

The background features a dark navy blue field with abstract, overlapping shapes in vibrant magenta and deep purple. Thin, light-colored lines intersect diagonally across the composition. The text is positioned on the left side.

# AWS re:Invent

DECEMBER 2 – 6, 2024 | LAS VEGAS, NV

DOP105-S

# The State of Developer Experience – with Atlassian Engineering Leaders

**Andrew Boyagi**

Head of DevOps Evangelism  
Atlassian

**Preeti Kota**

Head of Engineering, Compass  
Atlassian

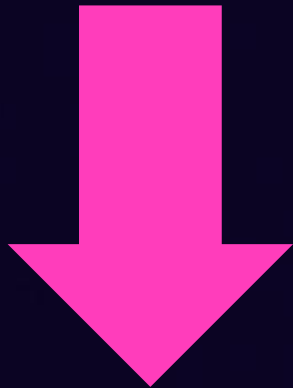


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# The State of Developer Experience

# The State of Developer Experience

No. of Ping Pong Tables



per Company\*



\* Graff, A. (2016). *Ping-pong table sales are falling: Is the bubble about to burst in San Francisco?* [online] SFGATE

# The State of Developer Experience

Frozen pizza

>50%

of total pizza sales\*



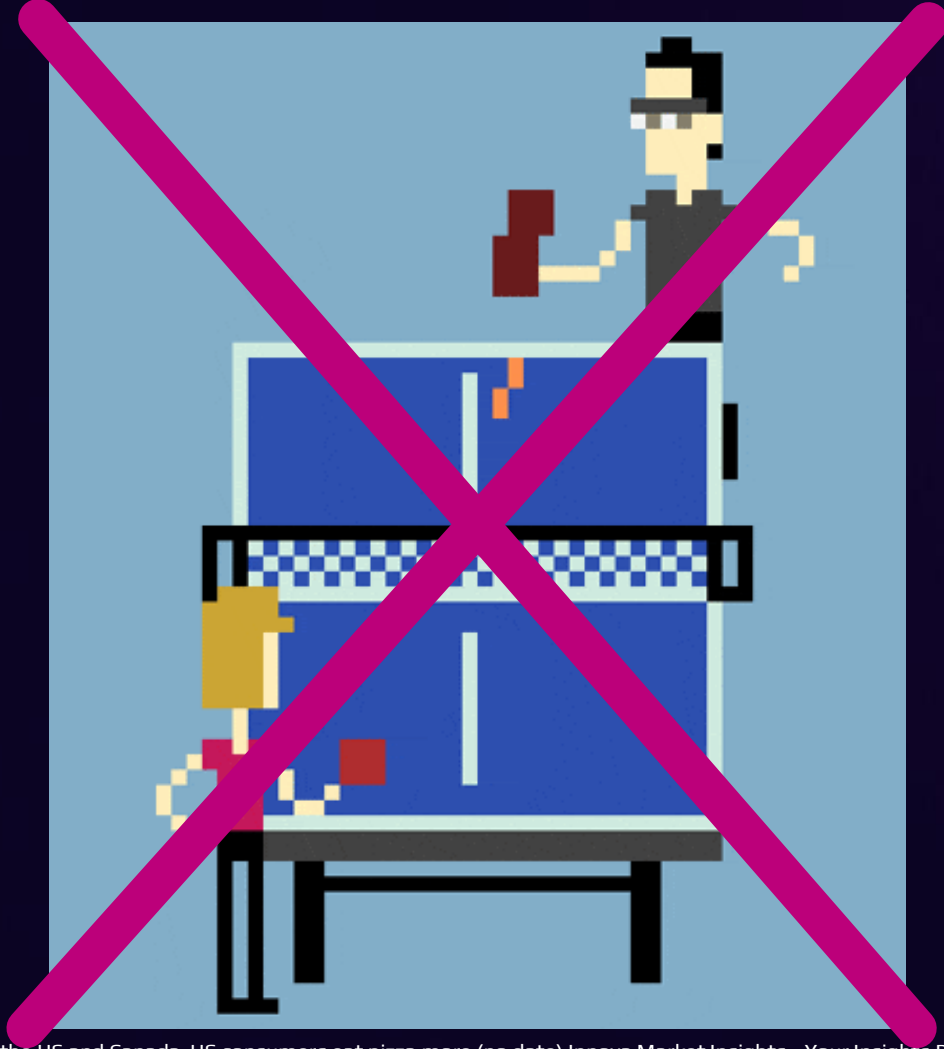
\* Pizza Trends in the US and Canada. US consumers eat pizza more (no date) Innova Market Insights



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# The State of Developer Experience



\* Pizza Trends in the US and Canada. US consumers eat pizza more (no date) Innova Market Insights - Your Insights Partner for Growth



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# What is Developer Experience?

Developer experience is how devs **think and feel** about the **tools, frameworks, and processes** they use to deliver software within a company.

# Why Developer Experience?

**Happy devs  
are  
productive  
devs!**



## Employee satisfaction

- DevEx is critical for attracting new talent, and retaining high performers



## Higher quality software

- Removing friction allows more time to focus on quality



## Improved productivity

- Remove inefficiency and make work as easy as possible



## Turbocharge innovation

- Faster release cycles lead to enhanced experimentation and learning





# State of Developer Experience Report



Download the full  
report



# State of Developer Experience Report



Download the full  
report

 The state of DevEx across the globe



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# State of Developer Experience Report



Download the full  
report

- ⊕ The state of DevEx across the globe
- ⊗ What's getting in the way of a good DevEx?



# State of Developer Experience Report



Download the full  
report

- ⊕ The state of DevEx across the globe
- ⊗ What's getting in the way of a good DevEx?
- ✱ The impact of AI on DevEx



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★ Partnered with DX and Wakefield





# State of Developer Experience Report



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report



The state of DevEx across the globe



What's getting in the way of a good DevEx?



The impact of AI on DevEx



Partnered with DX and Wakefield



Surveyed 2,150 devs and leaders







# State of Developer Experience Report



Download the full  
report

- ⊕ The state of DevEx across the globe
- ⊗ What's getting in the way of a good DevEx?
- ✱ The impact of AI on DevEx

- ★ Partnered with DX and Wakefield
- ⊙ ? Surveyed 2,150 devs and leaders
- 📊 Analyzed results and shared a full report

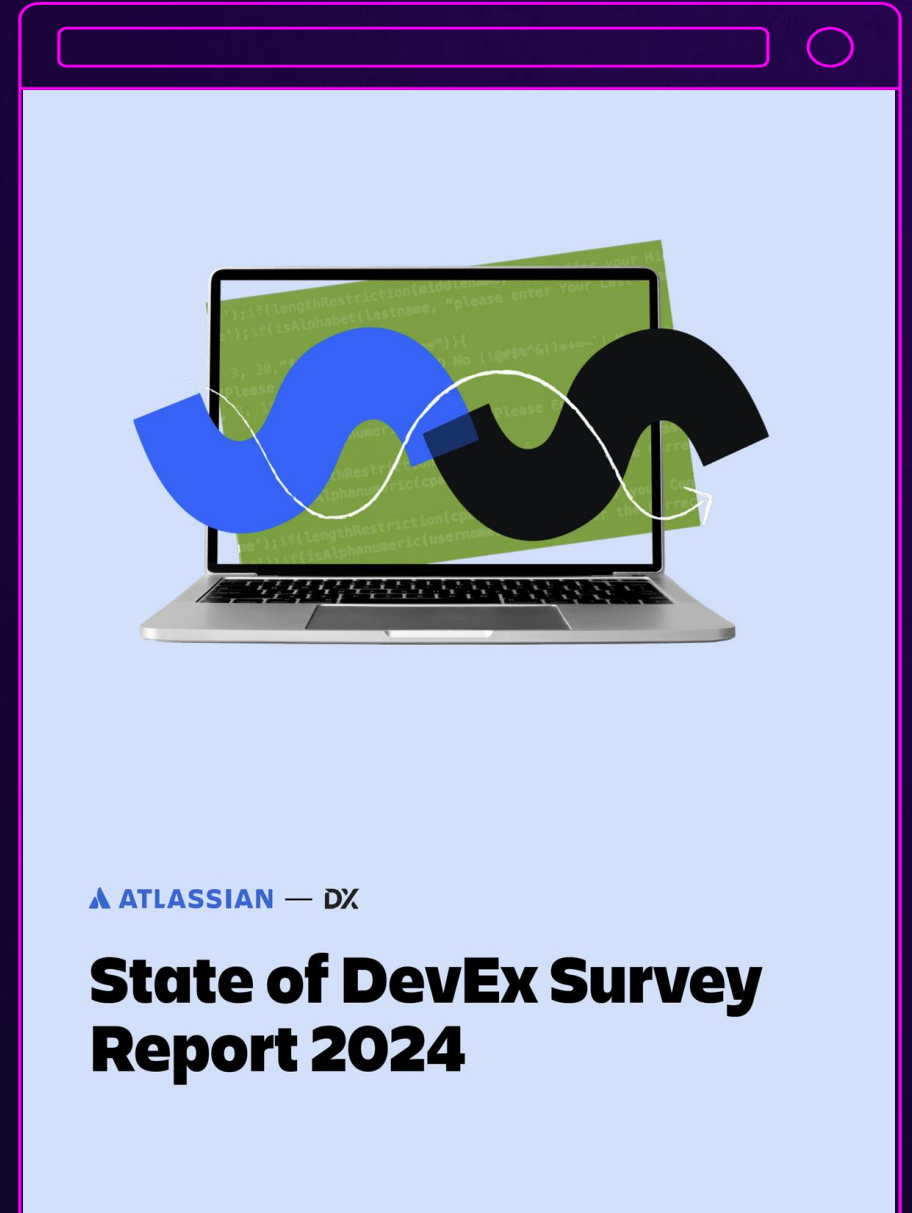


# Unpacking the 2024 State of DevEx

- Three high-level **themes** from the report
- Review **key stats** and **insights**
- What we're doing within Atlassian to **improve** our **DevEx**

