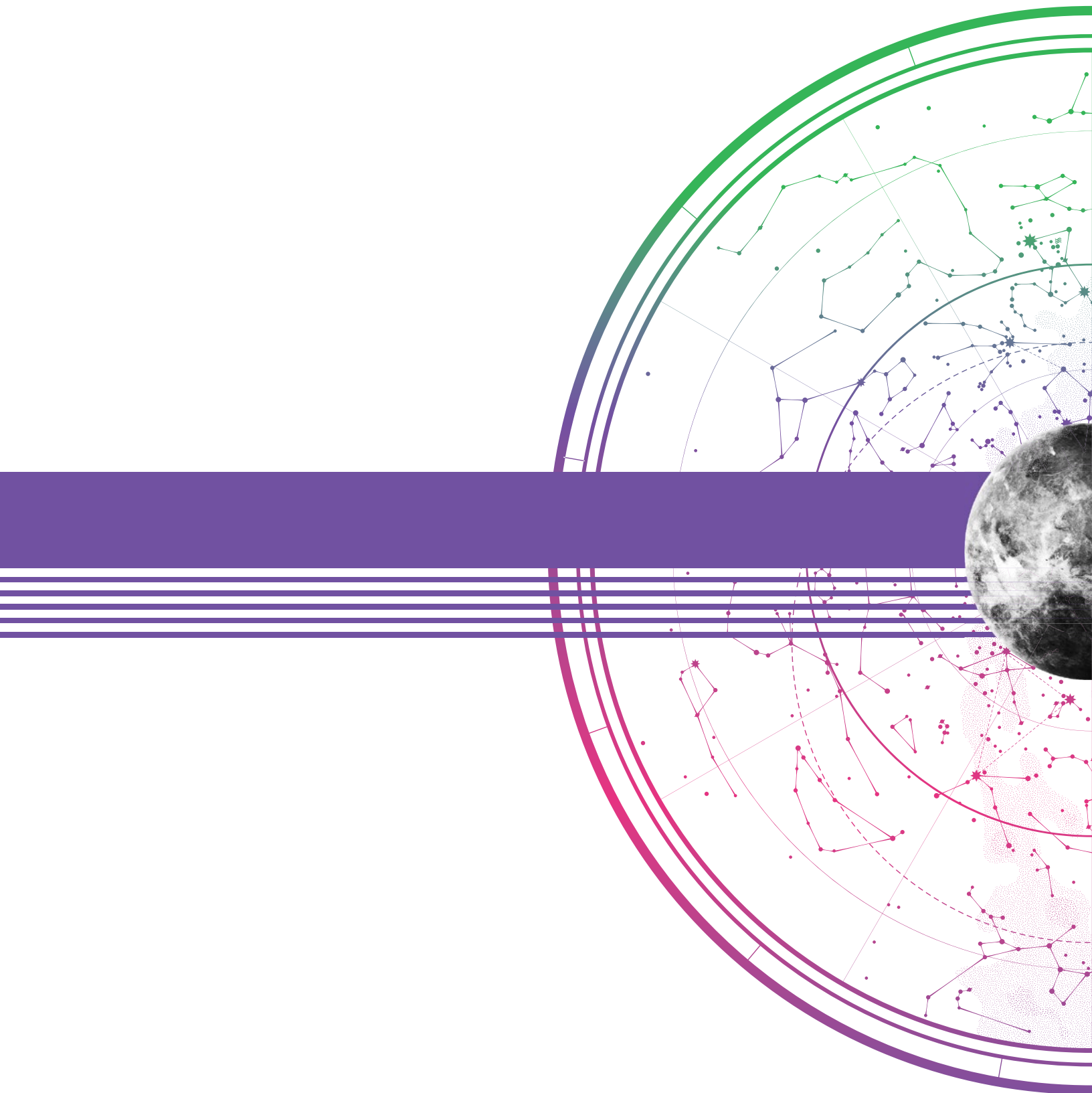




Charting Observability 2023

A VOYAGE INTO DATA GROWTH
AND THE ROI OF MONITORING







Charting Observability 2023

A VOYAGE INTO DATA GROWTH AND THE ROI OF MONITORING

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Introduction

We've long understood that observability data is growing, but few have researched what this means for you – the people responsible for observability.

Here at Edge Delta, we're solving the challenges of monitoring large-scale datasets. We built this report to help our team (and yours) understand these challenges on a deeper level.

