The IT/Telecom Top Four for 2024 — New Lessons to be Learned

Astound
Business Solutions

Executive Summary

The midpoint of 2024 has arrived. Buyers of enterprise-level IT and telecom technologies have long since zeroed in on their true needs, concerns, and top priorities. Through intel and insights gathered from our personnel working on the front lines of sales and service, we've identified four areas of interest that are consistently top-of-mind for today's business decision-makers. These topics uniformly cut across vertical industries, geographic markets, and business sectors, confirming them as universal marketplace hot buttons.

It's no surprise that **cybersecurity** continues to lead the pack as the number one customer concern. The pros and cons of **migration to cloud services** comes in at a very close second. **High-speed connectivity** always makes the list as an ongoing need for large and small companies alike. And lastly, **artificial intelligence** dominates conversations these days across virtually all aspects of personal and professional activity.

Four Issues, Four Lessons

No matter where any single business is positioned along the computing and communications continuum—whether as a technology manufacturer, hardware or software developer, internet service provider, integrator/reseller, or end-of-chain purchasing customer—discussions seem consistently focused on these four critical issues. We refer to them as "The IT/Telecom Top Four for 2024."

The universal interest and industry buzz these topics have generated certainly earn them a closer look. However, instead of viewing these challenges from the primary angle of "*let's find a product for this problem*," we've chosen to examine them from a more self-reflective perspective—hoping to derive new lessons to be learned and approaches to be taken.

Astound
Business Solutions

Lesson 1: Create a Culture of Cybersecurity

Securing enterprise-level data today is a dual-edged sword. In this age of widespread omnichannel communications, the more that companies scale their networks to expand their reach and extend their services, the more exposed they naturally become to cyberthreats of all kinds. As access points multiply and branch out, down to the device level, so do associated risks and vulnerabilities. After all, it only takes one loose brick in the battlement. And intrusion is always easier at the employee level. Unfortunately, it's true that while encryption solutions, compliance mandates, and network security protocols all increase in sophistication, the weapons hackers use to attack and wreak havoc only get better in lockstep. It can seem like a never-ending leapfrog race, and the stakes keep getting higher.

The reality is that breach-prevention technologies and anti-malware tools today are plentiful, and they prove effective deterrents for companies of every size, type, and budget. But companies can further bulwark these defenses by also confronting and openly overcoming the taboo of secrecy that can often overshadow and even hinder cybersecurity.

We recommend that Human Resources and other leadership personnel be enlisted to openly, purposefully, and proactively create and embrace a culture of cybersecurity throughout the organization. This would include conducting formal and ongoing training for employees on how to remain more aware and vigilant of the paramount role they each play in strengthening or weakening the company's collective exposure, and then rigorously and repeatedly testing what they've learned.

Simply stated, the cybersecurity lesson to be learned here is to combine technology enhancement together with greater employee focus, caution, and active participation. Their thinking needs to shift from unconsciously assuming that the company is protected, to conscientiously exercising safer, more prudent, more accountable behaviors. Deploying and fortifying a multilayered defense, both technological and human, is what defines true innovation in data protection today.

Astound
Business Solutions

Lesson 2: Ascend to the Cloud One Rung at a Time

Massive platforms like AWS and Azure make cloud integration and access easier, without requiring the prohibitive investment of having to perpetually expand IT infrastructure. As a result, migration to the cloud continues in full force for companies both large and small. Increasingly, enterprises are decommissioning ever-sprawling data centers and opting instead for on-demand, fluidly scalable, cost-effective, and subscription-based cloud computing and communication models. And yet, even today, long past that first rush of early adopters, not all companies appear convinced that the cloud is for them. Ironically, a fair measure of that hesitation can be attributed to the doubts that spring from the use of the jargon itself. For example, what is "the cloud," exactly? People don't always "get it," and the concept instinctively sounds and feels insecure. This is why private data centers, for now, will continue to exist, and even thrive.

We believe it's more helpful to think of "the cloud" as a fluid journey rather than a finite destination—with no "one size fits all" solution. For instance, adoption depends greatly on the industry, as some sectors and markets benefit from cloud computing more than others. The more astute internet service providers have developed solutions that can be tailored to fit customers wherever they are on that journey. They can offer reliable, fiber-based, high-speed connectivity to public, private, or hybrid clouds in order to achieve varying and fluid business goals.

These objectives may include providing more direct and easier Internet access, serving hybrid work environments, expanding programs and services, building redundancy for disaster recovery, or any combination thereof or beyond. Today's providers have even beefed up strategic consultancy as part of their sales and service engagements, because cloud computing remains among the most complex discussions they will have with their customers.

It's important to grasp that the cloud is not some monolithic thing or place to be reached, but rather a measured (if not linear) journey involving sometimes forward, diagonal, and sideways steps as organizations strategically on-board select operations sequentially or a la carte. This flexibility allows them to freely explore, examine, expand, compress, and stress-test new go-to-market services and operations without having to constantly scale and reallocate CAPEX-heavy investments to sustain all that big iron on-premises. It sounds almost too basic, but along their journey to cloud computing, it's essential for companies to be honest about what they truly grasp of the technology, and what they really need from it, so they can confidently connect with a trusted provider willing to meet them wherever they are on that path.

