

# 6

# Steps to Business Observability for Bell

Measure the business impact of technology to move from Telco to TechCo.



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# Business observability guides Telco to TechCo.

## You're modernizing your company.

That means investing in technology, implementing a new DevOps culture, and maturing your observability practice, all while providing better products and services to customers. Such an operational transformation works best when you capture its business value at every step.

## Many organizations struggle to quantify the business impact of technology.

For example, only 27% of the [2023 Observability Forecast](#) survey respondents said their data includes the right context to quantify the business impact of events and incidents. This is often due to a lack of visibility and data silos between technology and business teams, resulting in obsolete or non-actionable insights.

That's where business observability comes in.

## What is business observability?

Business observability is how you capture, measure, and manage the live interaction between technology and capital (telemetry data and business analytics). It can help eliminate data silos by actively aligning monetary costs and revenue impacts to the performance of systems, applications, and processes. Put simply, it correlates performance with key business results in real time.

Business observability, by showing how your applications and infrastructure impact your business, helps you make data-driven decisions for greater financial gains.

## Unlock value in key business areas:

### Maximize uptime and ensure good days for your customers

- › Improve system resilience
- › Ensure peak performance
- › Increase application security

### Optimize business and drive operational transformation

- › Improve digital experience
- › Decrease cloud hosting costs
- › Consolidate on-premise platforms

### Innovate faster by enabling developers

- › Drive developer productivity
- › Increase release velocity
- › Accelerate app modernization



# Business observability process

In this ebook, you'll learn about the six steps to achieve business observability:

- 01 Establish business objectives.**  
Identify a revenue goal, risk, customer impact, user engagement, or operational efficiency to improve.
- 02 Capture data from all sources.**  
Instrument telemetry data from all aspects of the business, including technical components, user interactions, and third-party services.
- 03 Quantify the financial impact of business metrics.**  
Measure and assess the effect of system performance on revenue, costs, and customer satisfaction.
- 04 View live metrics.**  
Use advanced visualization to capture real-time activity, track progress toward business objectives, and identify emerging trends or issues.
- 05 Quickly make data-driven business decisions.**  
Immediately prioritize and address issues or improvements based on their business impact.
- 06 Achieve positive business outcomes.**  
Quantify the results of attaining key business objectives.

# Business observability is a competitive advantage

But first, let's look at an example of the difference between monitoring, observability, and business observability. When you have the full context of how your technology impacts the business, you can make the right business decisions faster, giving you an advantage over competitors who rely only on monitoring.



## Good: Monitoring

IT teams



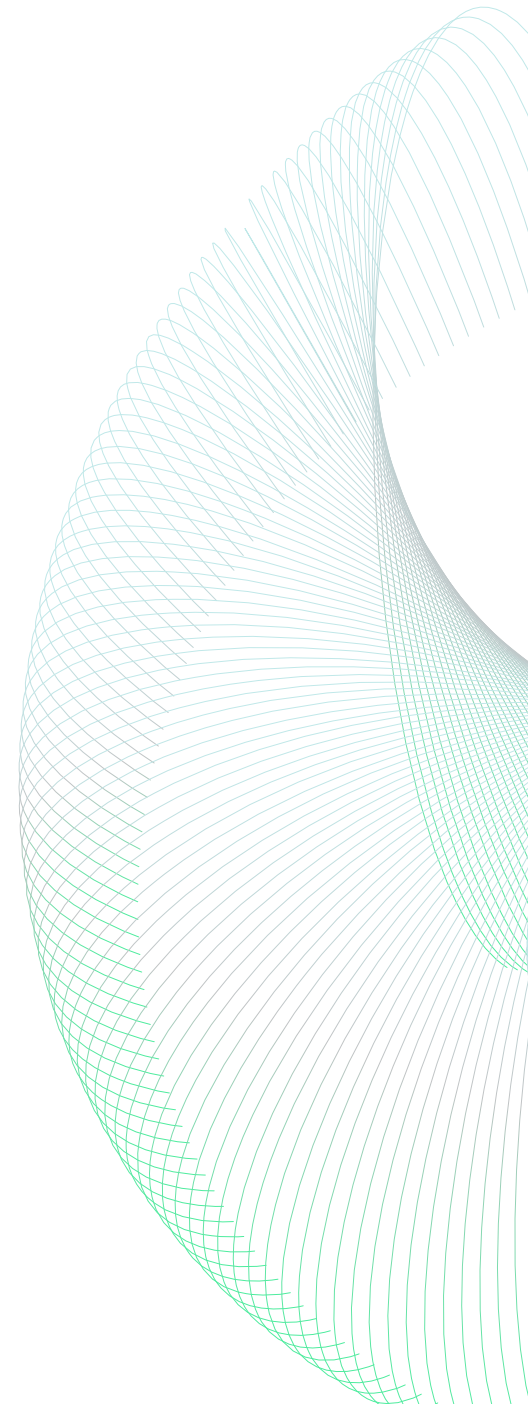
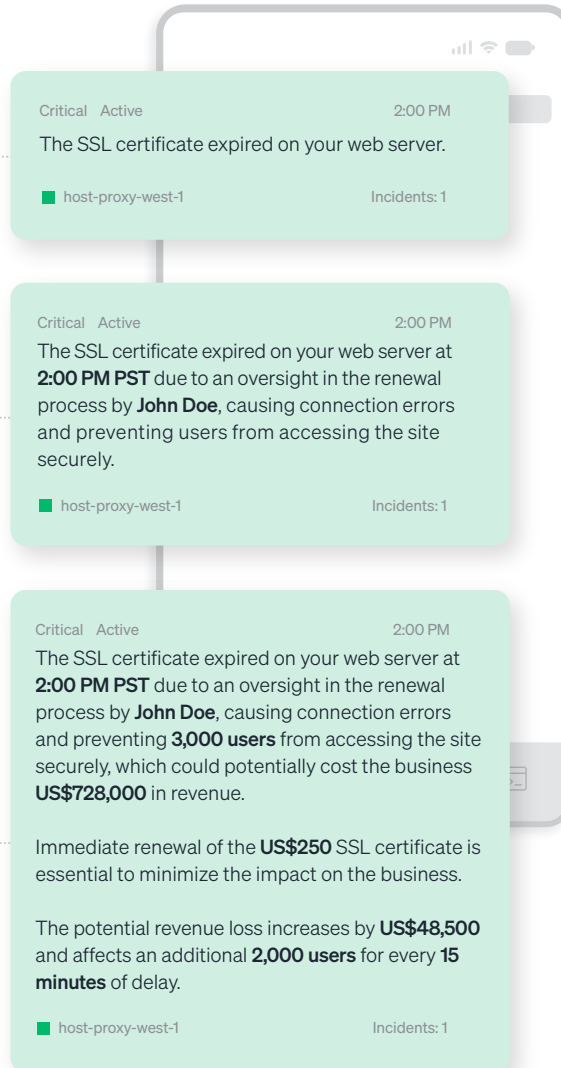
## Better: Observability

