Industry Trends: Spending
– Gartner October 2021

Worldwide IT spending is projected to total $4.5 trillion in 2022, an increase of 5.5% from 2021, according to the latest forecast by Gartner, Inc.

Segment	2020 Spending	2020 Growth	2021 Spending	2021 Growth	2022 Spending	2022 Growth
Data Center Systems	178,836	2.5	196,142	9.7	207,440	5.8
Enterprise Software	529,028	9.1	600,895	13.6	669,819	11.5
Devices	696,990	-1.5	801,970	15.1	820,756	2.3
IT Services	1,071,281	1.7	1,191,347	11.2	1,293,857	8.6
Communications Services	1,396,334	-1.5	1,451,284	3.9	1,482,324	2.1
Overall IT	**3,872,470**	**0.9**	**4,241,638**	**9.5**	**4,474,197**	**5.5**

"Digital tech initiatives remain a top strategic business priority for companies as they **continue to reinvent the future of work**, focusing spending on making their infrastructure bulletproof and accommodating increasingly complex hybrid work for employees going into 2022."

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Reinvent, Innovate, Mastering Change

– Accenture 2021

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"It's become clear that **there is no leadership without technology leadership**. The recent rapid digital acceleration has placed technology as **the cornerstone of global leadership**."

"Companies looked at operations and **saw fragile supply chains, untrustworthy information and radically new customer needs**. As they've adjusted to these realities, **the most successful ones have become Experts at Change**."
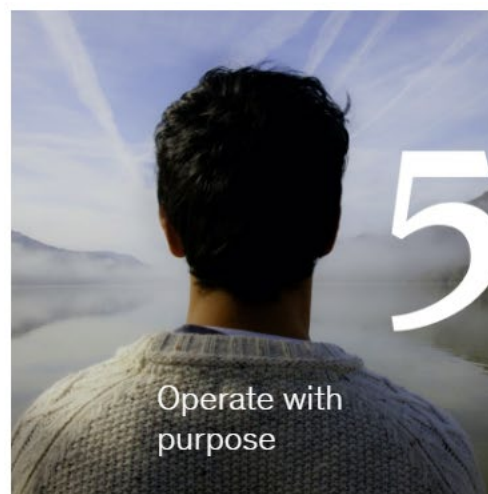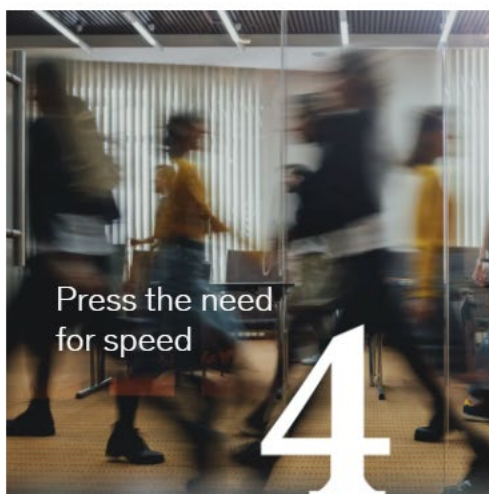
"Companies are no longer competing for market share; they are **competing to build their vision of the future** faster than the competition. **Success will depend on their ability to accelerate and manifest change** in all parts of their business."

83%
of executives agree that their organization's **business and technology strategies are becoming inseparable**, even indistinguishable.

92%
of executives report that their organization is **innovating with an urgency** and call to action this year.

91%
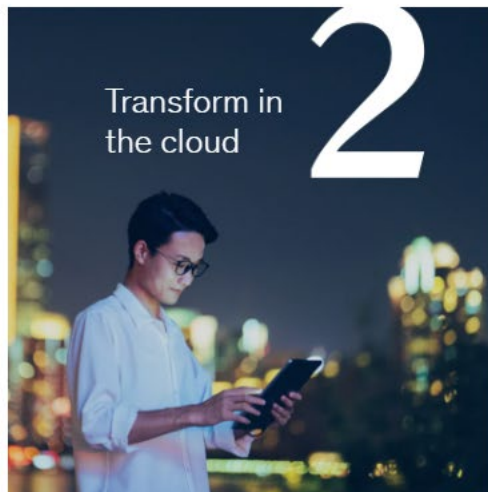of executives agree capturing tomorrow's market **will require their organization to define it**.

