5 remedies for the top IT pains in Higher Education

How to drive more institutional resiliency than ever with unified service and operations management

An unblinking look at where we all are

The shifts in educational needs and the processes that support them have revealed acute shortfalls in IT systems and approaches. In conversations we've had with campus IT leaders, they mention three common pains again and again:

Pain 1: High costs as IT tries to adapt

The restructuring of the institution to accommodate a decentralized and ever-changing workforce has added to the traditional challenges the IT org must overcome. When IT teams must focus on distinct functions while working with multiple, non-integrated IT systems, what results are delayed actions and inconsistent experiences for students and employees.

Pain 2: Inability to scale IT

It's the classic "catch 22." The IT org is not able to add staff limitlessly, but the evolving way of working creates more mission-critical incidents to resolve. Isolated, remote workers see green lights on their domain-based monitoring tools, and they assume all is well. But is it? If an important campus service goes down or runs sub-optimally in one domain, IT teams need to see and address issues end-to-end with broad insight into IT and campus impact; without that visibility, users are frustrated and stakeholder satisfaction levels plummet.

Pain 3: Poor service experiences

Multiple interfaces, poorly designed end-user support services, lack of visibility, manual processes, and uncoordinated responses continue to create poor experiences and waste expensive staff hours. Employees and students alike, are feeling more stress than ever; their patience for dealing with service issues or a lack of responsiveness is at an all-time low. They just want their issues resolved.

So what is the answer? The need for scalability and flexibility has never been more mission-critical. Your approach to IT operations and service management should reflect this reality.

Start by bringing your technology services and operations together

Driven by new market opportunities, the emergence of hybrid work, and the quest for agility, most IT leadership is looking for change and is open to considering fresh perspectives. IT organizations should double down on creating a single source of truth from which to successfully drive their improvement strategies across customer experience, governance, cost, and growth.

In the following pages, we'll explore the benefits of combining two historically disparate and detached areas of IT: service management (ITSM) and operations management (ITOM). The lack of collaboration between these teams only exacerbates the pains of IT leaders. By breaking down the old barriers between these two areas of IT, you can pivot away from barely acceptable norms and bring about significant improvements.

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> **41.5% of organizations have different reporting structures for IT services and operations, ultimately meeting only at the CIO or CXO level.**
>
> **Valerie O'Connell**, Director of Research, Enterprise Management Associates
>
> Taken from ServiceOps: innovation at business speed and scale, March 2022.

A look at all the benefits:

Benefit A:

Expand technology services while reducing costs

1. Use a single platform for IT in the cloud to gain a shared understanding and view of infrastructure and services.

2. Leverage an up-to-date common service data model to automate core processes for service and operations processes (i.e., incidents, changes, and routine requests).

3. Gain visibility of resources, applications, and assets—across on-premises, mobile, and cloud environments—from a single dashboard.

Benefit B:

Deliver extraordinary employee and customer experiences, resiliency, and productivity

1. Deliver a unified catalog, with AI-powered virtual agents, across all technology services from end-user requests to infrastructure as a service.

2. Increase change throughput while minimizing risk and overhead using AI-based change policies combined with DevOps tools integrations.

3. Use built-in analytics and machine learning to anticipate trends and improve staff productivity.

4. Prioritize business service issues and identify root cause faster with Predictive AIOps and automated event analysis.

5. Predict and prevent service disruptions with Predictive AIOps anomaly identification and remediate issues automatically with workflows. on-premises, mobile, and cloud environments—from a single dashboard.

Benefit C:

Drive technology best practices with optimized, efficient processes

1. Provide recommended or required services and suppliers to make sure all technology teams meet vendor, compliance, cloud, security, and performance standards.

2. Identify and operationalize ways to improve workforce effectiveness and improve processes.

Real results you can expect

By studying the challenges and successes of thousands of our customers who've managed IT services and operations in concert, we've identified the major areas in which they achieved the following tangible outcomes:

For service management

1. **Fewer submitted issues requiring human intervention**
   Predictive intelligence incident routing saves IT agents 12% of their time through ML-based automatic assignment. Intuitive, employee self-service means 30% fewer agent ticket assignments. Automated resolution of common issues deflects 16% of incidents.

2. **Greater knowledge sharing and diagnosis information**
   A single view powered by shared monitoring and data offers deeper information needed for a 75% reduction in resolution times.

3. **Delivering scalable IT services on a single cloud platform**
   Leverage the advantages of common data sources, seamless integration between all aspects of IT, and automation to adjust services more effortlessly as needed to increase CMDB accuracy by up to 50%.

