



The CIO guide to crisis recovery

Map your business plan to **stabilize, reopen, and grow**

WHITEPAPER



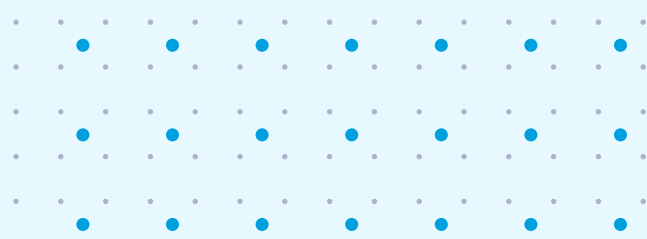


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A note from our CTO, Uri Sarid

As we all manage our way through a pandemic, on behalf of all of us at MuleSoft, we hope you and your families are safe and well. At MuleSoft, we stand committed to our customers, partners, and the wider community who are leading through the crisis with speed and agility — building the foundation for the future.

Everyone is using the term “unprecedented disruption” to describe the impact of the pandemic — and it truly is unprecedented. In fact, this huge shock is leading to radical transformations in consumers’ lives and businesses across industries. CIOs and IT teams now need to support rapidly increasing demand for digital capabilities, improve workflows, and adapt to changing customer experiences. They also need to think about their long-term strategy to accelerate digital transformation and build future-proof foundations that will make them stronger, more resilient, responsive, and efficient over time.

I say “this huge shock” above — but which shock, actually? It’s not just this pandemic, as one day it will be largely behind us. It’s about the economic repercussions that will likely last much longer. And even more so, it’s about a shock to “the bar” — the bar of expectations about the speed at which we deliver changes and responsiveness to any threat or opportunity; the bar of the worker experience and work from home (WFH) as a new



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default for many; and the bar of costs and ROI being measured in hundreds of percents. This shock ushers in a new, longer-lasting reality.

While “fully digital” has been an aspirational goal with varying degrees of urgency, now “not digital” is simply debt — not just technical debt but also business debt. Today, anything that can be effectively automated and hasn’t been is considered technical and business debt. Throwing bodies at problems that can be solved automatically by machines is no longer tenable. Your people are your most precious resource — enable them to automate processes, to handle exceptions versus the routine, and to add intelligence, insights, and empathy on top of streamlined automated customer journeys.

In short, agility must now be not just a strategy but also a highest-order practice. Organizations must unlock data and automate actions based on that data to stabilize, reopen, and grow in the next normal — while ensuring the safety of customers, partners, and employees. We’ve seen our customers, who have already set themselves up to be agile, evolve incredibly quickly. They were already creating a composable enterprise, often on existing assets, with API-led connectivity. And they can now rapidly recompose those digital capabilities in days or weeks, rather than in months or years it would take building from scratch. For example, we have customers in healthcare who have securely exposed patient information through standard APIs to improve efficiency. Now, since they can’t have as many patients visiting at one time, they’re completely rewriting their operations manuals by reusing the same

APIs — creating new scheduling systems or telehealth apps in just a few days.

You can’t unsee this. Once stakeholders understand what can be done, how fast it can be done, and how quickly you can iterate and come up with new solutions, speed from IT teams will be expected. We’re not going back to the normal way of two- and five-year projects — this is going to be a major shift.

Today, IT’s role is more critical than ever, especially as companies adapt by enhancing their digital capabilities and transform operations to increase speed and agility.

This guide provides a step-by-step approach for CIOs and IT teams to assess where their business is today and what actions they can take to achieve speed and agility with an eye on growing in the next normal.

URI SARID,
CTO, MULESOFT



Introduction

COVID-19 has challenged leaders across organizations to move at an unprecedented pace, as they go from stabilizing operations to reopening the workplace to growing in the next normal.

Startups have crumbled and more than 100,000 small businesses closed permanently in the new economic reality.¹ Ninety-four percent of the Fortune 1000 have seen supply chain disruptions, forcing companies to quickly find new ways to reduce supply chain risk and the likelihood of any future disruptions.² It's safe to say that more has happened in the past few months than the past 10 years.

The impact of COVID-19 has made two things very clear: First, that the need for digital transformation has been accelerated by the crisis. Second, CIOs across every industry are in a mission-critical position to determine their business' success or failure. IT can no longer be viewed as a separate domain of the business. As Jo-ann Olsovsky, CIO, Salesforce, said "No matter what industry you're in, we're all technology companies, we're all enabled by technology, and it is so important for us to find ways to drive efficiencies and innovation, and really be change agents throughout all of our organizations."³ With all businesses becoming tech companies, CIOs now hold the key to accelerating digital transformation in their organization.

Digital has moved beyond imperative — it's now existential. According to a recent survey of Fortune 500 CEOs, 63% said that the crisis would accelerate their digital transformation.⁴ Every industry faces immediate change, and every organization needs to deliver faster than



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JO-ANN OLSOVSKY,
CIO, SALESFORCE



ever before. To do so, companies need a new innovation model based on data processes and digital capabilities that can be easily and quickly composed into new experiences. As a result, IT's role is more important than ever, as they maintain operations, launch time-sensitive initiatives, enable remote productivity, and serve as the stewards and co-creators of innovation.

The choices CIOs make in these moments are critical, and not all options are equal. According to a Gartner survey in March 2020, 55% of tech CEOs were not prepared for an economic downturn prior to COVID-19.⁵ How ready is your business to handle another wave of crisis? How quickly can your business transform to succeed in the new normal?

During this time, CIOs and IT leaders have the opportunity to lead with future-proof foundations rather than continuing to introduce technical debt. There are two key factors to pay attention to:

1. Are your technologies flexible and capable of handling change with speed and agility to address today's needs?
2. Are you built to scale innovation and set up for future growth?

