

Pytech Summit

All about Python **2023**

18 maja 2023

Godz. 10:00



Ruslan Korniichuk

**Another parasite in the team?! Introduction
to Developer Experience (DX)**

indieBI



Another parasite in the team?! Introduction to Developer Experience (DX)

Ruslan Korniichuk | 18.05.2023

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

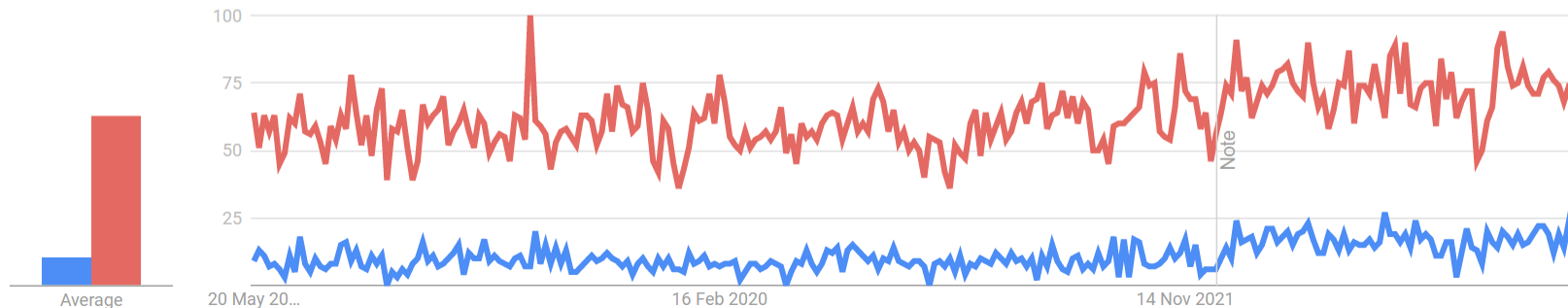
United States ▼

Past 5 years ▼

All categories ▼

Web Search ▼

Interest over time ?





Developer Experi...

Search term

Platform Enginee...

Search term

Internal Develope...

Search term

+ Add comparison

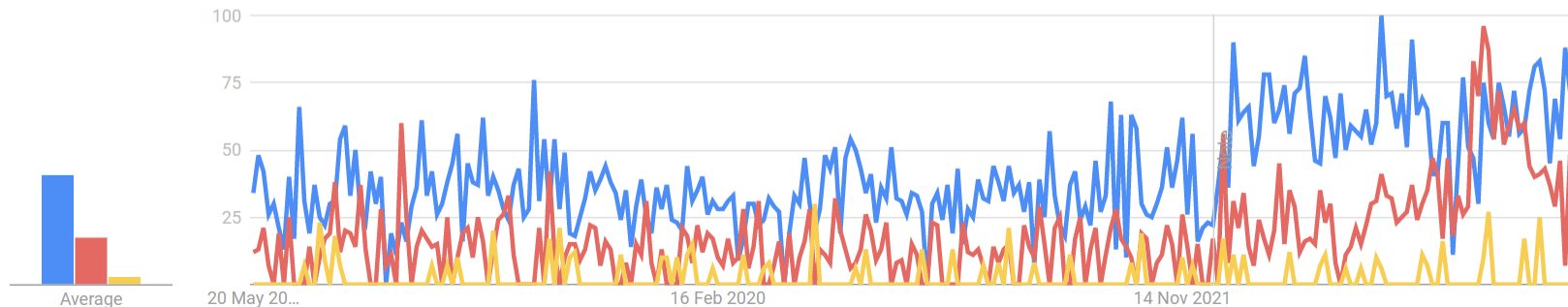
United States ▼

Past 5 years ▼

All categories ▼

Web Search ▼

Interest over time ?



Introduction

Platform Engineering is a practice aiming to deliver self-service and excellent Developer Experience (DX) via an Internal Developer Platform (IDP).

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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.

Introduction

Some platform engineering principles and best practices:

- Clear mission and role
- Treat your platform as a product
- Focus on common problems
- Glue (platform teams) is valuable
- Don't reinvent the wheel

02

Problem statement

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

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

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

03

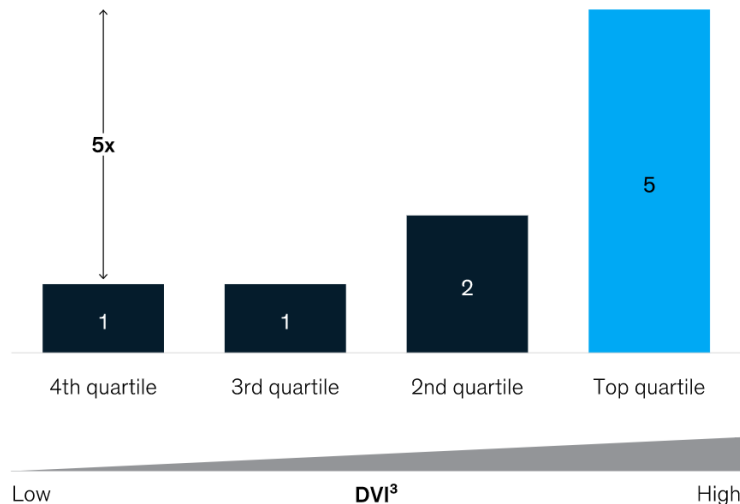
Pros and cons

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

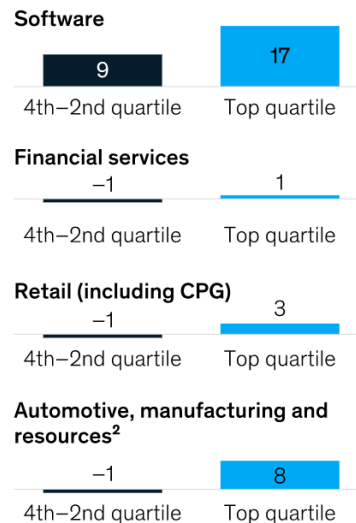
–McKinsey

Top companies by Developer Velocity Index

Revenue CAGR¹ by DVI quartile, all companies,² 2014–18, n = 239, %



Select sectors, %²



¹ Compound annual growth rate.

