

Introduction to Developer Experience (DX)

Ruslan Korniiichuk | 30.06.2023

It is **NOT** a talk about employee benefits
(e.g., fruit days and life insurance)

01 Introduction



● Developer Experience

Search term

● User Experience

Search term

+ Add comparison

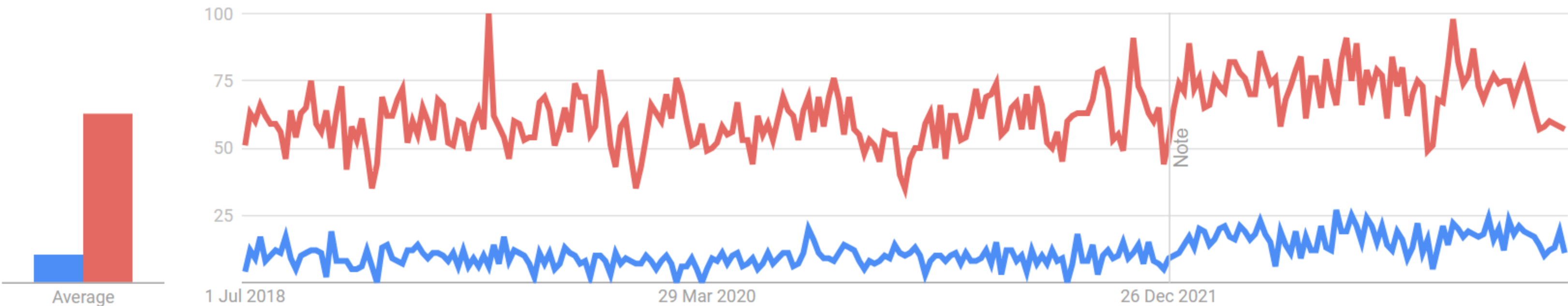
United States ▼

Past 5 years ▼

All categories ▼

Web Search ▼

Interest over time ?





Developer Experi...

Search term



Platform Enginee...

Search term



Internal Developo...

Search term



Add comparison

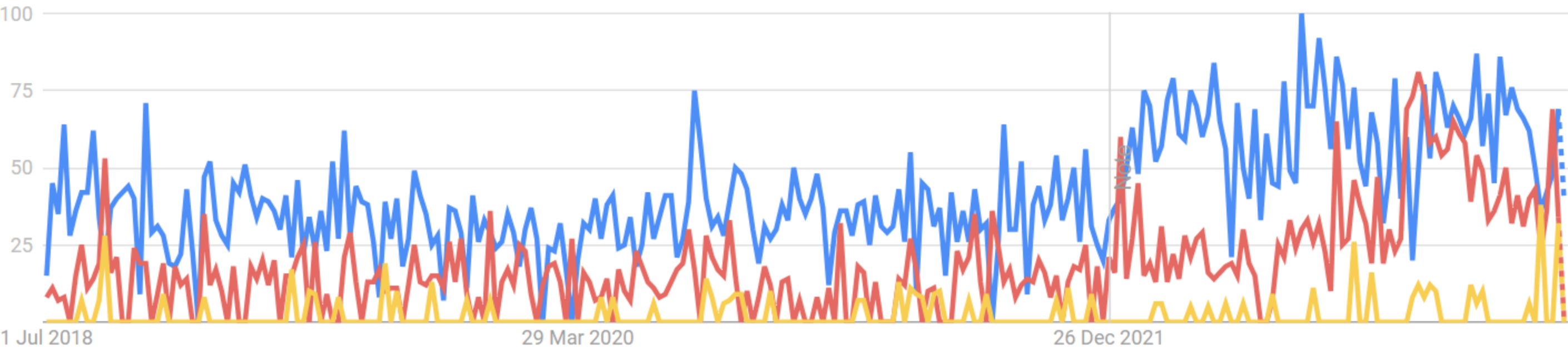
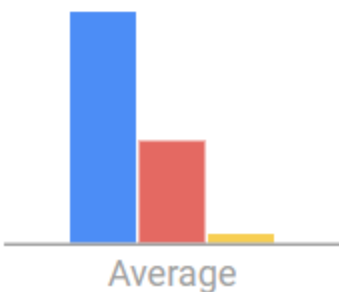
United States ▼

Past 5 years ▼

All categories ▼

Web Search ▼

Interest over time ?