After talking to 200 DevOps and SRE professionals, we learned the following:

- **Hidden costs are the norm**
 98% experience overages or unexpected spikes in costs at least a few times a year.
- **Every organization discards data**
 82% limit log ingestion to cut costs often or all of the time.
- **Observability ROI has gotten muddy**
 84% agree that ROI has NOT grown at the same rate as costs.

In the pages that follow, we'll dive into these findings at a deeper level. We'll also quantify observability data growth and explain how leadership teams respond to rising costs.



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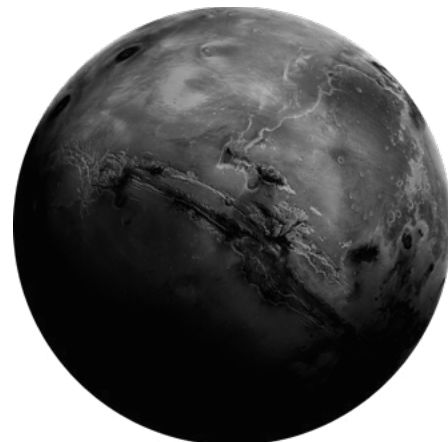
Methodology

Edge Delta commissioned Wakefield Research, a leading polling agency, to conduct the survey in this report. We surveyed 200 DevOps and Site Reliability Engineering (SRE) professionals.

To represent a broader range of the market, we interviewed folks with varying technology backgrounds. We surveyed both buyers and end users of observability platforms. We also spoke to teams that build on traditional infrastructure and cloud-native platforms. Our audience consists of the following overlapping criteria:

- **At least 100 buyers/decision makers that purchase observability and monitoring tools**
- **At least 100 users who leverage these tools to monitor customer-facing applications**
- **At least 100 people whose organization builds and runs applications on Kubernetes**

Where applicable, results have been rounded up to the nearest percentage point. In the following pages, we'll review the survey results and explain what these trends mean for the market.



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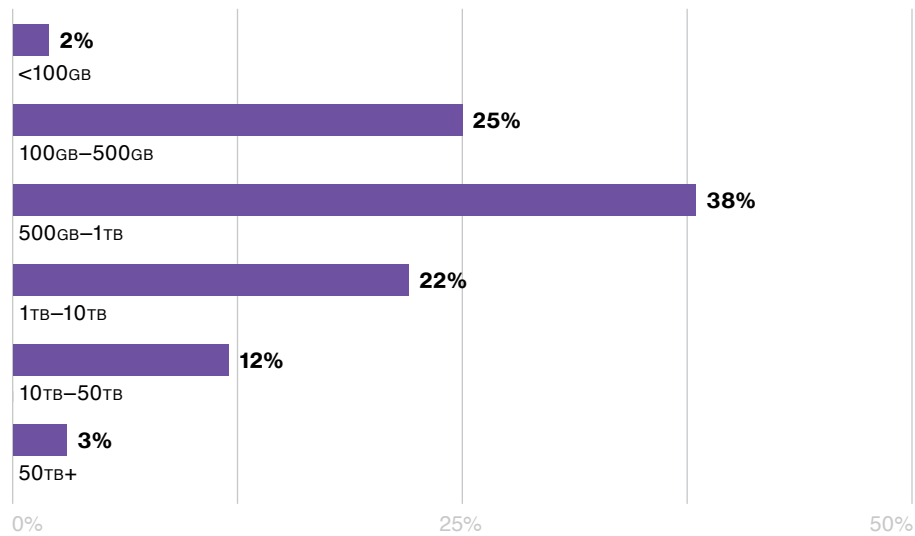
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Quantifying “Exponential” Log Data Growth

Overwhelmingly, we hear that log data growth has become problematic – the term “exponential” gets thrown out a lot. Nearly everyone is looking for a solution to manage growth. But, we rarely hear a standard volume or rate of growth. So, we wanted to quantify the ranges of data companies create and better understand what they mean by “a lot of data.”

DAILY LOG GENERATION



Among respondents, the most significant sample of companies (38%) generate between 500GB and 1TB of data daily. Many companies generate terabytes and beyond. 36% generate over 1TB and 15% generate more than 10TB of data daily.

