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Visibility Into Performance of Digital Services

The Case and Roadmap For a Fundamental Transformation

Key findings of the research study

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About the Study

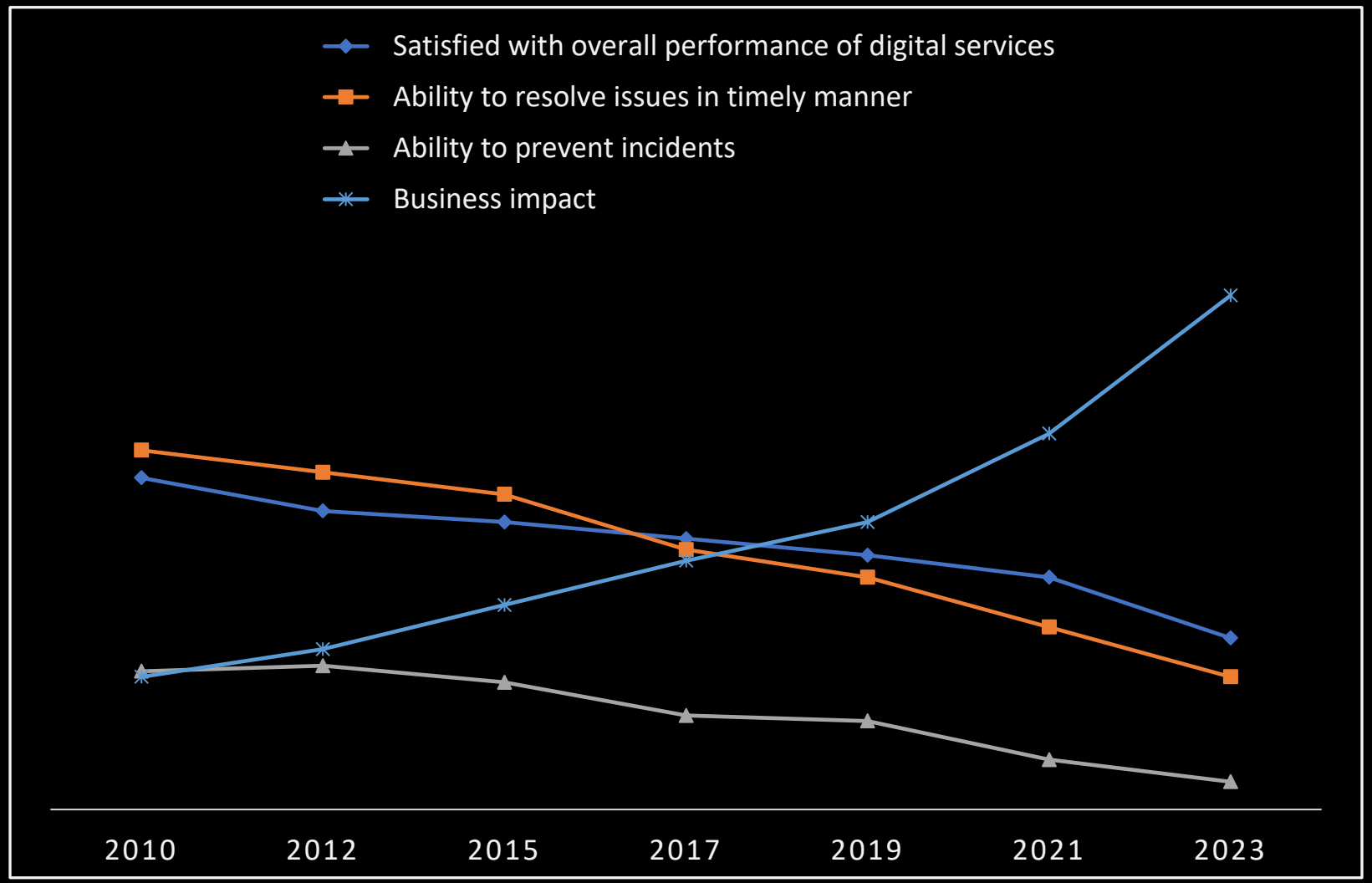
This research study is based on insights from 2,476 organizations.

The study also includes DEJ's trending data collected from tens of thousands of organizations around different issues related to monitoring and improving the performance of digital services since 2010.

1. The study doesn't mention any technology vendors *
2. All recommendations included in the study are based on the analysis of survey data.
3. The study will be promoted to more than 500K end-users
4. Participants by company size – Large – 44%; Medium – 37%
5. Participants by geography – NA – 58%; EMEA – 23%.
6. All averages calculated for the study are based on average company size of 1,219 employees.

* The findings of this study will be used as a foundation for DEJ's upcoming Visibility COREscape report that will provide an –in-depth vendor evaluation

Where we are and how we got here



34% decrease over the last 3 years, in the number of organizations describing their visibility capabilities as effective.

Simultaneously, the research shows a 79% increase in the business impact of issues with IT performance over the last 3 years.

Key factors impacting visibility over the last 3 years

71%

Increased importance of monitoring from users' perspective

68%

Increased amount, velocity and cardinality of data

63%

Limitations of manual work

66%

Amount of change in IT environments

47%

Increase in cloud native adoption

57%	Enabling remote and hybrid work	60%	Increased importance of visibility in pre-production
48%	Complexity of managing network performance	51%	Number of blind spots on digital delivery chain
57%	Lack of visibility into the impact of IT performance on business results	55%	Inefficient process for incident management

40%

Lack of capabilities for Kubernetes monitoring

Definition of Top Performing Organizations (TPO)

	Top Performing Organizations (20%)	All others
Percent of performance issues that are proactively detected	**81%**	**37%**
Average Mean Time to Resolution (MTTR) per incident	**41 minutes**	**201 minutes (3.7 hours)**
Percent of IT budgets available for growth and innovation	**56%**	**29%**

1. TPO class is defined with the goal to identify practices of these organizations that allow them to outperform their peers

2. To provide recommendations to "all other" organizations, DEJ identified TPOs capabilities that have the strongest impact on their performance

3. All key TPO capabilities are grouped in 4 categories - Strategy, Process, Organization and Technology

DEJ's research shows no correlation between companies' sizes, industry sectors or geographical location and their representation in the TPO class

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Key Underlining Issues for Suboptimal Performance

1. Choice of outcomes that organizations are looking to drive

Top Performing Organizations are more likely to focus their visibility efforts on improving user experience and enabling innovation, while other organizations are primarily focused on availability and troubleshooting

2. Lack of an enterprise-wide, strategic approach

The study shows that lack of visibility into performance of digital services has an enormous impact on goals that are very high on business and IT executives' agendas. However, only 16% of organizations are taking a unified, enterprise-wide approach for managing their visibility initiatives.

3. Attributes of the solution selection approaches

Velocity and the amount of change they are experiencing are driving organizations to adopt a different approach for understanding the alignment of their visibility initiatives with broader technology and business trends.

