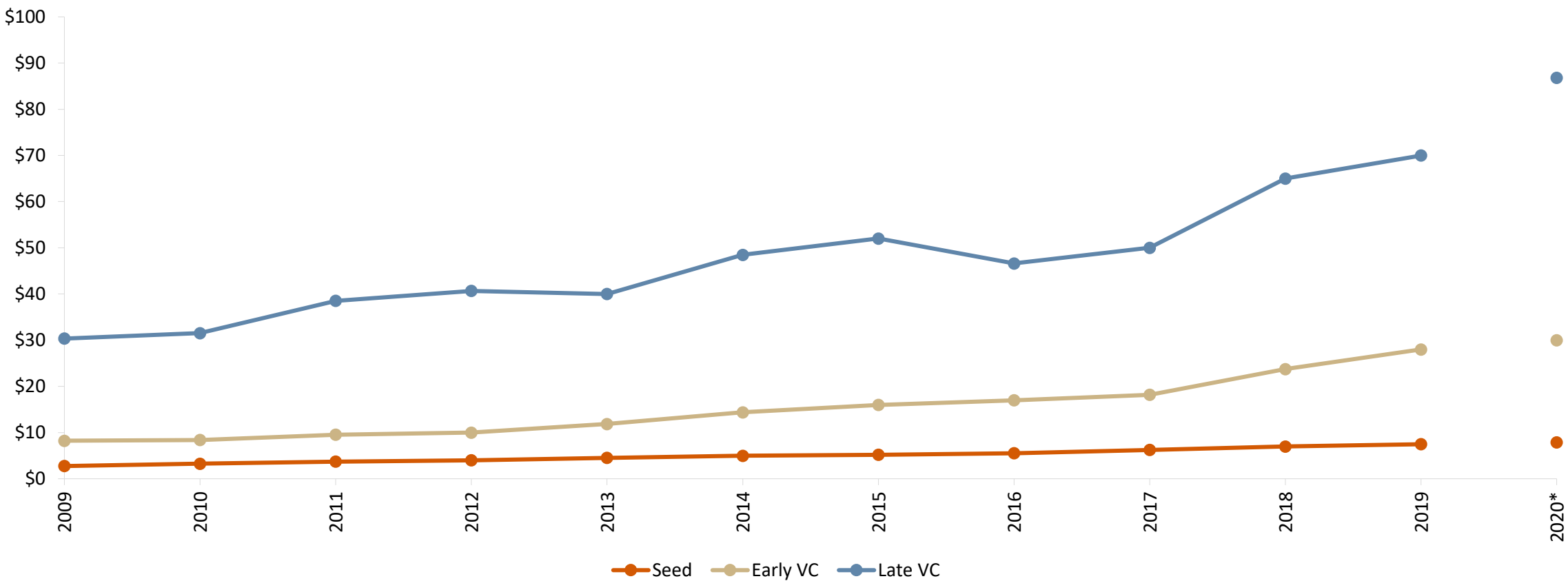


B2B Technology companies are defined as companies offering technology-focused or technology-enabled solutions and whose customers are primarily other businesses.

# But Seed Valuations Declined for First Time in 10 Years

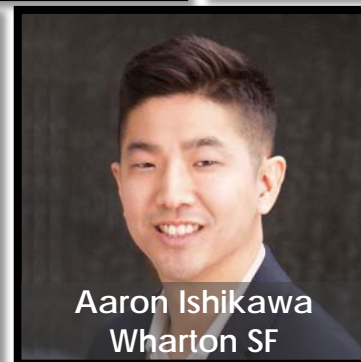
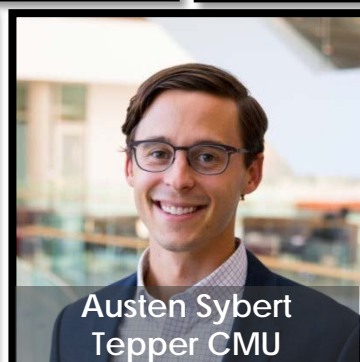
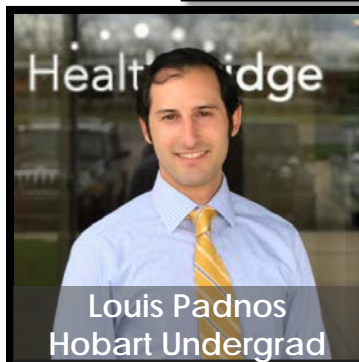
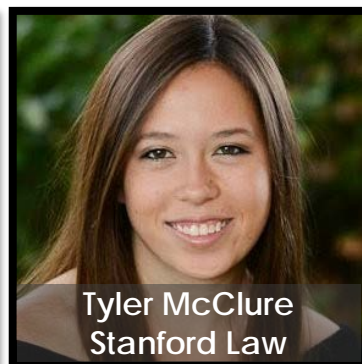
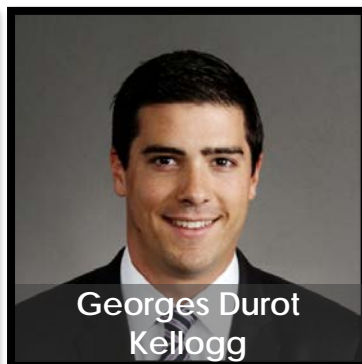
LATE STAGE FINANCINGS SEEING EXTRAORDINARY ONGOING LIFT

US VC Median Pre-Money Valuation (\$M) by Stage



# Illuminate's Interns 2019-2020

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# Sneak Preview: Survey & Whitepaper Update