Real results for service management

75% Reduction in resolution times

30% Fewer agent ticket assignments due to intuitive, employee self-service

16% Number of incidents deflected due to automated resolution of common issues

12% Predictive intelligence incident routing saves IT agents 12% of their time

For ICampus Infrastructure Management

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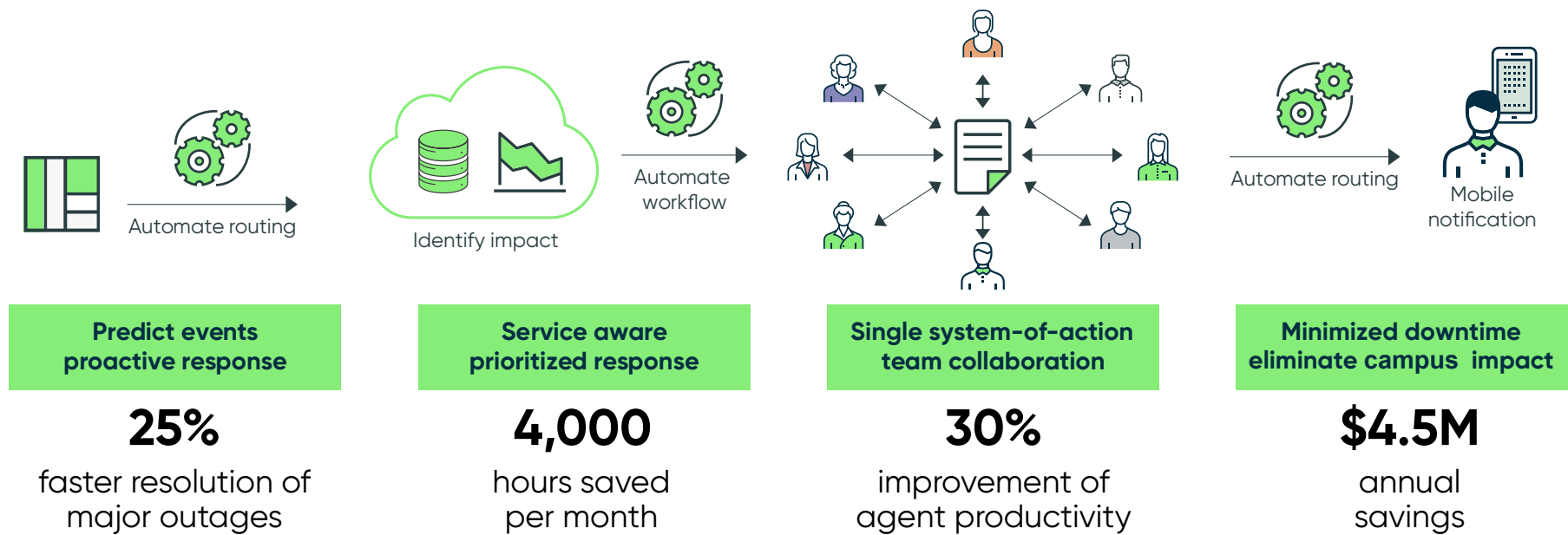**1. Event management and Predictive AIOps for noise reduction**
The average ServiceNow customer can reduce event management noise by up to 75% to address events more proactively and reduce administration costs. Automation through Predictive AIOps and machine learning can save organizations up to $1 million per year and expedite resolution of major outages by 25%.

2. Faster root cause analysis
The average ServiceNow customer sees a 50% reduction in resolution time for priority 1 incidents through ServiceNow Service Maps, a visual representation of the infrastructure items and dependencies used to accelerate root cause analysis.

3. Greater efficiency for IT service agents
Centralized and integrated IT support processes, knowledge management, and workflow automation can make tier 1 and 2 employees are 30% more efficient, on average.

Predict events proactive response	Service aware prioritized response	Single system-of-action team collaboration	Minimized downtime eliminate campus impact
25%	**4,000**	**30%**	**$4.5M**
faster resolution of major outages	hours saved per month	improvement of agent productivity	annual savings

Now, let's take a look at the five ways you can capitalize on the benefits of combining IT service management and IT operations management to treat and virtually eliminate the three most common IT pains.