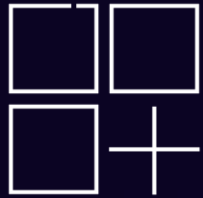


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# Atlassian 2024 State of DevEx – Key Themes

THEMES TO EXPLORE DURING THIS SESSION

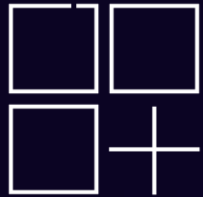


## DevEx Misalignment

Devs aren't empowered to do their best work, and there's significant misalignment between engineers and leaders as to why.

# Atlassian 2024 State of DevEx – Key Themes

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## DevEx Misalignment

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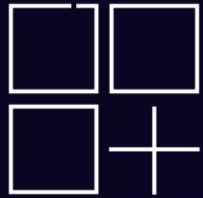


## Measuring DevEx

Understanding and improving DevEx pays dividends but companies are struggling with how to do this.

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AI has a role to play in DevEx, but is it being applied in the right areas?

# The **misalignment** on Developer Experience



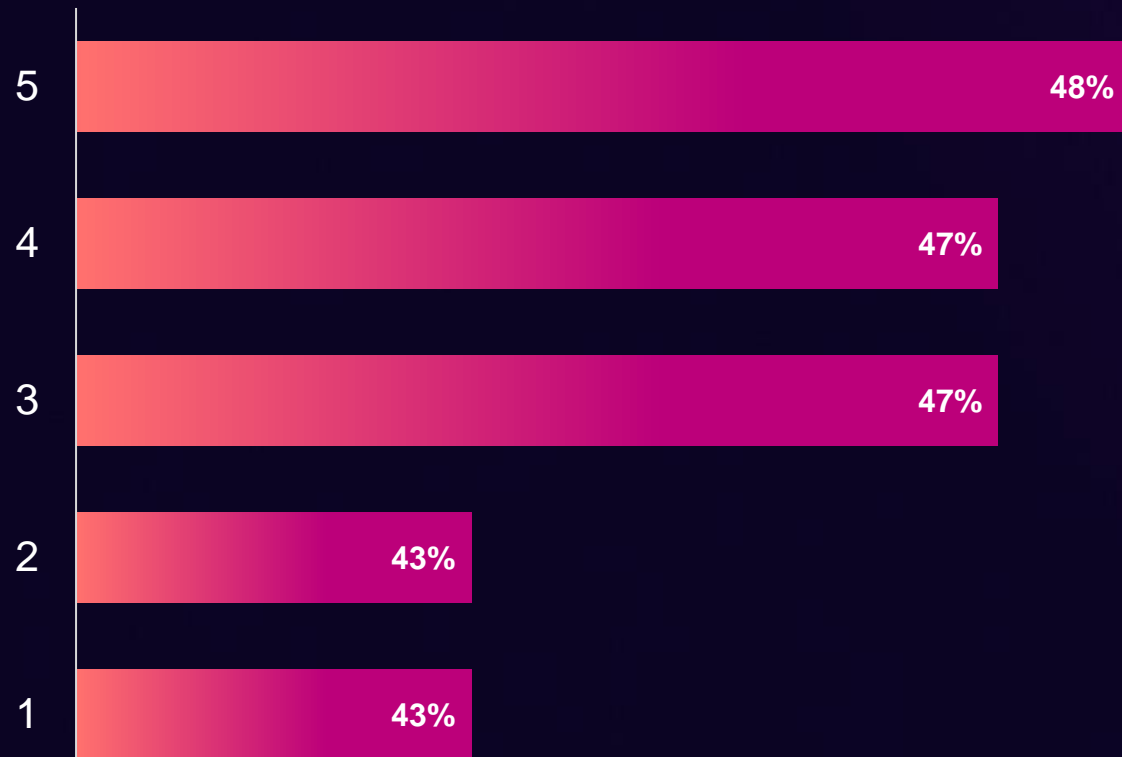


# DevEx Misalignment

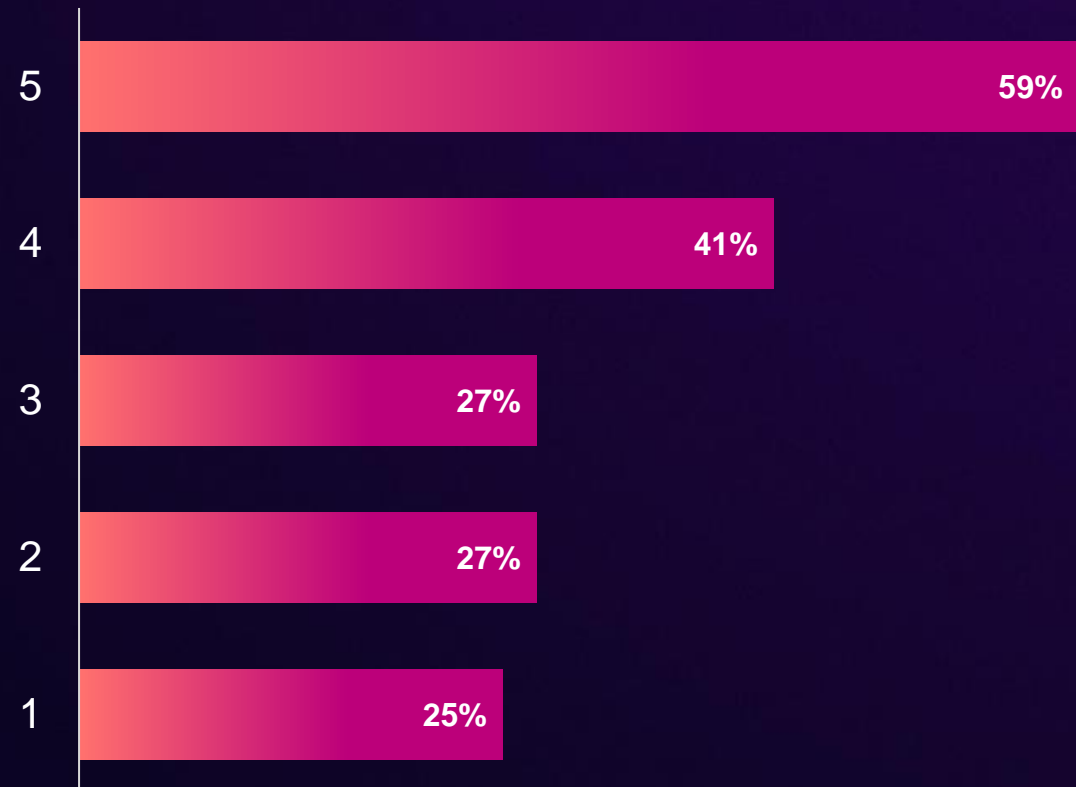
MISALIGNMENT BETWEEN DEVELOPERS AND ENGINEERING LEADERS

## Top 5 impacts to DevEx

### Leaders



### Developers





# DevEx Misalignment

MISALIGNMENT BETWEEN DEVELOPERS AND ENGINEERING LEADERS

You can't improve **Developer Experience** if you don't **understand** the **friction points** developers are facing