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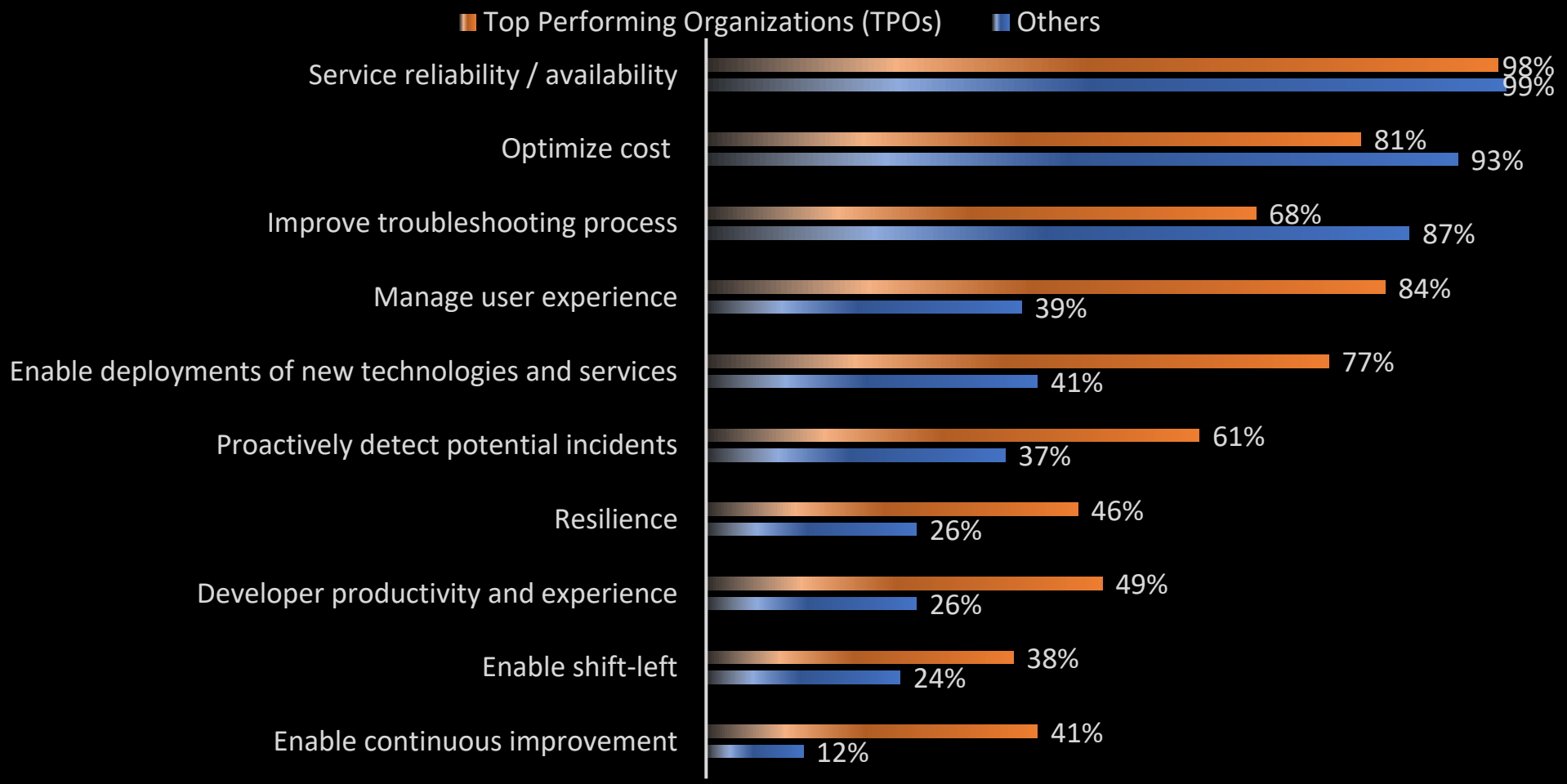
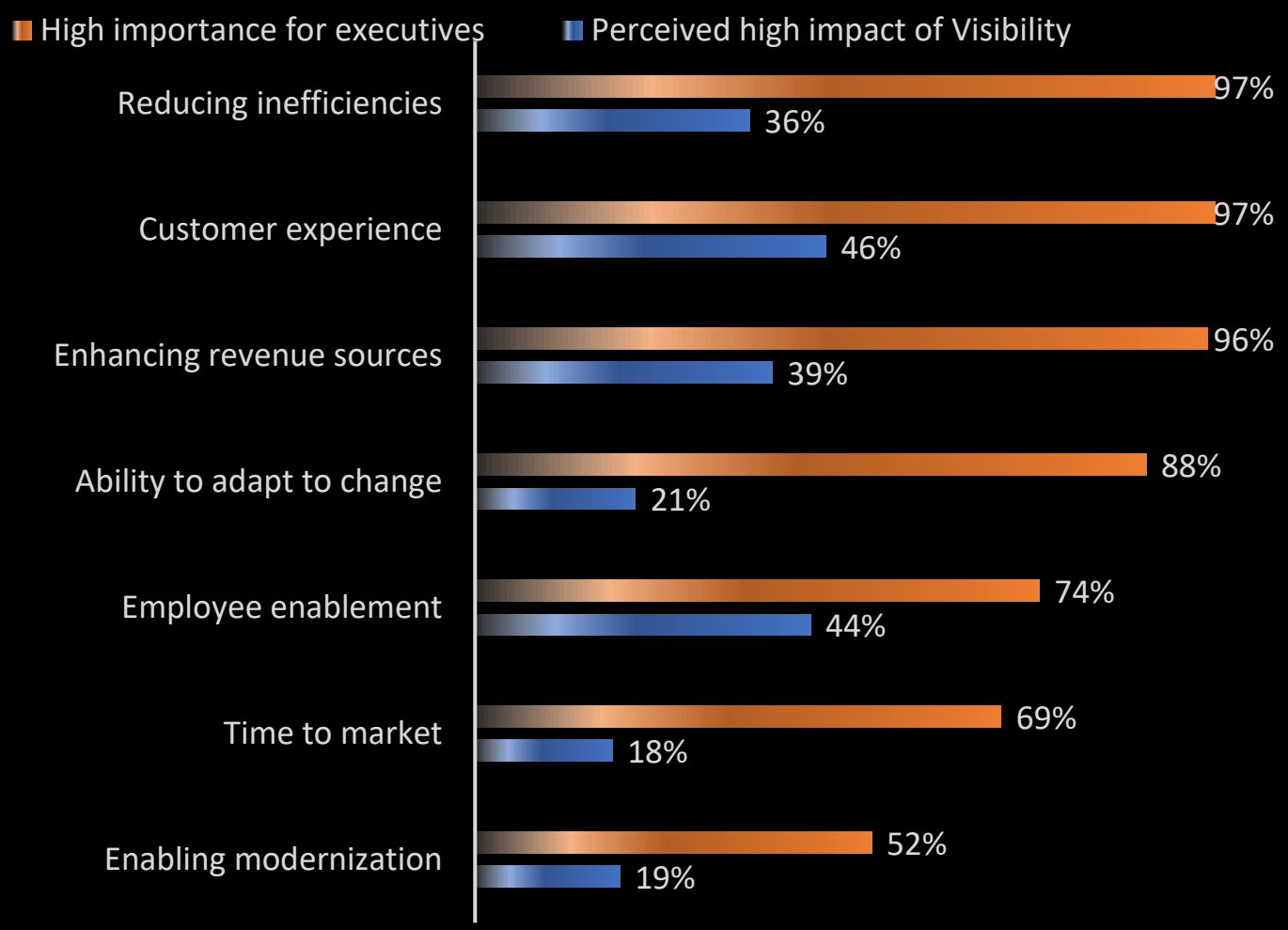
Top desired outcomes from improving visibility