Remedy 1:
Consolidate on a single platform

Put an end to silo-based thinking and operations. We're not proposing that there will be an actual melding of teams and responsibilities, but by placing ITSM and ITOM on top of a shared platform, the service and operations management disciplines will be better informed with a common data model, helping staff better understand the relationships of all IT resources and their dependencies, and addressing issues preventively and proactively in near real-time. You can't do this when ITSM and ITOM run as separate tools, have independent data models and resulting blind spots.
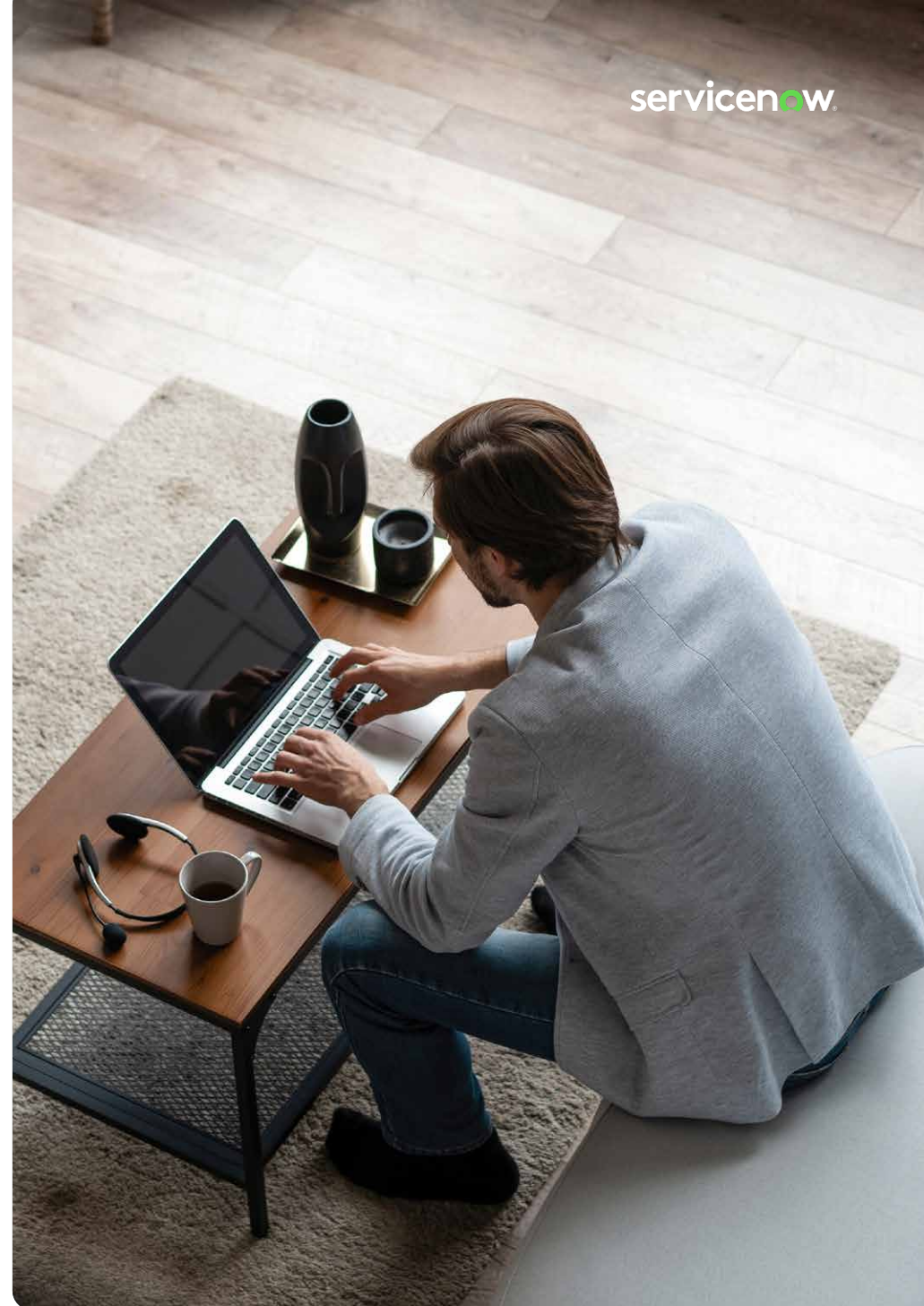
Centralizing and modernizing your CMDB

Have modern IT systems evolved beyond the need for a Configuration Management Database (CMDB)? Not in the least. With IT complexities and the number of data sources exploding (think IoT), this centralized place to track your IT components and their relationships is more vital than ever.

Modernizing and merging your CMDBs will better support solutions beyond just ITIL functions such as your service desk. Older legacy systems must be moved out of the on-premises datacenter and into the cloud to enable faster scaling and greater interoperability across multiple cloud-based systems. This gives rise to tools for understanding relationships and dependencies.

A new, consolidated CMDB, should be built to support both service and operations management as well as all IT functions. It will power a wider spectrum of ITSM and ITOM capabilities that contribute to these business outcomes:

• Near real-time visibility into true operational state of campus services

• Vulnerability remediation based on institutional service priority

• Understanding the impact of making a change

Broadening your visibility across the entire IT landscape

Visibility from services and operations must be centralized to highlight cross-dependencies. We'll use the ServiceNow CMDB solution as an example. With it in place, our customers are creating clean repositories for:

- **Infrastructure data (aka, horizontal discovery).** The CMDB records the IT-asset makeup of your organization's environment and identifies all infrastructure. This discovery spans both the physical and virtual assets in your data center as well as the different types of assets available from cloud service providers such as Amazon Web Services (AWS) and Microsoft Azure.

- **Vertical data.** ServiceNow's service-aware approach provides a top-down discovery method that maps your organization's business services. This living service map tracks the infrastructure on which the business services rely, giving your IT organization clarity on how changes to, or issues with, infrastructure can impact a business service.

- **Cloud mapping.** ITOM Discovery facilitates tag-based mapping of public and hybrid cloud elements. These include LaaS, PaaS, FaaS, and CaaS instances as well as containers, Kubernetes service pods or volumes, and virtual machines.