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Internal Developer Platform (IDP) is a combination of tools to create golden paths and provide developer self-service.

Developer Experience (DX) is a cultural approach aiming to simplify or eliminate anything that don't contribute to the creative output and the delivery of applications for engineers.

02

Problem statement

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Every company that has Software Engineer(s) deals with DX.

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So, we all deal with **Developer Experience (DX)**, but we do it in a chaotic and unmeasurable way.

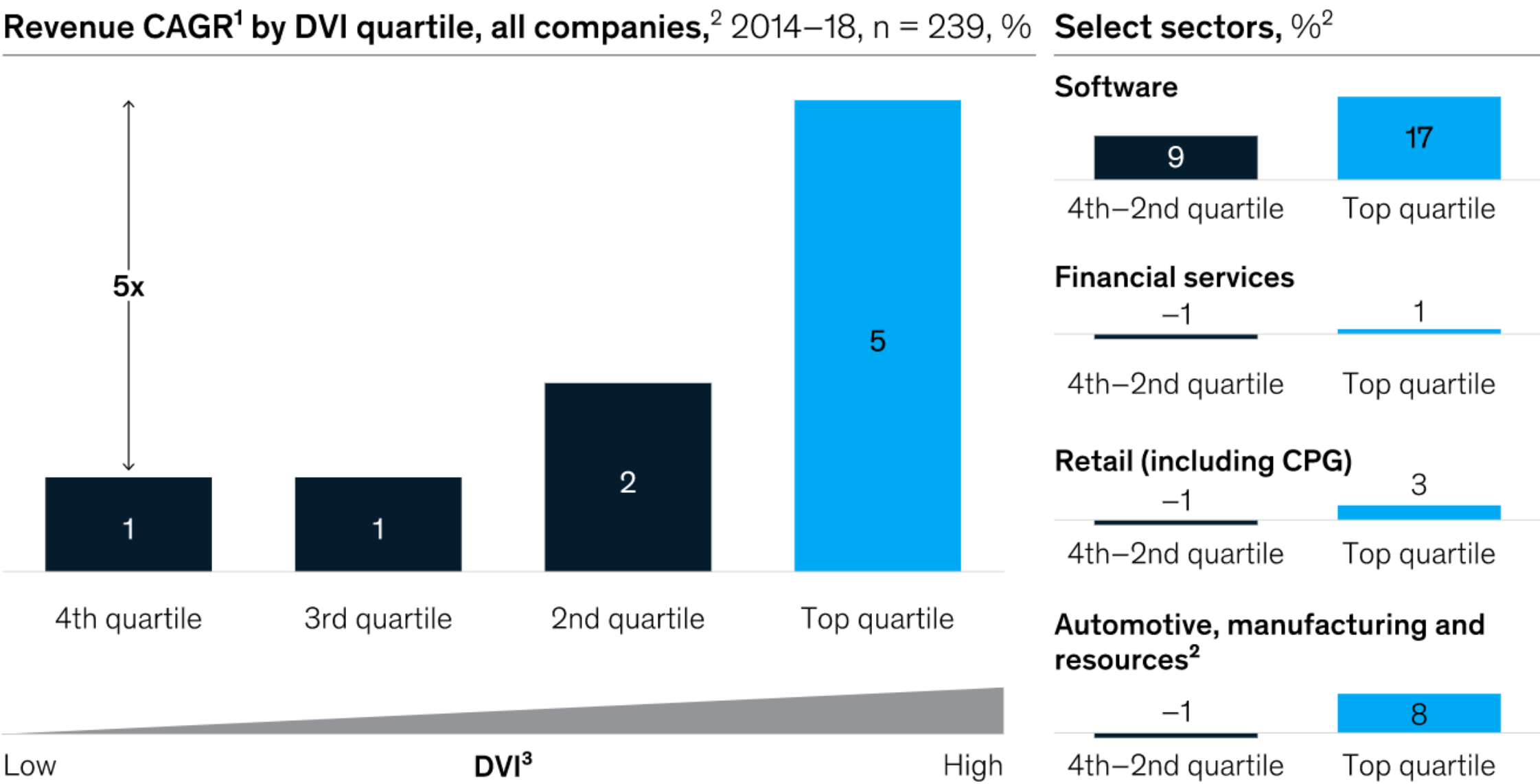
03

Pros and cons

“Companies in the top quartile of the Developer Velocity Index (DVI) outperform others in the market by four to five times.”

—McKinsey

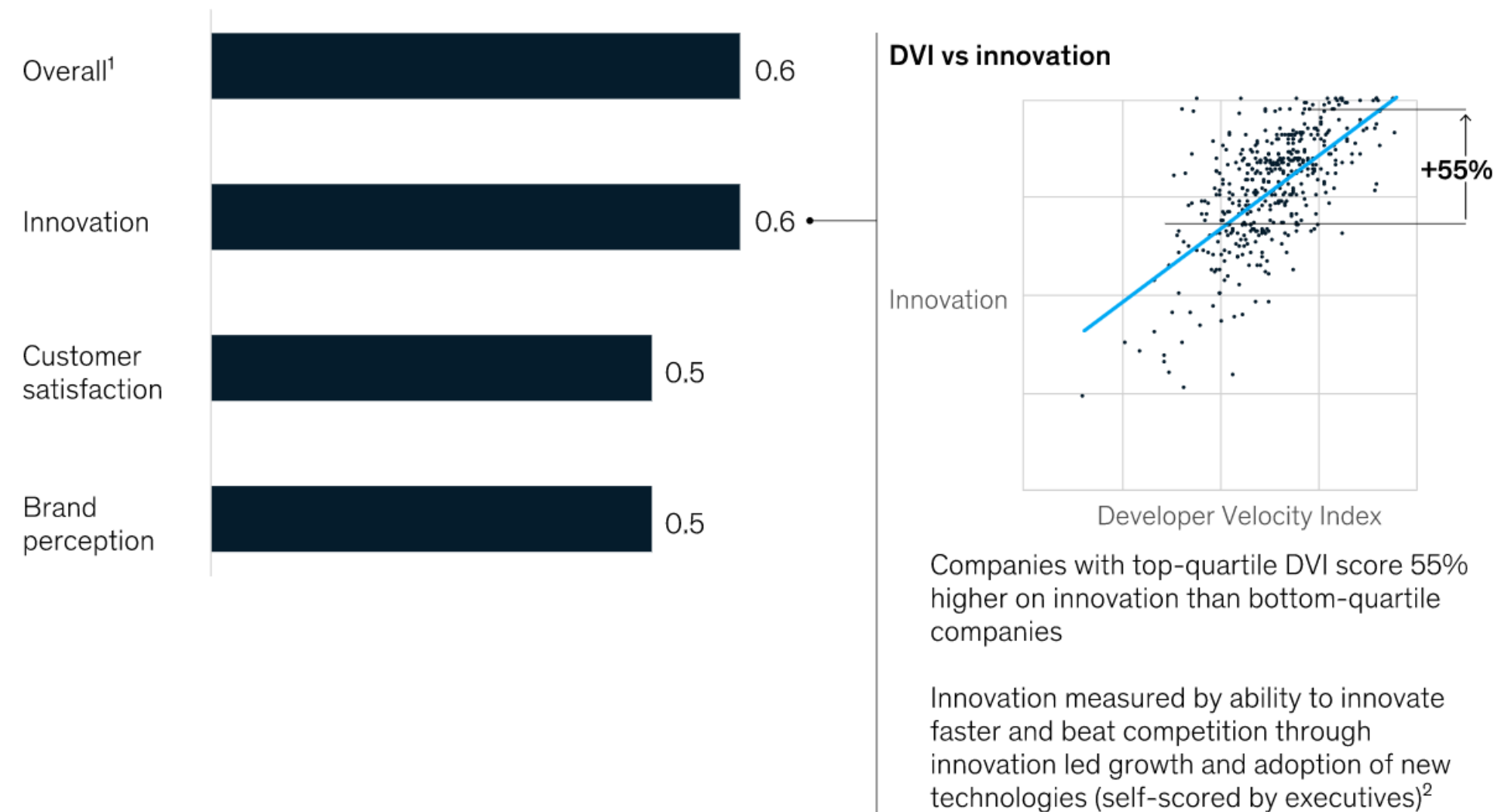
Top companies by Developer Velocity Index