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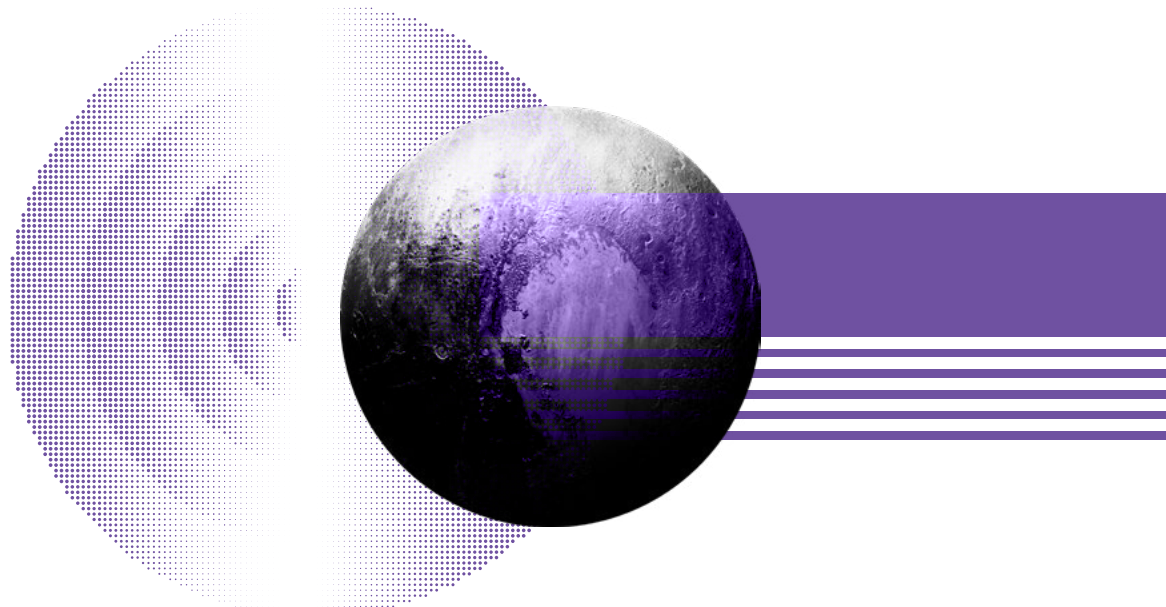
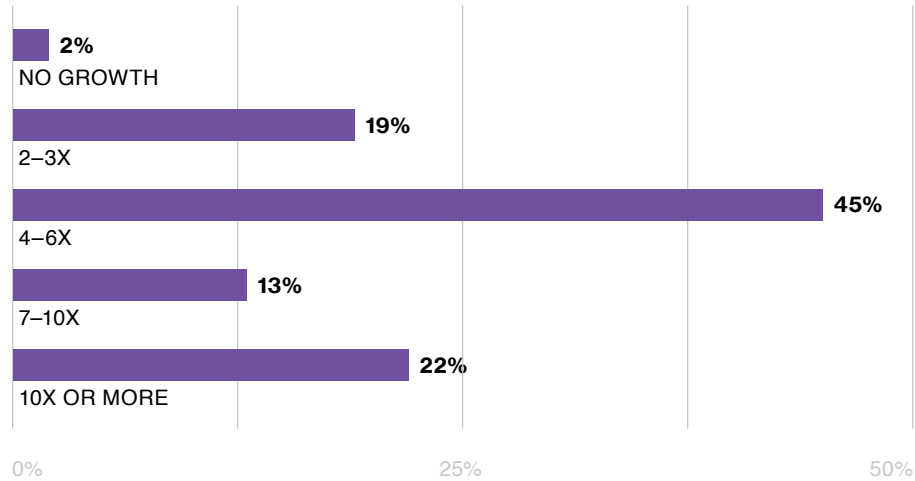
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Perhaps more telling than the volume of data is the rate at which data has grown. **On average, log data has grown 5x over the past three years**, and nearly a quarter of respondents (22%) experienced a growth rate of 10x or higher. These responses indicate that observability data growth shows no signs of slowing.