Driving Greater Employee Engagement:
"5 Priorities for CEOs in the next normal"
– McKinsey 2021

1 Center strategy on sustainability

2 Transform in the cloud

3 Cultivate your talent

4 Press the need for speed
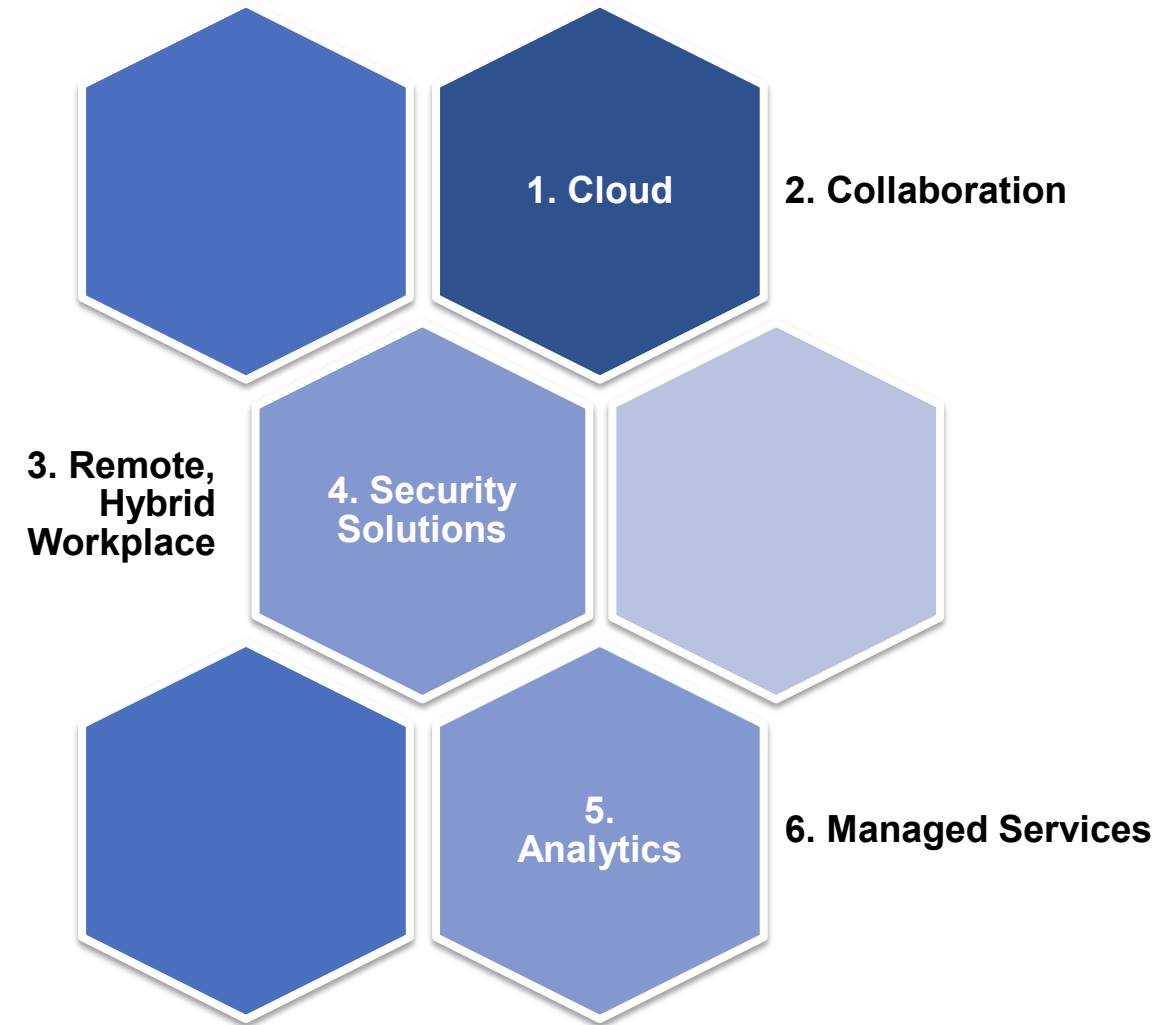
5 Operate with purpose

TAKE AWAYS

1. Organize the business and operating model for sustainability. Enable the team to make rapid changes

2. Deploy a new IT and operating model that exploits cloud for speed, agility, and efficient scalability

3. Hire talent, build skills and teams that live the core values and mission

4. Build internal muscle memory around the right way to perform hybrid work using cross silo teams

5. Create, communicate, reinforce purpose, vision, core values and align activities to driving outcomes and the mission at hand

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2021 Top Business Issues, IT Priorities
- TechAisle Research 2021

1. Business Growth

2. Profit Growth

3. IT Outsourcing Strategy

4. Workforce Productivity

5. Product, Process Quality

6. Speed to Market

1. Cloud

2. Collaboration

3. Remote, Hybrid Workplace

4. Security Solutions

5. Analytics

6. Managed Services

https://techaisle.com/blog/449-2021-top-10-smb-and-midmarket-business-issues-it-challenges-it-priorities

Cybersecurity Trends: Growing Tsunami of Attacks

- Microsoft, National Security Institute, Security Magazine 2021

Global threat activity

Countries or regions with the most malware encounters in the last 30 days

Select region ⌄

World
94

"Experts estimate that **a ransomware attack will occur every 11 seconds** in 2021. The number of **ransomware attacks nearly doubled** in the first half of 2021."

"**Every 39 seconds, there is a new attack** somewhere on the Web. That is about **2,244 attacks occurring on the internet daily** in 2021."