- **Intelligent traffic-based mapping.** Ideal for bulk mapping of less critical services, this approach leverages machine learning to identify significant service-level relationships from traffic flow data. The traffic data is collected by ServiceNow Discovery, and you can also import VPC and NetFlow logs.
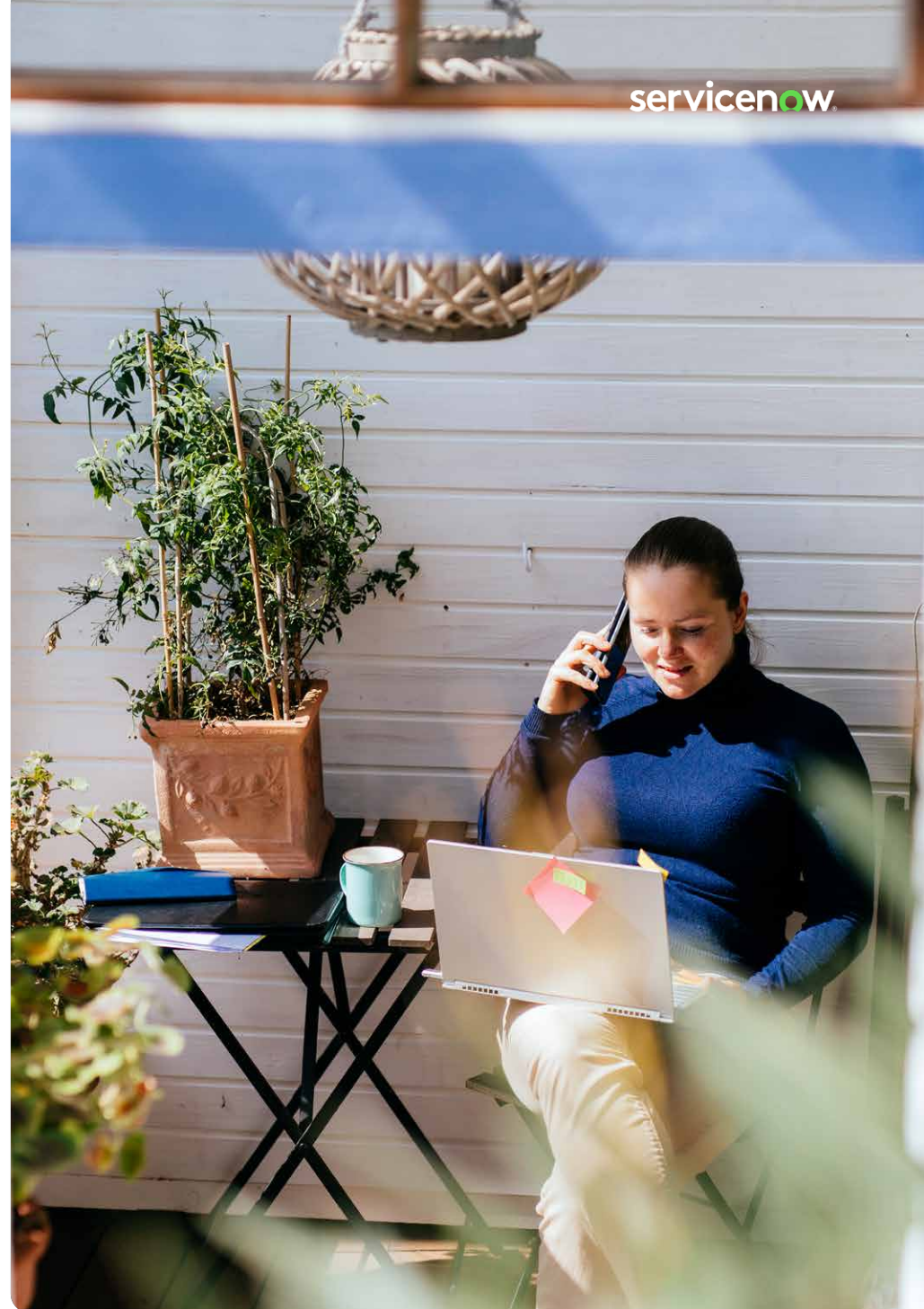
Wesleyan University

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CUSTOMER EXAMPLE
Wesleyan University's IT-centric pandemic response

As a small university, Wesleyan's IT is centralized with students and faculty alike accessing systems and equipment provided on campus. When the coronavirus pandemic struck, university leaders offered students and staff he option of remaining on campus or studying and working remotely, often overseas. As a result, the Wesleyan IT team's ability to respond quickly and provide vital additional services and support was tested to the limit.

Connect Chat launched in:

1 day
when the pandemic hit

IT Portal Accessibility to:

3200
students to continue their studies

IT Portal Accessibility to:

ALL
students, faculty, and staff

Remedy 2:
Reconsider your IT service management (ITSM) strategy

Gut check here. Are your service desk agents empowered to succeed? Do they work as a unified team solving issues across the institution or are they isolated and only worried about their own fenced-off area? It is surprising how many educational institutions serve IT needs through dozens of different tools and databases, especially those campuses growing rapidly through mergers and acquisitions. It is critical that your institution implements a solution that supports your ITSM strategy and can scale and adapt along with your institutional objectives.

Choosing a solution that supports your ITSM strategy

The ServiceNow ITSM Offering is an 8-time Gartner Magic Quadrant Leader. Its extensive capabilities have helped it stand apart from the competition.

- **Service Operations Workspace** – Brings together IT Operations and Service Management capabilities to provide a unified experience and reinvented workflows that enable modern best practices to automate and improve service reliability and deliver a seamless experience.

- **Incident Management and Problem Management** – Restore services faster with intelligent routing after an unplanned interruption or major incident by investigating the root cause to quickly resolve critical service disruptions and eliminate recurring incidents.

- **Change Management** – Accelerate change management by leveraging automated change frameworks to reduce friction between IT and DevOps. For more complex changes the Change Advisory Board (CAB) Workbench is a single, auditable repository of all planned changes.