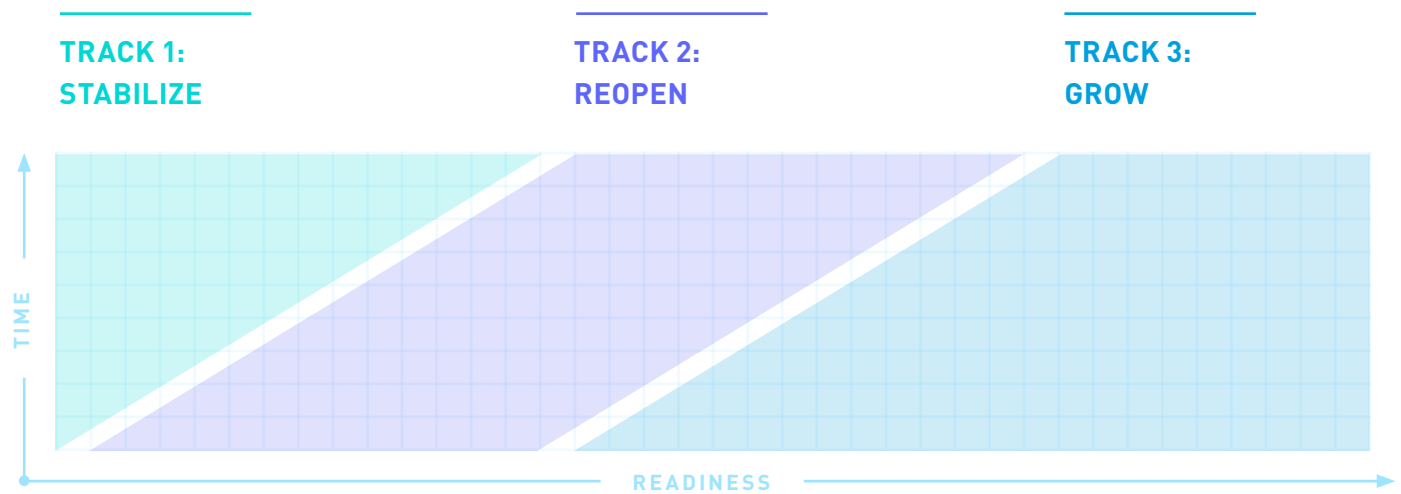
Unlocking and integrating data with APIs is key to helping organizations respond quickly, increase agility, and scale to meet growing or new demands. Organizations need an API strategy, so they can compose existing digital capabilities to quickly deliver critical services, return to work, and prepare for accelerated digital transformation.

**According to Gartner,
55% of tech CEOs were not
prepared for an economic
downturn prior to COVID-19.⁵**



Structuring your approach

MuleSoft, a Salesforce company, has broken down how IT teams can adapt to today's environment and beyond COVID-19 in these three tracks.



SOURCE: SALESFORCE. THE COVID-19 RESPONSE PLAYBOOK. [WORK.COM](https://www.work.com)

TRACK 1: STABILIZE

Companies in this track are focused on mitigating short-term risks and stabilizing operations. Their focus is on employee health and safety, business continuity, and financial stability. The imperative is to act quickly and deliver with speed. To respond to time-sensitive, mission-critical initiatives, you need to be able to unlock, unify, and secure data, while maintaining business continuity and transforming to increase speed and agility.

TRACK 2: REOPEN

Companies in the reopen track are planning and orchestrating how to return to the workplace. They are focused on new ways of working to

enable reopening businesses and communities. In this location-independent way of working and operating our businesses, remote employees require digital independence. IT must shift from being reactive to proactive in accelerating innovation by democratizing digital access. They can do this via reusable building blocks that securely expose data and capabilities through APIs — enabling teams across the organization to discover and consume these business capabilities.

TRACK 3: GROW

Companies that enter the growth track are focused on accelerating new digital initiatives to become more agile. Organizations must unlock

data quickly to address the digital imperative. To do this, they need to become a truly composable enterprise. Modern applications are composed, not custom coded. IT needs to design for reuse and scale, so teams can expose and consume business capabilities with standardized APIs — driving innovation, speed, and agility. An API strategy will pave the road to legacy debt retirement by abstracting and loosely coupling systems. This API-led approach empowers IT and the business to create connected experiences and new revenue opportunities, faster.

The key point is that different parts of your business will be operating at different paces.

We refer to “stabilize,” “reopen,” and “grow” not as phases, but tracks. That’s because, in a single company, various parts of the business operate at different paces. You might have one business unit or geography struggling to stabilize because of the lack of leadership communication, or insufficient information available to make fast and accurate operating decisions. They may spend a long time in “stabilize” before they’re able to move to “reopen” — this could be due to issues created by the crisis or pre-existing factors. At the same time, other parts of the organization may already be in the “reopen” track or well into the “grow” track because they were born digital or the market supports their business model.⁶

The key point is that different parts of your business will be operating at different paces. So,



by having a clear understanding and plotting out where the various business units in your organization stand, you will know what each needs — making it easier to align leadership teams on next steps.

CIOs and IT leaders are uniquely positioned to lead the business through challenges in each track. Use this guide to map your response each step of the way.

Stabilize



Overview of steps to stabilize:

→ **Step 1:** Build a single enterprise view to ensure health and safety

→ **Step 2:** Respond to changes in customer behavior

→ **Step 3:** Adapt internal operations

As we emerge from the global crisis, organizations and communities of all sizes are looking to mitigate short-term risks and stabilize operations. To do this, business leaders must prioritize employee health and safety, business continuity, and financial stability. End-to-end data integration and visibility are critical components not only in helping business leaders be responsive in this rapidly changing environment but also in giving them the information they need to make sound decisions that will stabilize their operations.