LOG DATA INCREASE

Previous 3 years



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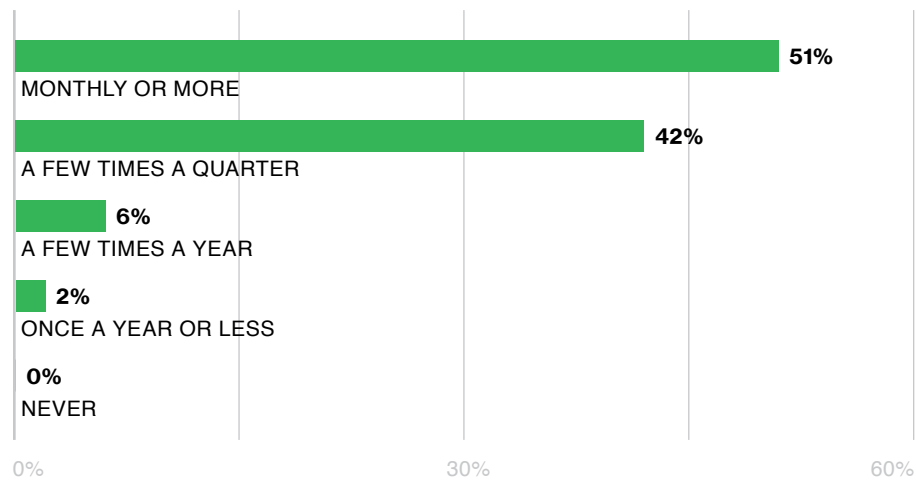
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On top of the sheer growth of data, we often hear customers struggle with unanticipated costs. In some cases, this is due to the many different levers a company includes in their pricing model. For example, you might come across different fees to ingest, index, pre-process, and query data. In other cases, the team might see a surprise data growth – maybe a developer forgot to turn off DEBUG or a new service created more data than expected.

Given this trend, we hoped to measure the frequency of unanticipated costs. Are overages a once-in-a-while thing or a regular occurrence teams must plan for?

FREQUENCY OF OVERAGES/COST SPIKES



Unfortunately, it's the latter. 51% of respondents experience overages or unexpected spikes in spending at least monthly. Nearly everyone (98% of respondents) faces these costs at least a few times a year.

When asked about the most common causes of unanticipated costs, 46% of respondents cited product launches or updates, and 42% cited log data mistakenly included for ingestion.

