



# Enabling Top Performing Engineering Teams

## Research study – key findings

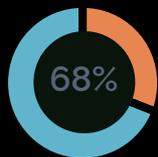
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The key findings of Digital Enterprise Journal's research study based on insights from more than 800 organizations.

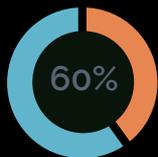


# Key Goals

71% - Streamline debugging process



Align work of Engineers with business goals



Ensure that frequent code changes don't deteriorate user experience



Improve systems' resilience

88%

Balance between speed, cost and user experience

63%

Reduce amount of unplanned work

59%

Create actionable insights from code data

44%

Turn incidents into learning opportunities

62%

Proactively prevent issues before users are impacted

## Key Challenges

68%

Time spent of not business contributing tasks

62%

Lack of actionable data for improving code

65%

Inability to measure impact of new releases on performance

51%

Identifying weak spots in systems reliability

64% Lack of collaboration between teams

45% Lack of automation capabilities

61% Inability to prioritize engineering resources

66% Inability to deal with change and complexity

54% Fragmented management tools

61% Monitoring capabilities for managing microservices & Serverless

60%

Lack of knowledge and process management capabilities

# By the Numbers

68%

reported that they are experiencing a “flying blind or flying slow” challenge

76%

Don't have visibility into how Engineer's time is spent

57%

Described value of Chaos Engineering as “Important” or “Very Important”

41%

Average increase in importance of speed of delivery over the last 12 months

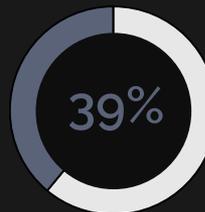
## View of Top Performing Organizations (top 20% of the survey pool)

2.2X

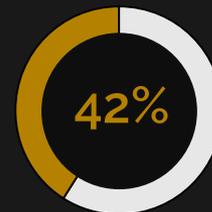
MORE likely to view creating revenue as the KEY role of Engineering Teams

58%

LESS likely to view reducing cost as the KEY role of Engineering Teams



Reported code debugging as a source of competitive advantage



Reported that value of SRE is aligned with their key business goals  
**2.3 x increase since 2019**



# Maturity Framework

DEJ identified a class of top performing organizations (TPO) which represents the top 20% of the survey pool.

# Definition of Top Performing Organizations (TPO)

	Top Performing Organizations (20%)	All others
Percent of revenue generated from new digital services	<b>21%</b>	<b>6%</b>
Percent of time spent on unplanned work	<b>26%</b>	<b>59%</b>
Percent of IT budgets available for growth and innovation	<b>53%</b>	<b>23%</b>

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



# Key Attributes of Top Performing Organizations

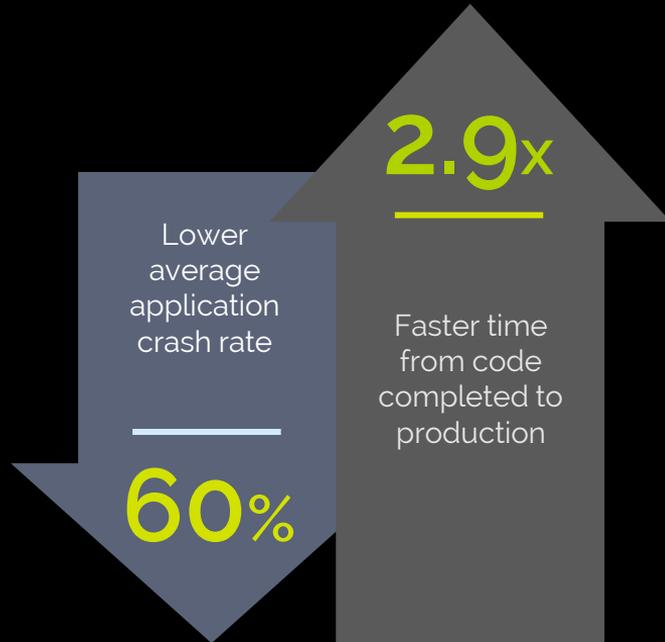
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Our analysis is centered around highlighting capabilities that are enabling these organizations to outperform their peers and industry averages.