In this track, it is important for CIOs to consider how their organizations are consuming and integrating COVID-19 public data to inform time-

sensitive decisions around the health and safety of their employees. They must also lead the way in understanding how customer behavior changes are impacting IT systems, identifying operational gaps, and determining how to deliver the right customer experiences. Finally, CIOs need to evaluate how all these changes are affecting the supply chain and internal operations from an IT perspective, and how to move forward.

STEP 1

Build a single enterprise view to ensure health and safety

The impact of COVID-19 has changed the way we interact with one another — from social distancing to remote work — and we will likely not be returning to the status quo anytime soon. As we approach a new normal, organizations must prioritize the health and safety of their employees, customers, and the general public. Most will inevitably need to transform the way they approach health and safety as they look to stabilize business operations.

Digital plays a critical role here. CIOs can lead the charge in creating a single view of the enterprise by unlocking data and helping developers to easily access business, employee, and public health data so they can quickly respond to urgent initiatives. This requires an API-led integration approach, which enables developers to deliver on critical, time-sensitive projects by connecting data from any system via APIs, no matter where that data resides.

LAUNCH HEALTHCARE SOLUTIONS FASTER.

Reduce healthcare integration challenges with our COVID-19 solutions designed to streamline manual processes, enable cross-collaboration, and unlock healthcare data in a secure, reliable manner.

[Learn more](#)

To create this single view of the enterprise, first, determine what data sources are needed. Internally, you may need to pull HR data from Workday, ERP data from SAP or NetSuite, and CRM data from Salesforce. Externally, you may need to pull health data from the Center for Disease Control (CDC) or the World Health Organization (WHO). Then, connect all data sources using an integration platform by leveraging custom or prebuilt integrations and APIs. Next, visualize the data in software such as Tableau to create actionable insights for end users. Once you have done this, you can then begin to automate business processes to increase employee and developer productivity. Finally, ensure high performance by monitoring all your APIs and integrations in a single pane of glass.

STEP 2

Respond to changes in customer behavior

COVID-19 has reshaped the business landscape and has rapidly brought to the surface previously existing, underlying consumer trends. As the impact of the virus persists, customers are forming habits and behaviors that will endure beyond this crisis.

Today, more customers are looking to engage with businesses through digital channels. Do

you have the systems and services necessary to adapt to this shift? Are you able to scale those systems to handle the demand and ensure optimal performance? CIOs and IT teams must identify and solve operations gaps in order to respond to these changes and deliver the types of experiences customers are looking for. You and your team need to implement systems and services that can meet the changing demand.

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Integration is critical to adapting to changing customer behaviors. The right integration strategy and platform can ensure a business's ability to scale to meet demand, implement and integrate new applications to fill operational gaps, and secure important data.



DEEPEN CUSTOMER RELATIONSHIPS WITH THE RIGHT DATA.

Staying connected with customers is more important than ever and involves disparate systems, multiple data formats, and changing data sources.

[Learn more](#)





CUSTOMER SPOTLIGHT

AXA

AXA Luxembourg goes the extra mile for customers

AXA Luxembourg and AXA Wealth Europe are branches of the multinational finance and insurance firm, AXA, that provides various insurance and wealth management services for individuals and businesses. Above all, AXA seeks to provide its customers with an outstanding customer service experience.

At the beginning of the coronavirus pandemic, the IT team was under immense pressure to ensure that employees were able to deliver the same high-quality customer service and connectivity while working remotely. Olivier Vansteelandt, the CIO of AXA Luxembourg, says that IT played a critical role in enabling AXA employees to work safely from home. Vansteelandt says the team is now entering the second phase of the crisis — which involves finding new ways to work under these new conditions.

“We changed our operations from paper-based work to now a paperless environment. We need to capitalize on that to avoid coming back to the previous way we were working. That’s the next step for us in IT — to go the extra mile and to finalize the transformation.”

OLIVIER VANSTEELENDT,
CIO, AXA LUXEMBOURG



STEP 3

Adapt internal operations

Customer behavior is not the only aspect of the business landscape to undergo change. The way employees work and engage with one another internally has transformed overnight. For many companies, most, if not all employees have shifted to remote work. Changing demands have also put added stress to associated business functions and disrupted the supply chain.

Even if your business isn't yet optimized for remote work, to stabilize your operations, at minimum, you need to have the right technology in place to allow your employees to begin doing their jobs at home. Do you have the hardware, software, systems, solutions, and other tools necessary for all your employees to get back to work? Do your employees have what they need to communicate and collaborate? Do you have the infrastructure to handle a large number of employees working from home? Have you taken the necessary steps to ensure you are keeping your data secure regardless of where your employees are working from? Are your systems connected to deliver the critical return-to-



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Connect Sales Cloud to applications like SAP, Oracle, and NetSuite to manage your complete business by unlocking your back office data through integration.

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work initiatives and respond to new workplace requirements? Although these questions may sound simple, each must be properly addressed in order to set your business and employees up for success in this new normal.

CIOs and IT teams not only play an important role in enabling a remote workforce, but they must also lead the way in integrating and connecting systems to scale necessary business capabilities and enable flexibility in the supply chain. This is critical so other business leaders can make adjustments and adapt to handle changes in demand and supplier capabilities. With reusable APIs and integrations, your IT teams can deliver the right experiences, products, and services, to both internal and external customers faster.





