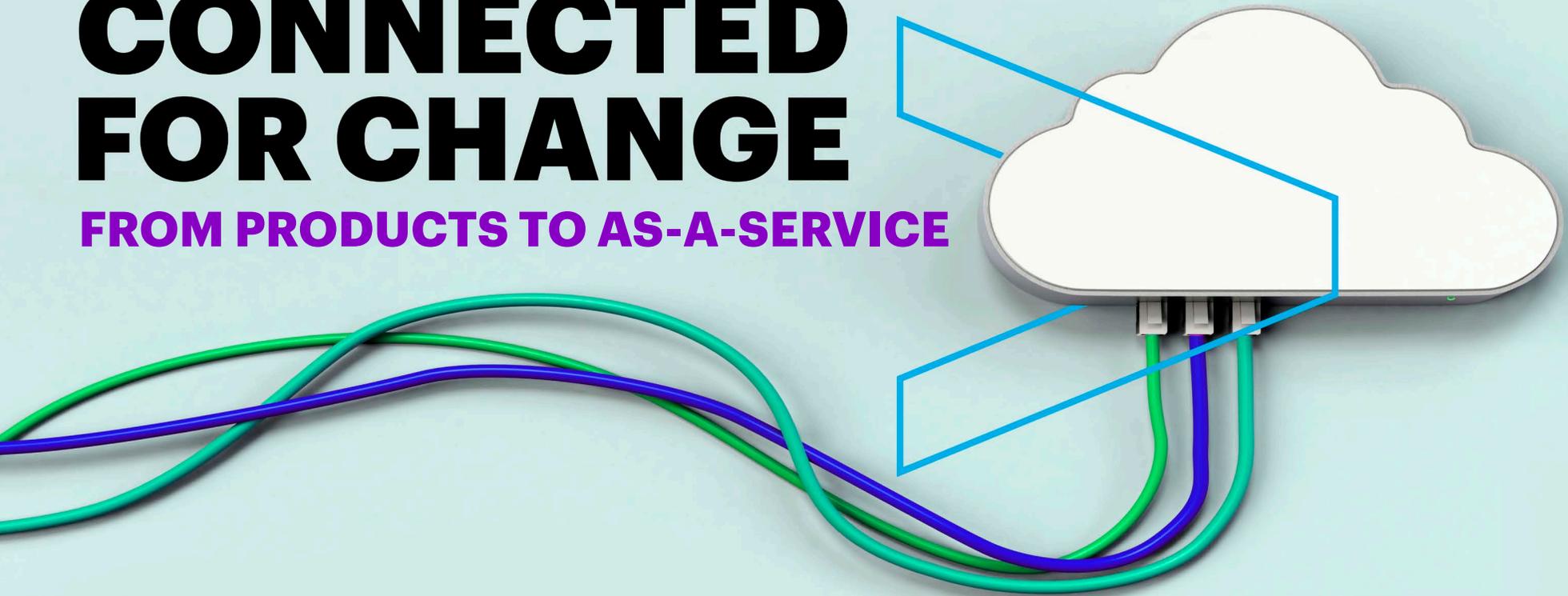


CONNECTED FOR CHANGE

FROM PRODUCTS TO AS-A-SERVICE

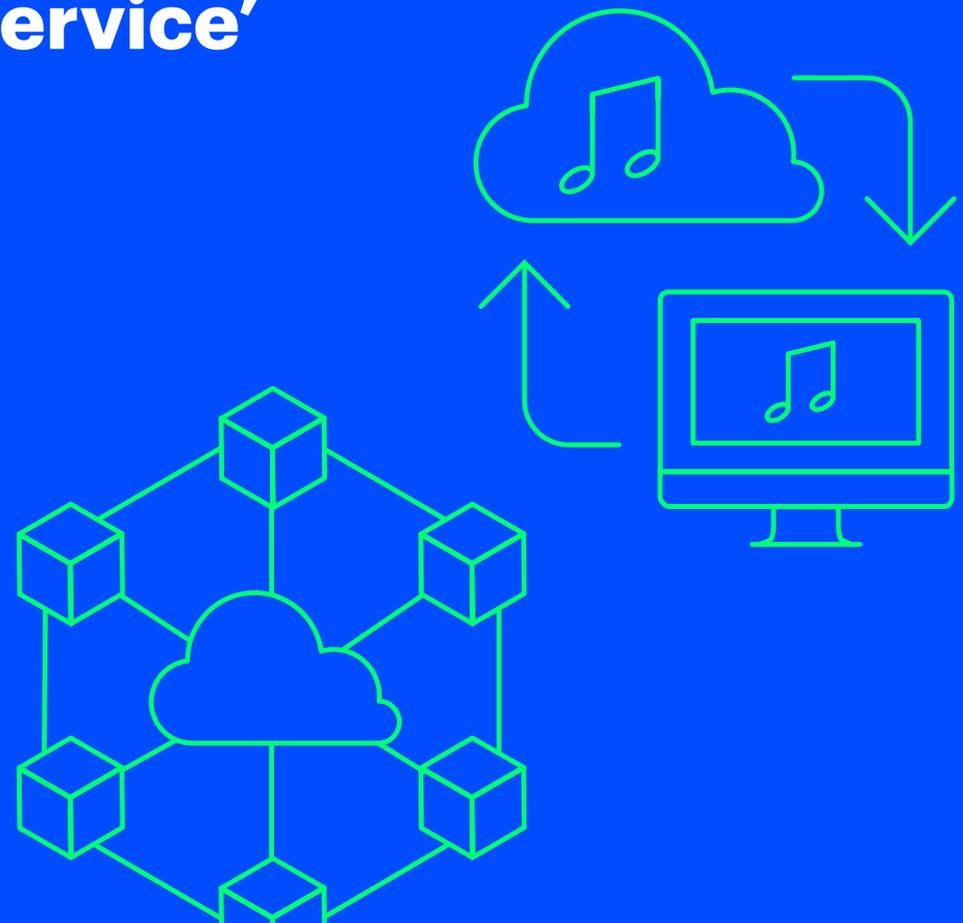


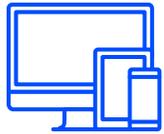
High-tech leaders recognize that demanding markets require a new era of products that are connected to both the external ecosystem and internal enterprise systems, as they look to capitalize on growing 'as-a-Service' business models.

Powerful forces pulsing through the high-tech industry are the precursors to an unprecedented period of disruption. In a world that increasingly relies on connected platforms, cloud-based software and IoT capabilities to deliver product features – as industries increasingly pivot to consumption-based, as-a-Service business models – the

lines surrounding what constitutes a “product” have blurred. Today, success is awarded to companies that challenge existing business models by rapidly adapting their products, processes, data and resources to deliver customer-centric experiences.

Accenture identified a nexus of three key drivers behind this wholesale reinvention of the high-tech industry.