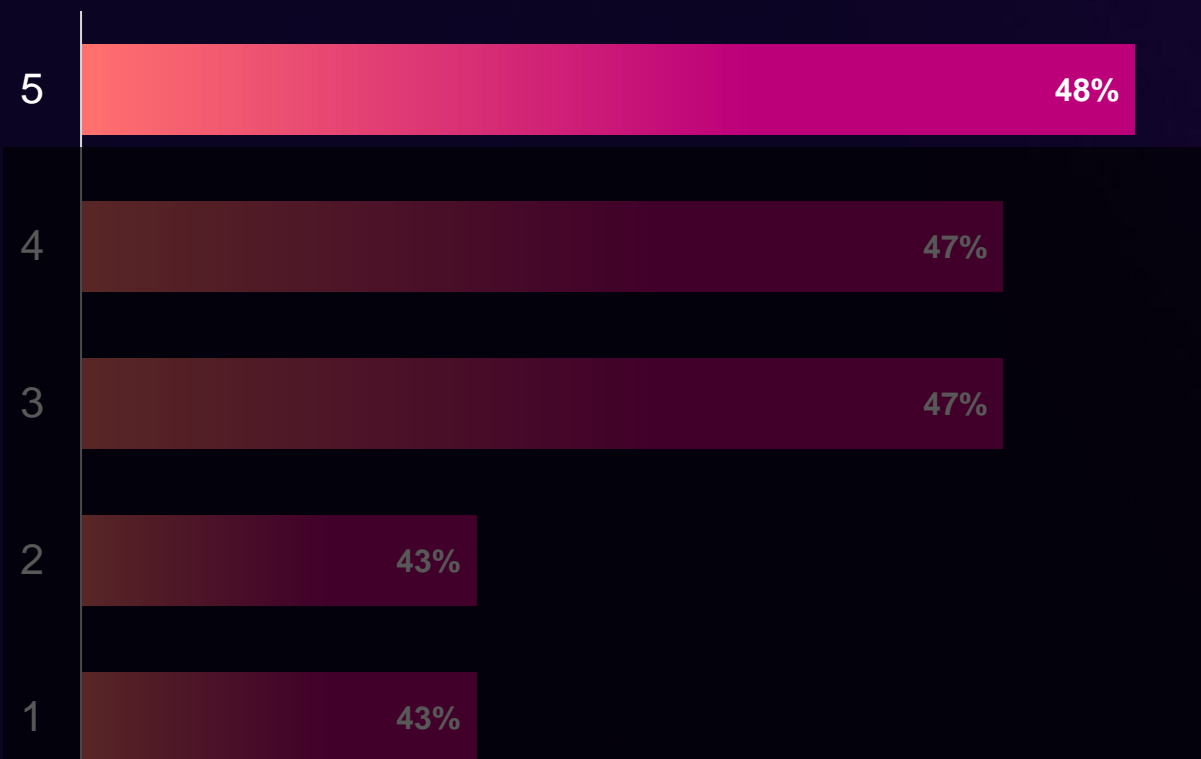


# DevEx Misalignment

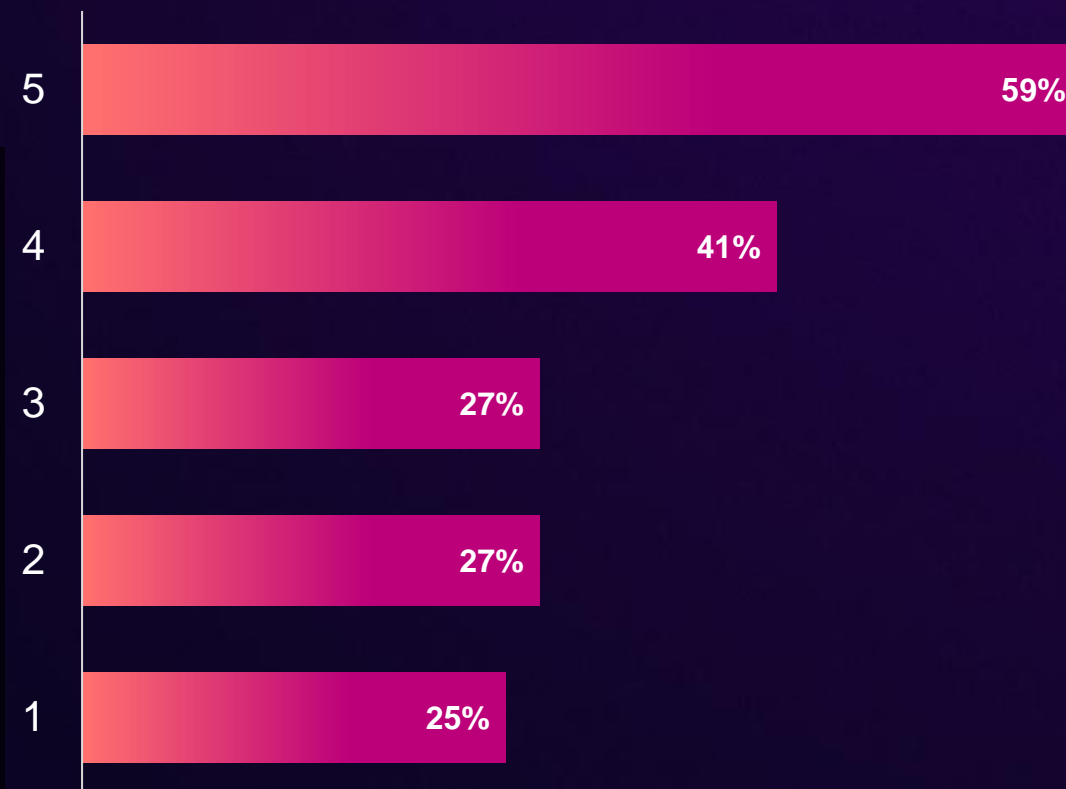
MISALIGNMENT BETWEEN DEVELOPERS AND ENGINEERING LEADERS

## Top 5 impacts to DevEx

### Leaders



### Developers



# DevEx Misalignment

MISALIGNMENT BETWEEN DEVELOPERS AND ENGINEERING LEADERS

44%

of developers **believe leaders are aware** of DevEx  
Issues

# DevEx Misalignment

The misalignment on AI productivity

*Leaders believe*

AI

*is the **most effective** way to  
improve productivity and  
satisfaction*

62%

of developers are **yet to experience**  
significant **productivity gains**

# DevEx Misalignment

DevEx is important to both Developers and Leaders

86%

leaders say **attracting** and **retaining talent** will be near **impossible** without improving DevEx

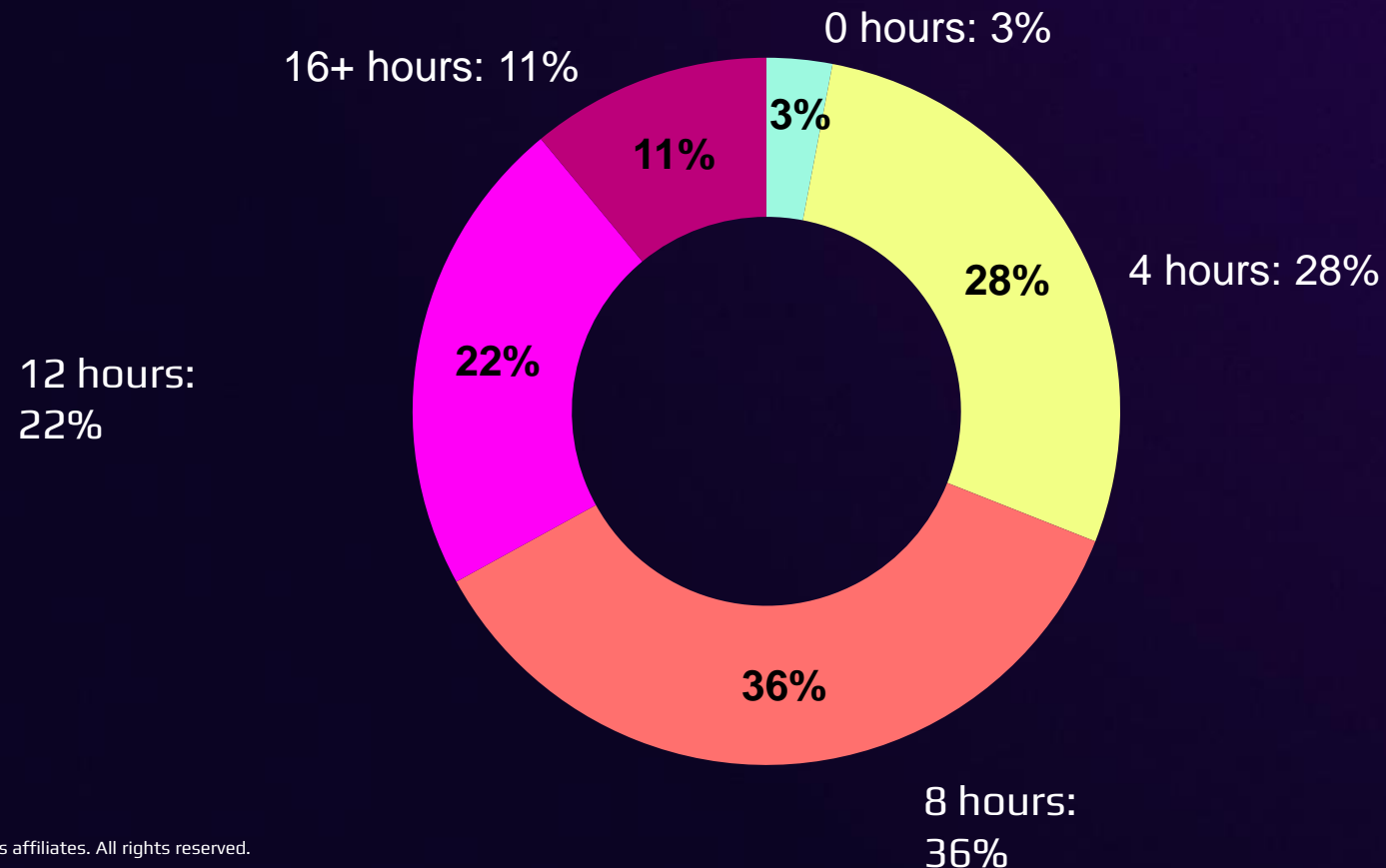
63%

Developers say **DevEx is important** when **deciding to stay** in their current job



# DevEx Misalignment

69% of developers lose 8 hours or more per week to inefficiencies





# DevEx Misalignment

What does it all mean?