CUSTOMER SPOTLIGHT

USDA

USDA enables hybrid workforce
with secure system access

The United States Department of Agriculture (USDA) is a federal government department that supports key programs across the nation including COVID-19 food chain management, rural development, and runs one of the country's largest federal employee pay processing centers. The agency employs more than 100,000 employees and has 4,500 offices in every county in the U.S. as well as abroad.

Because the USDA is a government agency, there was the potential for several issues to arise when employees had to shift to remote work, such as gaining secure access to critical federal systems and data. However, since the USDA has leveraged API-led integration to securely connect its systems and data, the USDA was able to maintain employee operations.

“We’ve really done a good job of building a decentralized system where we can support our offices anywhere in the country or the world. It was easy to extrapolate that to home offices in every city and county in the United States.”

CASEY COOK,
ENTERPRISE ARCHITECT, USDA



Reopen



Overview of steps to reopen:

- **Step 1:** Manage safety for in-person workers based on data
- **Step 2:** Establish contact tracing
- **Step 3:** Set up contactless operations
- **Step 4:** Enable speed and accuracy in decision making
- **Step 5:** Optimize for remote and flexible work
- **Step 6:** Build resilience into your IT infrastructure to handle future crises

Reopening the workplace in this new normal will no doubt be a challenge. CIOs must respond quickly to the seismic changes to the work environment created by COVID-19, and lead the effort to connect data, implement new digital capabilities, and improve workflows. As organizations look to reopen their doors,

both to employees and customers, the focus on health and safety needs to continue. CIOs must also lead their businesses in optimizing the remote, in-person, and hybrid employee experience.



STEP 1

Manage safety for in-person workers based on data

As mentioned before, connecting data and systems to build a single view of the enterprise is critical to stabilizing your business and monitoring the health and safety of your employees. As companies look to reopen their doors, to both employees and customers, additional safety measures must be in place.

First and foremost, compliance with national and local orders and protecting high-risk employees is a must. Additionally, the business must make data-driven decisions on employee, customer, and public safety. Workers should have a say in these decisions and should feel safe in the environments they are asked to operate in. As decisions are made, policies and standards must be clear and enforceable.

STEP 2

Establish contact tracing

With reopening, CIOs begin to navigate the increased complexities of managing the health of in-person and remote workers. Establishing contact tracing early is important. However, rolling out contact tracing to your workforce is a balancing act that requires sensitivity around privacy and security. It is critical that you keep up with the latest public health information and standards so your organization can best manage employee and customer health and safety. Employees must be able to opt-in and

contact tracing should be done manually to ensure privacy.

HOW TO IMPLEMENT AND INTEGRATE MANUAL CONTACT TRACING:

- Take an API-led approach to integrating human resources, employee benefits, and internal and external health-related systems and data.
- Give employees the option to opt-in. Use integration to capture consent information securely.
- Allow employees to manually report COVID-19 status through contact tracing application.
- Automate communications and recommended next steps to reporting employees if needed.





CUSTOMER SPOTLIGHT

Indiana Department of Child Services

Indiana Department of Child Services safely reopens 92 state buildings

The Indiana Department of Child Services leverages MuleSoft and Salesforce for state-wide connectivity across all of its systems. The department is now leveraging reusable integration assets to ensure safety for its employees — managing building operations for the 92 state office buildings with APIs. Using integrations between Salesforce, Cardinality, and the state's PeopleSoft architecture, the state can assess the safety risk of opening up buildings and tracking employee access to comply with social distancing policies. It also leverages these APIs to ensure that adequate PPE and hand sanitizer is distributed across its offices. The CIO of Indiana Department of Child Services says that it will be able to repurpose these solutions to provide care, health services, and much more down the road.

“Within eight hours, my team built a tracking software for all 92 counties to determine who’s in the building, when they check in and check out to meet social distancing limits, as well as how much hand sanitizer or how many masks we need.”

KEVIN JONES,
CIO, INDIANA DEPARTMENT OF CHILD SERVICES



STEP 3

Set up contactless operations

The way businesses are interacting with customers has changed quickly due to national and local policies and, additionally, many customers are looking for different ways to reduce contact and exposure to the virus when engaging with businesses. Delivering more contactless experiences for customers will require integrating data, systems, and applications in new ways to fill operational gaps.

This isn't just a nice-to-have for CIOs. To maintain customer trust and loyalty you and your IT teams need to deliver on these expectations, especially because you are dealing with the health and safety of your customers. By taking an API-led approach to integration, you will significantly reduce the time to launch new capabilities initiatives to deliver on customer expectations. It will also give developers the building blocks they need to continue to quickly react to shifts in customer demands around health and safety.

STEP 4

Enable speed and accuracy in decision-making

During a crisis, the business implications of fast and accurate decision-making are much more serious. Just think, in today's environment, if you were to reopen your business too early because of bad data, it could set you back for months. Making sound decisions is not just important

to the physical health of your employees, it's crucial to the operating health of your business.

CIOs and their teams play an important role here. In the past connecting siloed systems and data could have been classified more as a "nice-to-have" that was somewhere down the line on the IT roadmap — that isn't an option anymore. To truly break down data silos and connect systems, you need to have a single,

INFORM CRITICAL DECISIONS WITH THE COVID-19 DATA PLATFORM.

The COVID-19 Data Platform aggregates and curates public information to support data-driven decisions by business leaders and developers on the return to the workplace.

[Learn more](#)

unified platform that manages all your APIs, integrations, connectors, and microservices. When you take this approach, you are able to develop integrations quickly and make your IT infrastructure more resilient. This allows you to set up a foundation of reusable building blocks that can be leveraged to continually adapt to changes, no matter how large or small.