Executives' perception of the value of Visibility



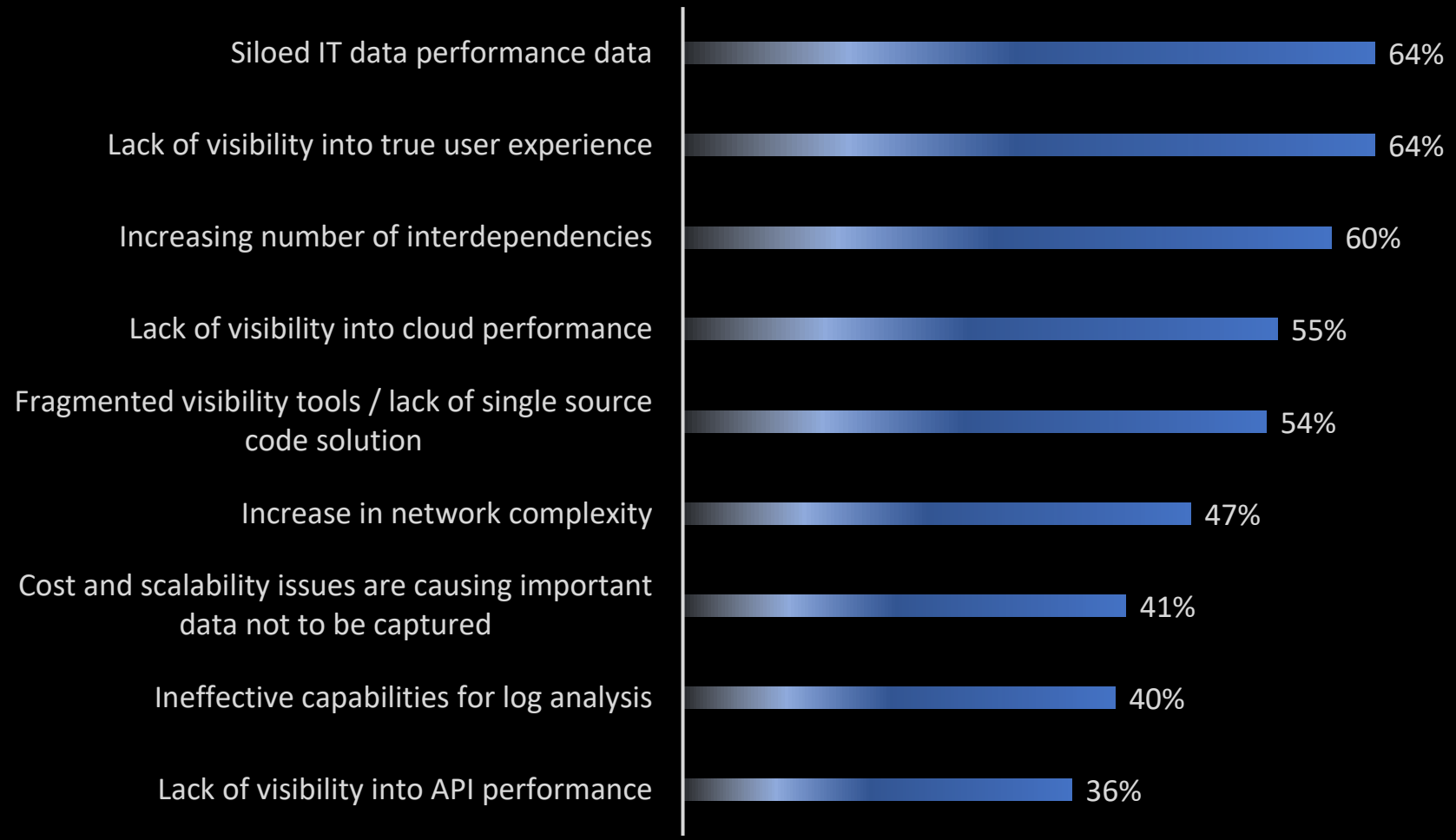
This chart shows that executives have a perception that visibility into performance of digital services does not have a strong impact on their key business goals.

The following slide will show what the ACTUAL impact really is.

The Real impact of Visibility on Business Goals

Business initiative	Business impact	Impact of Visibility
Time to market	**$32.5 million** – average annual loss due to performance related delays in releases of digital services	65% of delays in releases of digital services are due to inability to identify root cause of performance issues
Enabling modernization	**$24.8 million** – average annual cost of not acting around cloud management	62% of organizations reported that lack of visibility into how cloud resources are being used as a key challenge
Ability to adapt to change	40% reported a decline in a competitive position due to changes in customer expectations	56% reported an inability to adopt new technologies due to a lack of visibility capabilities for managing dynamic and complex environments
Reducing inefficiencies	**$33.8 million** – average annual loss due time spent on resolving issues with performance of digital services	67% reported a lack of visibility into root cause of performance issues as a key challenge
Enhancing revenue sources	**$24.1 million** - average annual loss due application downtime and slowdowns	72% reported a lack of capabilities for preventing performance issues before users are impacted
Employee enablement	**$3.7 million** – average annual cost of employee churn due to poor experience and satisfaction	81% reported a lack of capabilities for visibility into employee experience
Customer satisfaction	59% of customers switched to competitors due to poor digital experience	65% reported a lack of visibility into entire internet stack

Key reasons for “blind spots” on digital delivery chain



Vendor Selection

2.4x

More likely to be using "impact on business outcomes" as a key selection criteria by TPOs as compared to all others

$3.6 mil

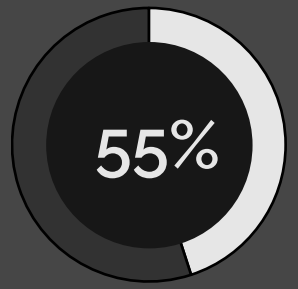
Average annual spend on visibility capabilities that are not being used

72%

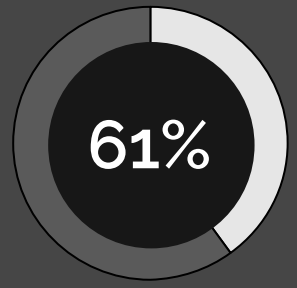
of IT and business executives are not aware of all visibility tools that are being deployed in their organizations

3.6

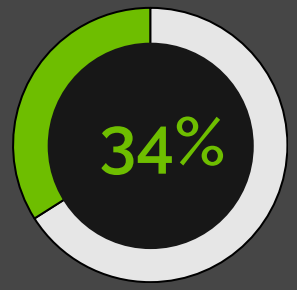
Different visibility solutions deployed, on average, before organizations identify the one that is the best fit for their needs.



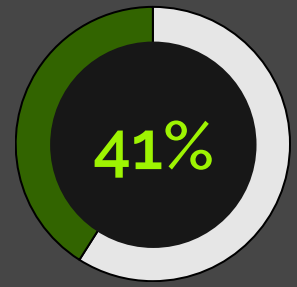
Of organizations reported "not a good fit for our use case" as the key reason for replacing visibility solutions



Of Developers reported that their organizations' visibility capabilities are not aligned with Dev workflows



Of organizations replaced their visibility solutions over the last 24 months



Increase in the number of organization using "cost of data processing and storage" as a key selection criteria for observability solutions over the last 18 months

“Why do we need another monitoring tool?”

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Reported that their organization doesn’t need more monitoring tools

76% Executives

31% Practitioners

2.8x
Average increase in complexity of IT environments over last 24 months

2.1x
Average annual increase in the amount of change over the last 24 months

73%
Increase in frequency of replacing visibility solutions over the last 24 months

55% Reported that changes in their IT environments are driving a need for new monitoring capabilities

57% Reported increase in new areas and domain they have to monitor

68% Reported increasing complexity driving the need for new visibility capabilities

65% Reported inability to make a business case as a key challenge for improving visibility

3.3x
Less likely to report a lack of executive buy-in for investing in visibility capabilities by TPOs

10 key principles

A current state of the market calls for a fundamentally different approach and DEJ's analysis of TPOs practices helped identify 10 key principles on winning strategies for improving visibility into performance of digital services.

