THREE | TECHNOLOGY DISRUPTION | By Scott Steinberg

Balancing Oversight and Governance With the Need for High-Tech Speed

Technology is **speeding along as fast as the innovation economy can push it**. How can regulators and legislators keep up?

55.2 Billion

The **number of devices** that will be connected and communicating with each other by 2025.
Source: International Data Corporation

Moore's Law—the observation that the number of transistors in an integrated circuit doubles every two years—used to seem aggressive. But now **Microsoft CEO Satya Nadella** says he's seen two years' worth of digital transformation in two months; e-commerce has also grown suddenly. As **Peter Diamandis**, creator of the **XPRIZE Foundation**, points out, going forward, high-tech shifts will no longer be linear or predictable, even though that's how people's minds are hardwired to think. As he puts it: "Humans are not prepared to understand the rate of change" that coming years will present. These changes will bring unique challenges for both domestic and international legal and regulatory frameworks. They raise the question: What will technology companies be accountable for going forward—and to whom?

"Photos, videos, search results, shopping options—so much of the content and information that we consume these days is now distributed and disseminated to us via Big Tech companies," says **Chris Zimmerman**, **senior analyst** for market researcher **FutureProof Strategies**. Given the often highly private nature of tech services and the high level of control that tech firms may exercise over their services, this raises big questions for lawmakers, industry watchdogs and the general public. "Whose job is it to police this stuff, what material is appropriate to share, and—given the sheer volume of information passing through these digital crossroads—where does responsibility for managing day-to-day oversight and regulatory compliance of these exchanges lie?" he asks.

Amazon, Facebook, Google and Twitter collectively influence the actions and decisions of billions of users worldwide.

All have lately been called upon to testify before lawmakers on a bevy of issues from anticompetitive practices to the sharing and distribution of questionable content. A great deal of discussion has centered on protections currently offered by Section 230 of the United States' Communications Decency Act, a 1996 law that effectively holds that websites, and the online services they provide, cannot be held legally responsible for their users' posts, however offensive or damaging those posts may be. But present-day communications laws may not be up to the task of protecting users from online harm: Just look at recent whistleblower complaints alleging Facebook's knowledge that its products and content-sharing algorithms are harming users, and record-breaking fines levied against Amazon for violating European Union (EU) guidelines for processing personal data.

Thanks to their exponential growth—Facebook alone gains 500,000 new user accounts every day—it becomes more challenging to govern online services with each passing month. Given the international legal system's slow pace of change, often archaic guidelines and general unfamiliarity with new and emerging technology, it's difficult for regulators to keep up with the blistering clip at which technology evolves. A September report from the U.K. Parliament's Public Accounts Committee said it's not clear that today's government and regulatory leaders are equipped to adapt to rapid technological change. What's more, even when regions such as the European Union do move to tighten privacy regulations, these measures can still take years to enforce, as evidenced by the 225 million-euro fine recently levied against WhatsApp owner Facebook—three years after the relevant regulation, the EU's General Data Protection Regulation, went into effect.

Even if government agencies and

lawmakers could come to a consensus on high-tech policy, by the time they've fully researched a topic and rendered a decision the high-tech world has typically moved on, often rendering that decision moot or outdated. Even when a global power such as the EU does manage to become more digitally sovereign and self-aware, it still struggles to make choices between conflicting objectives, notably privacy versus competition and consumer protection versus innovation, according to the Media Law Resource Center.

Meanwhile, artificial intelligence (AI) and machine learning will be preparing to supercharge industry evolution and growth. AI and machine learning are experiencing a massive influx of investment dollars, with global funding expected to reach $232 billion by 2025. They're already capable of making life-impacting decisions and generating content on an unprecedented scale.

"Artificial intelligence, and especially deep learning technology, are poised to transform virtually every sector of the economy," says **Martin Ford**, **author** of *Rule of the Robots: How AI Will Transform Everything*. "AI will eventually become so ubiquitous that it will evolve into a utility not unlike electricity—a resource that can be easily and inexpensively deployed to solve almost any problem. Going forward, the importance of AI to organizations across the economy will only grow."

The catch is that all of these AI routines are typically privately built and governed, and exactly as fallible as their creators. Likewise, they may also have inadvertent biases or flaws in their construction. With unprecedented levels of attention now being paid to topics such as the digital transformation of the workplace and whether robots will replace human workers, public interest in these topics is spiking. In 2019, 37% of U.S. workers age 18 to 24 said they feared **>>>**

$232B

The amount of **funding expected to be invested in artificial intelligence** by 2025. *Source: KPMG*

"**The world of technology moves fast—** and in coming years, we only anticipate that it will move faster—it's high time we started thinking about how we evolved regulatory and governance strategies as well." —**Chris Zimmerman**, senior analyst for market researcher FutureProof Strategies

being replaced by high-tech alternatives, according to a CNBC/SurveyMonkey *Workplace Happiness* survey.

Yet a September 2021 report from the nonprofit and nonpartisan Information Technology and Innovation Foundation found that recent concerns that AI and automation will eliminate millions of American jobs don't necessarily reflect market reality. According to the report, rates of job loss were actually lower in the third quarter of 2020 than they were back in 1995.