¹ Compound annual growth rate.
² Includes companies and verticals with n>15 for available public data; n for verticals shown: software equals 25, financial services equals 30, manufacturing and resources equals 36; retail equals 44; companies were split into DVI quartiles based on DVI score and industry ranking.
³ Includes automotive, manufacturing, oil and gas, and energy.
Source: Capital IQ; Developer Velocity Survey

Top companies by Developer Velocity Index

Correlation between Developer Velocity Index (DVI) and key business performance indicators,
n = 440, 1=highest positive correlation, -1=highest negative correlation, 0.5+=strong correlation



¹ Average of innovation, customer satisfaction, brand perception, and talent management.

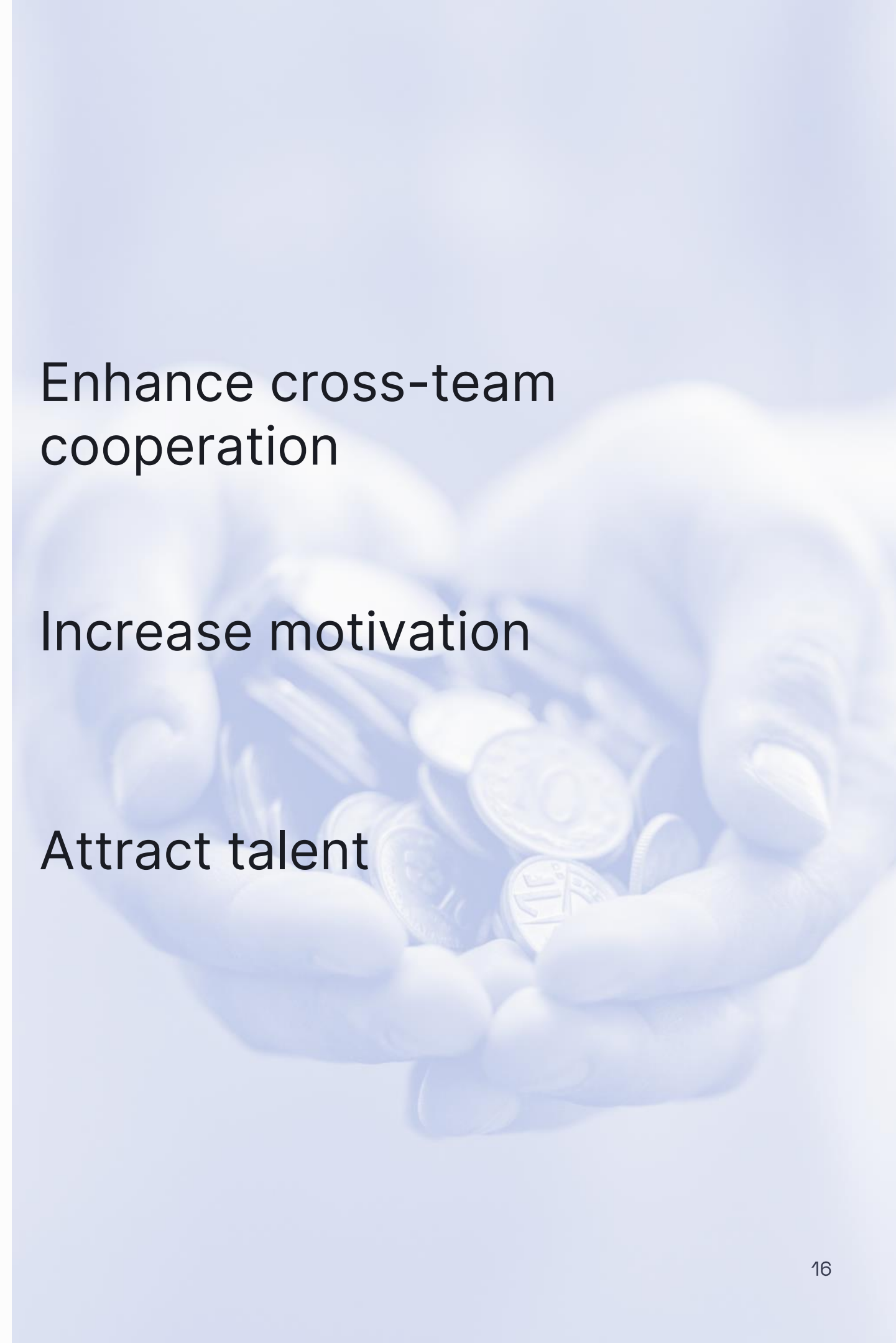
² Measured by an average of new technology adoption (level of adoption for artificial intelligence, machine-learning, Internet of Things, augmented and virtual reality, fifth generation, blockchain, digital twins, robotic process automation, edge computing, and autonomous physical devices) and McKinsey innovation quotient metrics (an organization's innovation-led growth as well as innovation speed and perception relative to competitors).