1. **Context**
2. **User's perspective**
3. **Intelligent automation & AI**
4. **Business context**
5. **Holistic**
6. **Proactive & resilient**
7. **Observability & data management**
8. **Empowering Developers**
9. **Strategic**
10. **Aligning tools, teams, and processes**

The following section of the document includes research findings behind each of these 10 principles.

Top Performing Organizations (TPOs) are…

Less likely to report that their visibility data is not actionable or relevant — **67%**

3.6x — Less likely to experience discrepancies between metrics that IT is using and actual user experience

More likely to identify right tasks and processes that should be automated while providing users control and transparency — **71%**

2.4x — More likely to provide visibility insights that can be used for making business decisions

More likely to prevent performance issues before users are impacted — **2.2x**

87% — Less likely to report "blind spots on a digital delivery chain" as a challenge

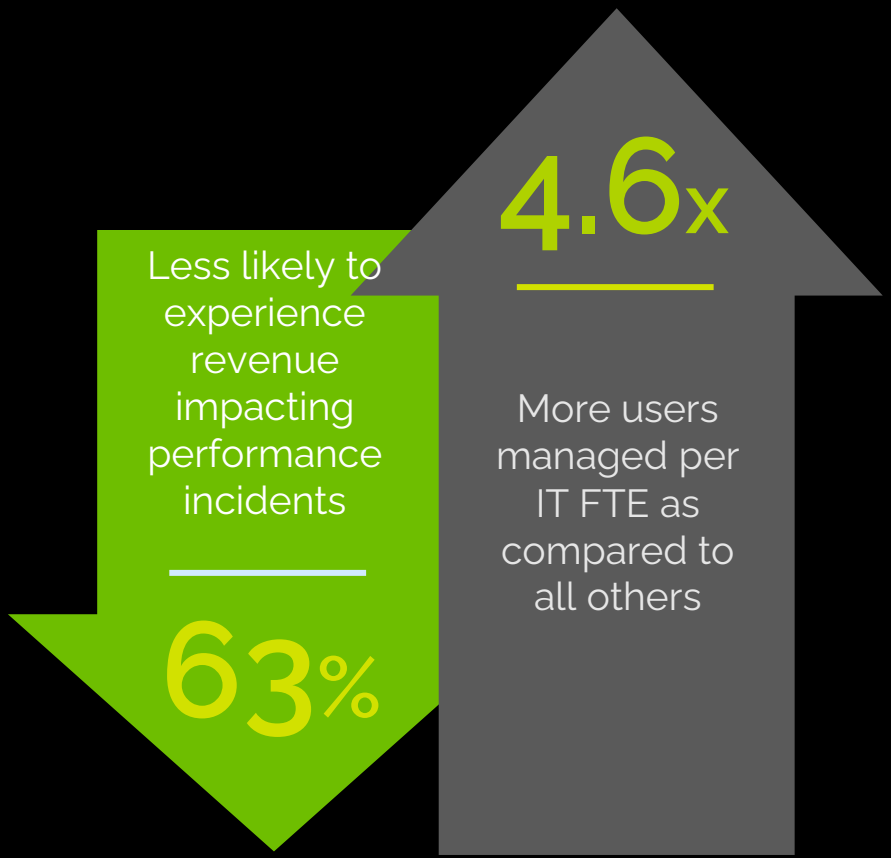
More likely to report "increasing amount of data" as an advantage rather than a challenge — **64%**

2.2x — More likely to be deploying processes for continuous learning and improvement when dealing with performance incidents

82% — More likely to report that visibility capabilities are driving improvements in developer experience

Attributes of TPOs - Context

As a result of having these strategies, TPOs are more likely to report measurable benefits



81% More likely to prioritize performance incidents based on the impact

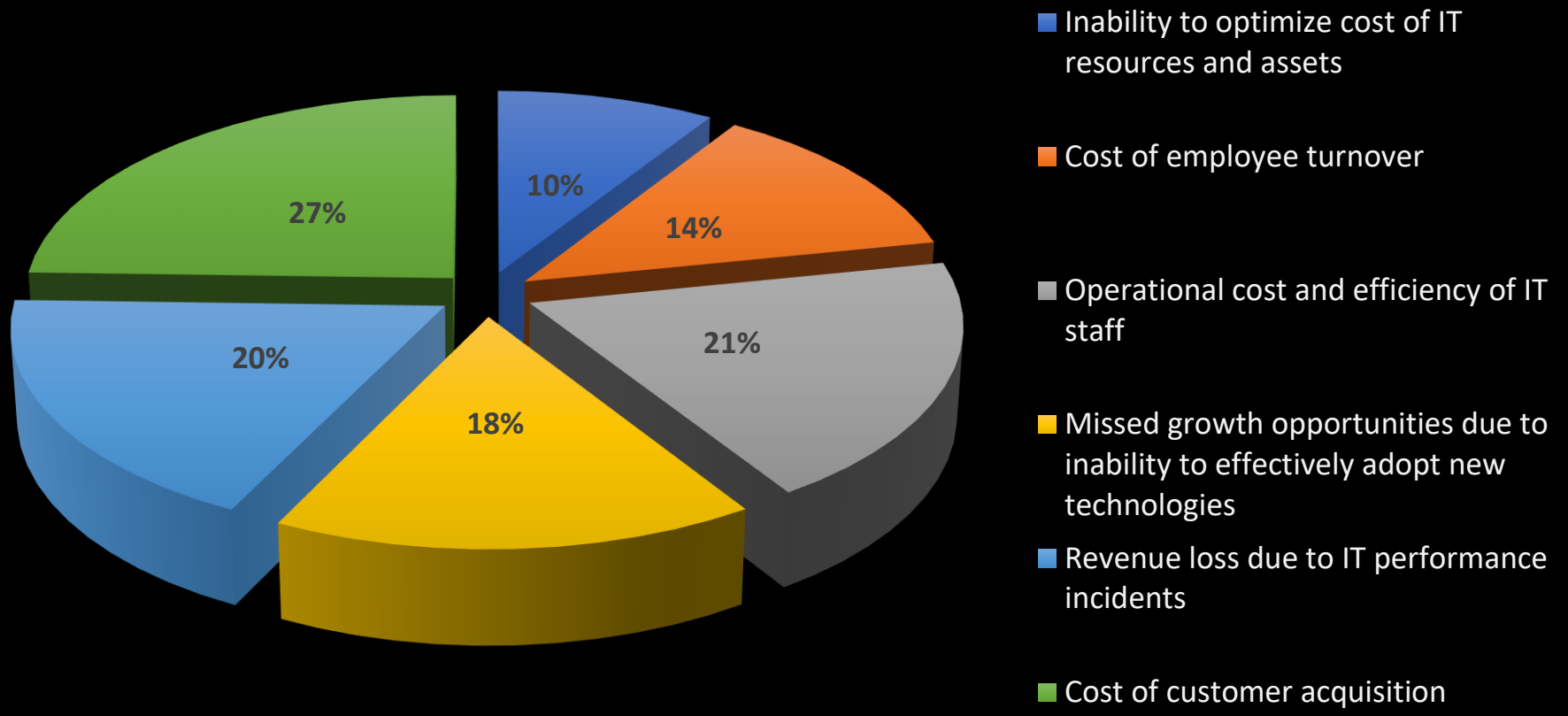
2.8x More likely to have the ability to connect incident detection with a path to the resolution