"The number of **data breaches through September 2021** has exceeded the **total number of events** in full-year 2020 by 17%."
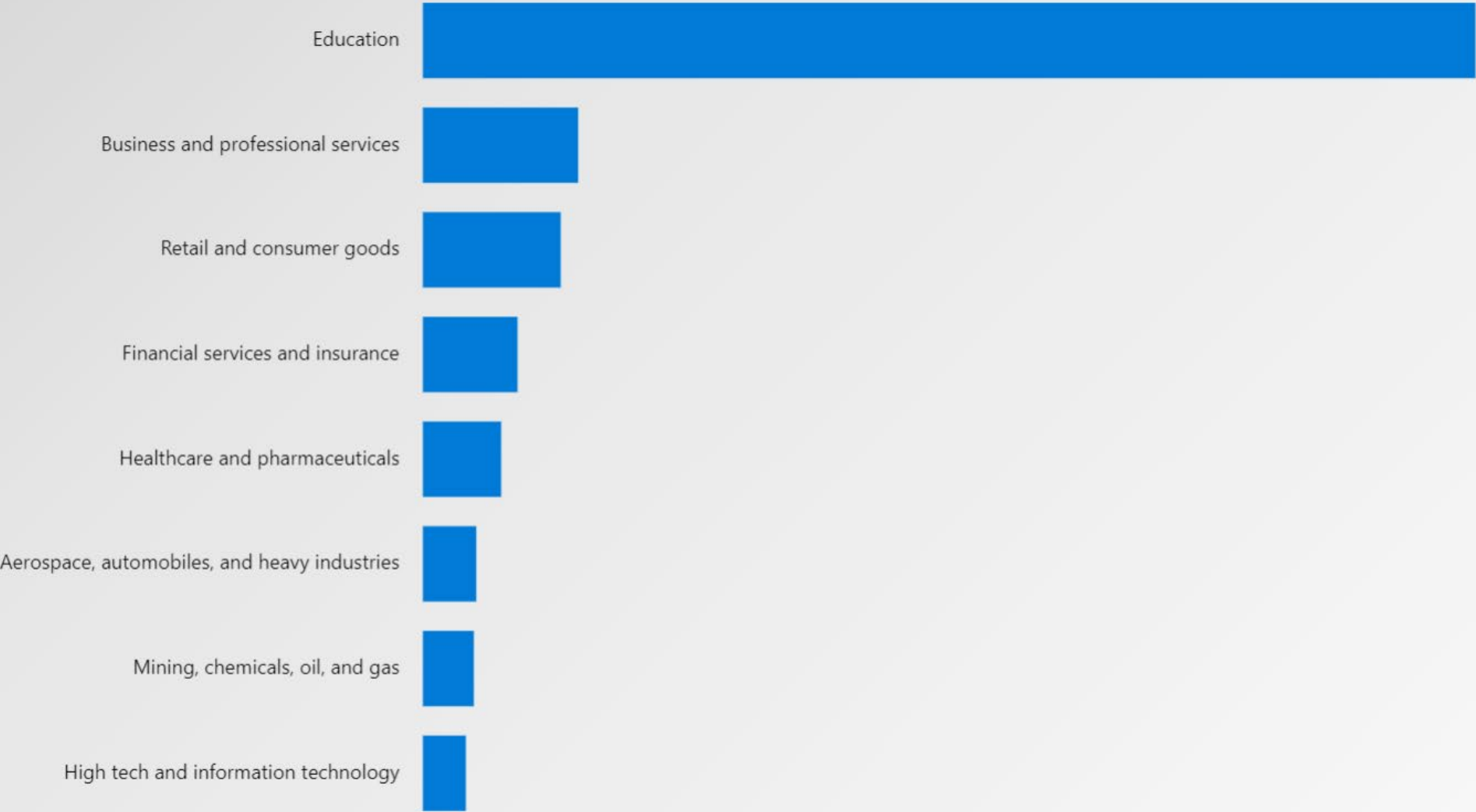
"There were 1,767 reported breaches in the first six months of 2021, exposing a total of 18.8 billion records. Some industries have experienced 200% - 3000% growth in cyber incidents over the last 36 months."

Top 10 Industries Under Attack & Breached 2021

Xceptional

Most affected industries

Reported enterprise malware encounters in the last 30 days

Select an industry ⌄

- Education
- Business and professional services
- Retail and consumer goods
- Financial services and insurance
- Healthcare and pharmaceuticals
- Aerospace, automobiles, and heavy industries
- Mining, chemicals, oil, and gas
- High tech and information technology

Total devices with encounters: 8,520,085

Internet Crime Complaint Center (IC3)
6 Million Crime Complaints

May 15, 2021
6 million complaints

Pipeline Update: Biden Executive Order, DarkSide Detailed and Gas Bags

Russia Denies Involvement in Darkside Attack on Colonial Pipeline

U.S. officials believe Russian cybercriminals were behind a ransomware attack that shut down a major artery of America's fuel supply, portending similar attacks on U.S. infrastructure.