Mobility

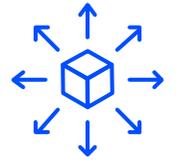


Cloud



Communications

Analytics



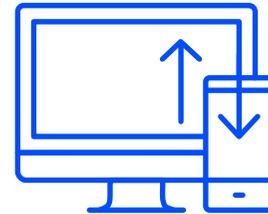
INTERNET & SOCIAL DISRUPTION



Evergreen products



Variant creation



Product and customer insight

Value moves to the cloud

Digital twins



TECHNOLOGY PRODUCTS BECOME PLATFORMS



Breakthroughs from product/service insight

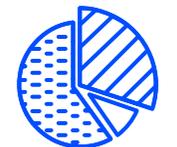


New ecosystem roles



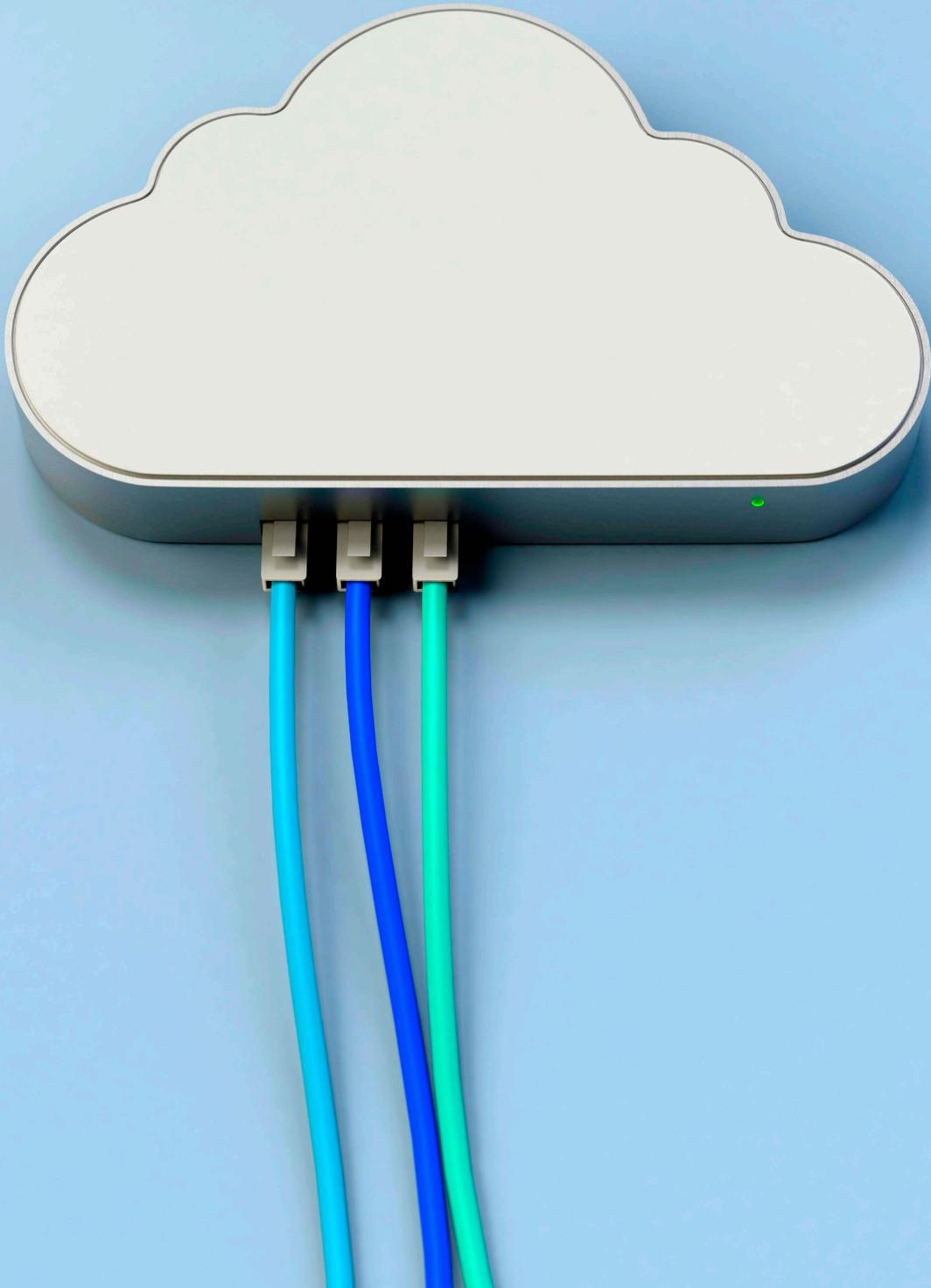
New product design philosophy

New market and customer segments



NEW BUSINESS MODELS

FROM NEXT GEN PRODUCTS TO THE AS-A-SERVICE REVOLUTION



INTERNET AND SOCIAL DISRUPTION

At the top level, internet and social disruption have reshaped the entire landscape. Digital-born natives like Amazon, Facebook, and Google have changed the rules of the game for all high-tech companies.

Using digital platforms, global scale and evolving ecosystems, they're bypassing competitive barriers like proprietary devices and licensed-based software, and storming established markets with new offerings. Having prefigured the accelerating trend for 'as-a-Service' consumption by 10 years, they're now using this model to scale their offerings at breakneck speed, leveraging customer insights from their engaging digital platforms to fuel continuous innovation and micro-responsiveness. As a result, they're transforming how consumers and enterprise buyers view broader technology purchases, and helping to drive 'as-a-Service' center-stage as the imperative business model for the high-tech industry.

It's a trend that's playing out throughout across the industry landscape. Particularly amongst B2B customers, there's increasingly an assumption that the technology products they buy will be available 'as-a-Service.' It's not just customers who are demanding this. Investor expectations have changed, too, with valuation methodologies recalibrated to recognize and reward 'Everything-as-a-Service' (EaaS), business models.

Since beginning its EaaS journey three years ago, Adobe's P/E ratio has surged by some 770 percent. Having captured headlines, it's a development that's spurring 360-degree reevaluations throughout the sector, as companies grapple with the need to broaden their revenue streams and extend market share (at the expense of margins) across the new ecosystems that are evolving around them.