FORTHCOMING FALL 2020: "TODAY'S MBA STUDENT IS TOMORROW'S ENTREPRENEUR"

## Background

- 3<sup>rd</sup> in a series of collaborations with Tepper students
- Ongoing goal to understand entrepreneurial opportunity, with a gender lens
- Focus on MBA students – direct outreach to two dozen highly ranked programs in the US
- Assisted by Poets & Quants (> 2M month visitors reaching 85% of MBA population)
- Over 500 responses, 22 MBA programs, >65% diverse including >30% women

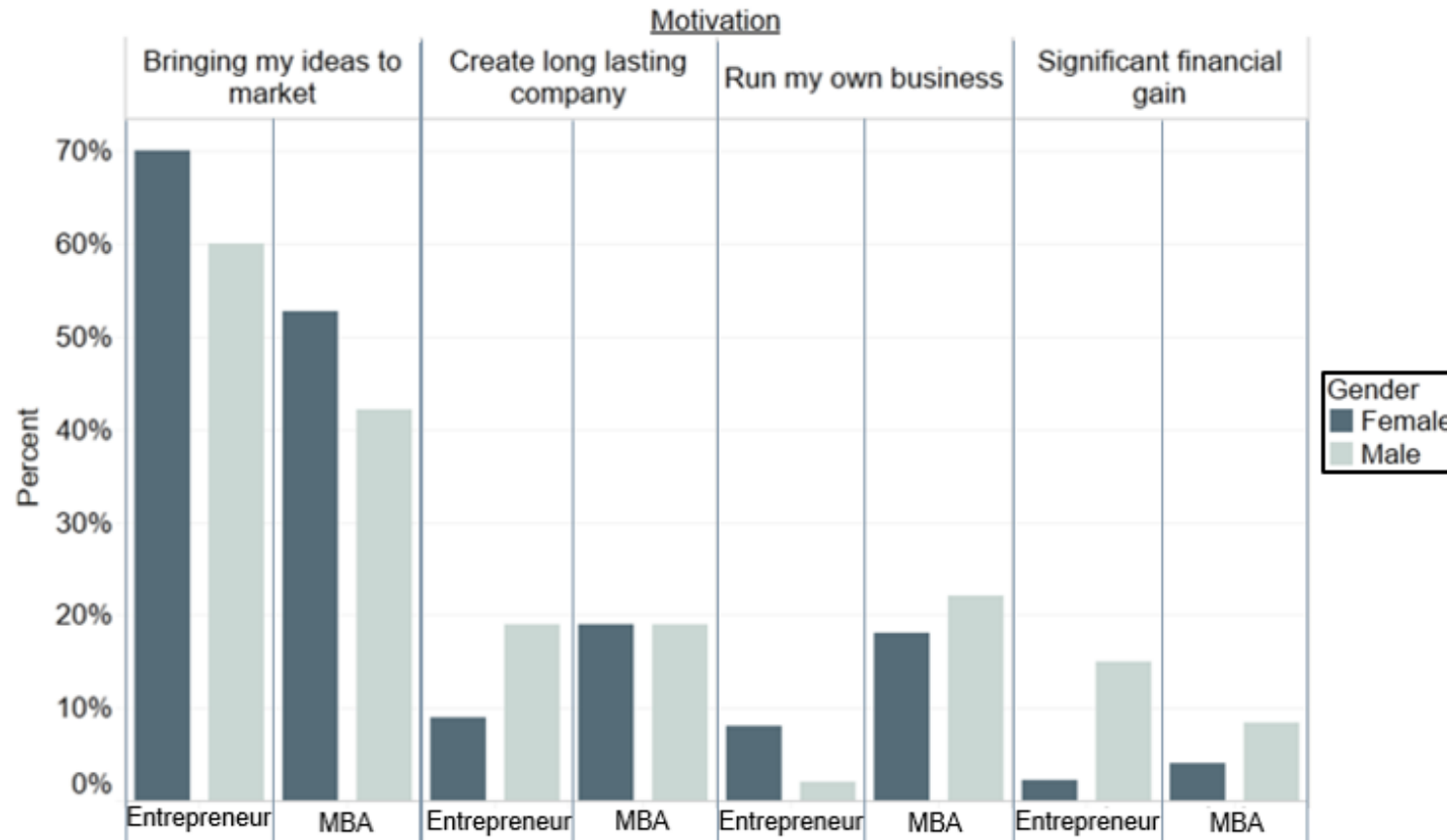
Tepper Students  
This Paper:

Cara Giannandrea  
Tepper 2021

Natalie Gerber  
Tepper 2020

# Top Motivations to Choose Entrepreneurship

CURRENT ENTREPRENEURS AND MBA STUDENTS HAVE SIMILAR REASONS TO BE FOUNDERS



Source: Illuminate Ventures Surveys 2018, 2019 and 2020

# Differing Views on Barriers to Entrepreneurship

STUDENTS, ENTREPRENEURS AND VCS SEE THE BARRIERS AS HAVING VERY DIFFERENT LEVELS OF IMPACT

Barrier	Female MBA	Male MBA	Female Founder	Male Founder	Female VC	Male VC
Concerns re: financial security	1	1	2	1	5	8
Access to startup capital	2	2	1	2	2	3
Access to the right networks	3	3	7	13	13	6
Having a unique idea	low	low	3	6	1	2
Acquiring Credibility/trust	4	4	4	3	10	4

# Thank you!

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