Operations teams



## Best: Business observability

Business managers





# Business observability in action

Below are some common industry use-case examples:



## Telecommunications



## Media streaming

<b>Data sources</b>	<ul style="list-style-type: none"> <li>• Network equipment (routers, switches, servers)</li> <li>• Customer devices (phones, modems)</li> <li>• Call detail records (CDRs)</li> <li>• Billing and customer relationship management (CRM) systems</li> <li>• Third-party APIs and services</li> </ul>	<ul style="list-style-type: none"> <li>• Streaming servers</li> <li>• Content delivery networks (CDNs)</li> <li>• User streaming devices</li> <li>• User interaction on the platform</li> <li>• Payment gateways</li> <li>• Advertising platforms</li> </ul>
<b>Business metrics</b>	<ul style="list-style-type: none"> <li>• Network latency</li> <li>• Packet loss</li> <li>• Call drop rates</li> <li>• Network use</li> <li>• Customer churn rates</li> <li>• Service activation times</li> <li>• Billing accuracy</li> </ul>	<ul style="list-style-type: none"> <li>• Stream start times</li> <li>• Buffering times</li> <li>• Advertising layers</li> <li>• Video quality</li> <li>• Subscriber growth and churn rates</li> <li>• User engagement with content</li> <li>• Payment success/failure rates</li> </ul>
<b>Business outcomes</b>	<ul style="list-style-type: none"> <li>• Optimize network coverage.</li> <li>• Ensure equipment efficiency.</li> <li>• Tailor service plans based on usage patterns.</li> <li>• Predict network disruptions, traffic spikes, or changes in usage trends.</li> <li>• Make proactive maintenance and service adjustments.</li> </ul>	<ul style="list-style-type: none"> <li>• Optimize content delivery.</li> <li>• Personalize user experiences.</li> <li>• Predict viewing trends and potential service disruptions.</li> <li>• Ensure a high-quality streaming experience.</li> <li>• Boost subscriber growth and retention.</li> </ul>



## Case Study: Verizon accelerates developer productivity and ensures 5G edge reliability

### CHALLENGE

#### **Simplify developer's tasks.**

Developers could not debug their workloads deployed on Verizon 5G Edge nodes.

### SOLUTION

#### **Instant observability for K8s workloads.**

Developers leverage a single dashboard across edge and non-edge workloads, using auto-telemetry.

### IMPACT

#### **Make it easier for developers to experiment.**

The team built a reference architecture to guide future developers to the right metrics and the best ways to configure dashboards and alerts.