At the same time, awareness of privacy and data-sharing concerns is skyrocketing. According to a new study by PR firm FleishmanHillard, data privacy and data security are now the top two issues that global consumers care most about—and the leading challenges that they expect companies to act on going forward. Granted, some firms—such as Facebook, which announced in November that it would be shutting down its facial recognition programs and deleting over 1 billion users' faceprints—are already taking proactive steps to mitigate some of these concerns. But these decisions remain largely voluntary and company-specific.

Users are being asked to share more sensitive data online, and at more digital touchpoints, with each passing day.

500K

The number of new **Facebook accounts** created every day.
Source: Brandwatch

Furthermore, with market researchers International Data Corporation predicting that 55.7 billion devices will be connected and talking to one another by 2025, including fitness trackers and smart thermostats, virtually any high-tech gadget comes with potential risks attached. And the data collected by the vast majority of products that people use every day simply isn't regulated.

"Add it all up, and you're only looking at more potential complexity and confusion surrounding the governance and oversight of technology and technology firms in coming years," says **Tim Rosato**, **president** of trend forecasters **Silver Lion Group**. "Major high-tech services and solutions are only becoming more far-reaching and sophisticated with each passing day, even as rising cybersecurity and privacy concerns continue to present more potential areas of compromise."

The world is already embarking on a fourth Industrial Revolution: an age of smart technology where entire supply chains, manufacturing systems and business operations are increasingly powered by the Internet of Things (IoT), capable of both communicating and analyzing information. By 2025, IDC predicts that over 55.7 billion devices will be connected and talking to one another and generating almost 80 zettabytes of data. Artificially intelligent factories, self-driving cars and assembly lines staffed by autonomous robots will become the norm—and will increasingly be making decisions for themselves. Even as regulators continue to struggle with the management and governance of current technology solutions, all of these advances may require further comprehensive regulation and oversight.

"While it's clear that we know what we know—and also evident that there is much we don't know—if we don't acknowledge how little awareness we have about what 'we don't know, that we don't know' in this new information age, we risk making decisions that could cause more harm than good," says **Insigniam consultant Barry Maloney**. "We must adopt a mentality that is seeking to question, and even be skeptical about everything of which we are certain, if we stand a chance to have new discoveries to match the challenges of tomorrow's technologies."

With so much uncertainty now swirling in the high-tech realm, how can organizations,

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governments and industry leaders stay one step ahead of the curve? **While there's no one universal answer, some strategic next steps might include:**

1 Instituting **universal, federally, regionally or industry-mandated policy standards and guidelines** regulating the collection, sharing and use of data, as well as the governance and maintenance of users' privacy.

2 Adopting consumer **privacy and protection rules on a regional or geographic basis** that promote cooperation and consistency between member states or nations and provide a model for others to learn from and build upon.

3 Establishing **nationally and internationally mandated government or industry task forces and committees** chartered with researching, reviewing and understanding the impact of new and emerging technologies—and empowering these teams to make swift recommendations to lawmakers surrounding them.

4 Convening **advisory boards and panels of experts hailing from differing industry areas and disciplines** to routinely provide a range of perspectives and opinions on tech-related subjects, and to discuss how best to address them.

5 Codifying **best practices and standards for technology, data, and privacy management and regulation**, as well as offering guidance, analysis, tools and resources to international lawmakers struggling to come to grips with new high-tech challenges.

6 Asking governing bodies and companies to engage in **regular future-focused scenario planning exercises**, grounded in real-world examples, to proactively plan for impending challenges.

7 Crafting **strategic partnerships and alliances between public and private sector leaders** to multiply the resources, impact and speed with which tech-related challenges can be addressed.

8 **Overhauling tax systems and regulations** to more swiftly and accurately reflect how businesses operate in the field, how users interact online, and the potential influence of technology on various types of commercial exchanges.

9 Working to **eliminate loopholes, workarounds, and vagueness in existing policies and laws** that provide gray areas in which less scrupulous high-tech actors currently find room to maneuver.

10 **Looking toward the future rather than the past**, and relying less on historical precedent and outdated use-cases and scenarios when making decisions aimed at addressing new examples of technology's influence and impact.

11 **Allowing younger generations**, who often use new technologies more frequently and know more about them than older generations, **more of a voice at the decision-making table**.

12 **Promoting greater high-tech education and reeducation, and conducting greater screening amongst lawmakers** to ensure that the decision-makers tasked with rendering key high-tech opinions have an up-to-date and comprehensive base of knowledge to draw upon.

Both government and executive leaders are well aware that concerns related to technology are poised to increase going forward as the pace at which technology evolves and continues to accelerate. At the same time, current rules and regulations often inhibit, rather than support, their efforts to rein in the undue influence of myriad virtual vagaries and high-tech hiccups. To get better about addressing these challenges, it's vital to have more informed discussions and make key decisions surrounding these topics more frequently, in the years ahead. It's also vital to consistently rethink our fundamental approach to tackling technology-related issues in coming months, given the unprecedented scope and influence that they now command.

"The world of technology moves fast—and in coming years, we only anticipate that it will move faster," notes Mr. Zimmerman. "It's high time we started thinking about how we evolved regulatory and governance strategies as well." **IQ**34