72% More likely to be able to correlate data from different domains

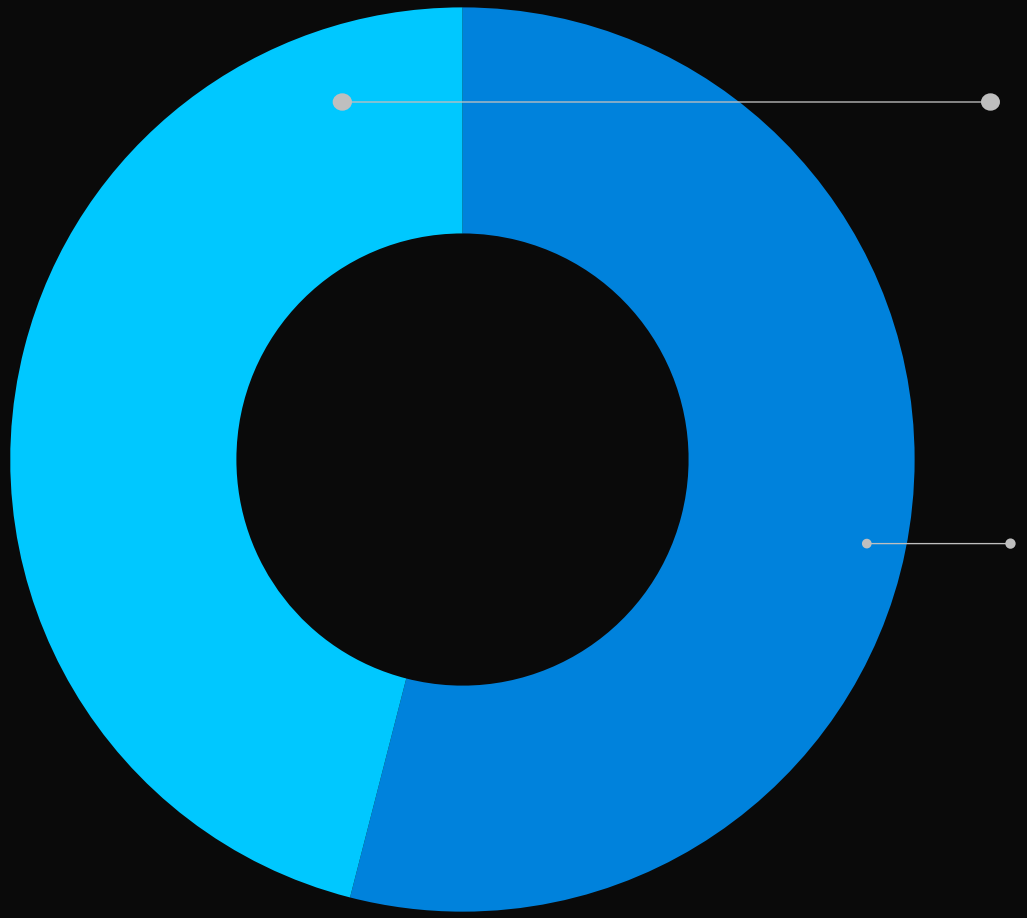
79% More likely to be deploying context-based alerting

2.6x More likely to have the ability to identify and engage relevant stakeholders

Anatomy of the cost of not acting around user experience management – “hard” cost only



Business impact due to a lack of visibility



46% : Cost of outages
+ Operational cost

- Cost / revenue loss due to service downtime +
- Operational cost of managing performance digital services that can be mitigated

54% : User experience
+ Inability to innovate

- Cost / revenue loss due to inability to manage user experience +
- Cost / revenue loss due to ineffectiveness in releasing new digital services and / or adopting new technologies

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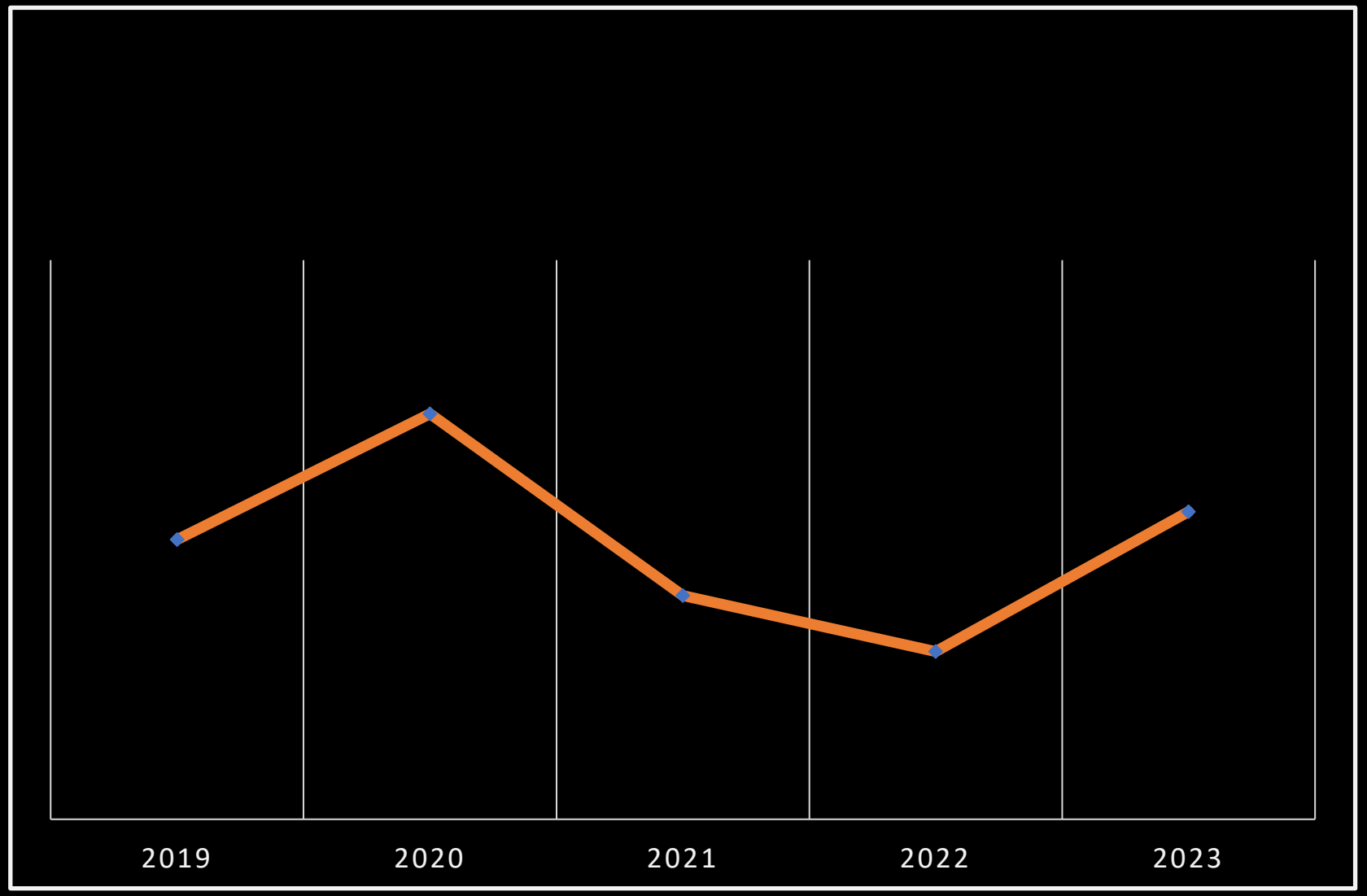
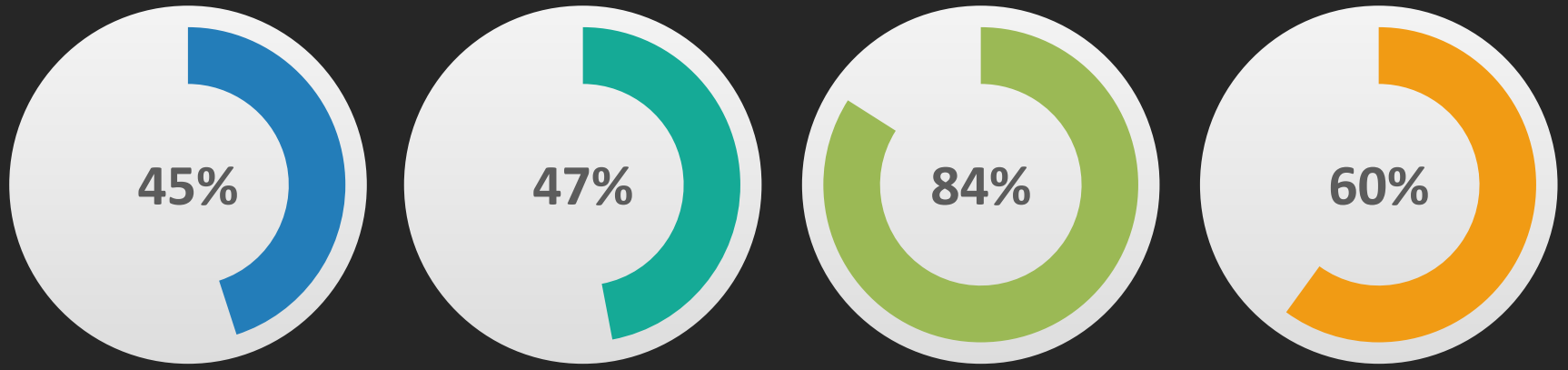
Interest in deploying AI and/or ML powered visibility solutions