**“The mobile edge introduces complexity in application observability. By working with New Relic, we embedded automation into the architectures that customers are using today, introducing powerful insights out of the box for the developer community.”**

Robert Belson

Developer Relations Lead, Corporate Strategy at Verizon

[Read Case Study](#)

# 01

## Establish business objectives.

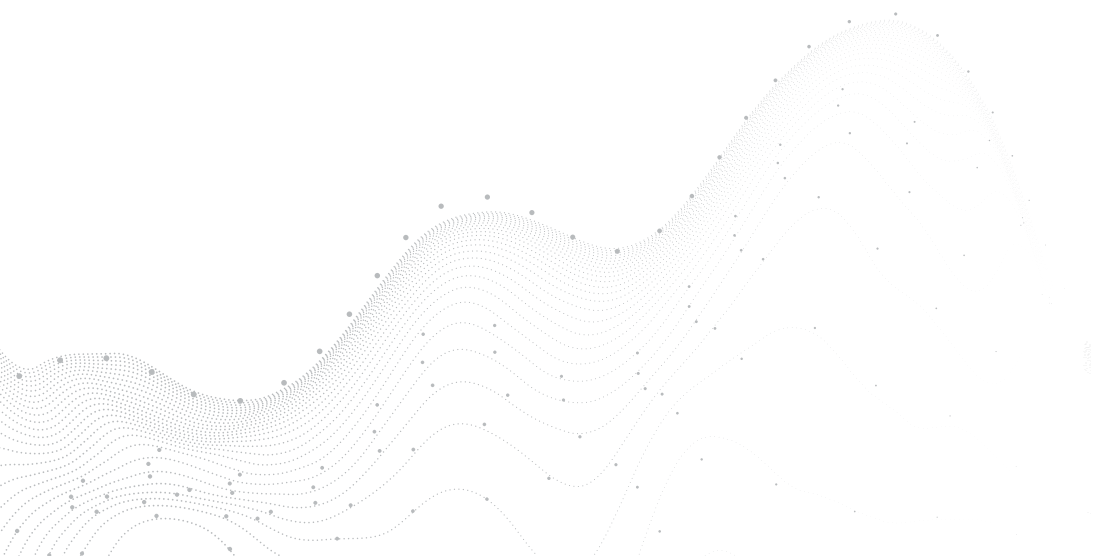
The first step in the business observability process is to define clear business objectives and assess risks. What do you want to improve? Establishing specific, measurable business objectives and risks can help ensure that your business observability process focuses on aspects directly related to achieving those objectives and mitigating potential risks.

Examples of business objectives include:

- **Revenue goal:** Increase subscription revenue by 15% in Q2.
- **Risk:** Decrease security breach incidents by 50%.
- **Customer impact:** Improve customer satisfaction (CSAT) score by 10 points.
- **User engagement:** Increase monthly active users (MAUs) by 20%.
- **Operational efficiency:** Decrease order fulfillment time by 30%.

ACTION

Identify a revenue goal, risk, customer impact, user engagement, or operational efficiency to improve. Then determine what data you need to achieve your objectives.



# 02

## Capture data from all sources.

Next, you'll need to assess how much of your tech stack you've instrumented and are currently monitoring.

Measuring the percentage of telemetry data captured from all sources across your entire business is known as telemetry data coverage, which is a key business observability metric. It helps you gauge how much of your systems, applications, and processes you are monitoring and the amount of data available for analysis.

The higher your telemetry data coverage, the more complete the picture of your organization's

performance and the more accurate and valuable the insights from the data. However, most organizations generally report achieving only 25–35% coverage, which is low. For example, only 33% of the *2023 Observability Forecast* survey respondents said they capture their telemetry across the full tech stack. Aiming for 70% or more can give you a more complete picture.

You can use telemetry data coverage to:

- ✓ Pinpoint gaps or areas that require additional data.
- ✓ Benchmark performance over time.
- ✓ Identify trends and patterns in the data.

### ACTION

To measure your telemetry data coverage, determine the number of data sources you've instrumented and are currently monitoring and then divide that by your total number of data sources.

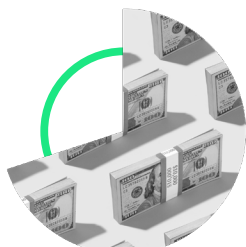


#### What is telemetry data?

Telemetry data is external outputs of applications and infrastructure that include metrics, events, logs, and traces (MELT), which are the essential data types of observability. Instrumenting everything and using MELT to form a fundamental working knowledge of connections—the relationships and dependencies within your system and business as well as its detailed performance and health—are prerequisites to practicing observability.



< 35%  
Low coverage



35-70%  
Medium coverage



> 70%  
High coverage

# Controlled vs. uncontrolled environments

Your organization’s telemetry data can come from two main sources:



- **Controlled environments** encompass your organization’s tech stack, including owned services, software, and infrastructure. They usually constitute only one-third of the business landscape and are easier to monitor and analyze due to direct data access and customizable monitoring and analytics tools.
- **Uncontrolled environments** include external systems, tools, and services not directly

