

PRESIDIO®



TOP 5 IT THEMES FOR 2022 IN A POST COVID WORLD

By: Rob Kim

July 26, 2021

Top 5 IT Themes for 2022 in a Post COVID World

NOTE: This is part 1 of a 4-part blogpost.

It's been quite a year! Organizations need their IT leaders to step it up faster than ever despite restrictions from quarantine mandates and economic uncertainty. Security is center stage and digital transformation became a necessity. The biggest obstacle? Talent – how to find, recruit, invest, and retain the most valuable asset in modernizing IT.

This blog post will focus on the modernization efforts organizations across all sectors are approaching business transformation. I'll discuss how COVID and the pandemic have affected the funding, prioritization and execution of the initiatives, and where we @Presidio are investing to fill in the gaps for our clients and ensure successful outcomes as we head into a post COVID world.

Over the past 10+ years, we preached how technology is shifting from an operational necessity and a cost of doing business to a strategic asset. It is the key differentiator on how organizations – regardless of industry or vertical – will move to the forefront, utilizing technology to get there – ahead of their competitors.

For many of us in the IT field, the operational successes that we achieved through designing and deploying bulletproof infrastructure solutions for the long-term (often-times without real thought to the business workloads that utilize those resources), buoyed the upward trajectory of our IT careers. However, these ARE NO LONGER the priority factors that will propel technology professionals to thought-leader status, as the game has changed.

What got us **here**, won't get us **there**.

We surveyed a sampling of our extensive client base (over 7000) and two themes emerged loud and clear as the top priorities for IT:

1. Be the change instigator.
2. Proactively act as a business co-creator

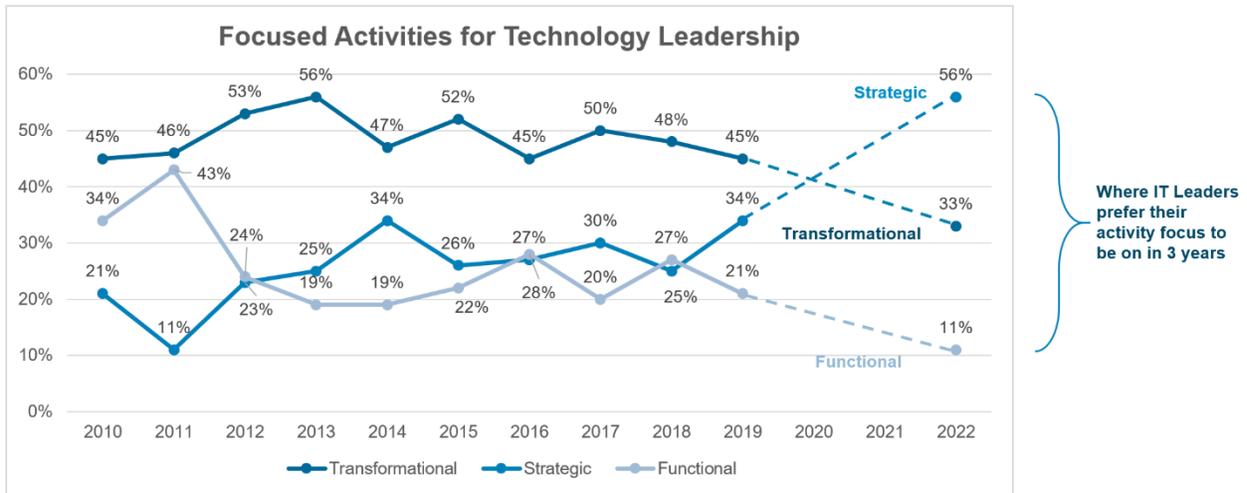
In essence, IT must be a partner in implementing the business strategy by influencing how organizations can use technology to innovate and redefine how the business executes its objectives successfully and how the differentiated use of technology will help GROW THE (topline) BUSINESS. These imperatives are so important that in survey results, we have seen that change in priority dramatically shift:

KEY IT PRIORITIES (surveyed business leaders):

Priority	2016-2018 Rank	2019-2020 Rank
Be the change instigator	9%	20% (up 11%)
Act as a business co-creator	36%	60% (up 24%)
Maintain trusted operations	55%	20% (down 35%)

This doesn't discount the importance of trusted operations but recognizes that the ability to maintain IT service levels are inherent and table stakes.