- **Virtual Agent** – This automated, conversational chatbot provides students and employees with 24/7 self-service, freeing IT staff to work on more meaningful tasks and allowing for greater scalability and smarter resource spend.

- **Digital Portfolio Management** – A unified workspace that allows owners to holistically view and collectively manage their services and applications through the full lifecycle. Manage roadmaps, prioritize backlogs and promote new ideas while optimizing portfolio performance and making more informed budgetary decisions.

- **Request Management and Knowledge Management** – This gives users a modern, omnichannel way to interact 24/7 with IT and other shared services groups using any device—enable self-help, collaboration, request items or services. Share, manage, and use knowledge from across the organization and make it readily available for shared or private use by IT and employees.

- **Predictive Intelligence** – Automatically categorizes and routes issues to the right resolution team, while empowering technicians with AI-assisted answers for faster resolutions.

- **Mobile Agent** – Unchain IT service agents from their desks by enabling them to triage, address, and resolve requests on the go, through any mobile device of their choosing.

- **Walk-up Experience** – A streamlined method for capturing and managing face-to-face IT support requests to help boost student satisfaction.

TransAlta

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CUSTOMER EXAMPLE:
TransAlta transforms the employee experience and maximizes visibility into IT service

An electricity power generator and wholesale marketing company, TransAlta operates 70+ power plants in three countries. Using ServiceNow, it jettisoned a hardtouse online service request tool. At the same time, it took advantage of improved visibility into service issues to resolve the problems, achieving an 80% reduction in service outages. Equally as important, IT can now more easily explain to its business partners how changes will affect the services they use.

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We couldn't keep track of the work we did for them. We ended up fixing the same types of incidents again and again because we weren't collecting the data we needed for effective problem management. IT is no longer seen as a tax on the business. Instead, people understand what they're paying for and are part of the decision-making process.

Jamie Duncalf, IT Operations Manager, TransAlta

80%
reduction in outages

100%
of employees empowered with self-service tools

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Remedy 3:
Let the machines do more to power automated remediation

For common ITSM and ITOM issues – simple to complex – the same data used to detect, analyze, and remediate the problem can power machines to take care of it with no human intervention. For example, take an issue with a web application where, through prior analyses, our ITOM solution knows that recycling the server will fix the issue 98% of the time. The server reboot can be initiated automatically while still following all prescribed ITIL processes and maintaining an accurate and complete record of the issue. Plus, there's also complete activity logging for IT to evaluate in the context of future issues and/or root cause analysis within a problem management scenario.

accenture
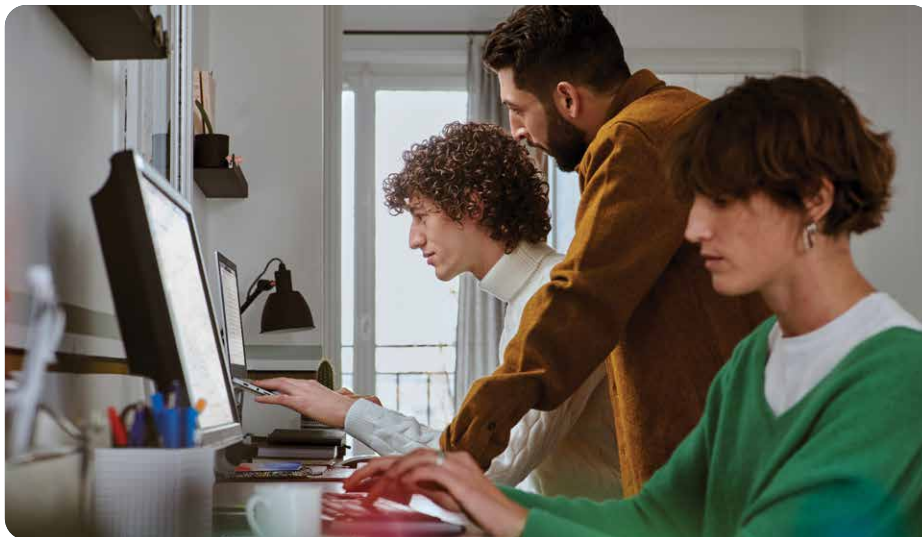
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CUSTOMER EXAMPLE:
Accenture takes a platform approach to deliver value for customers at speed

Using a platform approach with ServiceNow ITOM and ITSM, Accenture has transparency and control across their services, applications, and infrastructure which has provided some incredible results.

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ServiceNow is our engine for delivering technology-based services to help customers manage their IT more holistically.

Karen Odegaard, Managing Director – Global IT Digital Worker Technology, Accenture

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15

legacy support portals consolidated into one

90%

reduction in time from when an event occurs to when a ticket is created

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50%

improvement in configuration item accuracy which leads to less problems down the road

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ServiceNow IT Operations Management (ITOM) features

- **ITOM Visibility** – Provides visibility across infrastructure, cloud-resources, applications, and services.

- **Discovery** – Gives a holistic institutional view of operations footprint across on-premises data centers and cloud.

- **Service Mapping** – Maps the relationships between IT components and campus services in dynamic environments.

- **ITOM Health** – Delivers campus business service health and detect, diagnose, and remediate issues with Predictive AIOps.