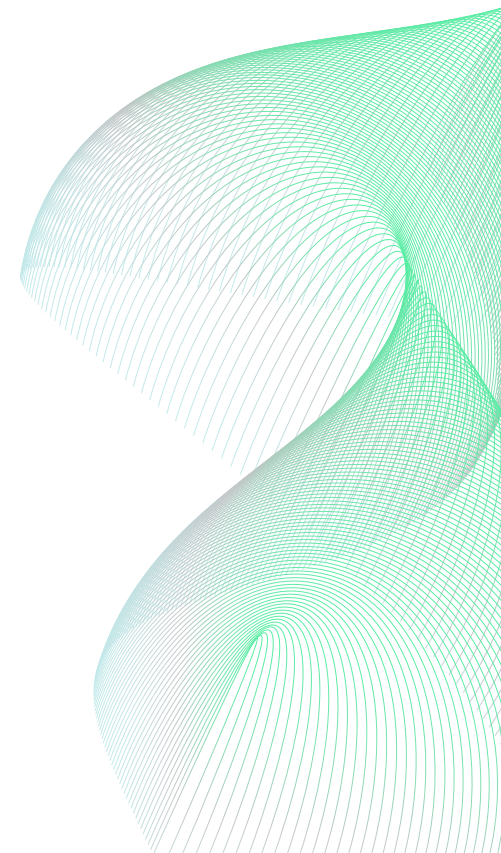
controlled by your organization. They constitute approximately two-thirds of the business landscape and can be challenging to monitor and analyze due to limited direct access, often requiring APIs or alternative methods for data collection and analysis.

Most observability solutions concentrate on controlled environments, neglecting uncontrolled data sources, which can lead to an incomplete understanding of your business landscape.

**ACTION**

**Map your controlled and uncontrolled environments to figure out how much you don’t know.**

	Controlled environments	Uncontrolled environments
<b>Business data sources</b>	Your tech stack (such as applications, frontend UX, mobile devices, infrastructure, and databases)	External systems (such as IoT, external APIs, smart devices, kiosks, gateways, SaaS, and POS systems)
<b>Access to/control of data</b>	Direct	None or indirect
<b>Business landscape coverage</b>		
<b>Ability to monitor and analyze</b>	Easier	More difficult
<b>Measuring methods</b>	Logs, AIOps, APM, infrastructure, network, database, mobile, browser, synthetic, serverless, model performance, Kubernetes, and security monitoring	APIs, synthetic scans, security scans, third-party services, and public data sources





# Black boxes and blindspots in uncontrolled environments

As organizations increasingly rely on third-party technology tools and services, the amount of data produced in uncontrolled environments has surpassed that produced in controlled environments. This can make it harder to monitor and analyze all the data necessary for a comprehensive understanding of your business performance.

Low telemetry data coverage in an uncontrolled environment can lead to black boxes and blind spots, which are essentially anything not covered by MELT.

- **Black boxes** refer to critical systems or services that are vital to your business but lack visibility. These can be difficult to monitor and analyze if your organization can't access the data or configure monitoring and analytics tools to meet

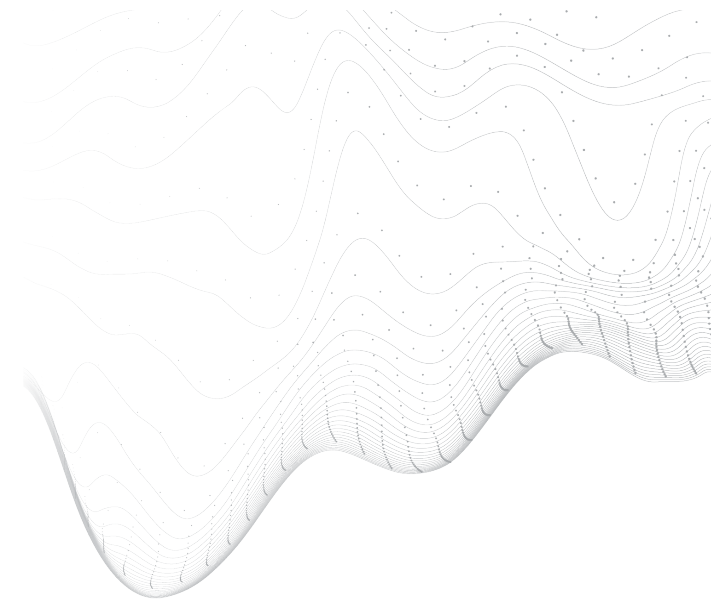
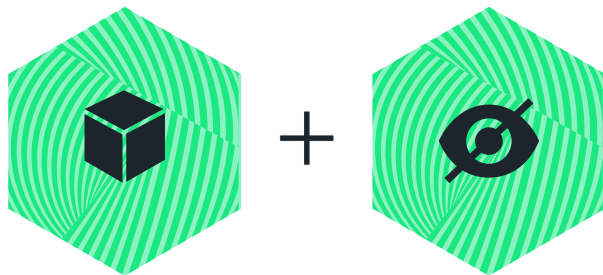
your specific needs. Examples of black boxes include proprietary devices, antiquated systems, and offline machines.

- **Blind spots** refer to systems and services that offer analytics and telemetry but require additional effort to access, capture, view, and store the information they provide. These blind spots can include cloud services, IoT devices, social media platforms, and other external sources that your organization doesn't control directly.

Identifying and minimizing black boxes and blind spots can increase your telemetry data coverage significantly, which can lead to reducing loss of money, time, and customers.

## ACTION

**Use custom instrumentation and integrations to capture data from all sources and monitor all components for a more accurate and complete view of your business operations.**



# Impact of high and low telemetry data coverage



Low telemetry data coverage can lead to greater business loss due to a lack of visibility into critical systems and services. This can result in missed opportunities, inefficient processes, and low customer satisfaction. Additionally, low telemetry data coverage can make it difficult to identify and troubleshoot issues, which can lead to increased downtime and costs.