Astound
Business Solutions

## Lesson 3: Link High-Speed Connectivity to Quality of Service

Data consumption is always expanding, driving the desire for greater speed. The market has an insatiable hunger for faster and faster connectivity—more reach, more bandwidth, more velocity. If there was ever a need in IT/telecom where the overwhelming perception is that "more is more," and that instant access is *always* the primary goal, high-speed connectivity certainly is it. Today's extraordinary velocities, regardless of how marvelously complex they are to generate and sustain, have become so readily accessible and affordable, that internet speed as a whole is now considered an everyday consumable commodity. But is "more" truly more? In the end, is it always just about Xbps?

In high-demand data environments, like the financial sector, or for real-time connected health care, that argument can be convincingly made. In these mission-critical applications, there is zero tolerance for even the occasional latency blip—not when so much, literally, rides on the line. And even in less crucial use cases across diverse business, commercial, and consumer environments, high-speed connectivity has become as second nature to us as oxygen is to breathe. Speeds that not so long ago were hard to conceive, let alone commercialize, fail to impress us today. Blame the perpetual normalization of highly complex technologies. Phenomenal advances quickly become mundane. Is there no limit to how fast we wish to connect and compute? And with every speed record eventually becoming just the latest agility baseline to beat, will we ever be satisfied? Taking a step back, a wiser question to ask might be: What good does it do to accelerate things that we keep doing wrong?

The new lesson to be learned here is to link broadband speed to reliable and repeatable Quality of Service (QoS), and then mandate that each be codependent on the other. For example (especially for customer-facing services), what if we ensure that we must first attain and sustain higher quality standards of operational and functional excellence—whether self-dictated or punitively demanded by the market—before we simply default to purchasing more speed. Because higher speeds will never make up for poorly executed transactions or poor customer experiences.

So, congratulations: You're now making the same mistake, only faster! As a rule, shouldn't we all first seek to optimize efficiency and ROI on the throughput circuits we already have before just buying more bandwidth? Once again, self-examination is key. Besides, any service provider worth their salt will help customers maximize the broadband they already have before pushing them to pony up for more. Any proposals to the contrary should immediately raise red flags.

Astound
Business Solutions
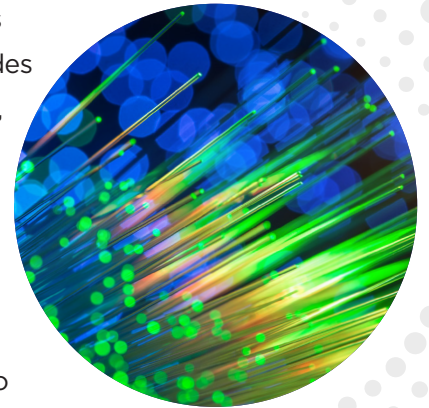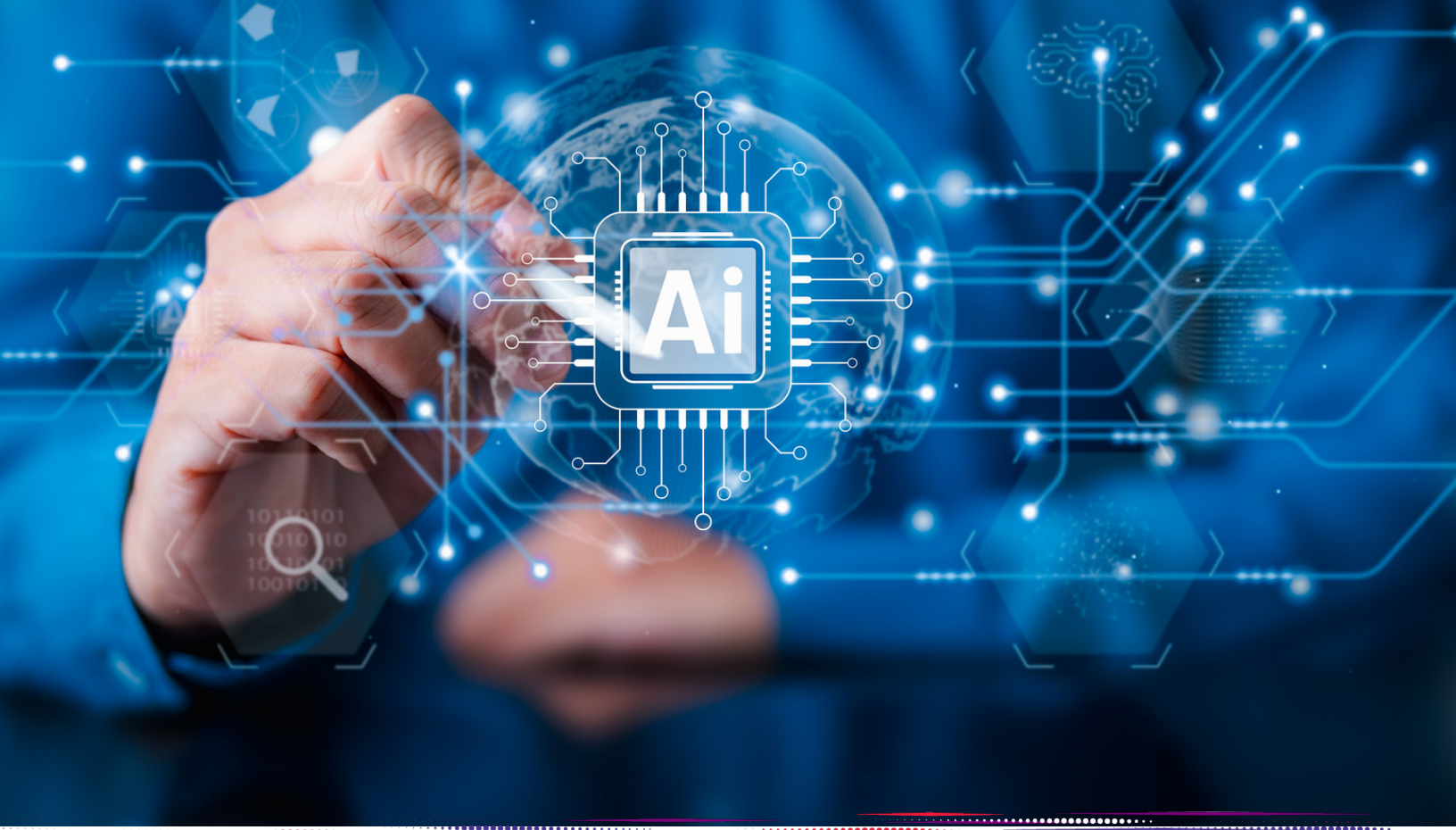
Lesson 4: Put Artificial Intelligence in Its True Place