It may be a business imperative, but the transition to this capability represents a major challenge for high-tech incumbents. Still built on operating models that have often been little changed for decades, they now need to be ready to design and execute hyper-compressed innovation cycles and supply technologies with the same agility as disruptive digital players. Approaches for confronting this challenge are outlined in the 'Where to begin?' section below.

TECHNOLOGY PRODUCTS BECOME PLATFORMS

Internet and social disruption are prime movers behind the shift toward EaaS; but, the next layer amplifies and accelerates the EaaS phenomenon. Technology products are becoming platforms in their own right, as the amount of software in products becomes their defining factor.

In a trend that's been escalating for the past three years, we're seeing a proliferation in 'evergreen' products that can be continuously updated once they've been launched. The combination of software and interconnectivity is changing everything. Provided their hardware has the functionality to cope, high-tech companies can keep on evolving their products – on an 'as-a-Service' basis – further defining and refining new features online.

Along with evergreen products, high-tech businesses are focused on the promise of the Internet of Things (IoT). But up to now, they've been struggling to define what they should do with it. Where's the value for their customers? And how can the IoT mesh with existing operations? Leaders are pointing the way ahead. In the manufacturing sector, we're

seeing companies like Caterpillar and GE put sensors into their machines to transmit data back on how those products are being used – data that can be used for insight-driven preventive maintenance, for instance.

The IoT's power is not restricted to enhancing service for existing customers. It also turns the economics of supply and demand upside down. Instead of having a handful of big customers, companies are now realizing how the IoT creates a connected marketplace in which thousands of customers are suddenly within reach. As this happens, we're seeing ecosystems spring up that create entirely new business opportunities for industry players and newcomers. Take a look at Philips Health, for example, the medical equipment maker and high-tech innovator. Working with three

cloud partners, it's built the Philips HealthSuite platform, a platform-based business model to support an entire ecosystem of interconnected patients, providers, and partners. Philips' vision aims to improve the quality and cost of patient care. It also provides the company with new paths to grow across thousands of new customers.

The IoT's boundless connectivity creates huge benefits for how high-tech companies operate. With continuous feedback flowing into the business, companies can optimize their marketing, reorient R&D, fine-tune supply chain operations, and minimize warranty costs. All of this is made possible through the IoT, with the cloud providing must-have scale and flexibility for harnessing the oceans of data that are being created, and sophisticated analytics generating product and customer insights from

this information. In some instances, this data can be further monetized to generate new revenue streams for high-tech companies.

As digital moves to the cloud, we're witnessing another development – 'digital twinning' – which has potentially enormous ramifications for the high-tech industry. It's highly relevant for any company that has IoT-enabled products and components, whether that's an engine, a skyscraper or a semiconductor. Connectivity via sensors enables companies to identify the constituent parts of a product, digitally recreate an exact image, and display it in real-time strike the comma here in digital format. Using augmented reality and virtualization technologies, it's a breakthrough that allows companies to predict failures, and plan preventive maintenance and upgrades for their customers' products.