DEJ's research shows a renewed interest in AI/ML - powered types of solutions. This can be contributed to the following factors:

- Maturing of technology and more targeted focus on its key value areas
- More transparency of AIOps solutions workflows
- Increasing complexity and the number of tasks that can't be completed by "throwing more people at the problem"

Deploying automation capabilities



Of organizations are looking to make incident resolution process(es) repeatable

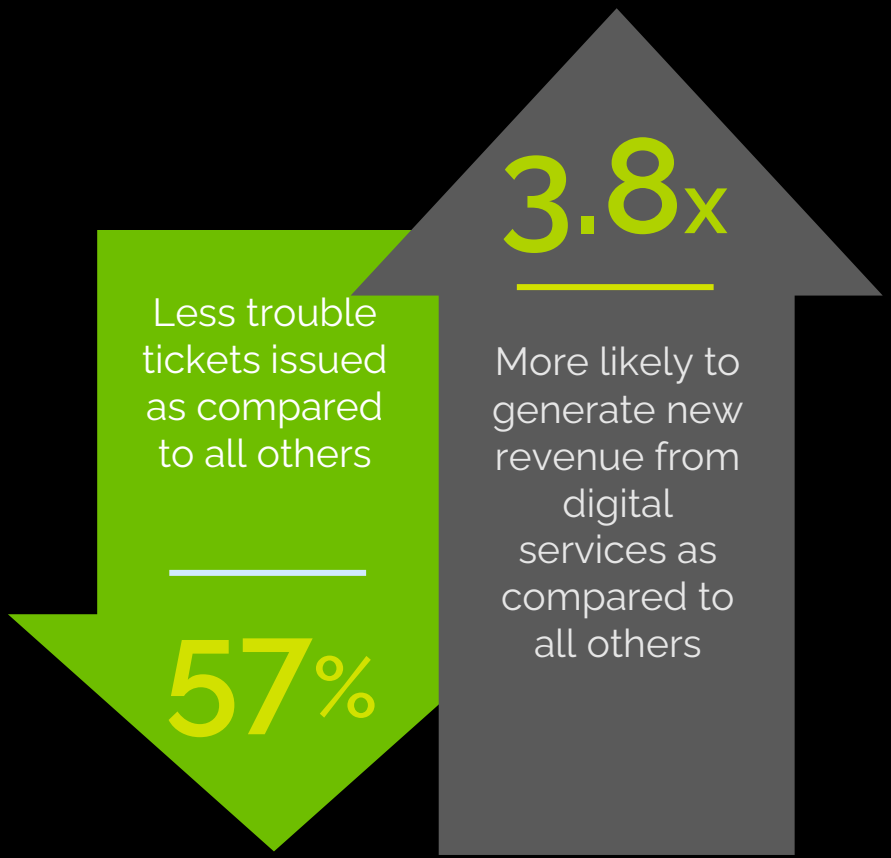
Reported that is no longer humanly possible to effectively manage network performance without strong automation capabilities

Reported they are looking to automate just a path to remediation, but not entire remediation process

Reported that quality and a lack of context of data are the key obstacles for automating more visibility tasks

Attributes of TPOs - Business-centric approach

As a result of having these strategies, TPOs are more likely to report measurable benefits



3.2x	More likely to be correlating IT performance with business metrics
2.4x	More likely to have the ability to intelligently optimize resource utilization and performance
77%	More likely to be able to correlate IT performance with business services
3.5x	More likely to be leveraging Service Level Objectives (SLOs)
80%	More likely to have the be conducting assessments of service delivery risks

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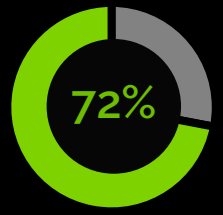
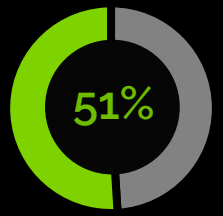
Empowering Developers

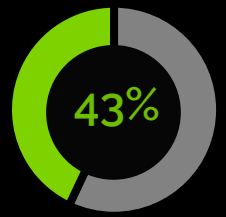
$9.14 mil Average annual loss due issues with developer experience related to a lack of visibility



Reported that removing barriers to release velocity is their key goal



Are looking to empower developers for full-service ownership



Looking to reduce technical knowledge required for developers to find the right balance between velocity and reliability

61%

Reported their monitoring capabilities are not aligned with Dev workflows

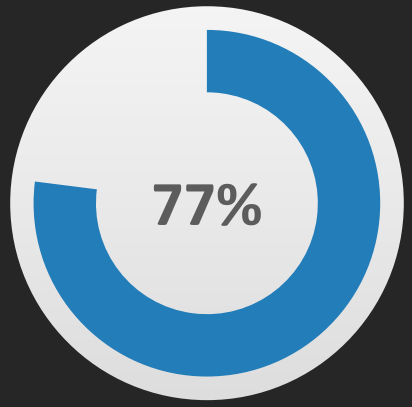
43% Of organizations are looking to deploy new monitoring capabilities for developers in next 12 months

72% Reported that monitoring capabilities have direct impact on developer experience