By Paul D. Shinkman | May 11, 2021, at 10:54 a.m.

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InfoSec Insider

Shifting Threats in a Changed World: Edge, IoT and Vaccine Fraud
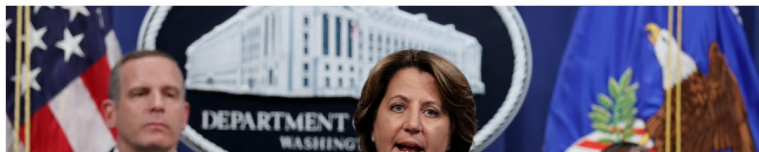
THE WALL STREET JOURNAL.

Home   World   U.S.   Politics   Economy   **Business**   Tech   Markets   Opinion   Life & Arts   Real Estate   WSJ. Magazine   Sports

◆ WSJ NEWS EXCLUSIVE | BUSINESS

JBS Paid $11 Million to Resolve Ransomware Attack

Meat supplier's U.S. chief says firm paid cybercriminals in bitcoin to avoid more disruptions

November
2 million co

This is.

AUG 18

Scripps Health Ransomware Attack Cost Increases to Almost $113 Million

POSTED BY HIPAA JOURNAL ON AUG 18, 2021

Ransomware attacks on hospitals can cause huge financial losses, as the Ryuk ransomware attack on Universal Health Services showed. UHS is one of the largest healthcare providers in the United States, and operates 26 acute care hospitals, 330 behavioral health facilities, and 41 outpatient facilities. UHS said in March 2021 that the September 2020 ransomware attack resulted in $67 million in pre-tax losses due the cost of remediation, loss of acute care services, and other losses suffered by UHS ps Health has proven lifornia-based t facilities in the os Health lost access ff couldn't access the backup servers were also affected. Without access to critical IT systems, Scripps Health was forced to re-route stroke and heart attack patients from four...
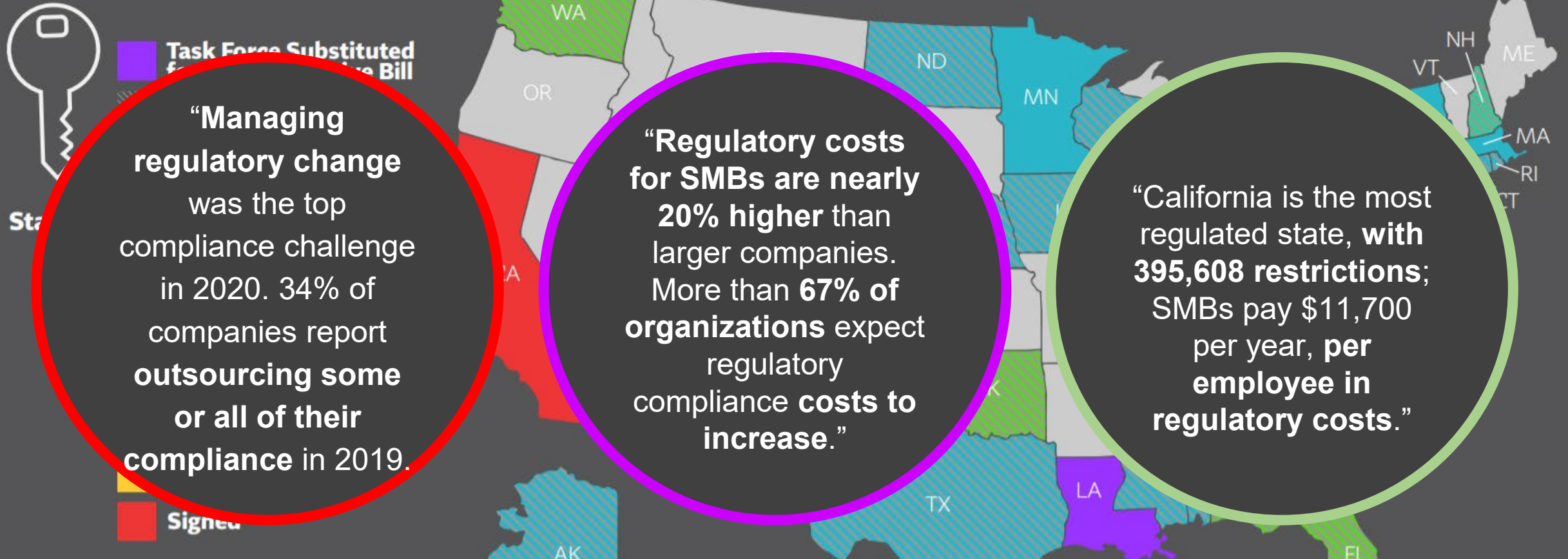
U.S. Deputy Attorney General Lisa Monaco said investigators have recovered more than $2 million in cryptocurrency paid in ransom to

"Ransomware attacks **will cost** the global economy an estimated **$20 billion** in 2021."
- Cybersecurity Ventures 2021

2000   2001   2002   2003   2004   2005   2006   2007   2008   2009   2010

Task Force Substituted for ... Bill

Sta...