Source: Developer Velocity Survey; expert interview

More pros

- 01** Increase performance
- 02** Improve time-to-market (TTM)
- 03** Save costs
- 04** Reduce duplications and overhead

- 05** Enhance cross-team cooperation
- 06** Increase motivation
- 07** Attract talent



Cons

01

Reduced customer focus

02

Potential reduction in security

03

Potential reduction in record and audit

04

Lack of competent Developer Experience Owners

05

Increased communication



Cons: Increased communication

number of employees	time spent on communication per employee	productivity of employee	real employees in project
3	25.00%	0.7500	2.2500
4	33.33%	0.6667	2.6668
5	37.50%	0.6250	3.1250
6	45.45%	0.5455	3.2730
7	46.15%	0.5385	3.7695

04

How to improve DX

Three pillars of developer experience



USABILITY

How easy your product is to use



FINDABILITY

How quickly engineers can find the functionalities



CREDIBILITY

Engineers trust your product to solve their problems

Best practices

01 Job descriptions reviewed by engineers

02 Create the engineer journey

03 Well prepared technical onboarding

04 Get to know the demand well

05 Proper architecture and modern design standards

06 Focus on self-service rather than support channels

07 No blocking dependencies

08 Learning and sharing community

Doc Search

Popular Words: [test](#) テスト

Search

Options

HOST	
dev.mysql.com	4711
pandas.pydata.org	2739
developer.mozilla.org	2636
numpy.org	2470
fastapi.tiangolo.com	2449
perldoc.perl.org	2323
maven.apache.org	2057



Search 75 billion lines of code from 40 million projects

SEARCH

Simple, comprehensive code search

Helping you find real world examples of functions, API's and libraries in 243 languages across 10+ public code sources