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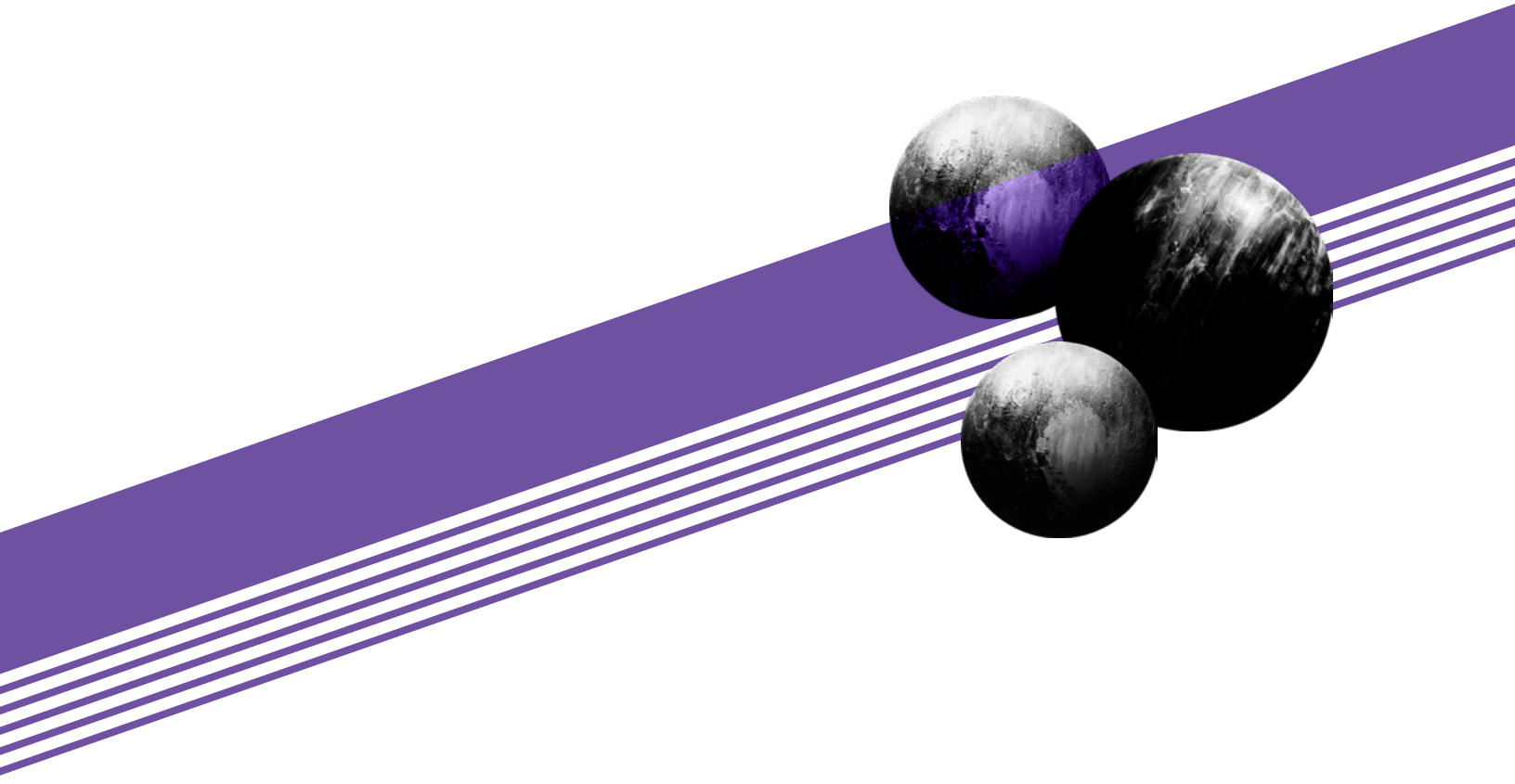
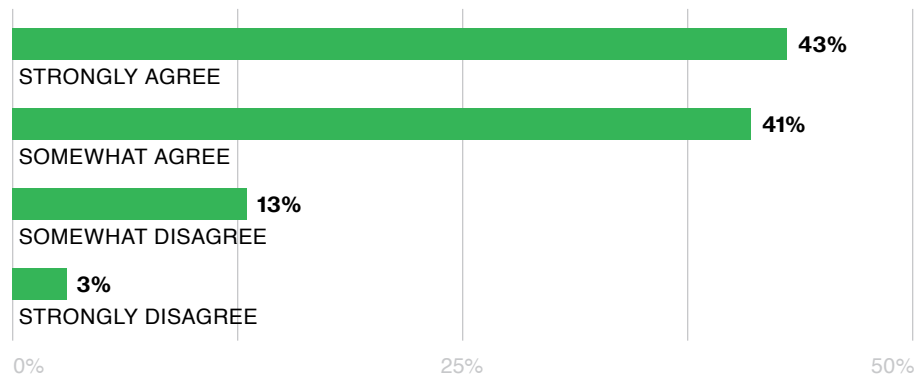
Leadership Teams Look To Cut Costs

"The Year of Efficiency" has been a common talking point in 2023. With observability costs scaling linearly with data volumes, we wanted to understand how spending would be impacted. Will leadership teams set aside more budget for monitoring critical applications, or will they look for ways to reduce costs?

First, we wanted to quantify the value teams derive from their observability platforms. Alarming, 84% of respondents agree that ROI has *not* grown at the same rate as costs.

AGREE OR DISAGREE:

The ROI on observability and monitoring platforms we use hasn't kept up with their cost.



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If the ROI of observability is muddy, how are leadership teams responding? Spoiler alert: they're not setting aside more budget.

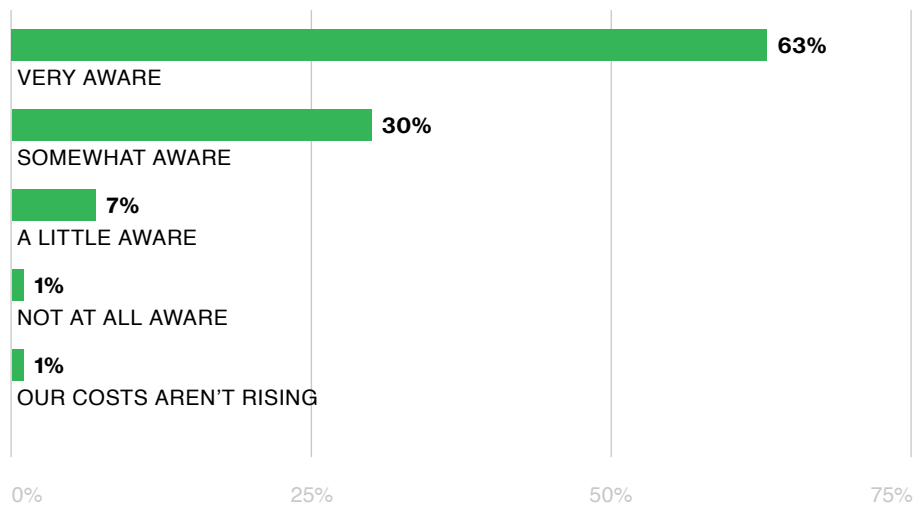
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93% of respondents claim that their leadership team is very or somewhat aware of rising observability costs. 91% of teams anticipate facing scrutiny to reduce costs in the next 12 months. Perhaps most noteworthy, only 1% of companies claim their observability costs are not rising.