# DevEx Misalignment

What does it all mean?





# DevEx Misalignment

What does it all mean?

# DevEx Misalignment

## What does it all mean?

Developers are  
dealing with huge  
amounts of friction

# DevEx Misalignment

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Leaders don't have a  
good understanding  
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# DevEx Misalignment

## What does it all mean?

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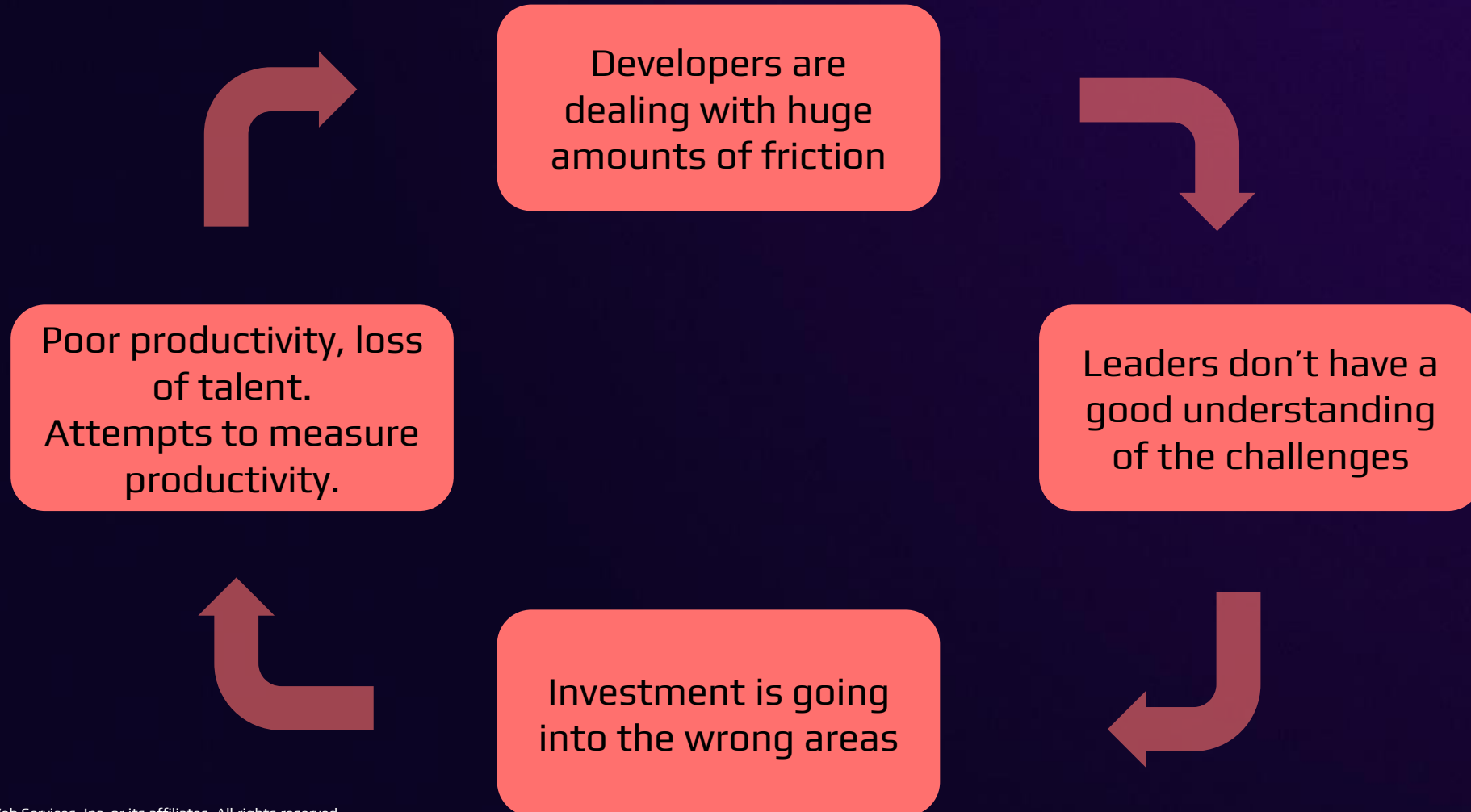
Leaders don't have a  
good understanding  
of the challenges