NEW BUSINESS MODELS FOR A NEW INDUSTRY

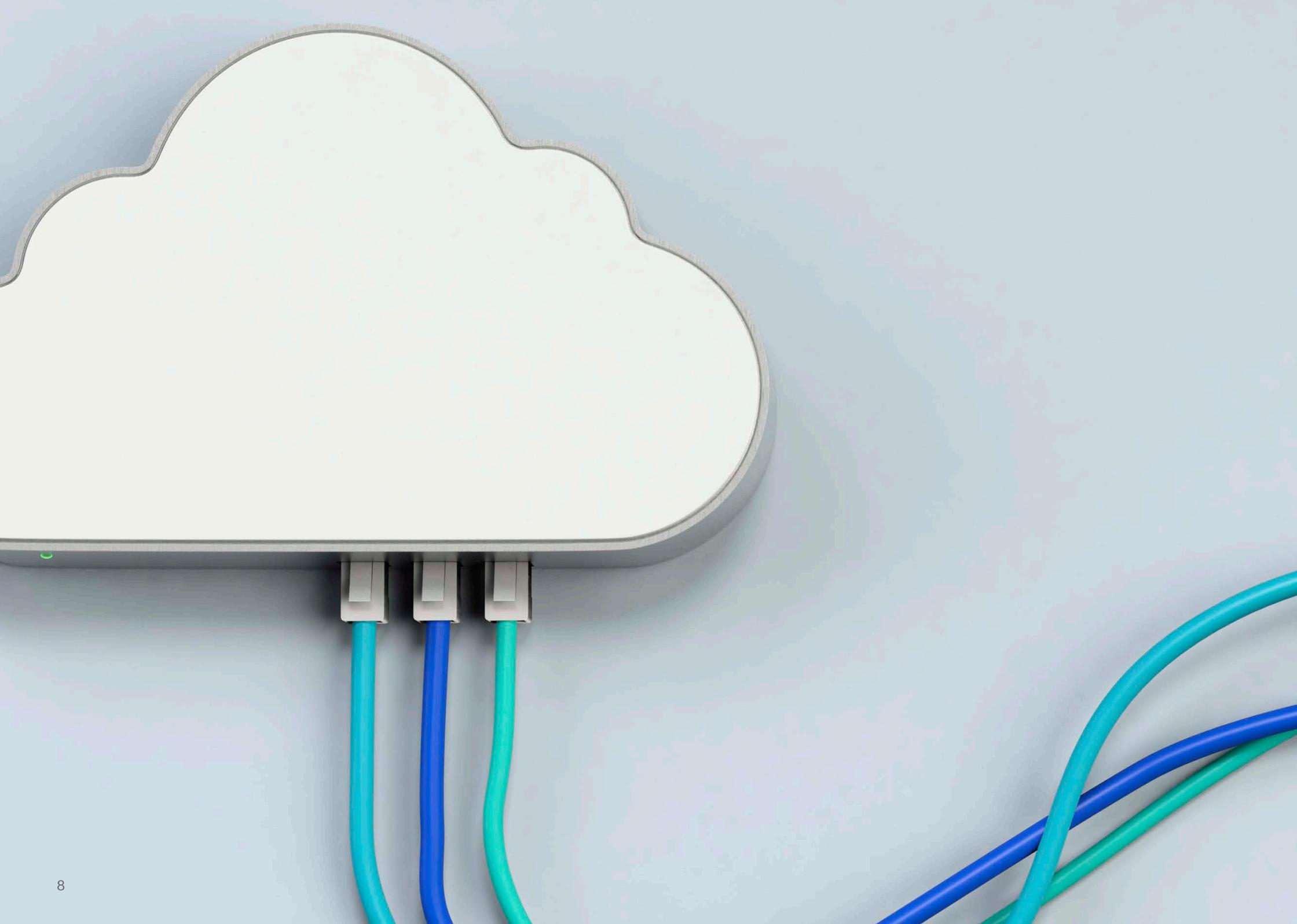
The IoT is, of course, closely linked to the proliferation in EaaS, forecasted by some analysts to outpace traditional software delivery channels by five to one by 2020.

As more as-a-Service technologies are sold with in-built connectivity, we're seeing networks of standardized APIs enabling multi-party interaction with these technologies, galvanizing uptake and creating the foundations for whole new ecosystems, spawning new markets, players and customer segments.

Of course, it's not all opportunity. As these connected ecosystems evolve and coalesce, tech companies are also being forced to confront new security challenges that demand holistic responses, within and beyond the enterprise.

Although leaders are pointing the way ahead, most high-tech companies are still only at the start of the journey into this new industry environment. Developments are playing out in real time around them, with new business models and ecosystems taking shape. But for many, the challenge lies in knowing where to begin.

ALTHOUGH LEADERS ARE POINTING THE WAY AHEAD, MOST HIGH-TECH COMPANIES ARE STILL ONLY AT THE START OF THE JOURNEY INTO THIS NEW INDUSTRY ENVIRONMENT.



WHERE TO BEGIN?

Pulled by consumer demands and pushed by the need to drive business growth and long-term value, companies know it's crucial to emulate their nimbler, digital-born rivals by transitioning to an EaaS business model. But we see many of them underestimating the challenges that this creates.

Based on our experience with companies across the high-tech sector, we know that successfully navigating the transition calls for a rigorously structured approach. Strategy comes first. Spanning strategic decision-making across financial and business plans, operating models and investor relations, EaaS has a wide impact. Big issues will arise in all these areas, and all of them must be planned for. R&D functions will need to be equipped to handle continuous product evolution at speed and scale. Evergreen products make a 'fail fast' mindset essential. Sales and marketing will be transformed by access to real-time insights into customer behaviors and product performance.