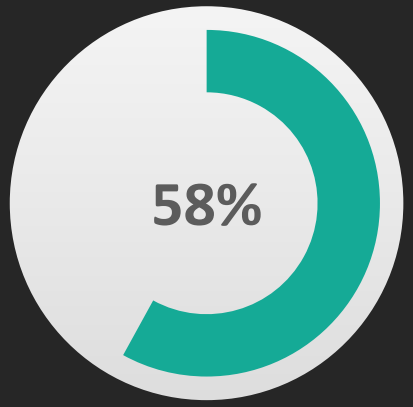
Reported increasing frequency of code changes as a key driver for improving monitoring competencies

Reported they lack visibility into Kubernetes performance

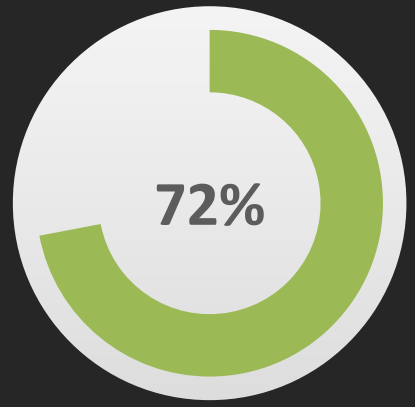
Monitoring for Developers



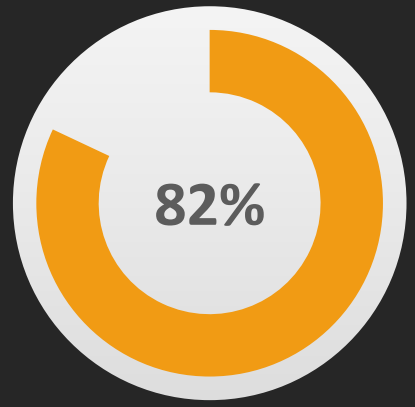
Of Developers described the impact of monitoring capabilities on their productivity and experience as “Strong” or “Very Strong”



Of Developers are not satisfied with monitoring capabilities they are currently using

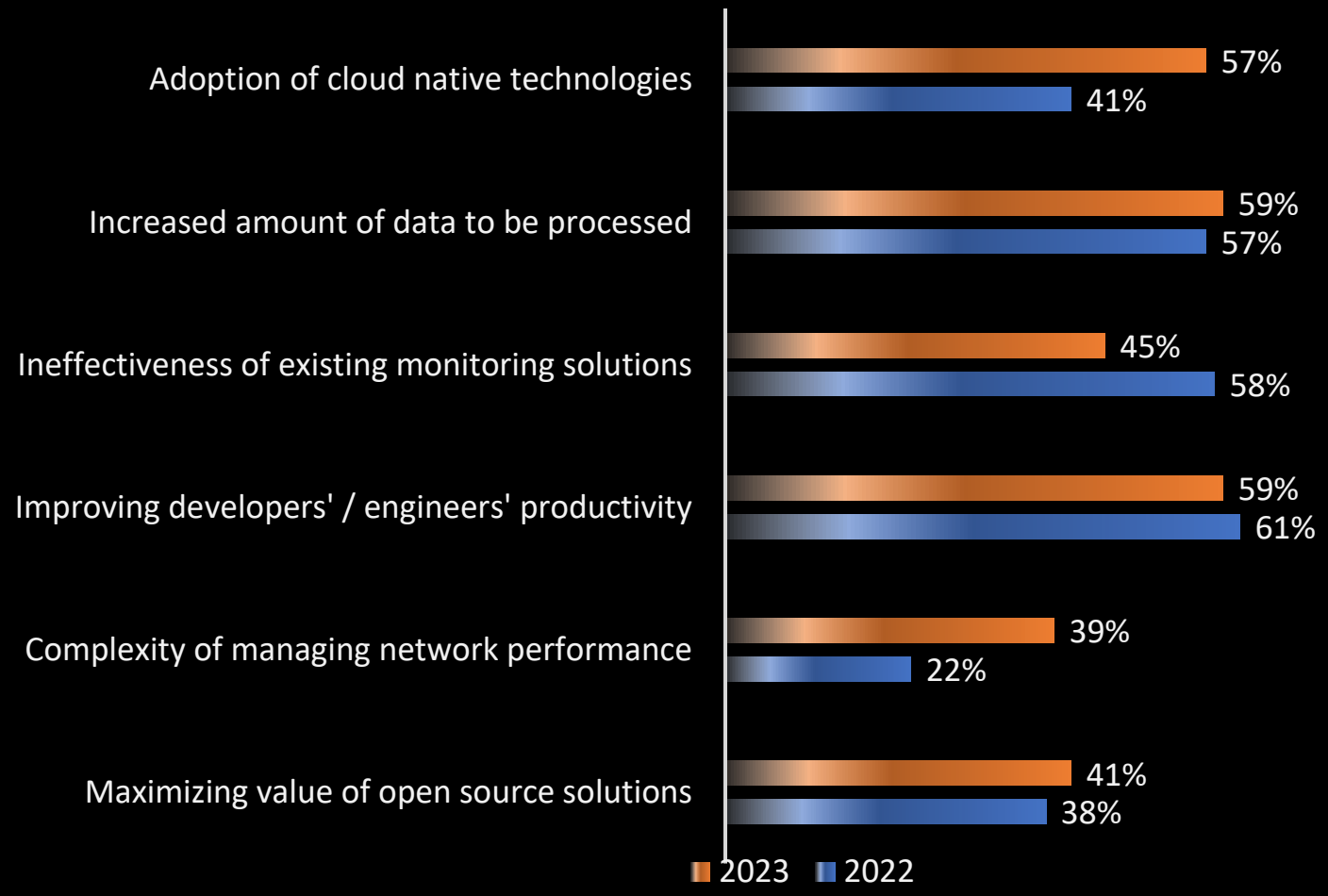


Of Developers are looking to get more visibility into user experience for digital services they are building



Of monitoring solutions used by Developers are not purchased as a part of enterprise-wide visibility initiatives

Key drivers for adopting Observability solutions



This chart shows that, as compared to the findings of DEJ's 2022 Observability study:

- Increased adoption of cloud native technologies and managing network performance as two use cases that are driving new adoption of Observability solutions;
- Increased awareness that Observability solutions are not "next generation monitoring".

The impact of Visibility on cloud native environments

Challenges		After deploying solutions for cloud native observability and/or Kubernetes monitoring	
Average increase in time spent on low-value tasks by developers and engineers after adopting cloud native	28%	Average improvement in time spent on high value tasks	69%
Average increase in MTTR per incident after adopting cloud native	44%	Average improvement in release times	65%
Percentage of engineers and developers reporting that their satisfaction declined after adopting cloud native	37%	Average decrease in MTTR per incident	2.2x
Average increase in number of alerts that are not relevant nor actionable after adopting cloud native	55%	Average decrease in developers' and engineers' churn	38%