Investment is going  
into the wrong areas



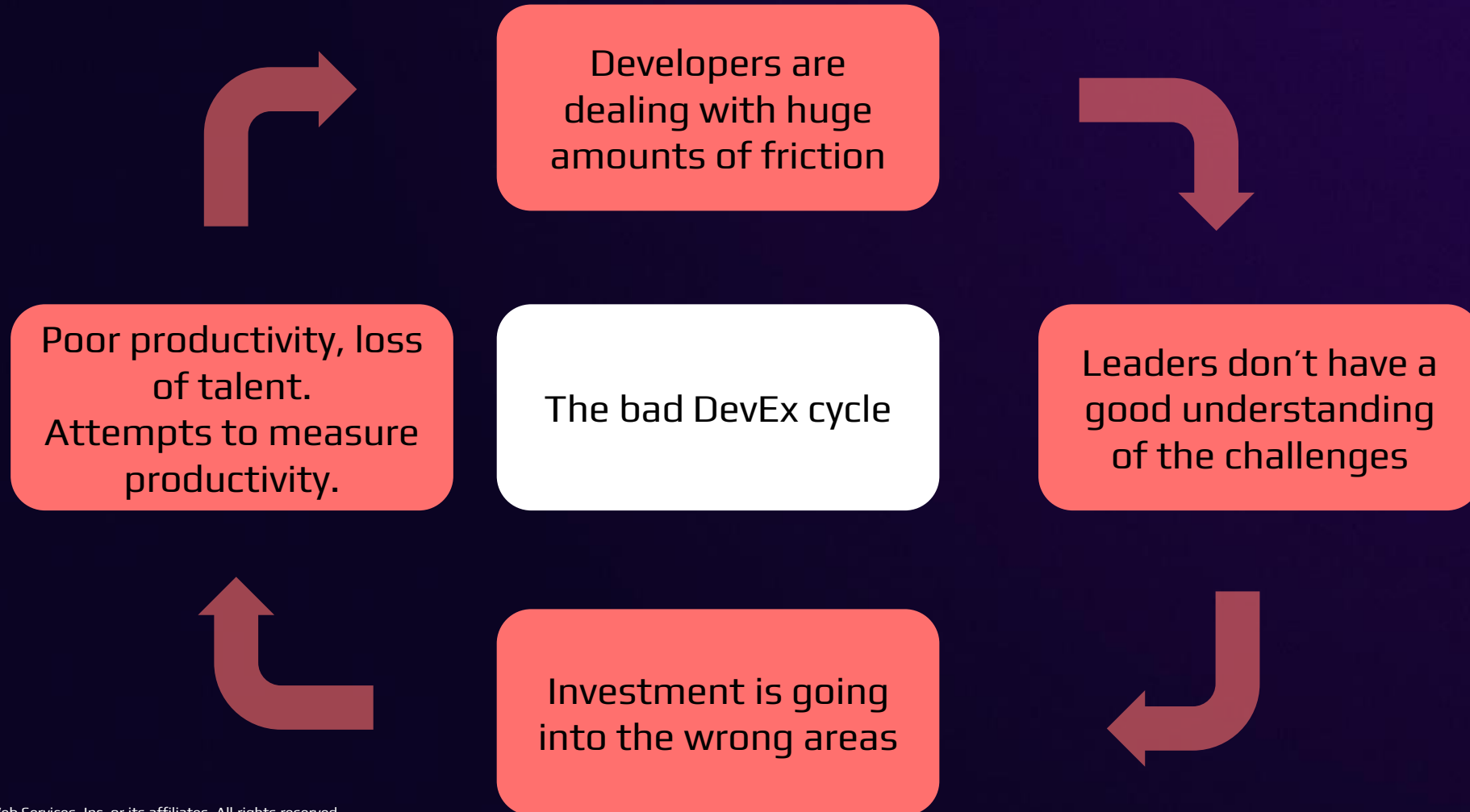
# DevEx Misalignment

## What does it all mean?



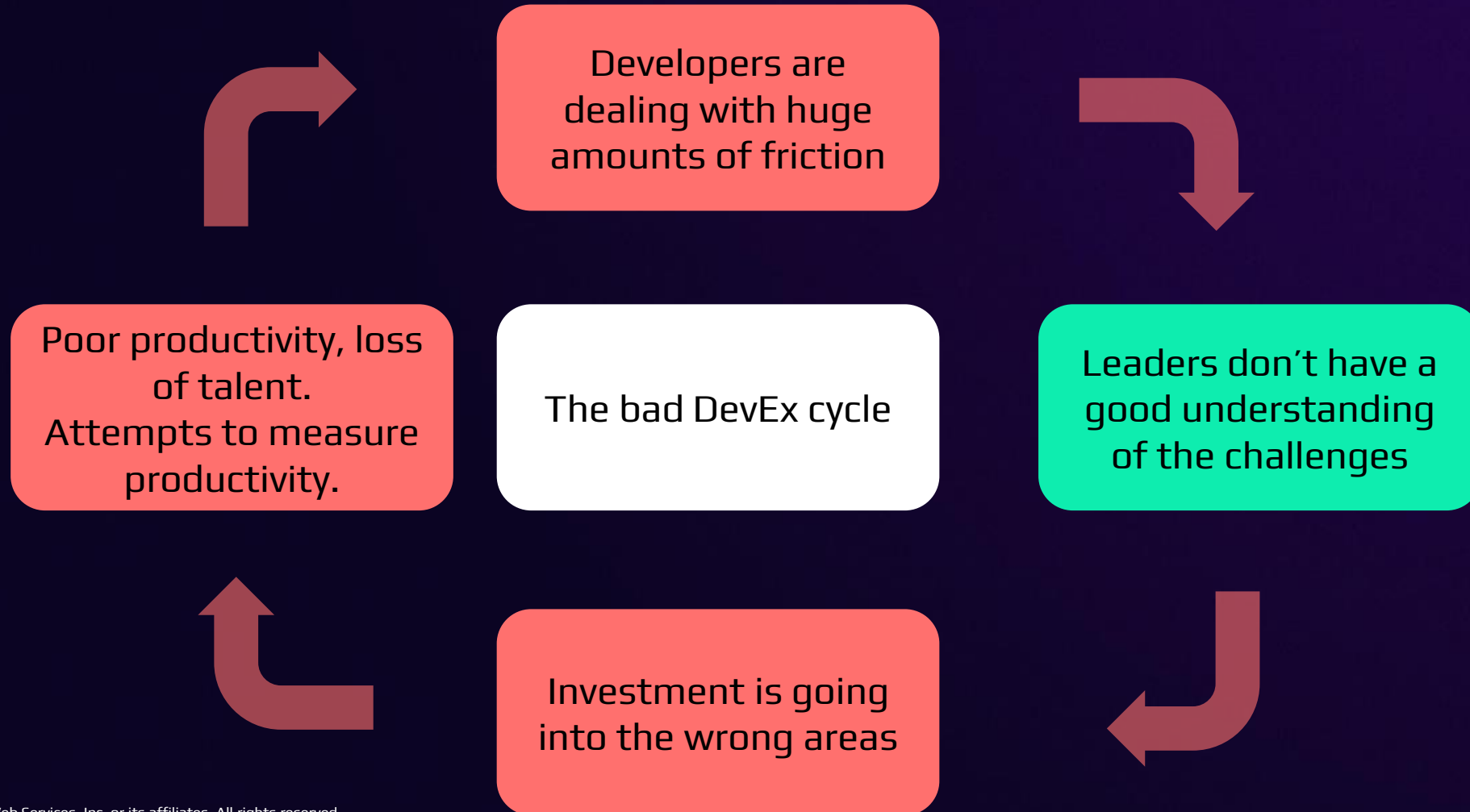
# DevEx Misalignment

## What does it all mean?



# DevEx Misalignment

## What does it all mean?



# DevEx Misalignment

## Understanding your Developer Experience

### 1. Ask your developers

# DevEx Misalignment

## Understanding your Developer Experience

1. Ask your developers
2. Survey developers

# DevEx Misalignment

## Understanding your Developer Experience

1. Ask your developers
2. Survey developers
3. Measure and baseline points of friction



# Understanding our Developer Experience



# ATLASSIAN Understanding our Developer Experience



## Quarterly survey

- Survey 5,000 devs
- ~90% participation
- Ask about inner/outer loop
- 20% of responses to open-ended questions

# **ATLASSIAN** Understanding our Developer Experience



## Quarterly survey

- Survey 5,000 devs
- ~90% participation
- Ask about inner/outer loop
- 20% of responses to open-ended questions



## Focus areas

- General pulse check
- Signals on challenges
- Identify top focus areas
- Work on improving pain points

# **ATLASSIAN** Understanding our Developer Experience



## Quarterly survey

- Survey 5,000 devs
- ~90% participation
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## Focus areas

- General pulse check
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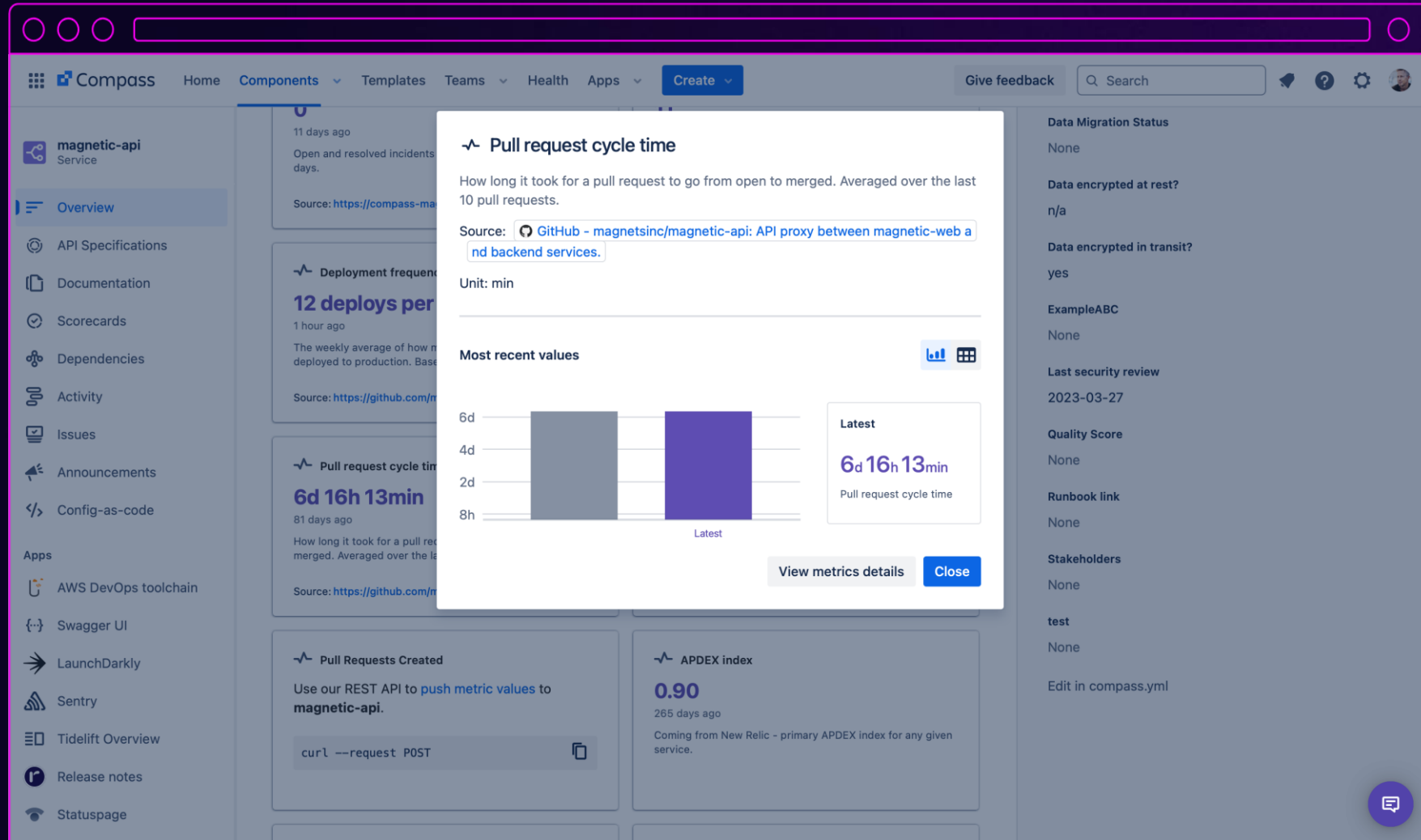


## Close the loop

- Have devs felt a difference
- What are direct managers doing?
- Metrics available for every team

# ATLASSIAN Understanding our Developer Experience

## Metrics available for every team in Compass



# ATLASSIAN Understanding our Developer Experience

## Improving PR Review Time with AutoReview

**Bitbucket** Your work Repositories Projects Pull Requests Create

Search / DevXperience / CodeXperience / Pull requests

### Create a pull request

Source branch: SW-124\_support-default-TTS → Destination branch: main

Description: Add supplementary actions for the SmartLink component which are displayed, even when the link itself is disabled

Reviewers: Taha Kandemir, Fran Perez

Delete branch: ☐ Delete SW-124\_support-default-TTS after the pull request is merged

Create pull request

1 commit

Author	Commit	Message	Date	Builds
Crystal Wu	07e42d6	A commit message	2024-04-24	✓

Triggering Autoreview  
When enabled via the AI config file in a repository, Autoreview will be triggered when a pull request is created

packages / domain / feature-flags / src / legacy.ts

@@ -63,23 +63,35 @@  
10 10 export const VITAFLEET\_DISPLAY\_USER\_ROLES = 'vitafleet-display-user-roles-xtidk'

# DevEx Misalignment

Developer satisfaction

 25%

has **rapidly increased** through this approach

# Atlassian 2024 State of DevEx – Key Themes

AREAS TO EXPLORE DURING THIS SESSION



## DevEx Misalignment

Devs aren't empowered to do their best work, and there's significant misalignment between engineers and leaders as to why.