To protect your business, you should increase your telemetry data coverage. By increasing visibility and access to data from all sources, you can gain a more complete understanding of your business performance, identify areas for improvement, and make more informed decisions.

Types of business loss:

- Revenue
- Security (theft and crime)
- Credibility (customer confidence)

**ACTION**

**Use monitoring tools and other measuring methods to broaden the scope of your data collection and encompass all aspects of the business for a comprehensive understanding of your entire business ecosystem.**

# 03

## Quantify the financial impact of business metrics.

Once you've increased telemetry data coverage, you're ready to turn **data into dollars** by measuring the real-time financial impact of performance issues or outages. This is called metric monetization.

Metric monetization refers to the process of quantifying the financial impact of specific metrics on a business. These metrics could include:

- **Order cost:** Cost of placing orders via apps and kiosks
- **Outage cost:** Financial loss during system downtime
- **Cloud-to-cash ratio:** Efficiency of cloud services spending in generating revenue
- **Revenue replication:** Identification and replication of successful revenue-generating strategies across products, segments, or regions
- **Service-level loss:** Financial impact of failing to meet SLAs or KPIs

Understanding the financial impact of different metrics can help you prioritize your efforts to improve the performance of critical systems and services. Additionally, this knowledge can help you make data-driven decisions about investments in new technology and infrastructure.

In short, metric monetization is a crucial part of business observability. It enables you to understand the financial impact of specific issues and make informed decisions about how to resolve them. This leads to a more streamlined, quantified, and profitable business.

### ACTION

Map any business-critical process to specific data metrics and quantify the total financial impact of any issue or outage. For example, identify what constitutes system uptime or availability and measure activity for your business (what's making or costing you money). Then quantify your costs by attributing a financial value for activity and availability (loss/cost or gain/profit/income).

# 04

## View live metrics.

Once you've achieved metric monetization, you need advanced visualization to capture real-time activity, track progress toward business objectives, and identify emerging trends or issues. A telemetry data platform is where you can bring together and effectively grow the seeds of business observability.

It's essential to have a telemetry data platform that provides both telemetry data collection and programmability. An off-the-shelf platform with canned dashboards won't suffice.

Your telemetry data platform should be a space where you can eliminate black boxes and blind spots as quickly as they appear and where navigating between controlled and uncontrolled environments feels exactly the same. The kind of magic that can finally bridge technology with business and achieve metric monetization.



### Why is programmability important?

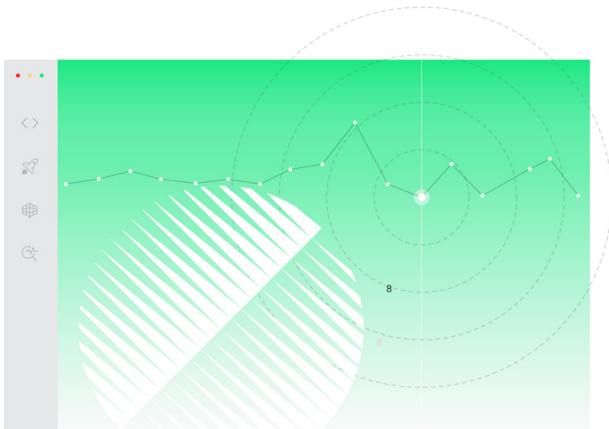
Programmability enables you to program or customize your telemetry data instead of just measuring and monitoring it, as well as deploy custom business performance tools and applications that take full advantage of the unified intelligence harnessed in the platform.

### ACTION

Look for a telemetry data platform with the following key characteristics:

- ✓ Data-agnostic
- ✓ Source-friendly
- ✓ Handles high-throughput, low-latency telemetry data
- ✓ Distributed event storage and stream-processing power
- ✓ Full programmable layer

You should also be able to use advanced dashboards, querying, and AIOps capabilities to view your metrics in real time. Predictive modeling, correlation analysis, and anomaly detection can help you capture, process, and analyze multi-dimensional data, plus reveal the relationships between system performance, business goals, and risks.



# 05

## Make data-driven business decisions.

Next, you'll be ready to prioritize and address issues or improvements immediately based on their business impact. Below are some examples of the types of informed decisions enabled by business observability.

### Enhanced business performance

Pinpoint bottlenecks and inefficiencies that may be impacting revenue generation, customer satisfaction, or operational costs, prioritize them, and then take corrective action, which can significantly enhance your overall performance.

### Proactive, real-time risk assessment and management

Detect anomalies and potential issues in real time and proactively mitigate risks before they escalate, which can help prevent costly outages, service disruptions, and customer dissatisfaction, as well as safeguard your organization's reputation and financial health.

### Optimized customer experience

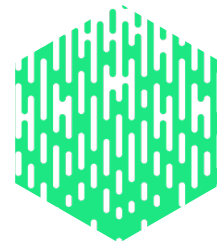
Monitor the entire customer journey to gain deep insights into customer behavior and preferences and use them to inform strategies that enhance the customer experience, which can lead to increased customer loyalty.