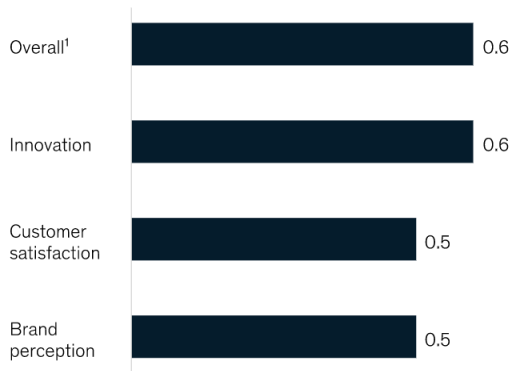
² Includes companies and verticals with n>15 for available public data; n for verticals shown: software equals 25, financial services equals 30, manufacturing and resources equals 36; retail equals 44; companies were split into DVI quartiles based on DVI score and industry ranking.

³ Includes automotive, manufacturing, oil and gas, and energy.

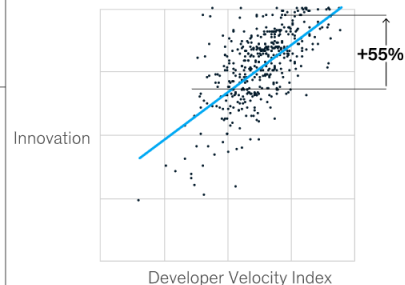
Source: Capital IQ; Developer Velocity Survey

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



DVI vs innovation



Companies with top-quartile DVI score 55% higher on innovation than bottom-quartile companies

Innovation measured by ability to innovate faster and beat competition through innovation led growth and adoption of new technologies (self-scored by executives)²

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** Save costs
- 02** Increase performance
- 03** Improve time-to-market (TTM)
- 04** Increases motivation

- 05** Enhance cross-team cooperation
- 06** Reduce duplications and overhead
- 07** Attract talent



Cons

01

Reduced customer focus

05

Increased communication

02

Potential reduction in security

03

Potential reduction in record and audit

04

Lack of competent Developer Experience Owners

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

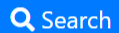
08

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

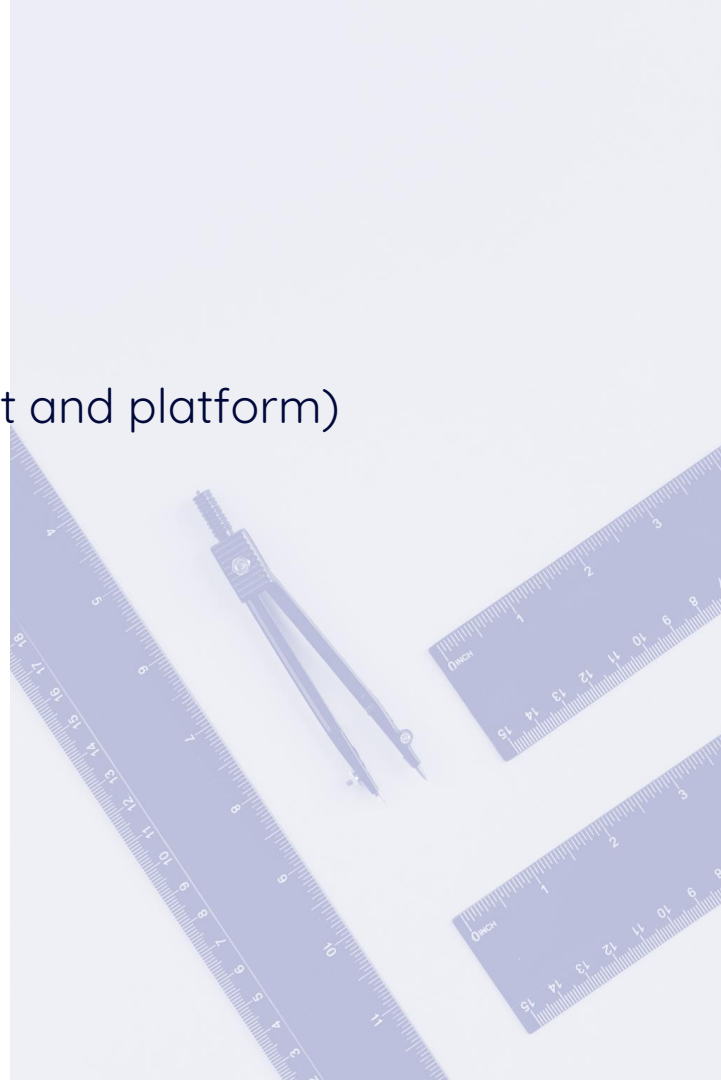
05

Measuring DX

Measuring DX

Metrics:

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



Measuring DX

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

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.



STRONGLY DISAGREE STRONGLY AGREE



**BE BRAVE
LIKE UKRAINE**



Ruslan Korniiichuk

Software Engineer

Warsaw, Mazowieckie, Poland

5K followers · 500+ 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. 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.

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*

Email*

[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/DXPYTECH

06

Q&A session