## Measuring DevEx

Understanding and improving DevEx pays dividends but companies are struggling with how to do this.



## Role of AI in DevEx

AI has a role to play in DevEx, but is it being applied in the right areas?



# Measuring Developer Experience

Top 5 ways organizations are measuring productivity





# Measuring Developer Experience

Top 5 ways organizations are measuring productivity

- 1.
- 2.
- 3.
- 4.
5. Change failure rate



# Measuring Developer Experience

Top 5 ways organizations are measuring productivity

- 1.
- 2.
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# Measuring Developer Experience

Top 5 ways organizations are measuring productivity

- 1.
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# Measuring Developer Experience

Top 5 ways organizations are measuring productivity

- 1.
2. Deployment frequency
3. Story points
4. Hours worked
5. Change failure rate



# Measuring Developer Experience

Top 5 ways organizations are measuring productivity

1. Amount of code
2. Deployment frequency
3. Story points
4. Hours worked
5. Change failure rate



# Measuring Developer Experience

Top 5 ways organizations are measuring productivity

1. Amount of code
2. Deployment frequency
3. Story points
4. Hours worked
5. Change failure rate

50%

of companies using these  
measures find them **effective**



# Measuring Developer Experience

You **can't measure** developer  
productivity...



# Measuring Developer Experience

You can't measure developer  
productivity... *but*





# Measuring Developer Experience

You can't measure developer  
productivity... *but*

Measurement has an  
important part to play in  
productivity



# Measuring Developer Experience

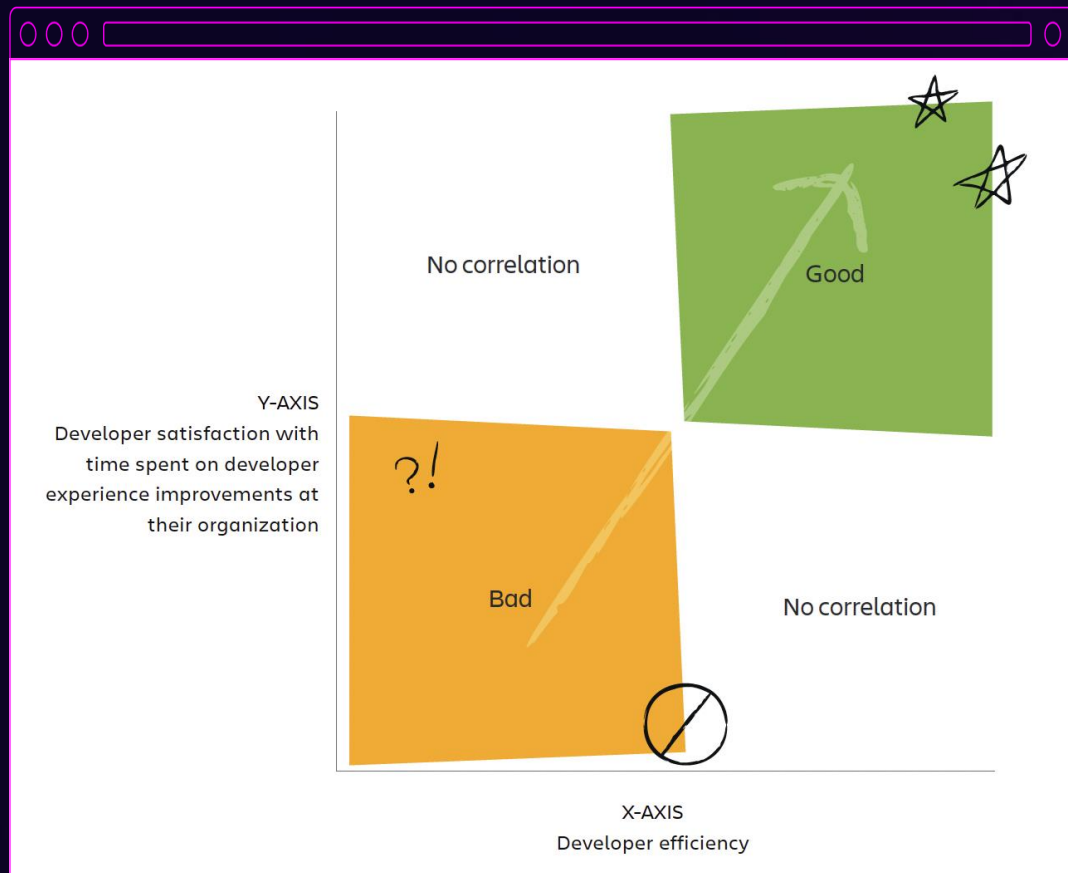
## Understanding your Developer Experience

1. Ask your developers
2. Survey developers
3. Measure and baseline points of friction



# Measuring Developer Experience

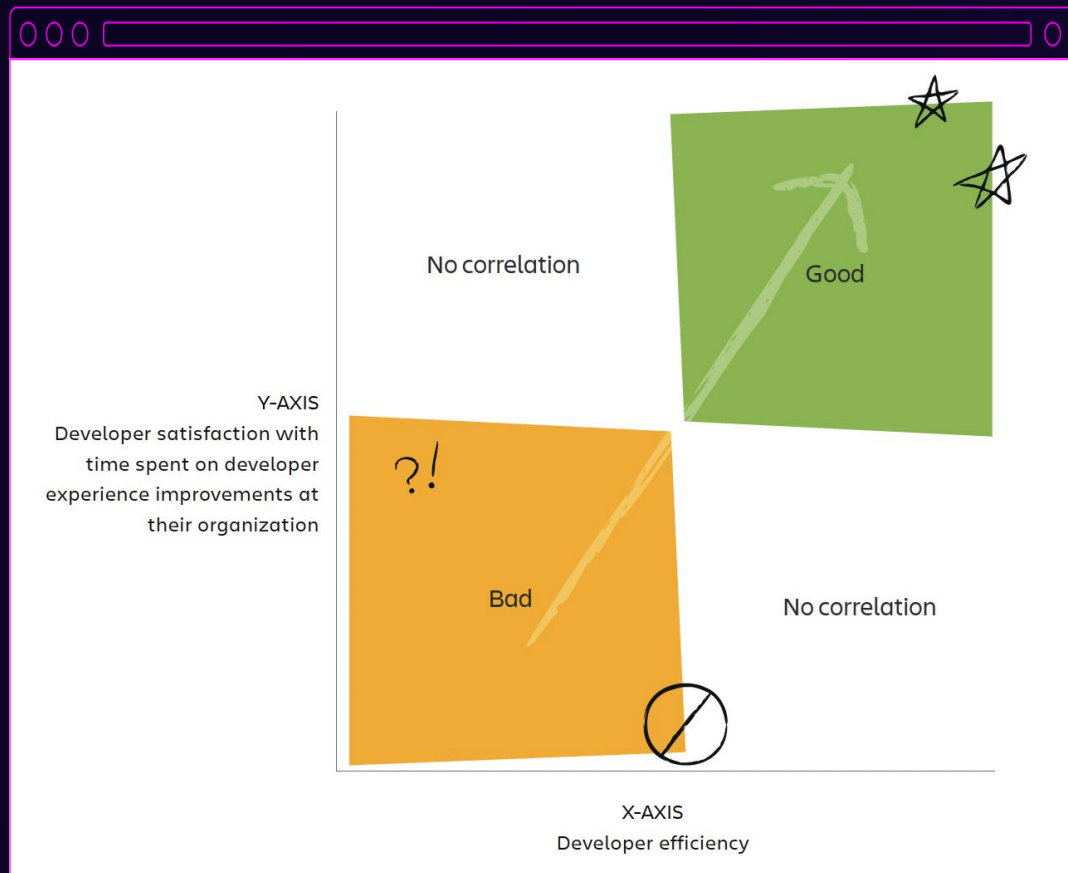
Correlation between developer **satisfaction** with time spent on DevEx and dev **efficiency**





# Measuring Developer Experience

Correlation between developer **satisfaction** with time spent on DevEx and dev **efficiency**



Measuring and improving points of friction results in happier, more productive developers!



# Measuring our Developer Experience



# Measuring Developer Experience

Measurement caution

Developer Experience is **unique** to your organization – what you **measure should be too**.



# Measuring Developer Experience

Measurement caution

Developer Experience is **unique** to your organization – what you **measure should be too**.

Take **inspiration** from companies who do this well, but **don't replicate** their measures.



# Measuring Developer Experience

Measurement caution

Developer Experience is **unique** to your organization – what you **measure should be too**.

Take **inspiration** from companies who do this well, but **don't replicate** their measures.