Signed

Last updated: 9/16/2021

"**Managing regulatory change** was the top compliance challenge in 2020. 34% of companies report **outsourcing some or all of their compliance** in 2019.

"**Regulatory costs for SMBs are nearly 20% higher** than larger companies. More than **67% of organizations** expect regulatory compliance **costs to increase**."

"California is the most regulated state, **with 395,608 restrictions**; SMBs pay $11,700 per year, **per employee in regulatory costs**."
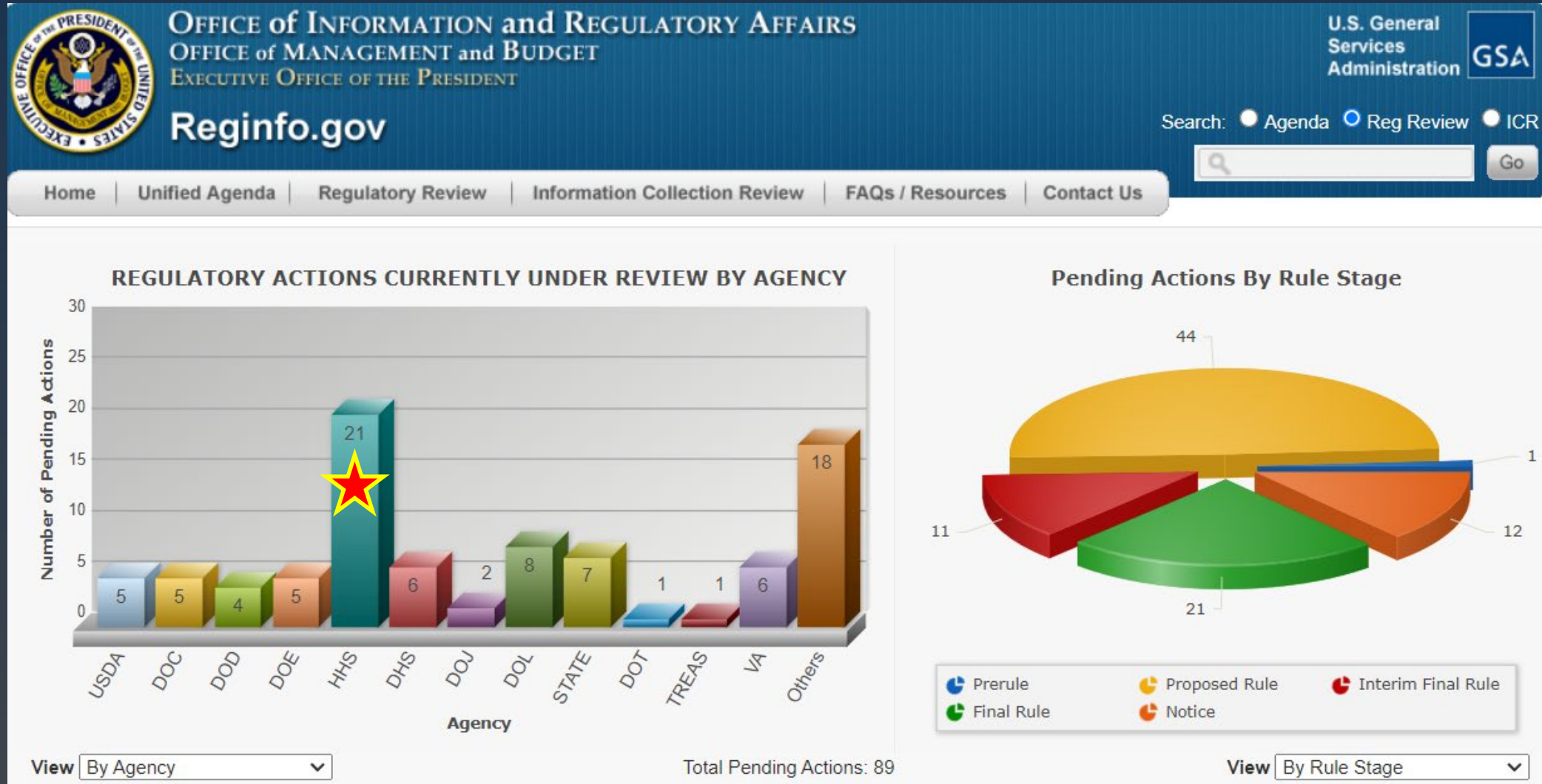
Over the last 24 months 34+ States had data privacy statutes or bills under review. With **growing enforcement** actions around HIPAA and GDPR we expect more States to pass similar data privacy laws as within California, Colorado and Virginia.