### Accelerated innovation

Identify opportunities for innovation and swiftly act on them, which can lead to developing new products, services, or business models that drive growth and differentiation in the market.

### Business model validation and strategic planning

Use predictive business modeling to analyze data and predict future trends and outcomes, which can help you anticipate market shifts and customer behavior changes and then adapt accordingly.



### ACTION

Seamlessly integrate your business observability insights with your organization's existing processes and workflows, enabling data-driven decision making to become a natural part of your business operations. Encourage collaboration between different teams to ensure that the data collected and insights gained from business observability are relevant and actionable for both technical and business stakeholders.



# 06

## Achieve positive business outcomes.

Finally, you'll be able to quantify the results of attaining key business objectives. Some common outcomes of business observability include:

-  Reduced costs
-  Increased revenue
-  New revenue streams
-  Quick return on investment (ROI)
-  Increased profitability
-  Decreased total cost of ownership (TCO)
-  Regulatory compliance

You'll likely wonder how you ever did without it.

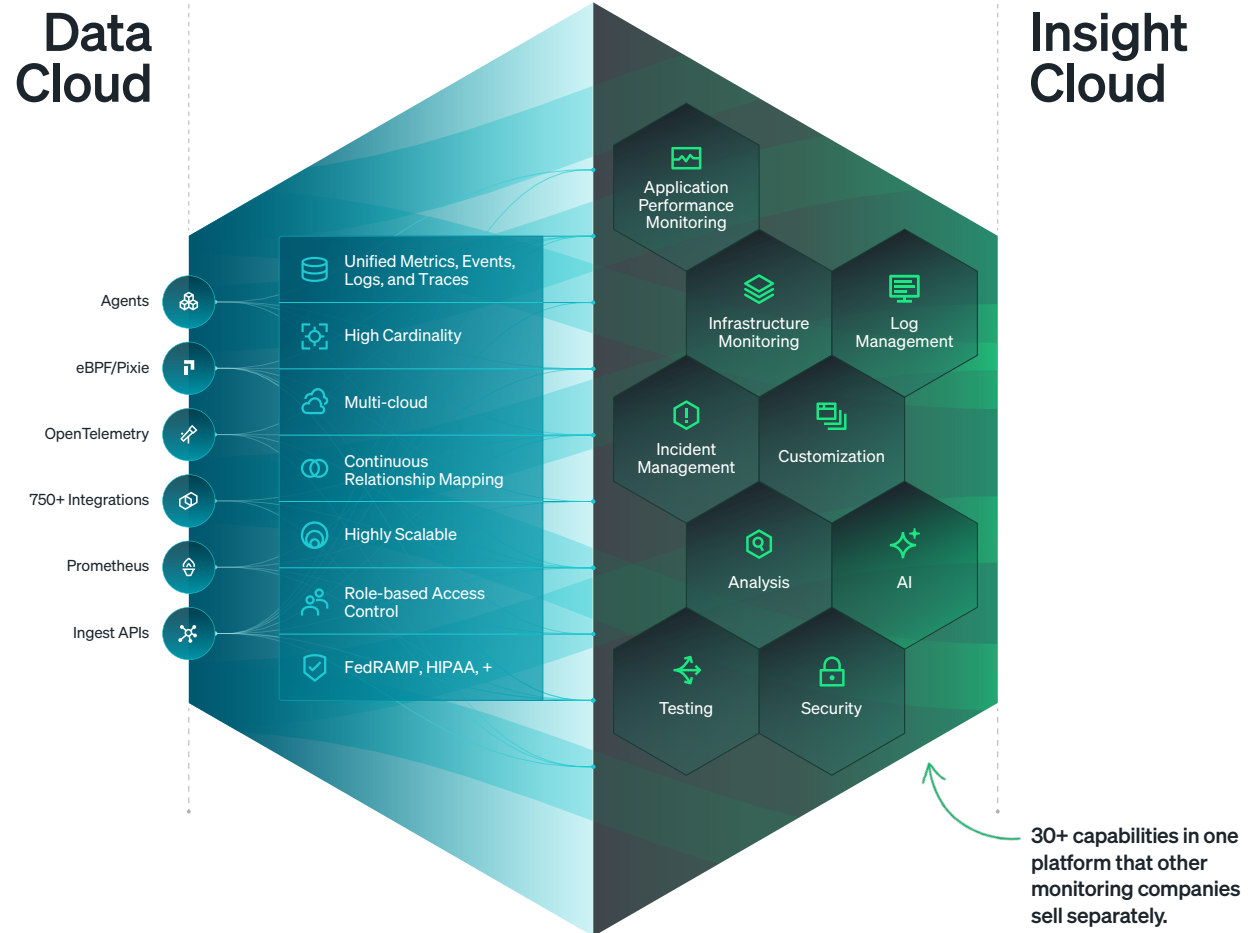


# What's the best platform for business observability for Bell?

New Relic is the first observability platform to provide 100% telemetry data coverage for true business observability. The [New Relic database](#) is the only telemetry data platform that provides programmability for business observability. It has the world's biggest Kafka engine with more than 201 petabytes of data ingested every month and 6.5 billion data points processed each minute. No other telemetry data platform comes close.