When comparing this to what we have seen from the industry analyst reporting, the results are remarkably similar:



Source: IDG, State of the CIO, 2019

This change in priority has also forced IT practitioners to flip the script on much of what we held as key approaches to deploying enterprise IT solutions, notably, from all three organizational areas – people, process, and technology. The major themes are illustrated below (NEW vs OLD):

- **Good enough vs. High Fidelity** – deliver capability as fast as you can, even if it’s not the richest or highest-quality
- **Iteration vs. Release** – instead of an aggregated release, deliver individual functionality that is minimally disruptive to the end-user and requires a minimal learning curve
- **Just-in-time resourcing vs. “Build it and they will come”** – purpose-built infrastructure resourcing that needs less upfront “requirements gathering” and more focus on what’s needed now - not 3 years from now
- **Built to Change vs. Built to Last** – expect that anything you design will change quickly so focus on extensibility/flexibility in design instead of scale or permanence
- **IT General Contractor vs. IT Specialist** – focus on “building the house” and not just “putting in the plumbing” as commoditization of IT has spawned an overabundance of choice – help find the signal through the noise

NOTE: We will explore each one of these themes in this blog series, so we will just start with a quick primer for each in this post.

	Speed to Market	Convenience	Intuitiveness	Extensibility
Good Enough	X	X	X	X
Iteration	X	X	X	
JIT Resourcing	X	X		X
Built to Change	X	X		X
IT GC		X		X

As compared to the traditional IT approaches, the motivator of these changes is striking and clear – it’s all about speed and convenience that is delivered intuitively, allowing flexibility to quickly adapt to new needs – as these needs are constantly emerging.

Top 5 IT Themes for 2022 in a Post-COVID world (2/4)

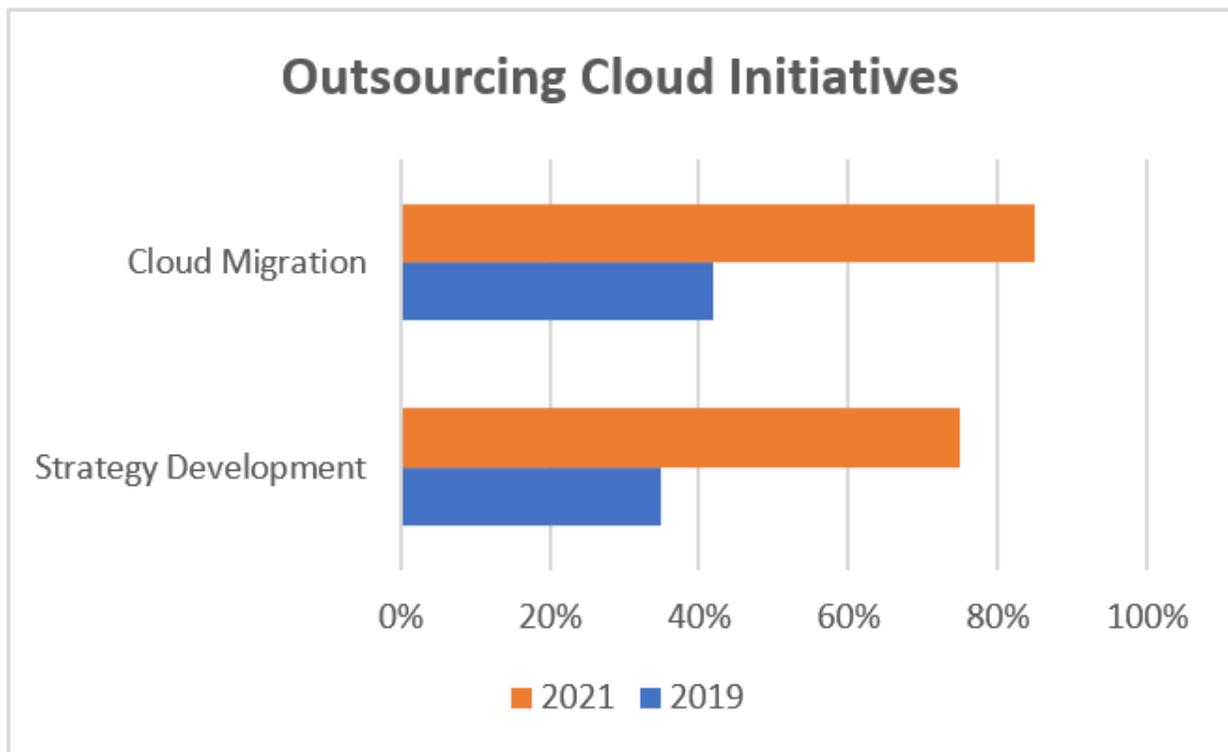
NOTE: This is part 2 of 4.