Creating software is a **team sport**





# Measuring Developer Experience

The measures Atlassian uses to assess Developer Experience

- Developer Satisfaction
- Time from Commit to Deploy
- Pull Request Cycle Time
- Self-Serve Documentation
- Self-Serve Dependency Maintenance

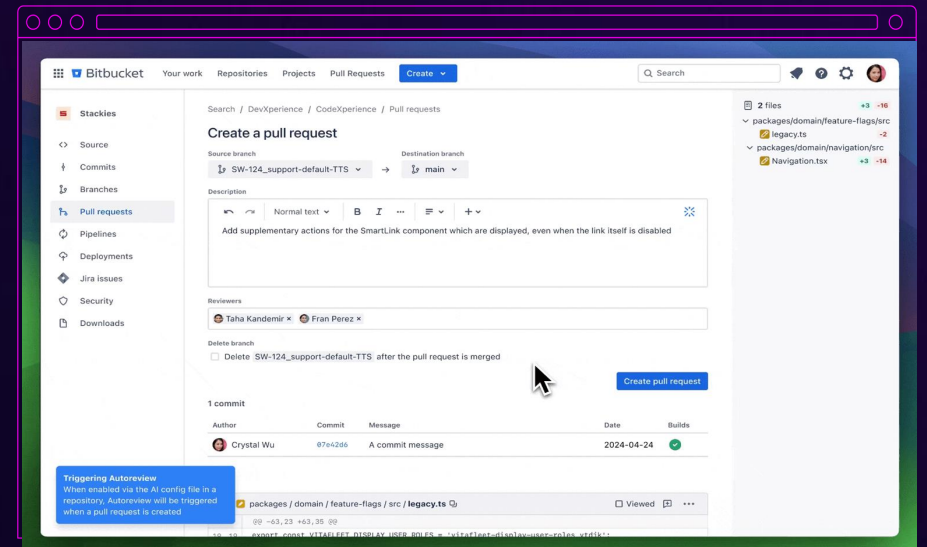


# Measuring Developer Experience

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AutoReview





# Measuring Developer Experience

## Self-Serve Documentation

Components / Services / magnetic-api

### Documentation

Manage your component documentation in a single place.

[Add documentation](#)

**Discover** 0  
Specs, key concepts, and core features to help people understand this component.

**Contributor** 0  
Standards, guides, and diagrams to help people contribute to and integrate with this component.

**Maintainer** 0  
Runbooks and dashboards to help people maintain this component.

**Other** 4  
All other documentation relating to this component.

Documentation	Category	Added by	Added
<b>Architecture overview</b> Updated on Mar 6, 2024	Other	<a href="#">GitHub for Compass</a>	28 October 2024
<b>Runbook</b> Updated on Oct 8, 2024	Other	<a href="#">GitHub for Compass</a>	28 October 2024
<b>API design specs</b> Updated on Jul 19, 2023	Other	<a href="#">GitHub for Compass</a>	28 October 2024
<b>Endpoint contracts</b> Updated on Jul 19, 2023	Other	<a href="#">GitHub for Compass</a>	28 October 2024

[+ Add documentation](#)





# Measuring Developer Experience

## Rovo Search

The screenshot displays the Rovo Search interface within a browser window. The search bar at the top contains the query "What is PPG?". Below the search bar, there are filters for "Filter by app" and "Type". The results section shows "Showing 10 of 45 results". The first result is titled "Portal Payments Gateway" and includes a detailed description of the PPG as a digital platform for online transactions. Below this result, there are links to "Related work" including "Blueberry technical updates", "Blueberry outline", and "Blueberry technical milestones". To the right of the main results, there is a sidebar with a "Topic" section titled "Inventory Portal" and a description of the Vitafleet Web Development team's new project. Below the topic section, there are "Related topics" including "Mobile development", "Mobile apps", and "Inventory". At the bottom of the sidebar, there is a section for "Ask a follow up question" with two suggested questions: "When is this due?" and "Who is working on this?".

Search

What is PPG?

Filter by app Type

Showing 10 of 45 results

**Portal Payments Gateway**

The Portal Payments Gateway (PPG) is a digital platform or service that facilitates online transactions between customers and businesses by securely processing payments. It serves as an intermediary between the merchant's website or application and various payment networks such as credit card processors, banks, and digital wallets. Portal Payments Gateway is being changed with the project Blueberry. 3

Related work

Blueberry technical updates Blueberry outline Blueberry technical milestones

Content quality may vary Powered by Rovo

**Blueberry outline**

Confluence • Page • Blueberry • Updated 6 days ago by Veronica Rodriguez

The Vitafleet Web Development team is making substantial changes changes to the PPG and launching a new customer inventory portal to help customers more accurately predict and i...

**Blueberry technical updates**

Jira • Epic • Vitafleet Web Development • Updated 6 days ago by Priya Hansra

Integrate the latest version of the preferred payment gateway to ensure compatibility with

**Topic**

**Inventory Portal**

The Vitafleet Web Development team is launching a new project Blueberry to help customers more accurately predict and implement Just-in-Time (JIT) shipping to increase efficiency by reducing inventory, it doesn't include partners and is planned to be delivered for 12 customers.

[Learn more](#)

**Related topics**

**Mobile development**

**Mobile apps**

**Inventory**

**Ask a follow up question**

**When is this due?**

**Who is working on this?**



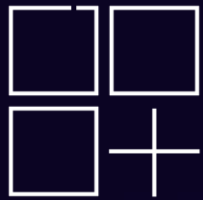
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# Atlassian 2024 State of DevEx – Key Themes

AREAS TO EXPLORE DURING THIS SESSION



## DevEx Misalignment

Devs aren't empowered to do their best work, and there's significant misalignment between engineers and leaders as to why.



## Measuring DevEx

Understanding and improving DevEx pays dividends but companies are struggling with how to do this.



## Role of AI in DevEx

AI has a role to play in DevEx, but is it being applied in the right areas?