iapp

Regulatory Actions Under Review

# Regulations & Compliance Frameworks: Growing Complexity

- **NIST 800-53:** **(256 Controls / 18 Families)**
- **NIST CSF:** **(5 Sections / 22 Categories (Functions) / 98 Subcategories (Outcomes)**
- **CIS 20/CIS RAM:** **(1-6 Basic / 7-16 Foundational / 17-20 Organizational)**
- **COBIT**
- **ISO/IEC 27001**
- **NCUA/ASET/AIRES**
- **FFIEC**
- **FINRA**
- **NERC-CIP**
- **PCI DSS:** **(6 Sections / 12 Requirements)**
- **HIPAA:** **(3 Security Safeguard Sections / 18 Categories)**
- **GDPR**
- **CCPA**
- **NY DFS**
- **CMMC**
- **HITRUST**
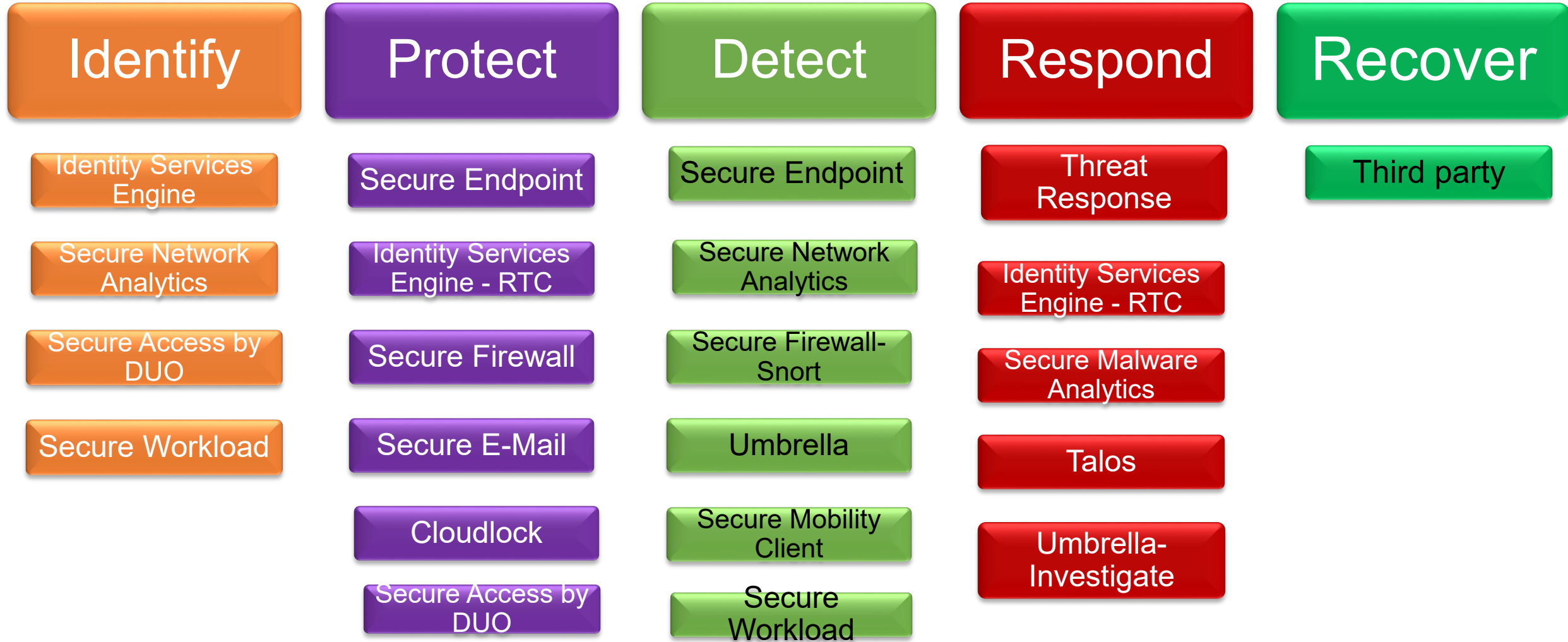- **SSAE-18 (16)**
- **SOX**
- **OWASP**