All MELT are stored together in a single database, enabling you to correlate all your telemetry data across your entire stack in one place, sort through the data, and instantly query it in real time (while the data is moving).

Your provisioned users automatically get access to the power of the New Relic database and 30+ observability capabilities, including log management, APM, infrastructure monitoring, mobile monitoring, browser monitoring, AIOps, generative AI, security monitoring, and more.



# Business observability capabilities

The New Relic platform includes many capabilities that can help you achieve business observability.

## Dashboards

Visualize critical key performance indicators (KPIs) for your business alongside technical metrics. Custom [dashboards](#) can help stakeholders assess the financial impact of system performance and make data-driven decisions quickly.

## Quickstarts

Accelerate your implementation process with [New Relic Instant Observability](#), a catalog of 750+ quickstarts that include pre-built configurations. Quickstarts can help you reduce time-to-value and enable faster insights for cost optimization and revenue enhancement.

Plus, New Relic has an app for that.

## Digital experience monitoring

Analyze user interactions and conversions by improving the overall digital experience. Digital experience monitoring (DEM)—which includes [browser monitoring](#) and [mobile monitoring](#) (together known as real user monitoring or RUM) plus [synthetic monitoring](#)—can help you identify performance bottlenecks, reduce customer churn, and increase revenue.

## Service-level management

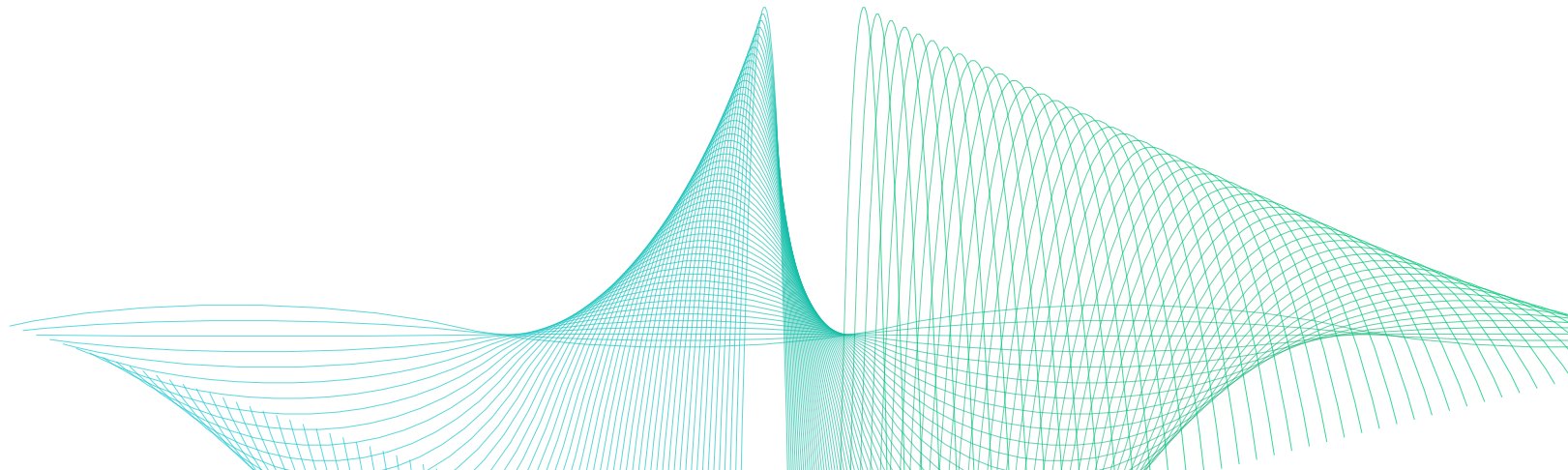
Align service performance with business objectives by setting and tracking service-level objectives (SLOs). [Service levels](#) can help you minimize the financial impact of downtime and poor user experiences.

## Generative AI

[New Relic AI](#) lets you discover cost-saving opportunities, optimize resource usage, and uncover hidden revenue potential across your tech stack using natural language prompts. Need to build your own AI tools? [New Relic AI monitoring](#) helps you optimize for speed, cost, and quality—while ensuring data privacy.

## Workloads

Group applications, services, and infrastructure by business function [Workloads](#) can help you provide more effective resource allocation, cost control, and prioritization based on business value.



# The industry's only business observability app

Pathpoint—a New Relic open-source project—is the industry's only business observability app. It merges customer, product, and services paths into a single business journey.