These days, it's nearly impossible to read an article or blog entry or tune into a podcast or a TV news report that isn't sounding the alarm about the "scourge" of Artificial Intelligence (AI). As such, AI rounds out our list of top IT/telecom topics on the mind of today's enterprise executives. But just like all things in the realm of high tech, any discussion regarding AI, especially generative AI, is inherently more nuanced than today's generalized hero/villain narratives would suggest.

In the grand scheme of things, especially at first, AI is more likely to augment and extend existing processes and people, rather than simply replace them. While we must always keep an eye to the future and demand essential regulatory safeguards, much of the early fear-mongering that denigrates AI will likely prove more sensational than substantive. Moving forward, the true place for AI will be in leveraging it as an additive utility, rather than a subtractive "either/or" substitute. As it now stands, when one considers such data-demanding dynamics as the ever-expanding Internet of Things (IoT), smart automation, and machine-to-machine (M2M) learning, AI is already the productivity and efficiency force multiplier it was first conceived and developed to be.

To best support today's explosion of AI-driven applications and environments, as well as the trails this amazing technology will blaze, it's imperative to have a deft command over each of the issues explored in this paper. For instance, AI demands the highest and strictest levels of *cybersecurity*, plus copious amounts of *cloud computing*, and, of course, super-high-speed *connectivity*. And because AI itself is also self-learning, each of these performance demands will exponentially grow, be challenged, and continually evolve.

Astound
Business Solutions

Adopt Every Chance to Forward Your Journey

While leaps in technology can open doors of opportunity and enhance performance, productivity, and efficiency, they can also produce the opposite effect. Advances can empower bad habits, which, in actuality, needed root correcting from the start, or they can further exacerbate already troublesome areas and outcomes. Again, a culture of poor customer service will only get worse when more speed, access, and capacity are added. With this in mind, perhaps the ultimate new lesson to be learned is that investing in *more* of a thing isn't always the best approach. Most technology adoptions, as we've noted more than once, are ongoing journeys. And it's never a matter of if one embarks, but when, and what changes to expect along the way.

The four topics we've discussed in this paper are not only current and urgent, but they are also inextricably interrelated and interdependent. Case in point: The need for **cybersecurity** exponentially increases when one migrates operations to the **cloud**, whose functions will more than likely integrate **AI** in some way, making **high-speed connectivity** a must to drive it all. Because of this, all steps should begin with self-examination—evaluating, identifying, and learning from within what an organization truly needs. Only then should a business consult with external experts, who can further that introspective insight with an honest and objective outside perspective, offering guidance and deploying customized solutions that are truly right for that particular circumstance.

In this respect, **Astound Business Solutions** remains a crucial technology partner to our customers, helping them uncover efficiencies, boost productivity, and capitalize on revenue-generating opportunities across a broad array of goals and objectives. Our expanding 400GB high-speed connectivity deployments across the country, along with offering even more flexible options in cloud services, are just two ways that Astound continues to invest in serving the diverse broadband needs of our customers.

We welcome the chance to help your organization proceed through its own unique journey—advancing, self-assessing, and cost-effectively adapting—especially when it comes to managing these Top Four issues, which will continue challenging IT/telecom decision-makers today and well into tomorrow.

Astound
Business Solutions

astoundbusiness.com