In part 1 of this blog, we focused on client survey research and industry analysis to explore the changing technology approaches to IT modernization.

Traditional IT approaches are too complicated, require too much upfront information, take too long to design and deploy. They also lack intuitiveness, requiring a learning curve for the end-user to adopt and become proficient. Consumerism stresses traditional IT approaches.

There is a reason why new technology approaches bear names like LEAN, Agile, Kanban, sprints, and the like – it's about SPEED.

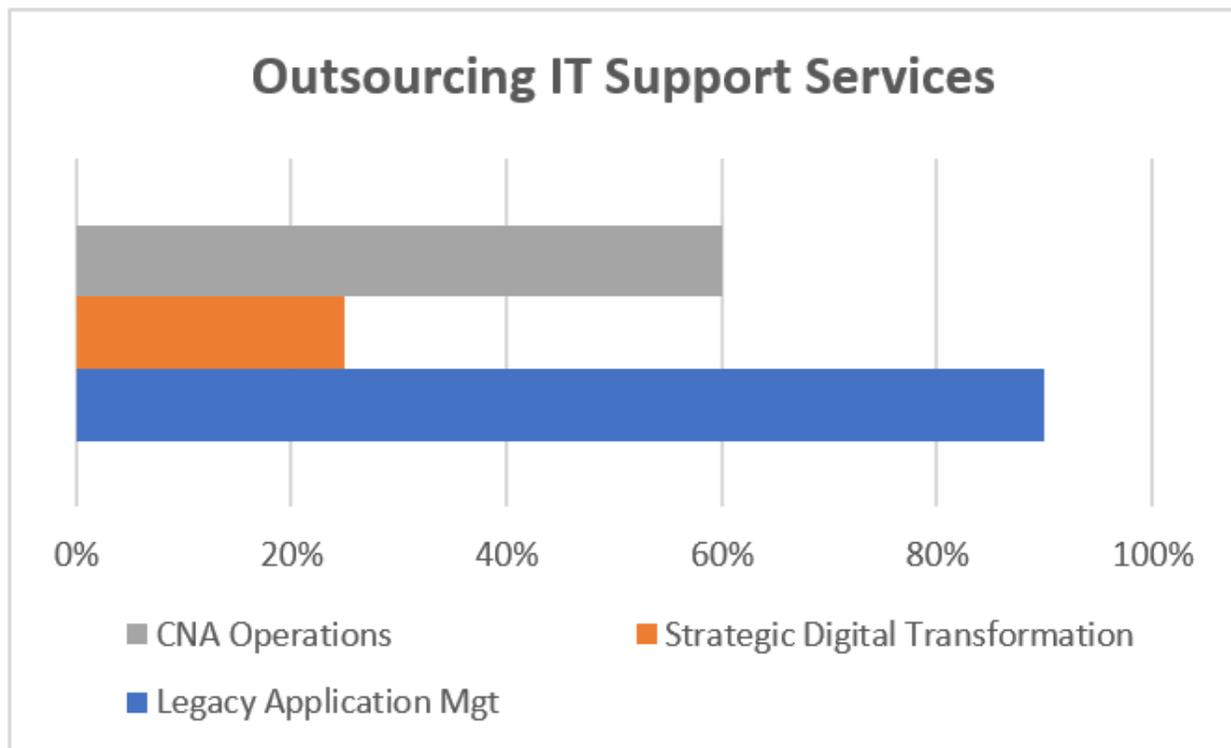
They create more operational complexity, as they are typically not adopting more immutable approaches in deploying technology, which increases the need for traditional ITO support, all of which culminates in the most barren of all resources – modern IT talent.