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OBSERVABILITY COSTS: HOW AWARE IS YOUR LEADERSHIP?

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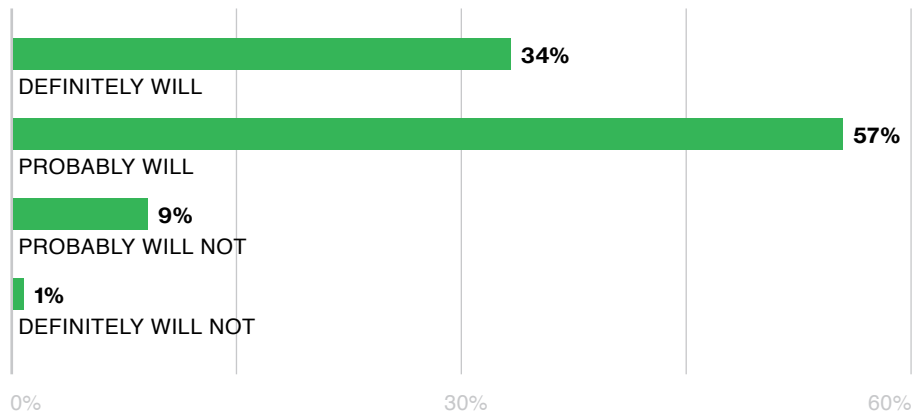


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HOW LIKELY WILL COSTS FACE MORE SCRUTINY FROM LEADERSHIP OVER THE NEXT YEAR AS BUDGETS TIGHTEN?

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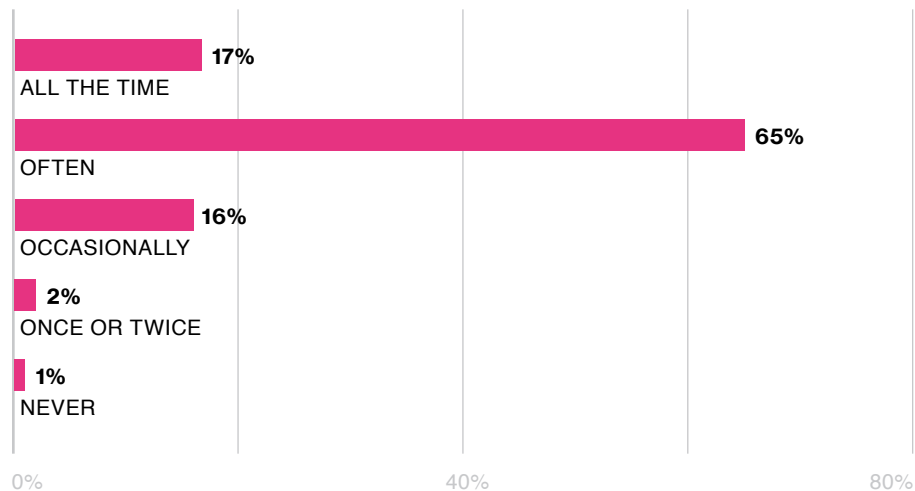
Teams Discard Data to Reduce Costs

It's essential to understand how companies have tried to reduce costs. Up to this point, one of the primary tactics has been to limit the amount of data ingested into the observability platform. We know from our conversations that dropping and sampling data is common. But, it has always been hard to tell how prevalent it was (until now).

98% of respondents stated that they limit log data ingestion to save money. 82% do so either often or all of the time.

Given the predominance of limiting log ingestion, we wanted to understand how teams determined which data to discard. Based on responses, it's clear that nearly everyone uses a combination of different strategies, the most common being to discard data based on function or perceived value. Additionally, 30% of respondents claimed to drop data randomly.