- **AIOps Event Management** – Reduces the flood of events from monitoring tools and presents the critical few alerts in near real-time. This helps determine the root cause and impact on campus business services and presents historical incident, problem, change, and resolution associated with the identified issue, dramatically reducing resolution time.

- **ITOM Governance** – Puts all cloud-related tasks in one place where teams can take action and correct course without halting application development and productivity.

Drill down to discovered servers to see the real utilization and how they may impact the migrations. Teams can scan the configurations, raise attention about non-compliant policies in minutes, and offer suggestions to fix them. or runs sub-optimally in one domain, IT teams need to see and address issues   end-to-end with broad insight into IT and business impact; without that visibility, users are frustrated and customer satisfaction levels plummet.

The operations team is now empowered to:

- Proactively identify service issues with Predictive AIOps – Predictive AIOps includes Event Management and Health Log Analytics.

- See the impact of a proposed change in advance, updates, and alterations with Change Management.

- Significantly reduce the time it takes to repair an issue with informed incident response. Because the speed of response is even more vital in major incident management scenarios.

- Identify past historical incident, problem, change, and resolutions in near real-time using ITSM data and apply automated remediated.

Remedy 4:
Focus on what your agents, students, employees, operations, and service team members really need

Information. Advice. Power. These are the things that drive greater satisfaction from IT staff and the students and employees they serve. With ServiceNow ITSM and ITOM working in tandem, ServiceNow users consistently enable the following:

Students and employees needing help can connect from anywhere by:

- Accessing a self-service portal on mobile or desktop, 24/7, to find and trigger automated resolutions for common issues

- Exploring a rich, contextual knowledge base for self-help

- Interacting with an AI-driven virtual agent that understands natural human language

Help desk agents can count on resolving issues faster by:

- Getting the right cases assigned to the correct person with the right skill sets, via intelligent routing

- Accessing a specialized Service Operations Workspace with a single view of the real-time and historical information they need to quickly resolve multiple incidents, problems, and change requests; managing issues via their mobile device

- Having accurate data and insights into the root causes of issues which facilitates collaboration

CONAGRA BRANDS™

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CUSTOMER EXAMPLE:
ServiceNow enables self-service portal for Conagra Brands

With a platform approach to IT Conagra Brands enables more efficient processes for their employees. Empowered employee users now have access to a 24/7 self-serve portal, thousands of knowledge articles, chatbot, and mobile app. While ITSM Pro is supporting a better user experience, working together with ITOM the solutions have unlocked greater visibility and control over the IT estate. In the event of a critical incident, notifications are automatically routed to the right person at the right time to safeguard system availability.

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Using ServiceNow ITSM and ITOM together is really powerful to enhance monitoring and incident management. It would be much more challenging to get that level of visibility if we were using tools from multiple vendors.

Dennis Piper, Global Operations and Service Delivery Manager at Conagra Brands

4.5x

fewer help desk agents required in year one

15

days to roll out minimum viable product (MVP)

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Remedy 5:
Deliver a single view across IT to better optimize campus effectiveness and processes

With a single system of record, common data model, and in-platform analytics, ServiceNow users can get real-time visibility into ITSM and ITOM activities and shared data at the strategic, operational, and individual levels. There is true visibility into the end-to-end activities that span across both services and operations management. It is through this visibility, optimizations of your workforce and processes can then be made to boost efficiency, improve skills, and increase customer satisfaction.

A single view shows you:

- All incidents, events, and problems

- Ways to boost team productivity with real-time insight into work items, escalations, and KPIs

- Optimization opportunities to increase efficiency and streamline workflows by quickly finding and removing costly variants in core processes

- Discovered assets, cloud resources, and service data

- Changes and their effects – including historical changes which are critically important.

- DevOps data to ensure governance of CI/CD process and increase the number of automated changes