Source: Gartner - "Forecast Analysis: Cloud Consulting and Implementation Services, Worldwide," G00465495

The ability to hire, invest in, and retain top-level IT talent has become a leading concern in predicting successful outcomes of planned digital/cloud initiatives.

- In 2021, 85% of large enterprises surveyed now plan to turn to outside partners to provide cloud migration services, up 43% from 2019.
- Similarly, 75% of respondents plan to outsource their strategy development efforts, up 40% from 2019.



Source: Gartner - “Forecast Analysis: Cloud Managed Services, Worldwide,” G00465494

The same trending is seen when reviewing operational support needs – including ongoing enhancement and support for workloads on both ends of the spectrum.

- 90% of Legacy application management will be outsourced to an MSP by 2024.
- 60% of Cloud Native workload management will be outsourced to an MSP by 2024.
- 25% of On-demand strategic resourcing will be contracted thru XaaS models by 2024

NONE OF THIS IS NEW.

While the pandemic significantly impacted global economies and essentially “Stopped the world from spinning,” it had the opposite effect on technology investment.

In fact, 73% of clients surveyed either increased or kept IT spending the same while increasing the number of IT initiatives they executed, *albeit more focused on key areas like workforce transformation*. Further, given the speed at which these initiatives were requested, organizations were FORCED to look outside the 4 walls to value consultancies that could fulfill task-level duties and for more senior architect roles that typically were kept internal evidenced above.

As much as we talk about CHANGE and TRANSFORMATION, it took a major change event to force the hand to modernize – because ultimately, technology investments provided the means for businesses to continue and thrive.

Just as shifting movie premieres from theaters to online streaming services can only be done through technology, so too across all industries:

- **In healthcare**, a drastic increase in telemedicine for remote diagnosis and initial patient screening, as well as collaborative physician consultation done remotely.

- **In retail**, a huge increase in e-commerce and the use of data analytics for dynamic pricing, inventory management/optimization, and supplier cost negotiations.
- **In finance**, a big influx in remote banking and data analytics to drive more LTV by using the customer data combined with external data sources to provide custom service bundles as well as automating portfolio management to shrink operational costs and improve returns for clients.
- **In judicial sectors**, deployment of remote technologies to allow the courts to continue to function, including the intelligent use of data (GPS, external sources, etc.) to ensure compliance.
- **In biotech**, the use of AI and GPU-based data processing to increase the precision of insights for developing vaccines – fundamentally shrinking the time that future vaccines/cures will be released to ensure public safety.
- **In utilities**, the use of edge-based data (SCADA, IOT, IT/OT, etc.) and AI to improve energy services as the increase in remote workforce dynamically changed the demand for how key utilities needed to be distributed.
- **In logistics and transport**, innovations in edge technologies and efforts to modernize distributed warehouses allowed for personalized inventory optimization, allowing quicker speed to delivery and optimizing driver routes to realize cost savings on fuel and improving driver safety and health.

*NOTE: All of the above are just a small sample of various projects and initiatives that we @Presidio were so fortunate in collaborating with our clients, and based on our recent investments in data, app, and security resources, how we plan to continue to accelerate our clients' initiatives in the future. We will feature these success stories in future episodes of our Presidio Podcast, **Digital Decode**.*

The impact of the pandemic didn't bypass the HW manufacturers. Quarantine restrictions reduced the output of key low-level parts that go into manufacturing infrastructure resources – compute, storage, networking. And with delayed ship times, lack of inventory, and cost increases, clients were forced to turn to cloud services to address resourcing needs.

In Part 3 of this blog, we will dive deeper into how organizations – in all verticals and sectors – dealt with the lack of available infrastructure resources and how it fundamentally changed the approach to rationalizing workloads to the cloud.

Top 5 IT Themes for 2022 in a Post-COVID world (3/4)

NOTE: This is part 3 of 4. If you missed either, please [click here for Part 1](#) and [here for Part 2](#) access.