STEP 5

Optimize for remote and flexible work

Business leaders acknowledge that as organizations begin to reopen their doors, the physical workplace will not look and feel like it did before COVID-19. Some businesses are more physically-oriented than others.⁷ For those companies, employee health and safety will need to be a top priority. Many organizations will have a large contingency of remote or hybrid workers. Regardless of where employees are, CIOs must focus on improving the digital employee experience. The in-person and remote work experience must get closer to being on the same level.

The employee experience will look different for workers across industries and companies. However, there are four key areas all CIOs must focus on to improve business processes and the digital employee experience to maintain employee engagement and productivity.

- Increasing visibility and engagement of remote workers by evaluating current technologies solutions, implementing cloud-based applications where necessary, and integrating new and existing solutions to prevent data silos.
- Improving each employee’s ability to connect and collaborate with people across the organization, regardless of their physical location.

- Enabling consistent data security for your in-person, remote, and hybrid workers.
- Making help desk offerings available to remote workers and creating technology onboarding guides to increase the bandwidth of help desk staff.

Your IT teams can take the lead on integrating new and existing systems to enable a more productive in-person and remote workforce.

FIND, SHARE, AND COLLABORATE ON COVID-19 DEVELOPER ASSETS FROM ONE LOCATION.

Crisis Response Developer portal provides developers with curated COVID-19 related APIs, templates, and other integration assets to help IT teams accelerate the development of critical projects.

[Learn more](#)

Whether it’s your internal communications system (e.g. GSuite) or a planning solution (e.g. Anaplan), you can improve your employee experience faster using APIs.





CUSTOMER SPOTLIGHT

The Rail Delivery Group

The pandemic is shifting the way RDG operates moving forward and its IT team is instrumental in leading that shift

The Rail Delivery Group (RDG) is the body where the railway industry in Great Britain comes together and it promotes change and innovation across all train operating companies across the UK. When the pandemic first struck, RDG needed to get information out quickly to rail customers — on services and timetables and now as we recover on which times people should avoid due to loading and congestion.

The pandemic is shifting the way RDG operates moving forward and its IT team is instrumental in leading that shift. To ensure that rail customers and employees have minimal contact — RDG is moving toward digital ticketing and increased access to information for riders, such as joined up train timetables. These types of changes give riders the ability to self-serve information and purchase tickets via the industry's digital interfaces.

“Before the pandemic, we were already on a journey towards introducing more digital ticketing — but actually, we can see that massively accelerating now. It’s not only in the interests of customers, but also staff members in railway stations. We need to get beyond customers having to queue at train stations to buy and collect paper tickets.

“The more we can move away from paper ticketing or from people having to queue to buy tickets, the more likely it is that we will be keeping our customers safe and the operational side of the railway efficient.”

SIMON MOORHEAD,
CIO, RAIL DELIVERY GROUP



STEP 6

Build resilience into your IT infrastructure to handle future crises

While no one can foresee something like the global crisis caused by COVID-19 and the impact it might have, organizations can take steps to build resilience into their infrastructure, processes, and culture so they are set up the best they can to weather any crisis.

In the traditional model of IT infrastructure — where on-premises systems, SaaS, mobile, and IoT devices are connected through custom code and point-to-point integrations — central IT owns every piece of the application stack, as well as security and governance. An infrastructure based on point-to-point and tightly coupled integrations amasses technical debt and quickly becomes unmanageable, brittle, and makes it more difficult to adapt to changes in the market caused by a crisis.

CIOs have the opportunity to lead the effort to build more resilience into their businesses. IT infrastructure is the backbone of an organization. As you look to build a more modern and flexible IT infrastructure, you will enable your IT teams to automate and build more resilient business processes. With the right infrastructure and processes in place, you have what you need to begin creating a culture of resilience — where you can approach every new challenge, application, or integration with resilience in mind.



So, how do you build a more resilient IT infrastructure? By decentralizing application ownership, but having your central IT team still own security and governance. This can be accomplished with an API-led approach to your infrastructure and integration management.

Your modern IT infrastructure must be composable. This means that you need to allow relevant constituents in the business to take pieces of information or the bits of functionality that they need from your central IT infrastructure and build new experiences. You need to have the component pieces of your IT infrastructure as composable APIs or composable services, that your IT teams can pull together in different ways to quickly design and deploy new applications and services.

With a foundation built on a resilient IT infrastructure, CIOs are now able to instill resilience across the organization. Your IT teams can use and reuse the composable APIs and services that are part of your infrastructure to automate processes to reduce dependencies.



They will also be ready to react to market, work environment, and customer behavior changes caused by a crisis and quickly launch new digital capabilities to fill operational gaps. You are not just preparing for the next crisis with API-led connectivity — you are building a future-proof IT architecture.

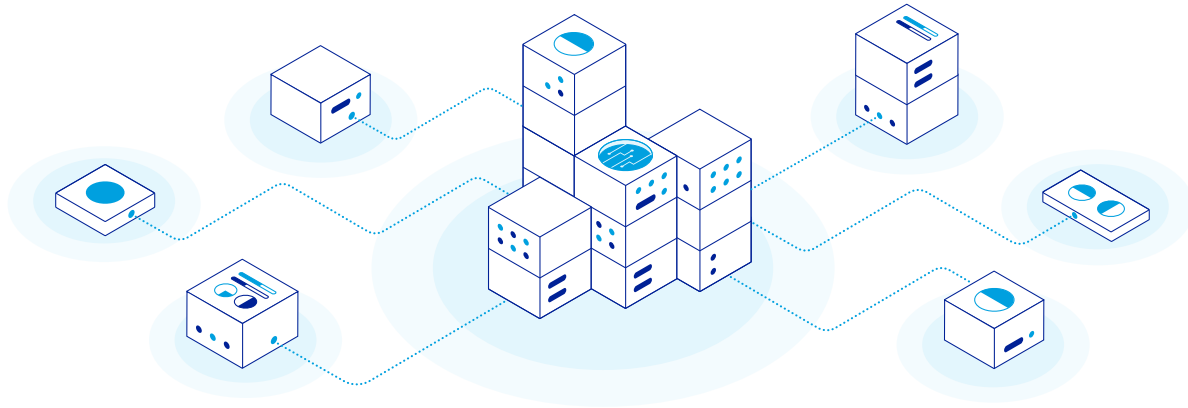


KEY CONSIDERATIONS WHEN BUILDING AN IT INFRASTRUCTURE FOR A RESILIENT FUTURE:

- What platforms, portals, and resources do you need to access to support a crisis response?
- Do you have the APIs and integrations in place to access and connect the systems you need?
- Do you have a central repository of reusable assets (e.g. APIs, services, connectors, integrations, etc.) that IT teams can leverage to deliver on critical projects?
- What steps are you taking to reduce dependency on your IT teams (e.g. automation)?
- Are you able to quickly adapt to any changes or disruptions to your supply chain?
- Do you have partners that you are overly dependent on?
- Do you have the ability to efficiently scale up or down specific operations or functions?
- Can you handle significant changes in the work environment?
- In the event of a crisis, are you able to maintain information flows, communication, and security?
- Do you have the right elements in place to build a culture of resilience?



Grow



Overview of steps to grow:

→ **Step 1:** Assess current state with an audit

→ **Step 2:** Pave the way forward with alignment

→ **Step 3:** Meet short-term demand gaps

→ **Step 4:** Enable long-term agility with an API strategy

Once organizations have stabilized to meet the new needs of their customers and communities, and have safely continued operations, leaders can begin long-term planning. CIOs can leverage the learnings from previous stages and evaluate the impact the pandemic will have on the company’s digital transformation.

MuleSoft’s [connectivity benchmark report](#) found that 92% of organizations were currently undertaking digital transformation initiatives or planned to in the next year. While the disruption caused some organizations to pause digital transformation projects to focus on stabilization, for many others it acted as a catalyst that accelerated their transformation.

Many organizations who quickly adapted to the crisis — by shifting to remote work

environments with minimal impact to productivity or quickly launching new channels so customers could access digital services and products, were able to do so because they had already laid the foundation for agility. Once your team has met all imperative demands and safety is ensured — it’s time to think about growth in the next normal.

Customer and employee demands will not be falling back to previous norms — instead, they will be shifting and moving forward. Your organization’s digital transformation strategy will need to change with it. The steps in this track will help you assess your current state of operations, identify areas for growth and agility, and adjust your transformation strategy accordingly.



STEP 1

Assess current state with an audit

As the dust settles, assess your organization’s systems and processes to see where you currently stand. You’ve seen how fast your business can run — now take the time to conduct an audit to see where your IT organization can be more efficient.

Communication will be key during this audit. Talk to the various stakeholders within your technical organization and have candid conversations about what the team has accomplished and how current operations can be improved.

Through this audit, identify which processes and applications are creating the most inefficiencies. As a business grows, the number of applications increases exponentially. If no checks are put in place, the organization’s overall efficiency will decrease. Consider which applications contribute most to business outcomes and which could be eliminated to reduce technical debt.

CONSIDER THE FOLLOWING AS YOU CONDUCT THIS AUDIT:

- Can your IT infrastructure maintain workforce operations in its current state?
- Is your team using multiple systems of record or duplicating datasets? Are there opportunities for consolidation?
- What new projects or tasks have been added to your team’s workload? What existing projects and tasks have been paused?
- How has the business strategy changed? How will this impact IT operations?

HOW MATURE IS YOUR INTEGRATION STRATEGY?

Assess the maturity of your IT organization and integration strategy in this 10 question calculator. Use your custom scorecard with recommendations to improve business impact.

[Get your score](#)



STEP 2

Pave the way forward with alignment

Once you understand the current state of your technology and processes, you can plan where to direct your organization next. This means defining your IT roadmap for the next normal.

First, align your stakeholders — the best way to do this is by establishing a [Center for Enablement \(C4E\)](#). A C4E is a group that drives the IT operating model shift and can set goals, priorities, and leads the team through this change. This group will get the business and technical teams to work toward the same goal.

After this team has been assembled, get visibility into business priorities which will influence the IT team's priorities, tasks, and projects. Continue this alignment as business demands shift with the new needs of the market. For the IT team, this could be increasing remote-working capabilities, automating manual processes, unlocking new systems and data, building new applications, etc.



ACCELERATE YOUR SUCCESS WITH OUR DELIVERY APPROACH.

Great technology alone isn't enough. MuleSoft Catalyst brings together an outcomes-driven methodology, assets, and services to drive your business transformation.

[Learn more](#)

Once you understand the current state of your technology and processes, you can plan where to direct your organization next.



STEP 3

Meet short-term demand gaps

With clear visibility, start to identify the gaps between your organization's offerings and current customer needs. It's likely your team was busy fighting fires during the stabilize phase — focusing on only the highest-priority tasks. See which low- to medium-priority needs were superseded, and consider how your team can now adjust to deliver on them.

Think of the tasks or projects that may be important, but not urgent. Here's an example in banking: Ensuring that employees had access to critical systems while working remotely was both important and urgent in the stabilization track, while creating a portal for customers to self-service information about their newly online loan application was important but not urgent. Now you can focus on the short-term projects that can deliver immediate support for customers and employees to set the business up for future growth.

Use integration technology with composable assets to create connected experiences, products, and services faster for the next normal. Composable integration assets enable your business to deliver on critical needs now and quickly scale later. Additionally, you can leverage these assets to create and scale new revenue channels for the business.