Not only does this provide insight into what's happening in terms of the effectiveness of operational activities and service performance. It also provides a gauge of organizational efficiency to enable administrators, managers, and staff to better align operations to institutional goals, identify and remediate process issues, and build high-performing teams to complement these optimized processes.
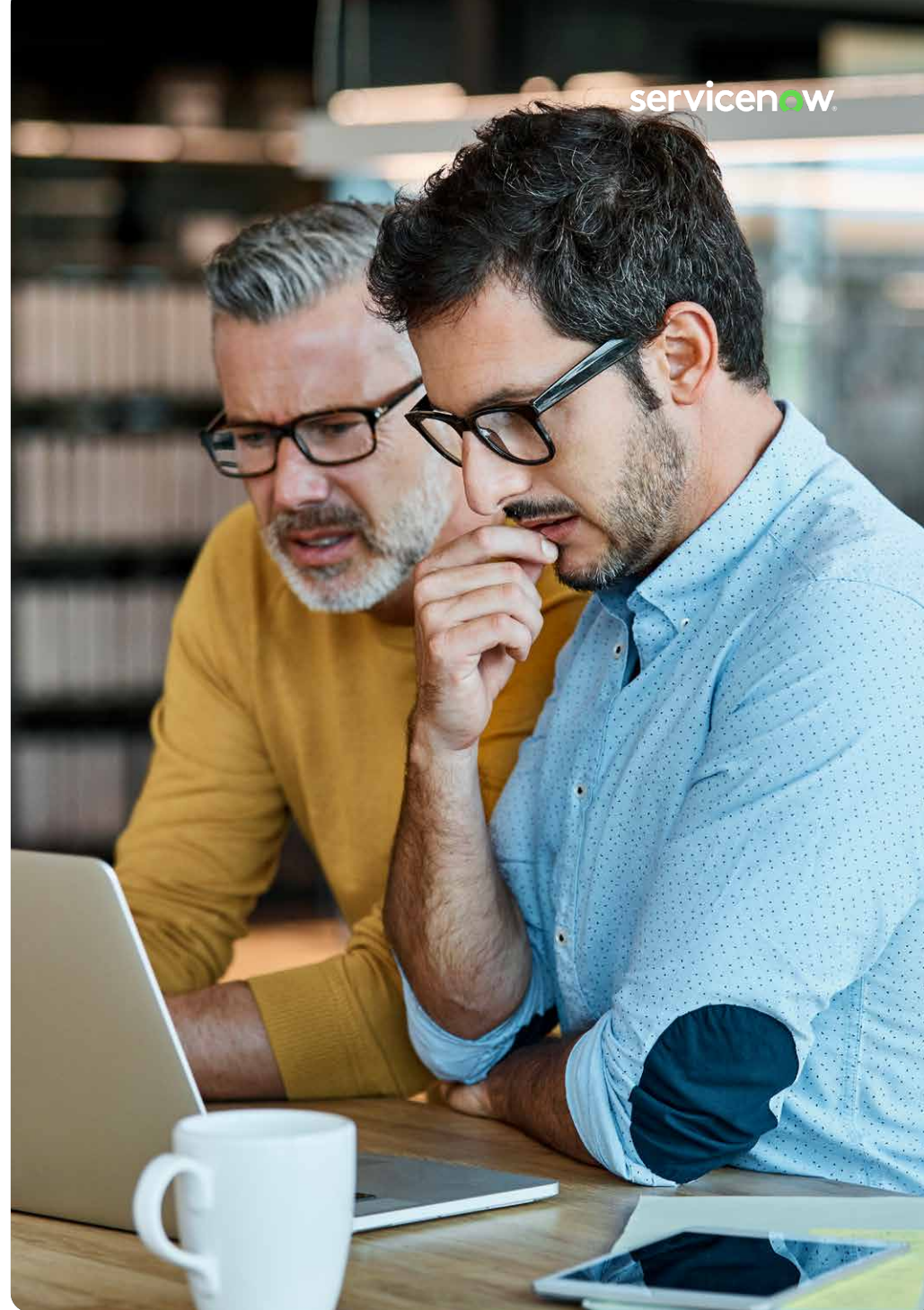
Choose a solution with capabilities to improve visibility and facilitate optimization.

Performance Analytics

Make smarter real-time decisions at scale. With powerful dashboards, users can see trends for improvements, adjust service coverage based on prior performance, and validate service metrics with business goals. ServiceNow Performance Analytics has helped your peers bring about a 60% reduction in critical incident resolution times.

Workforce Optimization

Build high-performing by intelligently optimizing schedules and work assignments. Via a single workspace, you can forecast service demand, determine staffing levels, and optimize work assignments across multiple service channels—including routing work to agents based on skills, availability, and other factors. Using the same workspace, grow team skills by monitoring and assessing customer interactions, identifying skills gaps using AI-powered skills recommendations, providing real-time coaching, and managing training programs.

Process Optimization

Work faster and smarter by optimizing the processes running on the Now Platform. Process Optimization mines your operational data to discover, visualize, and evaluate your processes using AI-powered root-cause analysis to help you identify and remediate process issues. You can also compare processes to ensure consistency and best practices, and measure fine-grained process performance to spot bottlenecks and set improvement objectives.

KAR AUCTION SERVICES℠

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CUSTOMER EXAMPLE:
KAR transforms IT service delivery using ServiceNow Performance Analytics

KAR Auction Services provides innovative remarketing solutions for the wholesale used vehicle industry. As a technology-driven company, KAR depends on IT to maintain its market leadership. As a global enterprise, that technology must work 24x7. That's why KAR chose ServiceNow IT Service Management, built on the Now Platform, to manage its IT services and infrastructure, creating a single system of record for all of its operational data.

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Creating consistent metrics is critical. It lets you build a common language across your organization—whether you're talking about executives, service managers, IT leaders, or frontline IT staff. People now collaborate instead of working in silos. That shared understanding lets you optimize your services by setting unambiguous objectives, driving aligned actions, and accurately measuring your results

Jason Hagen, Process Manager, KAR Auction Services

94%

reduction in metric maintenance efforts

60%

reduction in time to resolve critical incidents

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Conclusion: Embrace the benefits of unified service and operations management

The one thing that has always been constant in IT and life for that matter is change, whether driven by internal needs or global developments. The constant shifts in demands, workforces, and processes offer opportunities for businesses to rethink how they operate and many have leveraged ServiceNow solutions to consolidate, scale, and optimize their service and operations management to great success.

Reducing costs

- Tools are consolidated across services and operations on a single cloud platform for better dollar usage.

- Expensive disruptions are proactively dealt with before they can cause harm or they are resolved more quickly (an average of 50% reduction in time to resolve).

- Automation can deflect, on average, 16% of incidents to help IT workers focus on high-impact projects and can save 12% service desk time per month.