HOW FREQUENTLY DO YOU LIMIT WHICH LOGS ARE INGESTED BY YOUR OBSERVABILITY PLATFORM TO SAVE ON COSTS?



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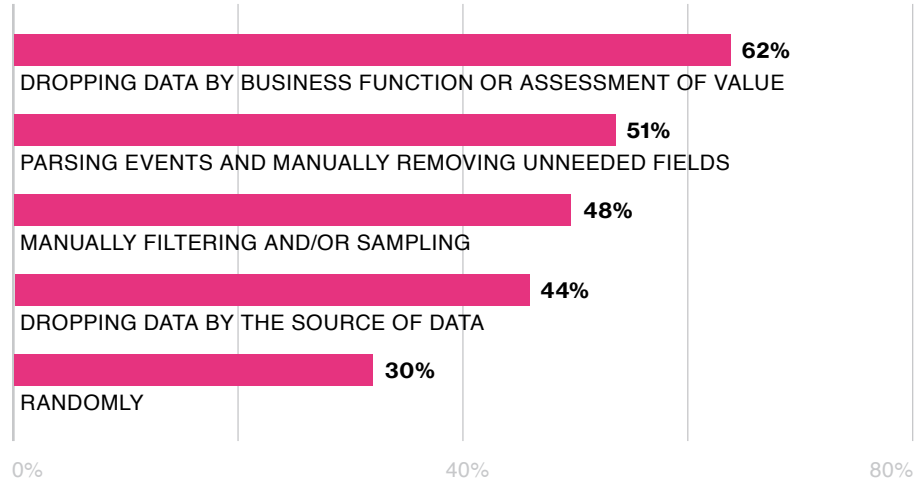
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WHICH STRATEGIES WOULD YOU USE TO CHOOSE WHICH LOGS NOT TO INGEST?



When asked about the top consequences of not ingesting all data, respondents most commonly cited increased risk and compliance challenges. This stat indicates that teams need a low-cost alternative to store data for compliance reasons.

Interestingly, adopting tactics to reduce ingestion takes valuable engineering time. 47% reported time spent preparing data for ingestion as a top consequence.

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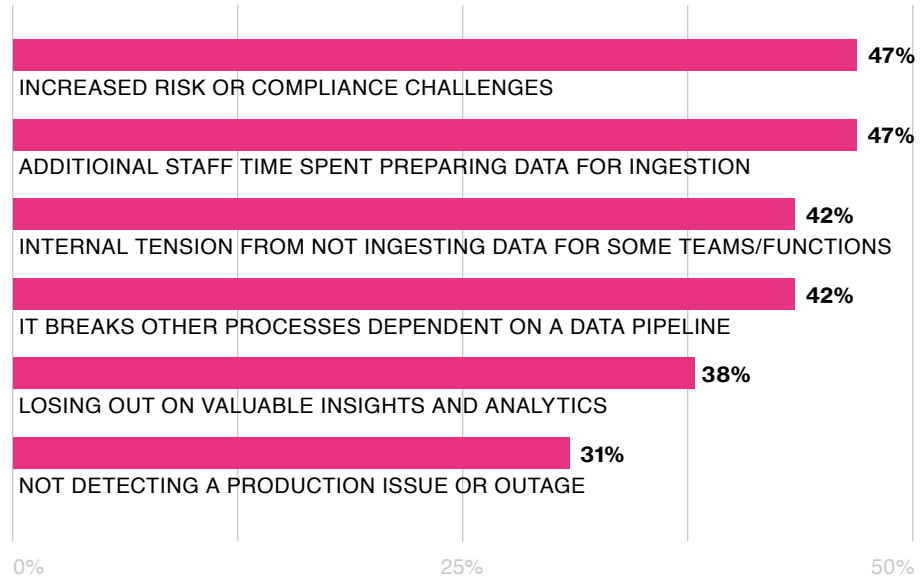
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WHAT ARE THE TOP BUSINESS CONSEQUENCES OF NOT INGESTING ALL YOUR DATA?



Outside of these consequences, what are the other downsides of discarding data?

83% of respondents noted that their decision to ingest or not ingest data has led to a dispute within their company.

Perhaps most alarmingly, **84% agree they're paying more than they should for observability, even when they limit how much log data gets ingested.**



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Edge Delta is a new way to do observability. We process your data as it's created and give you the freedom to route it anywhere. Make observability costs predictable, surface the most useful insights, and shape your data however you need.