NIST, CMMC, GDPR Comparison
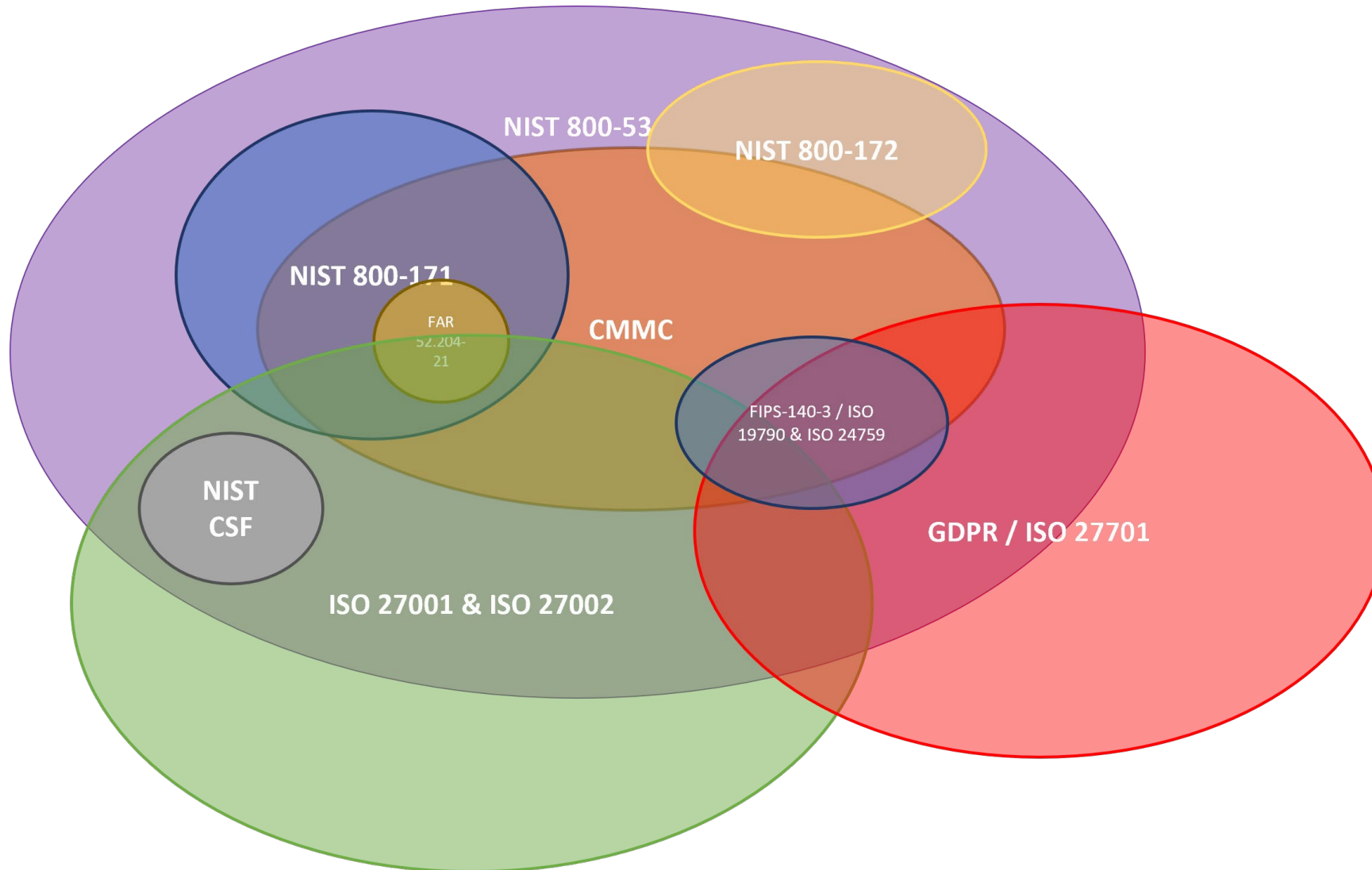
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- **Compliance is complex and can be costly.**

- **Very few companies have the time, resources to manage the process.**

- **Xceptional and Cisco to help reduce compliance complexity and improve readiness.**

- **Cisco's Best in Class Technologies Supported by an Award-Winning & Innovative MSP & IT Integration Company.**

NIST 800-53

NIST 800-172

NIST 800-171

FAR 52.204-21

CMMC

FIPS-140-3 / ISO 19790 & ISO 24759

NIST CSF

GDPR / ISO 27701

ISO 27001 & ISO 27002

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Cisco Solutions Supporting 5 Sections of NIST CSF

Identify	Protect	Detect	Respond	Recover
Identity Services Engine	Secure Endpoint	Secure Endpoint	Threat Response	Third party
Secure Network Analytics	Identity Services Engine - RTC	Secure Network Analytics	Identity Services Engine - RTC	
Secure Access by DUO	Secure Firewall	Secure Firewall-Snort	Secure Malware Analytics	
Secure Workload	Secure E-Mail	Umbrella	Talos	
	Cloudlock	Secure Mobility Client	Umbrella-Investigate	
	Secure Access by DUO	Secure Workload		

Cisco Zero Trust Technology Portfolio

Enabling Basic to Advanced Cyber Hygiene (Supports industry regulations)

Xceptional

Product	Capability	Basic 1	Intermediate 2	Good 3	Proactive 4	Advanced 5
ESA/WSA	Advanced threat protection capabilities to detect, block and remediate threats		▉	▉	▉	▉
Umbrella	Advanced defense and intelligence against threats	▉	▉	▉	▉	▉
Duo	Establish user trust w/multi-factor auth, SSO for SaaS and device visibility	▉	▉	▉	▉	▉
Cyber Vision	Threat detection/intelligence for cyber threats in the industrial networks		▉	▉	▉	▉
AnyConnect	Remote access to network with visibility and posture compliance via agent	▉	▉	▉	▉	▉
SDA/ISE/TrustSec	Wired, wireless, VPN access policy with network segmentation	▉	▉	▉	▉	▉
Tetration	Threat detection/intelligence for threats in the private/hybrid clouds	▉	▉	▉	▉	▉
AMP/Threat Grid	Threat detection/intelligence with host visibility and remediation		▉	▉	▉	▉
Stealthwatch	Threat detection with internal network and cloud visibility via flow sensors		▉	▉	▉	▉
Threat Response	Threat visibility and rapid containment with intel-driven incident response		▉	▉	▉	▉
Firepower	Network access, segmentation and threat detection with in-line insertions	▉	▉	▉	▉	▉