CUSTOMER SPOTLIGHT

Watchbox

WatchBox launches eCommerce
50% faster in new markets

WatchBox is the world's leading company for buying, selling, and trading pre-owned luxury watches with more than \$200M in revenue and a presence that spans the globe. The company's success relies on exposing its inventory to as many customers as possible for quick resale. To do so, WatchBox decided to move beyond brick-and-mortar retail and scale its business internationally via eCommerce. This required creating a powerful eCommerce experience that not only allows for rapid expansion, but also pulls critical inventory data from legacy and homegrown systems.

To achieve its objectives, WatchBox turned to MuleSoft's Anypoint Platform™ to roll out eCommerce sites, powered by Salesforce Commerce Cloud, for the United States and European Union. "Before bringing in MuleSoft, our IT team had to spend significant time and

resources to try to integrate data within our legacy and homegrown systems. With Anypoint Platform, our team is now using an API-led approach to integration, to connect that data faster than ever before," said Shri Ballal, CTO, WatchBox.

Within six months, the company stood up an eCommerce platform that supports customers in both the U.S. and E.U. The WatchBox team then reused the same APIs, such as its Inventory API and Pricing API, to deliver eCommerce experiences to new markets much faster — in six weeks for the Middle East, and in two weeks for Singapore. And by reusing API-led integrations for new launches, WatchBox expands its presence into any new region 50% faster than before.

[Read WatchBox's story](#)



STEP 4

Enable long-term agility with an API strategy

Finally, think about the long-term plan for the business and technical teams. How has your digital transformation plans shifted after COVID-19? Did you unlock data and build solutions in the previous tracks that are similar to the initiatives on your transformation roadmap? Are there assets that you can reuse to get these initiatives off the ground faster?

Agility will be what separates market leaders in this next normal. The ability to move and act upon changing consumer demands quickly — launching new products, services, and applications — will be crucial for your organization’s digital transformation. Get ahead of future change or disruption with an API strategy for integration to increase speed and agility, today and for the future.

The key to agility, from an integration standpoint, is reuse. With an API-led approach to connectivity, organizations can expose capabilities and data to the wider ecosystem and leverage it to enhance customer experiences. See which systems and processes are already unlocked and how you can leverage those in new innovations. Extend the power of the innovations you’ve created by enabling your partners and other third-party developers with access to your APIs.

START YOUR ORGANIZATION’S API-LED DIGITAL TRANSFORMATION WITH EXPERT-LED WORKSHOPS.

Build and launch your API program with instructor-led workshops to guide you in establishing a digital strategy, aligning culture and organization, evaluating and building supporting technology, and engaging your ecosystem.

[Learn more](#)





**CUSTOMER
SPOTLIGHT**

UCSF
How UCSF transformed the
patient referral process

As a specialty hospital, UCSF focuses on complex and specific cases that are extremely unique and often referred from another provider. Given the specific focus of each doctor and department, when a referral comes in, it is difficult to find the right doctor for a specific patient’s case. Once the referral is received, UCSF needs to gather information from the patient’s previous providers, work with different groups across the hospital, and process hundreds of fax pages.

UCSF knew that in order to provide top care that matches the top specialist care patients see in the office, it needed to re-think the referral process. They turned to the Center of Digital Health Innovation (CDHI) at UCSF, a team with a mission to build beautiful, empathetic, personalized, modern solutions for patients and providers who are trying to access information

and get care from UCSF. In this case, CDHI had a goal of making sure that the right doctor can see the right patient at the right time.

CDHI built an integration proxy layer to augment the EHR API functionality and connected its EHR to other systems — building FHIR API proxies and leveraging MuleSoft to help launch their SMART on FHIR app.

With MuleSoft, UCSF was able to make great strides in solving their interoperability issue, unlocking critical and sensitive data to power a compliant and secure patient experience.

[Read UCSF’s story](#)



Conclusion

Your crisis response journey with MuleSoft

The choices CIOs and IT teams make in this moment are critical: you have options, but not all options are created equal. You don't want to find yourself in this same position down the road. To get ahead of future disruptions, seek future-proof solutions that are flexible, capable of handling change, and put you in a position to navigate an uncertain future with speed and agility. This approach enables you to create your own flywheel of compounding benefits.

This helps you withstand future changes and forms the bedrock of your innovation going forward. Most importantly, it unlocks the power of your workforce to move with speed and agility — no matter where they are.

Check out the available tools and resources below to get started on your journey to stabilize, reopen, and grow in the next normal.

Thank you and stay safe.



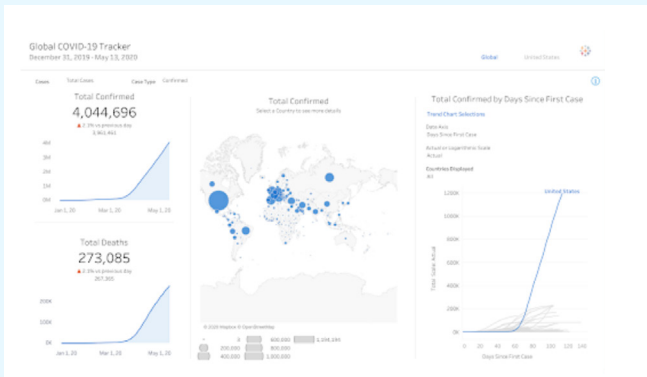
MuleSoft solutions for crisis management

LEVERAGE TRUSTED DATA

COVID-19 Data Platform

The COVID-19 Data Platform is an open data service for gathering and standardizing critical COVID-19 data sources to provide more reliable, reusable, and machine-consumable access and integration into applications and visualizations. It was built by using Salesforce, MuleSoft, and Tableau, in collaboration with Akamai Technologies, to serve API requests quickly and reliably anywhere in the world.