# The role of AI in DevEx

62%

of developers are yet to experience significant  
productivity gains through AI

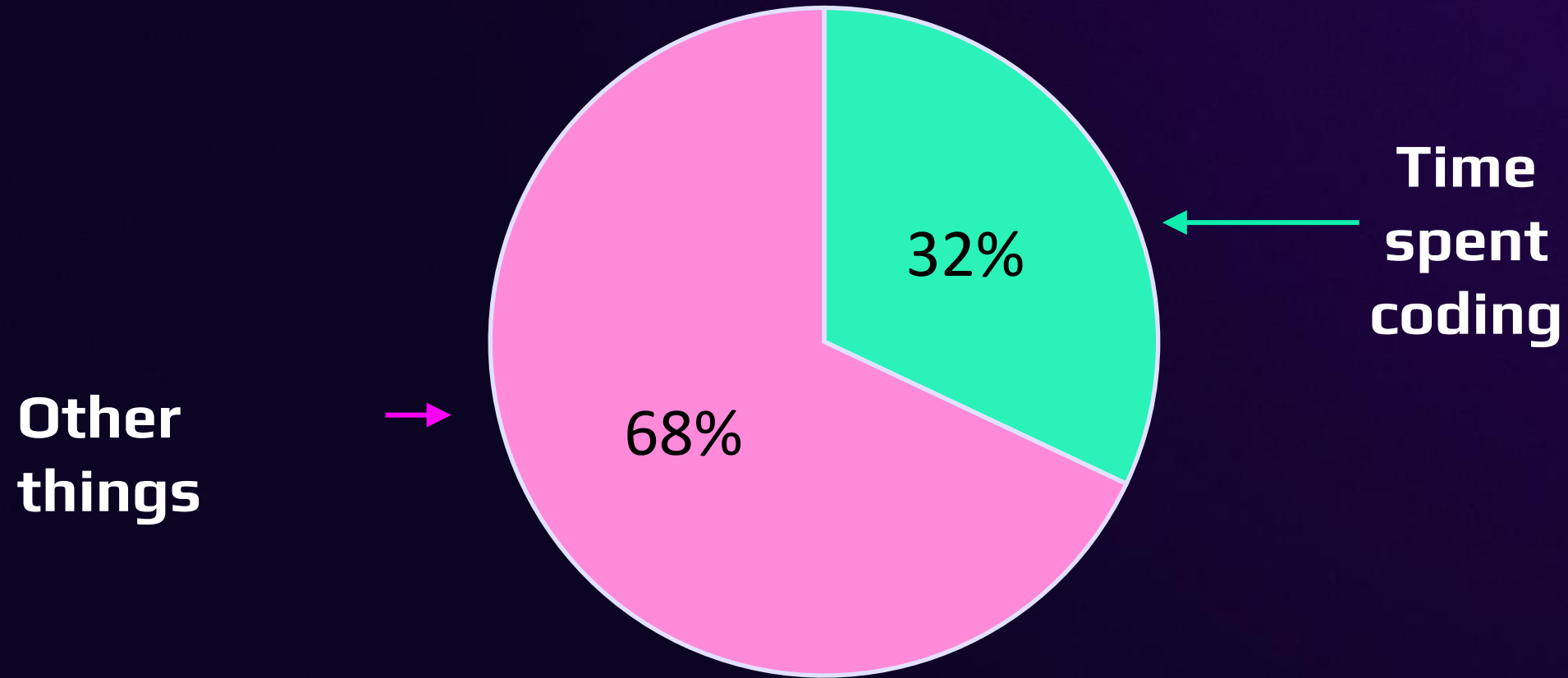
# The role of AI in DevEx

0%

of devs complain about spending too much time  
writing code \*



# The role of AI in DevEx





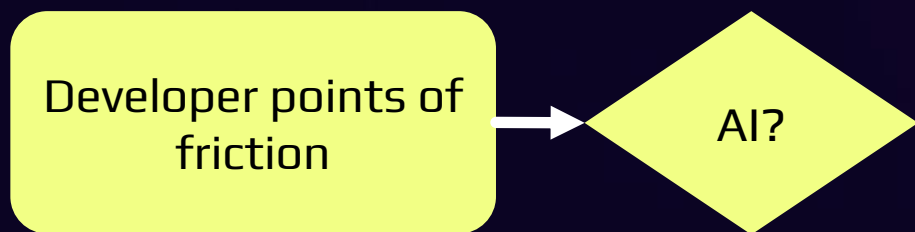
# Approach to using AI for engineering



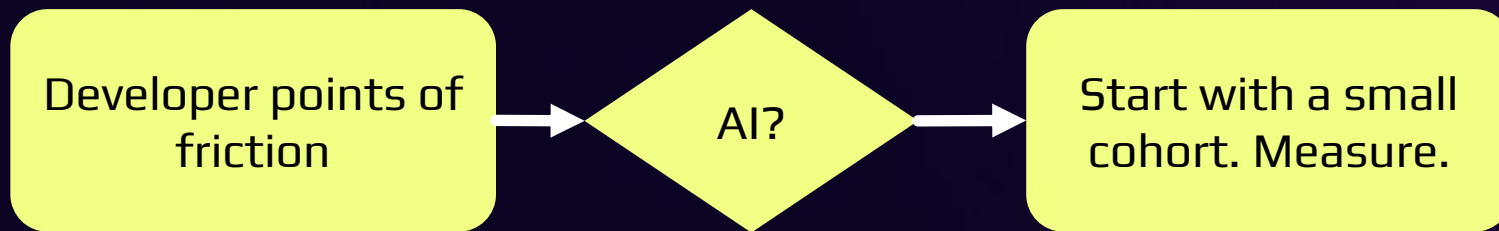
# The role of AI in DevEx

Developer points of  
friction

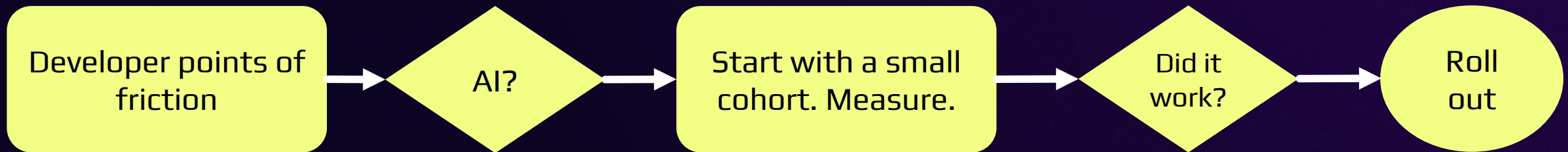
# The role of AI in DevEx



# The role of AI in DevEx



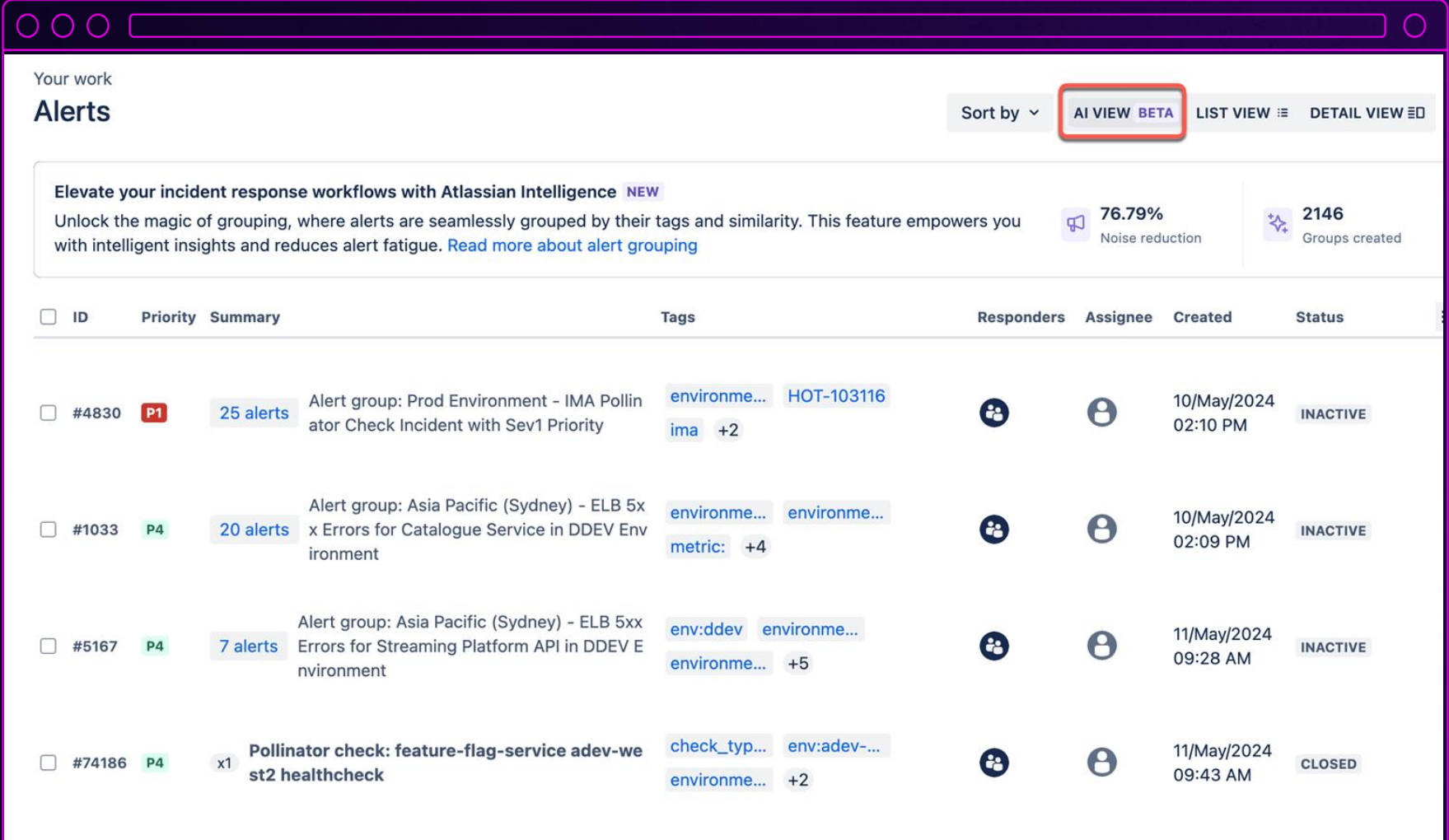
# The role of AI in DevEx



# The role of AI in DevEx

Using AI to improve DevOps

## AI Alert Grouping in Jira Service Management



The screenshot shows the Jira Alerts interface. At the top, there's a navigation bar with "Your work" and "Alerts". To the right, there's a "Sort by" dropdown and a "AI VIEW BETA" button, which is highlighted with a red box. Below the navigation bar, there's a summary section with the text "Elevate your incident response workflows with Atlassian Intelligence NEW". It includes a description of the feature and two statistics: "76.79% Noise reduction" and "2146 Groups created". Below this is a table of alerts with columns: ID, Priority, Summary, Tags, Responders, Assignee, Created, and Status. The table contains four rows of alert groups.

ID	Priority	Summary	Tags	Responders	Assignee	Created	Status
#4830	P1	25 alerts Alert group: Prod Environment - IMA Pollinator Check Incident with Sev1 Priority	environme... ima +2	HOT-103116		10/May/2024 02:10 PM	INACTIVE
#1033	P4	20 alerts Alert group: Asia Pacific (Sydney) - ELB 5xx Errors for Catalogue Service in DDEV Environment	environme... metric: +4	environme...		10/May/2024 02:09 PM	INACTIVE
#5167	P4	7 alerts Alert group: Asia Pacific (Sydney) - ELB 5xx Errors for Streaming Platform API in DDEV Environment	env:ddev environme... +5	environme...		11/May/2024 09:28 AM	INACTIVE
#74186	P4	x1 Pollinator check: feature-flag-service adev-we st2 healthcheck	check_typ... environme... +2	env:adev-...		11/May/2024 09:43 AM	CLOSED

# Wrap-up

## The 2024 State of Developer Experience



### DevEx Misalignment

The path to success is through a deep understanding of points of friction



# Wrap-up

## The 2024 State of Developer Experience



### DevEx Misalignment

The path to success is through a deep understanding of points of friction



### Measuring DevEx

Measurement is important. Measure the points of friction and work towards continuously improving them.

# Wrap-up

## The 2024 State of Developer Experience



### DevEx Misalignment

The path to success is through a deep understanding of points of friction



### Measuring DevEx

Measurement is important. Measure the points of friction and work towards continuously improving them.



### Role of AI in DevEx

AI is a fantastic tool that can be used to improve DevEx, if it's used to solve points of friction for developers.

# Thank you!

**Andrew Boyagi**

[linkedin.com/in/andrewboyagi/](https://linkedin.com/in/andrewboyagi/)

**Preeti Kota**

[linkedin.com/in/preetikota/](https://linkedin.com/in/preetikota/)



Please complete the session survey in the mobile app