“Why didn’t I do this sooner?”

It is generally agreed that workloads are what determine the resourcing options. Anytime we typically hear about the “repatriation of workloads” from the cloud back to on-premise deployments, it is typically a consequence of not properly rationalizing the best migration option for said workload. And as expected, the workloads that migrate first and remained in the cloud were those around re-factoring/re-engineering of applications, or re-purchasing through SaaS delivery options.

As for IaaS, it is arguable that running these workloads on-premise can be done in a more cost-effective manner, which made it harder to convince clients to migrate via lift and shift. Other confounding factors in the form of technology debt and traditional IT “FUD” made it even more difficult to convince clients that IaaS has a valuable role in their cloud transformation.

But COVID changed everything.

In a rush to implement new remote workforce technologies, organizations prioritized functionality over security. Only when we started receiving more requests for Incident Response due to resulting security breaches did we see a willingness to move to IaaS – all with less planning and addressing FUD than when it was originally proposed.

Why? Because hardware was not available.

This required organizations to deploy in cloud as quickly as possible. VMware Cloud and AWS became the first option – no detailed “right-sizing” was required to determine VM placement as the hypervisor was the same AND still deployed on dedicated hosts (no shared tenancy).

And as the recovery efforts happened in weeks rather than months, the most common post-recovery question was, “Why didn’t I do this sooner?”

And as we looked at other IaaS deployments, we completed over the course of the pandemic, the phenomena of *move to improve* jumpstarted modernization of technology debt that accumulated as a result of virtual environment sprawl, majority VMware, that grew too large and weren’t properly maintained (multiple versions, non-consistent patching/updating, lack of standardization in VMhost deployment, etc).

While in the case of breach recovery, there was no option except migrating to IaaS, other use cases like datacenter expansion/consolidation, VDI burst capability, and DR still chose IaaS overbuilding on-prem.

In the final part of this blog, we will discuss how organizations used the “move to improve” rationalization approach to jumpstart modernization of Mode 1 workloads and accelerate the development/modernization of Mode 2 workloads.

Top 5 IT Themes for 2022 in a Post-COVID world (4/4)

Spring Cleaning on Technology Debt

A couple of years ago, our family moved to a new home. To no surprise, the simple act of having to pack up belongings and move them to the new house forced us to get rid of all the junk. Two years later, we have accumulated a lot more junk in our house, yet the annual process of purging has not yielded nearly as much clean-up as that single move. This is the essence of “*Move to Improve*” – the rationalization method that accelerated during COVID.

For many paralyzed organizations and as an effect had not modernized their virtual environments, a simple move to the cloud via VMC allowed a quick way to get out of the technology debt that accumulated over the course of years., a simple move to the cloud via VMC allowed a quick way to get out of the technology debt that accumulated over the course of years. Without the lingering technical baggage, the move to modernize workloads to cloud-native became much easier. Moving and then improving helped accelerate digital initiatives like workload portability (deploying Kubernetes and container strategies) as well as OS and DB migrations to Linux and RDS, respectively.

Infrastructure teams saw their overall ability to scale environments increase – and quickly. They could manage more and work less to complete simple admin tasks – including upgrades and patching – understanding how cloud benefits led to working more proactively with the app/data counterparts to modernize.

For the Line-of-Business application owners (who initiate most of the investment for implementing new digital technology), there has been a growing appreciation for the operational and cost aspects of the production deployment and how legacy workloads are affecting the organization’s ability to move forward and scale. Now more than ever, IT and the business are meeting in the middle.

TECH INITIATIVES DRIVING 2021 IT INVESTMENTS:

	Heads of IT	LOB
Data/business analytics	#1 39%	#3 19%
Security/risk management	#2 37%	#1 31%
Enterprise applications (cloud-based)	#3 32%	13%
Customer experience technologies	#4 30%	15%
Machine learning/AI	#5 25%	11%
Cloud migrations	23%	#2 21%
Employee experience technologies	12%	#4 18%
Data center/infrastructure	17%	#5 16%

Source: IDG, *Impact of COVID on IT, 2020*

Meeting in the Middle:

- Heads of IT are getting more serious about modernizing legacy environments than ever before. They now see the value in “digital.”
- LOB realizes the importance of operationalizing platform and infrastructure to gain better visibility and cost control around the digital technologies they deploy. They better understand the ramifications of “shadow IT.”