These capabilities are grouped in 4 categories – Strategy, Process, Organization and Technology

# Attributes of TPOs – Strategy and Processes

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



77%

More likely to include context of data in the core of IT strategy

78%

More likely to have data driven process for allocating engineering resources

2.4x

More likely to be deploying process for understanding how bug fixes and troubleshooting impact the key business goals

66%

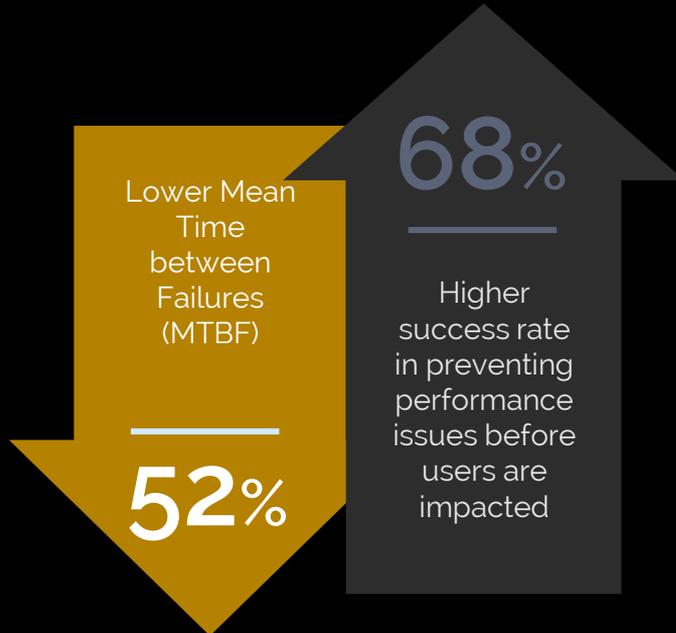
Process for knowledge sharing and collaboration between different teams

55%

More likely to be deploying a culture of Observability

# Attributes of TPOs – Technology

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



2.2x

Capability to prioritize code bugs that impact application performance

67%

More likely to be deploying a project management platform for software teams

2.1x

More likely to be deploying Chaos Engineering capabilities

80x

More likely to have capabilities for automated discovery of containers and dependencies for microservices

3.1x

More likely to be deploying SRE approach

52%

More likely to be deploying Observability tools across the full stack



# Key Takeaways

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Summary of actions that organizations should be taking to improve the performance and cost of non acting

# Key Takeaways

DEJ's research shows that the performance gap between TPO class and all other organizations is not only wide, but it is trending to be wider each year. To start closing that gap, organizations should ensure that the following 6 areas are a part of their IT Operations strategies.

1

Enabling Engineering Teams is a critical strategy for achieving business success in digital economy and comes down to finding a balance between, speed, cost and performance

2

Building resilient systems is the key for two main elements of digital transformation: 1) using technology as competitive advantage and; 2) ensuring optimal user experience

3

Creating actionable insights, and doing it at scale, is the key capability for improving application code

4

Developing processes for measuring the alignment of engineering work with key business objectives makes the difference between TPOs and all others

5

New approach for incident management, collaboration and knowledge sharing is critical for enabling engineering teams to focus on business critical tasks

6

SRE approach is critical for establishing a life-cycle, business-centric approach for continuous improvement, learning and keeping up with the key challenges.



The cost of non acting is significantly increasing every year and organizations need to have more urgency



Creating a business advantage is one of the key drivers for top performing organizations to modernize their practices for enabling Engineering teams

# Cost of not acting

## Business alignment

Some of the contributing factors include: amount of unplanned work and toil, lack of processes for aligning with business objectives, market opportunities and changes in customer expectations, etc.

## Competitive position

Some of the contributing factors include: Lack of alignment with business objectives, missed revenue opportunities, employee satisfaction, ability to adjust to new user requirements, etc.

ROI of deploying TPO debugging solutions

**2.6X** per 18 months

**\$3,550,000**

Revenue loss due to Engineers not focusing on business critical tasks

## Debugging

Some of the contributing factors include: impact on revenue lost due to user experience issues, opportunity cost due to slow releases, inability to identify the root cause, labor cost, etc.

**42%**

Decline due to time spent on non business critical tasks

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DEJ operates as a subsidiary of Cognanta Inc. Cognanta is a research firm dedicated to helping business professionals understand the impact of technology deployments on their key goals.

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