Scaling IT

- Automation powers virtual agents, eliminates bottlenecks from manual triggering, can be personalized for each customer.

- Contextual search and AI assist puts relevant results in front of agents, reducing effort by 66%.

- Collaboration across services and operations helps reduce time to solve major incidents by 53% and helps to proactively identify and resolve issues before users ever experience a problem.

- ITSM change policies, CMDB, discovery, and service mapping accessible from a single place help reduce average change timelines from 23 days to 2.5 hours.
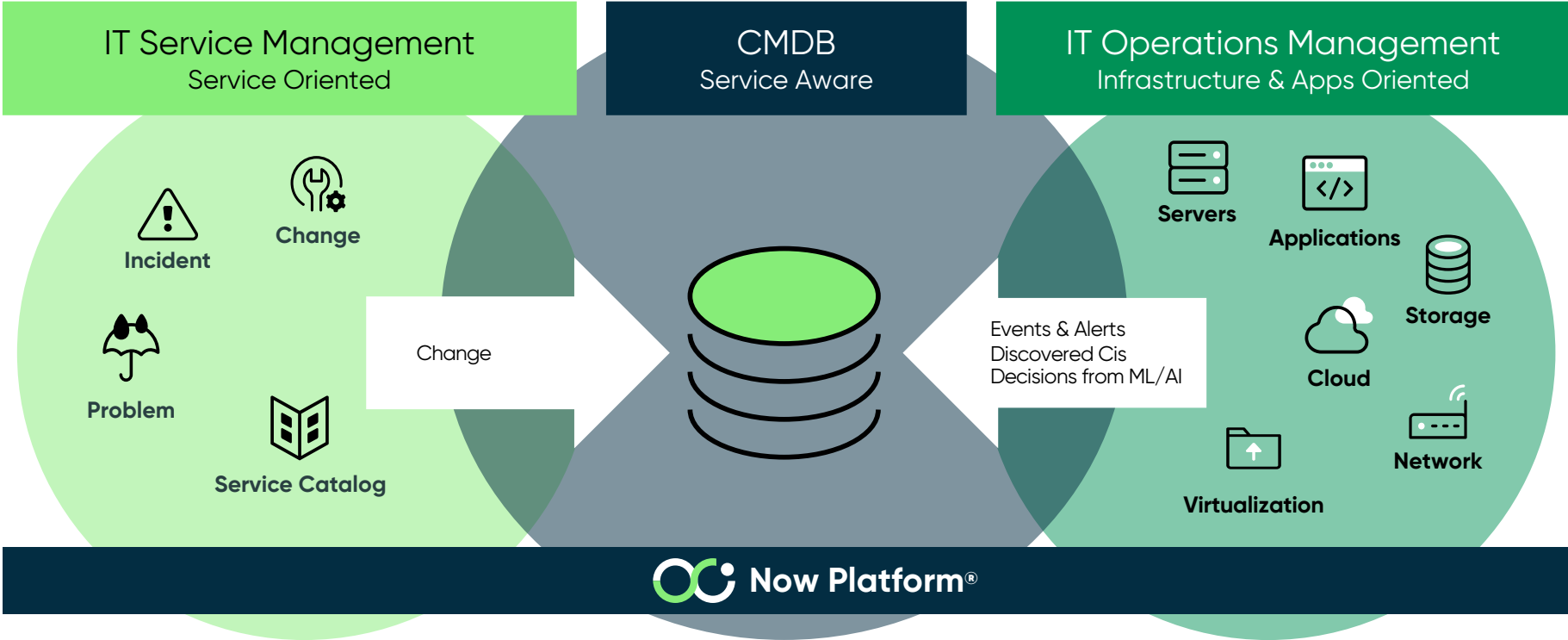
Delivering resilient service experiences

- Predictive AIOps ensures you can predict and prevent issues, and eliminate outages for greater employee and customer satisfaction.

- Enable employees to help themselves on common IT service desk requests.

- Meet employees where they are with omnichannel service to find answers, make requests and get help, on desktop or mobile (has brought about an average 25 point increase in CSAT scores).

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The power of the Now Platform

Born in the cloud and built from the ground up with a single data model and a one, scalable architecture, the Now Platform digitizes processes throughout your organization. By automating and connecting workflows across functions and critical business systems it enables you to maximize the value of your IT investments, eliminate operational silos, and increase business agility.

IT Service Management
Service Oriented

CMDB
Service Aware

IT Operations Management
Infrastructure & Apps Oriented

Incident

Change

Problem

Service Catalog

Change

Events & Alerts
Discovered Cis
Decisions from ML/AI

Servers

Applications

Storage

Cloud

Network

Virtualization

Now Platform®

White paper: **Total business value of ServiceNow IT apps**

Ebook: **How to keep your digital services up and running 24/7**

Ebook: **Deliver a CMDB with true business value: 6 essential steps**

About ServiceNow
ServiceNow (NYSE: NOW) makes the world work better for everyone. Our cloud-based platform and solutions help digitize and unify organizations so that they can find smarter, faster, better ways to make work flow. So employees and customers can be more connected, more innovative, and more agile. And we can all create the future we imagine. The world works with ServiceNow™. For more information, visit: **www.servicenow.com**.