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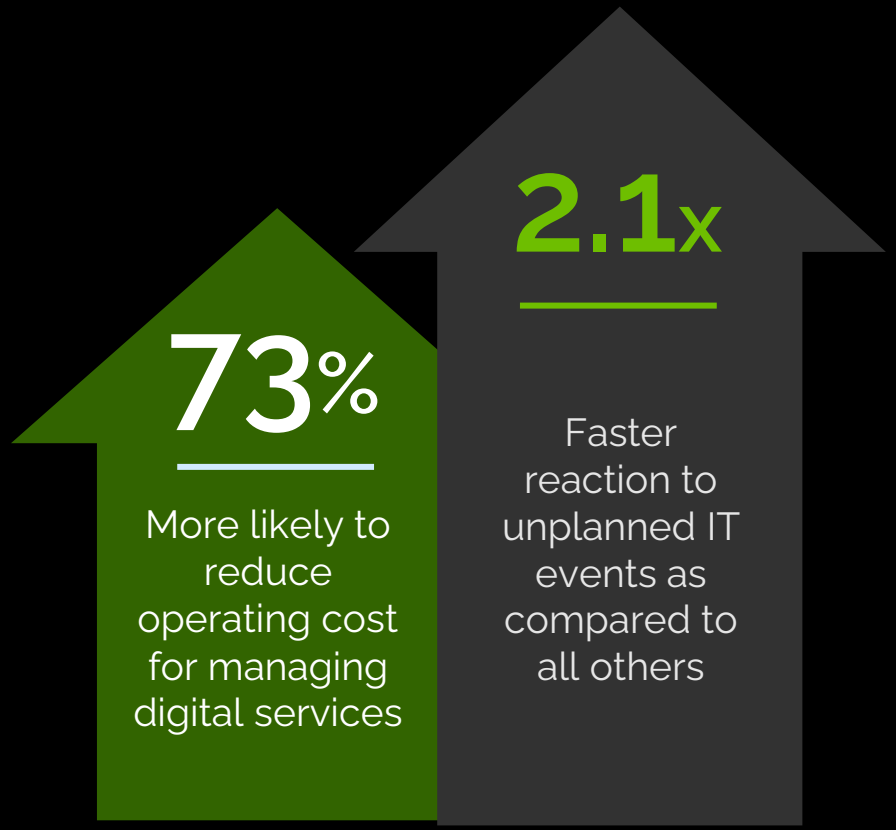
Attributes of TPOs – Teams, Tools, and Process

As a result of having these processes in place, TPOs are more likely to report measurable benefits



- **89%** More likely to have visibility into change impact
- **2.6x** More likely to include continuous learning and postmortem analysis into their incident management strategies
- **2.3x** More likely to have visibility into productivity and experience of remote employees and teams
- **74%** More likely to be deploying automated runbooks
- **65%** More likely to be deploying visibility solutions with integrated collaboration capabilities
- **63%** More likely to be using reliability of visibility solution as a selection criteria

Cost of not acting

Release velocity

Some of the contributing factors include: inability to identify a root cause of performance issues, developers' time spent on low-value tasks, missed revenue opportunities due to being slow to the market, etc.

$32,570,000

Average annual loss due to performance related delays in releases of digital services

Average annual loss due to time spent on resolving issues with performance of digital services

$33,790,000

Troubleshooting & resolution

Some of the contributing factors include: frequency of incidents, inability to identify the root cause,, number of IT FTEs involved, lack of context, the amount of IT data that is not actionable, inefficient workflows and processes, etc.

User experience

Some of the contributing factors include: inability to proactively prevent performance issues, lack of end-to-end view into health of business services, increased expectation for performance, time to resolve performance issues, etc.

$17,170,000

Average annual loss due to not managing user experience

Key Takeaways

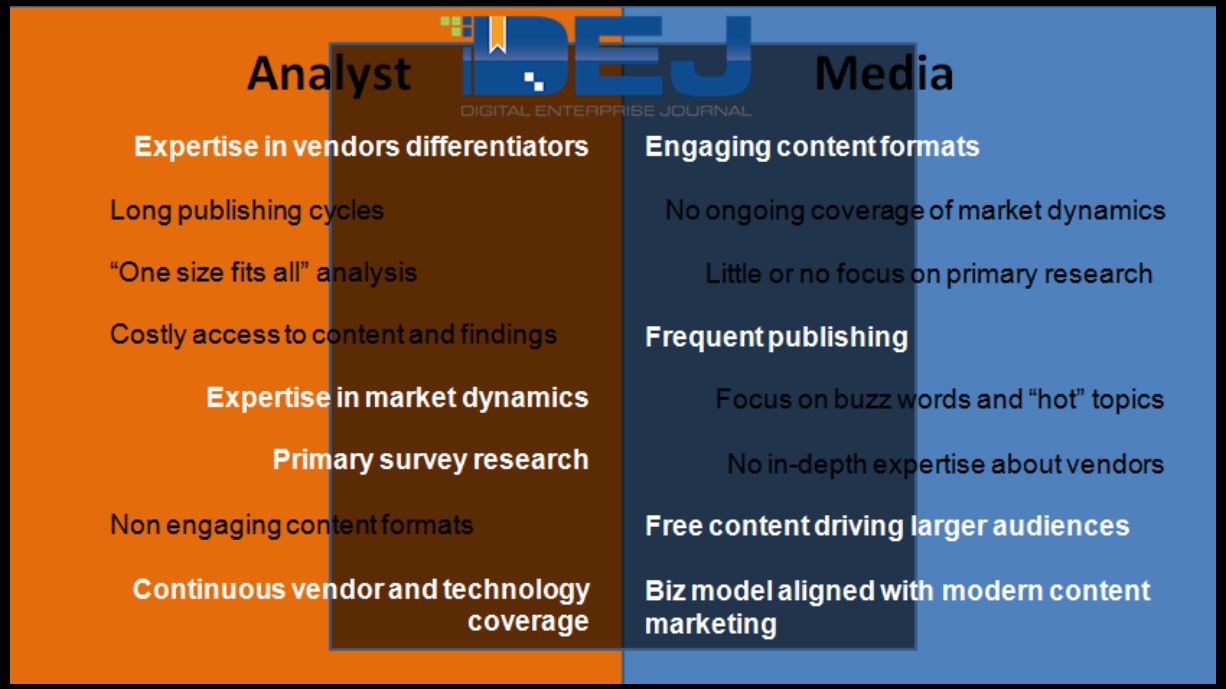
DEJ's research shows two major certainties: 1) the business impact due to a lack of visibility is constantly growing; 2) more than a decade worth of experience provides solid proof that playing catch up and approaching this issue a certain way is not working. This calls for a fundamentally different approach based on 10 key principles identified in the study..

1. Visibility into performance of digital services is an area that should be a part of boardroom agendas. Discrepancies between perceived and actual business value of visibility are significantly impacting business results
2. The amount and velocity of change and increasing complexity are "answering" the ever-present question – "why do we need another monitoring tool?"
3. Improving user experience and reducing inefficiencies to support innovation have a stronger business impact than traditional value areas, such as cost optimization and mitigating service outages.
4. There is a major need for monitoring capabilities that are aligned with developers' workflows
5. Organization should rethink their vendor selection processes and center their approaches around two key areas – impact on business outcomes and the best fit for their use case(s).
6. User experience should be a key goal of visibility initiatives, but that is an area where "you can't manage what you can't measure" is very applicable.

* DEJ's research shows a disconnect between business and technology executives and IT practitioners which leads to significant business loses.
* The monetary and competitive impact is rapidly progressing to the point where organizations, if they don't transform their approaches for managing visibility, won't be able to execute their core business strategies

About DEJ

Bringing together the most advanced concepts from analyst research and media industries



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Focus on business outcomes

Methodology framework leveraging a multi-step approach to connect vendor's differentiators with business outcomes

Situational analysis

Providing actionable recommendations to user organizations based on their individual requirements

User Insight Platform

Ongoing, personalized approach for research data collection and analysis

Business model

Ability to continuously leverage up-to-date research in each stage of the buying cycle & sales funnel