How Others Are Advancing Cyber Hygiene & Cyber Posture to Reduce Risk

HOW TO BEGIN

Program Based on Principles
(*SOC-SIEM, Logging/Monitoring, Policies, Procedures, Resources)

People
(Security Education, Training, Awareness, Internet Usage, Phishing Simulations)

Patching, Scanning
(Vulnerability Management Program - Planned, Automated)

Passwords
(Unique Phrases w Special Characters, Vault)

- ✓ *Security Operations, SIEM, Scanning & Monitoring
- ✓ Backups (Full-Off Network)
- ✓ Limit and Lock Down Administrative and System Access Control/Write
- ✓ Encryption (At Rest, In Transit)
- ✓ Limit, Block Network Access (RDP, etc), email file extension delivery

- ✓ End Point Detection & Response: Modern Anti-Malware, Ransomware, Encryption on End Points
- ✓ Updated BCDR Plans, Solutions (Ransomware, Social Engineering)
- ✓ IoT, IT Inventory, Assessment & Pen Testing
- ✓ Business Process Assessments

- The 4 Ps: Program, People, Patching, Passwords,
- Pick a Framework (NIST CSF, 800-53, 800-171, CIS 20, etc)
- Identify the Crown Jewels (what you want to protect)
- Focus on Data Privacy
- Educate Employees
- Understand Your Maturity, Risks, Vulnerabilities
- Discover Your Assets, Who Has Access to Your Systems
- Patch, Update Systems, Applications, Websites
- Harden & Monitor Systems, Applications, Websites

Why Reinvent, Innovate, Change

- Accenture 2021

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"PRODUCTIVITY: **Disengaged workers make 60% more errors** than engaged workers."

"RETENTION: **Engaged workers are 87% less likely to leave** the organization."

"REVENUE: Companies **with engaged customers** during the pandemic **drove sales**."

91%

of buyers miss shopping in-store. **Customer-centricity needs to be a top priority**.

25%-30%

of the workforce **will be working-from-home** multiple days a week by the end of 2021.

92%

of executives report that their organization is **innovating with an urgency** and call to action this year.

Internal Obstacles to Overcome

RESOURCES: Limited or lack of expert resources to develop and implement these plans.

TECH DEBT: Older technology that is outdated and potentially fragile or unstable.

FUNDING: Lack of visibility into, or lack of access to capital required for this type of change.

PRIORITIES: Too many competing priorities and not enough understanding of the value.

RISK / REWARD: Lack of insight into the risks associated with not doing this vs the business value.

ROADMAP: Understanding where, how to begin AND when the effort will be completed.

How We Can Help = The Portfolio

IT Network & System Architecture, Design, Implementation, Run, Operate, Maintain

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Xceptional CARE

- Remote and Onsite Managed Services Support

- 24 x 7 Monitoring and Management of Desktop, Network, Phones, and Applications

- Multiple Support Levels to Fit Your Business, Budget

- Virtual CIO: Quarterly Technology Reviews and Reporting. Includes Strategic IT Planning, Updates to Plans, Standards, Maintenance, and Support Levels

Xceptional CONNECT

- Design, Deployment, and Management of Telepresence and Video Solutions

- Voice, Video, and Web-based Conferencing

- Real Time Communications on all Devices

- Cloud, Onsite, and Hybrid Communications Solutions

Xceptional CLOUD

- Strategic enterprise-class Data Center and Hosting Services. IT Software, Services, Applications, Email, and Network Solutions (Hosting, IaaS)

- Storage Solutions

- Backup & Recovery Solutions (BaaS)

- Compliance as a Service Solutions (CaaS)

- Virtualization

Xceptional NETWORKS

- Networking Solutions Driving Technology and Business Operations

- Routers/Switches

- Wireless Mobility Solutions

- Security Solutions and Security as a Service

- WAN Optimization

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Wrap Up

Most executives we speak to are seeking ways to improve employee engagement and productivity, while looking for more creative, scalable, and innovative ways of reaching and supporting customers.

The amount of time, energy, effort, and resources required to align IT systems and business applications with the current **demands of the market, business, and customers** is significant.

You are not alone. Xceptional's portfolio of superior and proactive managed services and technology solutions can help!

As a leading, award winning provider of Managed IT Services, Networking, and Security Solutions, Xceptional is committed to helping customers transform their IT systems and successfully navigate technology change to thrive in the new reality!