With the COVID Data Tracking API — a new API available on [Anypoint Exchange](#) — teams can pull a subset of the included data from the COVID-19 Data Platform into their own applications and experiences to inform key business decisions.



INFORM CRITICAL DECISIONS WITH COVID-19 DATA PLATFORM.

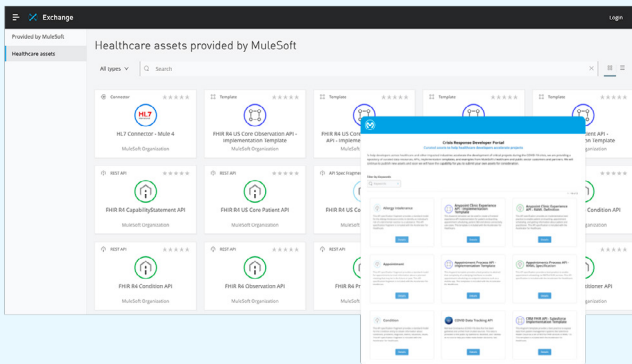
- **Highly curated data sources**
Accurate and trusted data sources, including the New York Times and EU CDC, validated by domain experts.
- **Standardized data models**
All data is protected, cleaned, and normalized to standard models: HL7/FHIR, ISO.
- **Resilient data pipeline**
Reliable and scalable platform powered by MuleSoft and Tableau.
- **Accessible to all**
Data is available via Tableau visualizations or pluggable APIs via MuleSoft's Anypoint Platform.

[Learn more](#)

RESPOND RAPIDLY

Crisis Response Developer Portal

The Crisis Response Developer Portal provides developers with curated COVID-19 related resources. Accelerate the delivery of critical healthcare projects with APIs, templates, and best practices. The portal includes curated third-party APIs that support how organizations address the COVID-19 pandemic.



FIND, SHARE AND COLLABORATE ON COVID-19 DEVELOPER ASSETS FROM ONE LOCATION.

- **Discover IT solutions for urgent needs**
Find new ideas to address COVID-19 use cases across healthcare and other impacted industries such as high call volumes, patient 360 and testing results.
- **Accelerate COVID-19 IT project delivery**
Go faster with free curated, reusable, prebuilt APIs and integration templates from health tech leaders, academia, and other trusted sources.
- **Share ideas globally**
Collaborate on valuable assets with a broader ecosystem of developers, partners, and employees to drive a connected response to COVID-19 challenges.

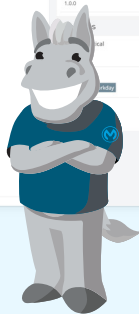
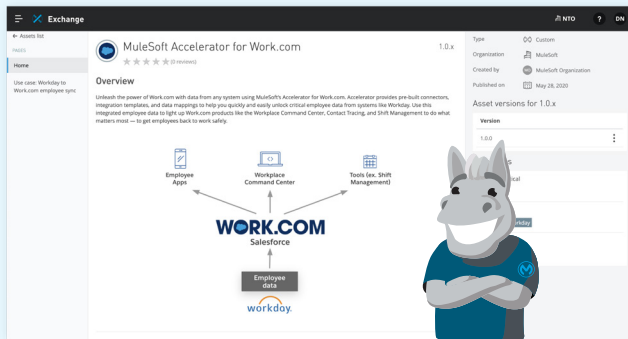
[Go to the portal](#)



RETURN TO WORK SAFELY

MuleSoft Accelerator for Work.com

Unleash the full power of Work.com with a set of prebuilt connectors, templates, and curated best practices to help customers quickly integrate their data from HCM systems, like Workday, into Work.com. Use this integrated employee data to light up Work.com products like the Workplace Command Center, Contact Tracing, and Shift Management to do what matters most — to get employees back to work safely.



QUICKLY AND EASILY INTEGRATE YOUR DATA INTO WORK.COM

- **Unlock employee data, fast**
Integrate employee data with Work.com, leveraging prebuilt connectors and integration templates.
- **Accelerate COVID-19 IT project delivery**
Light up functionality across Work.com products like Command Center to get employees back to work safely.
- **Share ideas globally**
Start from a proven foundation, based on subject matter expertise to accelerate your implementation.

[Learn more](#)



Resources

MULESOFT'S COVID-19 HUB

Explore Salesforce's free offerings to respond to COVID-19, including employee and customer support with chatbots, contextual learning, philanthropy, and more.

[See COVID-19 resources](#)

CIO WEB SERIES

Join MuleSoft's web series to hear from experts and industry leaders on how to navigate this challenging time.

[Learn about the series](#)

MULESOFT 1:1 EXECUTIVE BRIEFING

Connect with an executive at MuleSoft to get best practices for crisis management, operations, and communications.

[Contact us](#)

HOW TO MANAGE THROUGH CRISIS

Discover thought leadership, tips, and resources to help you manage your business in a time of uncertainty.

[Read blog series](#)



Citations

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MULESOFT, A SALESFORCE COMPANY

MuleSoft, the world's #1 integration and API platform, makes it easy to connect data from any system — no matter where it resides — to create connected experiences, faster. Thousands of organizations across industries rely on MuleSoft to realize speed, agility and innovation at scale. By integrating systems and unifying data with reusable APIs, businesses can easily compose connected experiences while maintaining security and control. Through API-led connectivity, customers unlock business capabilities to build application networks that deliver exponentially increasing value. MuleSoft is the only unified platform for enterprise iPaaS and full lifecycle API management, and can be deployed to any cloud or on-premises with a single runtime.

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