Example Searches

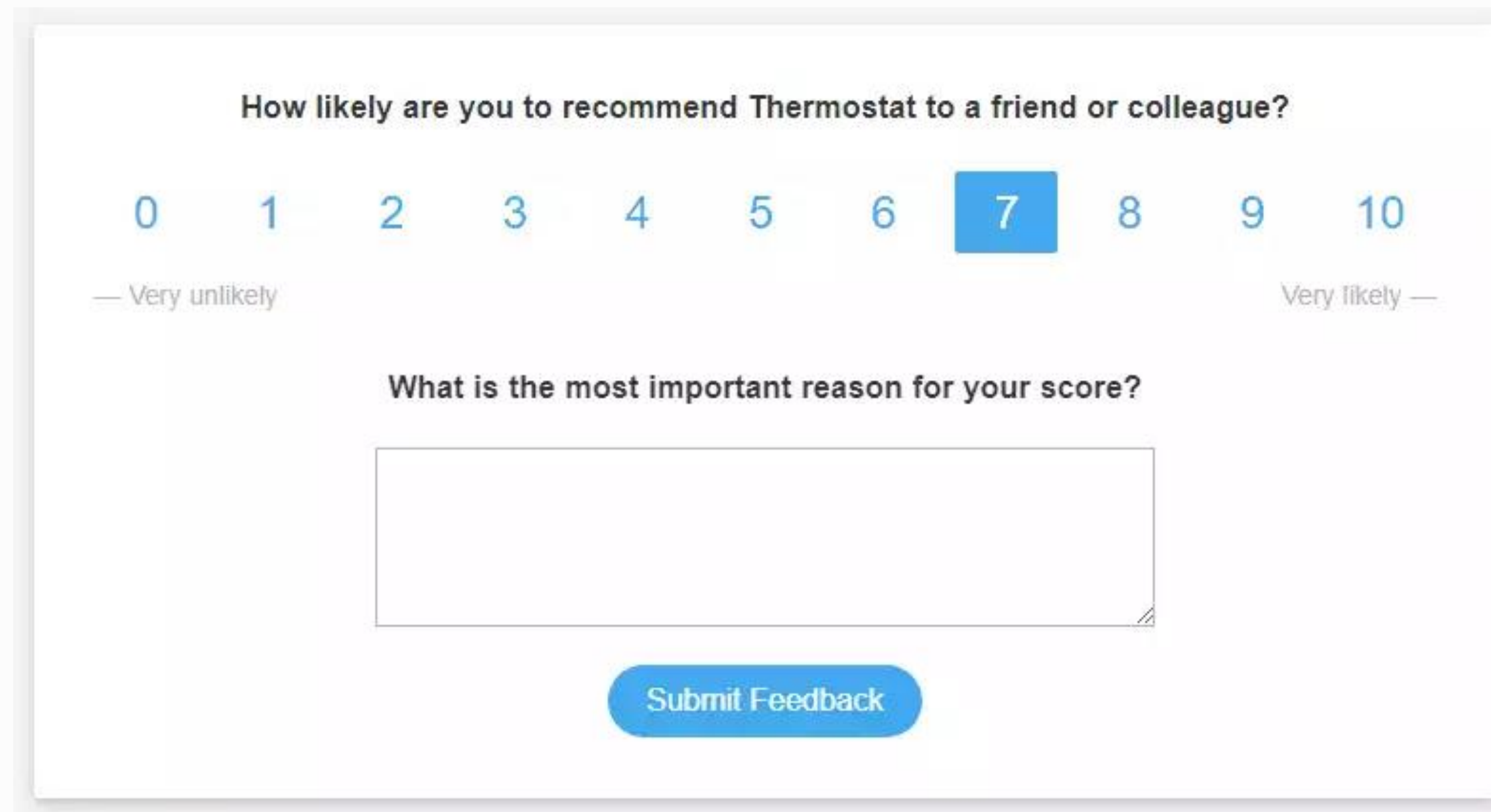
05

Measuring DX

Measuring DX: Metrics

- Support quality
- Onboarding experience (both employment and platform)
- Deployment frequency
- Availability
- Number of new tickets related to platform
- Net Promoter Score (NPS)

Measuring DX: Net Promoter Score (NPS)



How likely are you to recommend Thermostat to a friend or colleague?