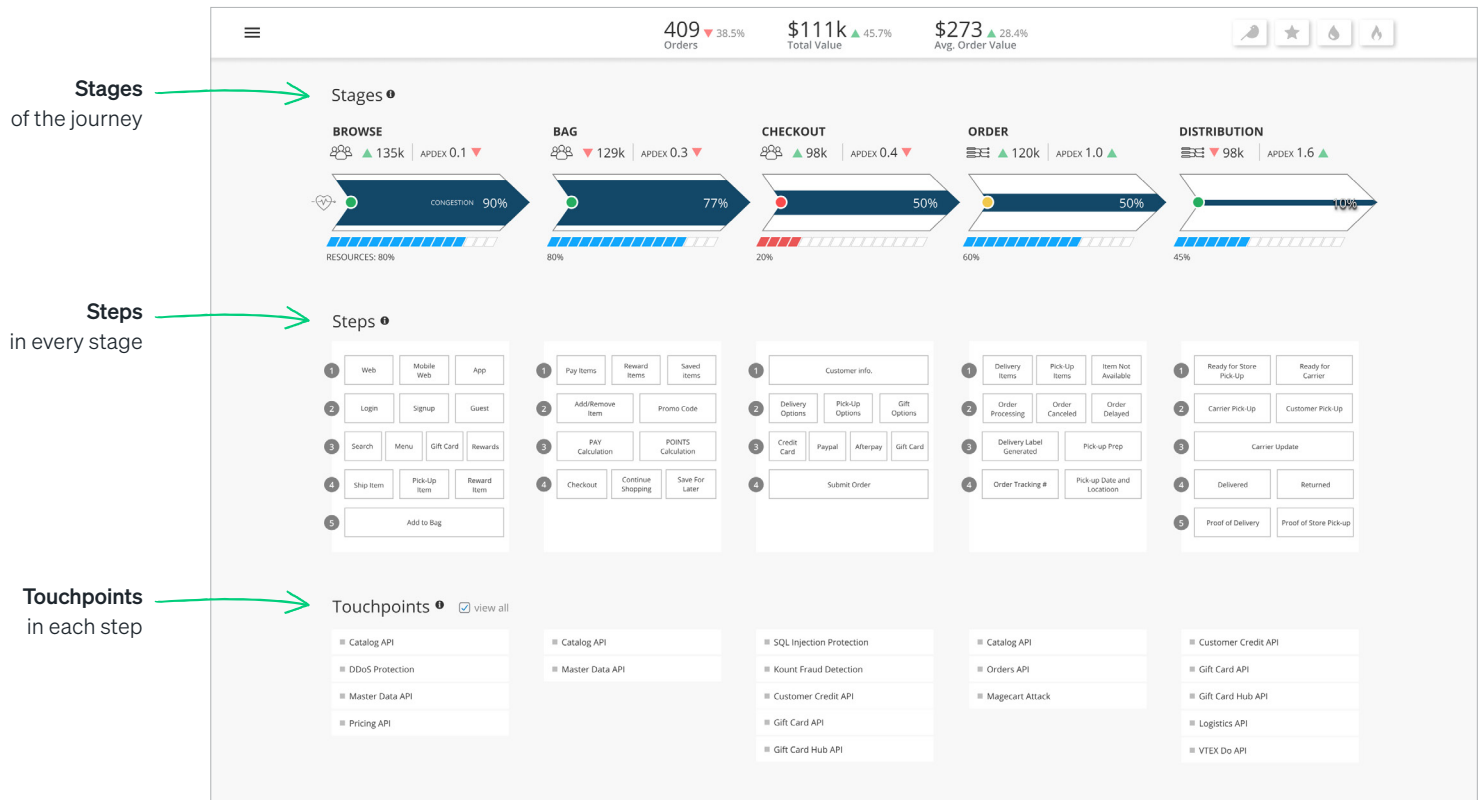
Pathpoint can help you monitor and analyze data from various sources across your organization and provides comprehensive visibility into the performance and health of your systems.



“Pathpoint allowed DAZN to take a pan-organization approach to understand the customer experience ingesting data coming from different sources into New Relic.”

**Peter Tanton**  
Principal Site Reliability Engineer, DAZN

Request a Demo



# The world's best teams run on New Relic

New Relic invented APM and has evolved to an advanced observability platform for digital businesses to eliminate interruptions to applications and services.

We are the first AI-powered all-in-one observability platform and the only provider to combine 30+ monitoring capabilities unified in a single platform, giving businesses unprecedented visibility and control of software performance and health, at the lowest total cost of ownership.

Digital businesses around the world, including E.ON, Toyota, Verizon, and GE, are standardizing their observability practice on New Relic to preserve flawless customer experiences, compete in the market, and protect revenue.

[See Customer Stories](#)



This ebook contains "forward-looking" statements, as that term is defined under the federal securities laws, including but not limited to statements regarding New Relic platform and its capabilities, including but not limited to New Relic AI, and their anticipated benefits related thereto. The achievement or success of the matters covered by such forward-looking statements are based on New Relic's current assumptions, expectations, and beliefs and are subject to substantial risks, uncertainties, assumptions, and changes in circumstances that may cause New Relic's actual results, performance, or achievements to differ materially from those expressed or implied in any forward-looking statement. Further information on factors that could affect New Relic's financial and other results and the forward-looking statements in this ebook is included in the filings New Relic makes with the SEC from time to time, including in New Relic's most recent Form 10-K, particularly under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Copies of these documents may be obtained by visiting New Relic's Investor Relations website at <http://ir.newrelic.com> or the SEC's website at [www.sec.gov](http://www.sec.gov). New Relic assumes no obligation and does not intend to update these forward-looking statements, except as required by law.