Back-end capabilities will also require a complete overhaul. In an interconnected EaaS environment, pricing must be much more responsive, with adjustments rolled out rapidly to address any fluctuations in demand. And financial metrics will have to be returned to an on-demand world, with billing, invoicing and revenue recognition all affected. Of course, new product and operations platforms will be needed to deliver the new as-a-service supply chain in multiple cloud modes with comprehensive connected tools and processes. Transition to EaaS isn't just complex, it's also expensive. From the outset, companies must be realistic about the scale of investment that will be required.

NO 'BIG BANG' APPROACH REQUIRED

The developments now unfolding represent the biggest change in the industry's history. But companies don't have to adopt a 'big bang' approach to their EaaS implementations. They can run two-speed operations, with a separate as-a-service business unit alongside their traditional business model. The latter can be ramped down through a phased approach to minimize the extent of enterprise-wide disruption.

An example from the automotive sector brings this 'two-speed' approach to life. From inception, Tesla aligned its operations to changing consumer demands to 'go green'. BMW knew it needed to compete. But it did not attempt to overhaul its existing business model to simultaneously address old (gas/diesel-powered) and new (electric first power) market demands.

Instead, it has continued to sell the old product line while launching a completely new business unit/product line (its 'i' platform) to compete. The company accepts that the i3 may hit sales of its established 3-series. It recognizes that the 'i' platform is the future – and it's transitioning the business now to be ready for this new wave of consumer demand (winning analyst/investor support in the process). To make this happen, BMW has retrained its sales and service teams to sell and support both models.

The same strategy applies for high-tech companies. Two-speed approaches to EaaS implementation provide a road map for creating a new business unit that can offer core products as a service, while winding down the legacy business over time.

HOW CAN HIGH-TECH COMPANIES STAY AHEAD OF THE PACK?

The developments now unfolding represent the biggest change in the industry's history. However, companies can take a very calculated approach to their EaaS implementations.

They can implement a multi-prong operation, with a separate as-a-Service business unit alongside their traditional business model. The latter can be ramped down through a phased approach to minimize the extent of enterprise-wide disruption.

An example from the automotive sector brings this structured approach to life. From inception, Tesla aligned its operations to changing consumer demands to 'go green.' BMW knew it needed to compete. But, it did not attempt to overhaul its existing business model to simultaneously address old (gas/diesel-powered) and new (electric first power) market demands. Instead, it has continued to sell the old product line, while launching a completely new business unit/product line (its 'i' platform)

to compete. The company accepts that the i3 may impact sales of its established 3-series. It recognizes that the 'i' platform is the future, and the importance of transitioning the business now to be ready for this new wave of consumer demand (winning analyst and investor support in the process). To make this happen, BMW has retrained its sales and service teams to sell and support both models.

The same strategy applies for high-tech companies. Multi-prong approaches to EaaS implementation provide a roadmap for creating a new business unit that can offer core products as a service, while winding down the legacy business over time.

NOTHING WILL BE THE SAME AGAIN

When tech companies transition to an as-a-Service model, they're adopting a digital philosophy where the priority must be to seize market share as rapidly as possible. The good news?

Through the IoT, they'll be able to sell connected technologies into multiple markets. From home appliances, transportation and logistics, through to machinery, healthcare and smart cities, they'll have the opportunity to use their products as platforms for new, in-demand products and

services. Over time, the platform will, itself, become the business model, enabling tech leaders to start entire new ecosystems that will grow their businesses and drive their strategies forward. As we said at the start, nothing will be the same again.

OVER TIME, THE PLATFORM WILL ITSELF BECOME THE BUSINESS MODEL, ENABLING TECH LEADERS TO START ENTIRE NEW ECOSYSTEMS THAT WILL GROW THEIR BUSINESSES AND DRIVE THEIR STRATEGIES FORWARD.

About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions – underpinned by the world’s largest delivery network – Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With more than 394,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

Contact

Sami Luukkonen

Global Managing Director
Accenture Electronics & High Tech Industry Group
sami.luukkonen@accenture.com

Join the conversation

#AccelerateGrowth

To learn more visit us at:

[**accenture.com/us-en/cmt-electronics-high-tech-industry**](http://accenture.com/us-en/cmt-electronics-high-tech-industry)

This document makes descriptive reference to trademarks that may be owned by others. The use of such trademarks herein is not an assertion of ownership of such trademarks by Accenture and is not intended to represent or imply the existence of an association between Accenture and the lawful owners of such trademarks.

Copyright © 2017 Accenture
All rights reserved.

Accenture, its logo, and
High Performance Delivered are
trademarks of Accenture.