How am I going to pay for that?

It's not the technical limitations that have restricted some organizations to adopt cloud and more digital technologies – especially as the industry shifts to a subscription model (XaaS from major HW vendors are proof). It's much more about how organizations plan to fund it as current financial regulations are limited in options for those that are opposed to non-capitalized cost structures.

However, with the more rapid adoption of cloud services through the pandemic – and across all industries and verticals – the priority to contain cost and derive a financial model that works best for the organization has become increasingly crucial.

Some prefer CAPEX options over OPEX, and others vice-versa.

Similarly, some like to pay upfront while funds are on-hand, versus others looking for more consistency with a payment plan structure over a year or agreed term.

This is where we need legislation to come up to speed. While there have been changes to [FASB](#) and [IFRS](#) rules to accommodate specific subscription deployments for a more CAPEX-friendly model, more needs to be done.

There hasn't been a more exciting time to be involved in technology. The lessons from the pandemic have only confirmed what we already knew – technology is a key component in solving our major challenges. Moreover, organizations are looking for technology advisors more than task-specialists, as these transformations are comprehensive and complex – experience is key to building confidence. But it's all wasted if someone breaches our walls.

Don't forget to lock the doors.

As a final focus area, the technology initiatives discussed would be-for-not without a solid strategy and execution plan around security. As to what to secure, that's more evident than ever – you **HAVE TO SECURE EVERYTHING**. The reality is that the new perimeter is not the data center; it's the user.

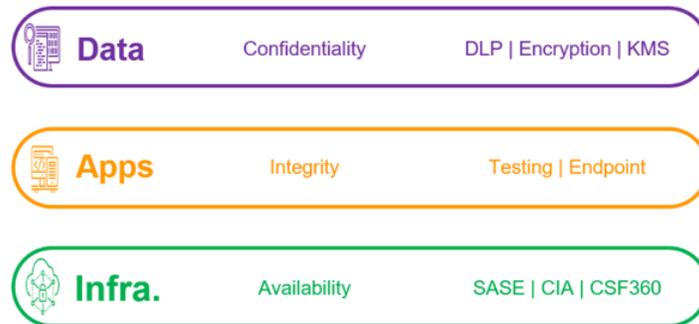
More importantly, it's not about focusing on being 100% breach-proof – because if someone wants to get in, they will. And while the policy, options, toolsets, and platforms are plentiful, it is important to simply be mindful of these key actions:



1. Identify internal and external threats AS QUICKLY AS POSSIBLE.

2. Isolate threat to PREVENT FURTHER INTRUSION.
3. Remediate the threat while MAINTAINING/RESTORING service availability AS QUICKLY AS POSSIBLE.

The focus areas differ slightly as we dive further in detail to the corresponding IT assets: DATA, APPS, INFRASTRUCTURE:



1. **Confidentiality:** How can we secure data to be accessed only by authorized users flexibly while preventing any potential data loss?
2. **Integrity:** How can we confirm that the workloads users interact with have not been tampered? How can we prevent tamper in the first place?
3. **Availability:** How can we quickly identify and isolate threats so that we can maintain service availability to apps and data as resiliently as possible?

So that's where we [@Presidio](#) are focusing our efforts – our **TOP 5 IT THEMES** for 2022 Post COVID:

1. **Remote is here to stay** – how do we prioritize its best use
2. **Spring cleaning on technology debt** – get rid of technical “baggage” to modernize faster
3. **Technology as a business partner** – differentiated use of technology leads to competitive advantage
4. **Don't forget to lock the doors** – secure everything, at every phase, across all IT assets
5. **Good talent is hard to find** – augment skills gaps with XaaS and ITO options

Looking forward to sharing more IT topics in our next month's post!

If you would like to learn or discuss any of the topics covered in this post in more detail, please reach out. I can also be found on [LinkedIn](#) or [Twitter](#).