0 1 2 3 4 5 6 7 8 9 10

— Very unlikely Very likely —

What is the most important reason for your score?

Submit Feedback

The image shows a Net Promoter Score (NPS) popup form. At the top, it asks 'How likely are you to recommend Thermostat to a friend or colleague?'. Below this is a horizontal scale from 0 to 10. The number 7 is highlighted with a blue square. Below the scale, it says '— Very unlikely' on the left and 'Very likely —' on the right. Below the scale is a text box asking 'What is the most important reason for your score?'. At the bottom of the form is a blue button labeled 'Submit Feedback'.

Example of an NPS popup provided by Thermostat

Measuring DX: More topics

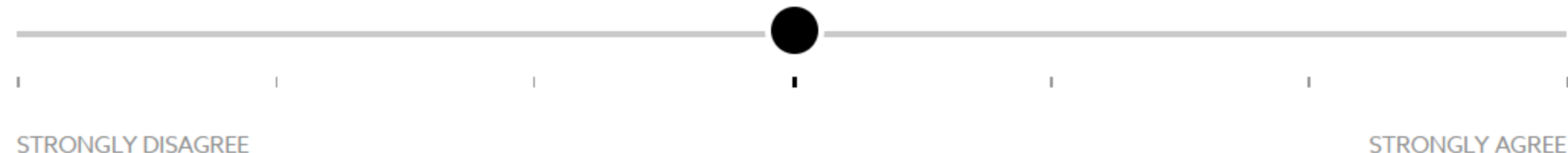
- Find something to measure against (aka baseline)
- Collect pain points from engineers (e.g., manual steps, slow scaling)
- Collect feedback
- Focus on continuous improvement
- Total Motivation (ToMo)

The Total Motivation Survey

A century of research has proven what many intuitively know: why you work determines how well you work.

Please take the below survey to help your team improve its performance. Begin by taking a moment to think about the reasons why you keep doing your current work. For each statement below, use the sliding bar to indicate how much you agree or disagree.

I continue to work at my current job because the work itself is fun to do.



A horizontal sliding bar with a black circular slider positioned at the midpoint. The bar is flanked by tick marks and labels for 'STRONGLY DISAGREE' and 'STRONGLY AGREE'.

STRONGLY DISAGREE

STRONGLY AGREE



**BE BRAVE
LIKE UKRAINE**

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Software Engineer

Warsaw, Mazowieckie, Poland

5K followers · 500+ connections



See your mutual connections

Join to view profile

About

Software and Platform Engineer based in Poland.

Solid experience of 8+ years in IT. Graduated as Information Systems and Intelligent Systems Engineer. Former Artificial Intelligence Architect at Schneider Electric. Former Python Developer and Data Engineer at Fortune 500 companies. Core areas: Cloud Computing, and Software Engineering. Especially interested in Platform Engineering.

The honest, reliable, and hardworking person with always a keen eye for work details. See the Contact info above to hire.

MAKE A DONATION TO OUR CHARITY FUND

The Charity Foundation "Come Back Alive" regularly and timely reports on its activities to all benefactors, state bodies and Ukrainian society.

[READ THE REPORTS](#)

Select the destination of your assistance

ARMY ASSISTANCE

SUPPORT THE FUND

All funds raised to help the army will be spent exclusively on purchases for the Armed Forces of Ukraine and other special forces in order to increase Ukraine's defense capabilities.

Payment method

PAYMENT BY CARD

SWIFT TRANSFERS

CRYPTOCURRENCY

Regularity

SUBSCRIPTION

ONE TIME

Payment currency

UAH, ₴

USD, \$

EUR, €

Amount of donation*

€ 10

Email*

name@surname.com

PAY

FAQ

HOW DO I KNOW WHAT'S REALLY GOING ON IN UKRAINE?



IS YOUR ORGANIZATION TRANSPARENT? HOW CAN I FIND OUT WHERE MY MONEY WILL BE DIRECTED?



tinyurl.com/DXPYCON

06 Q&A session