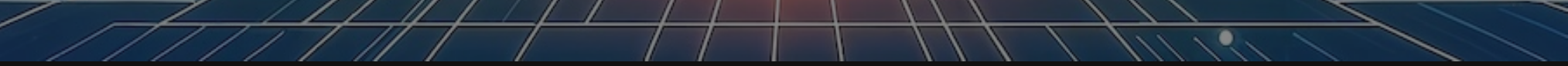
Developer Experience...

Central to DevOps Success

DEVELOPERWEEK

@IAmJerdog



“DevEx - that’s more about the frontend user experience, right?”

DevEx is *more* than your parent's software development lifecycle

Jeremy Meiss

Co-Founder

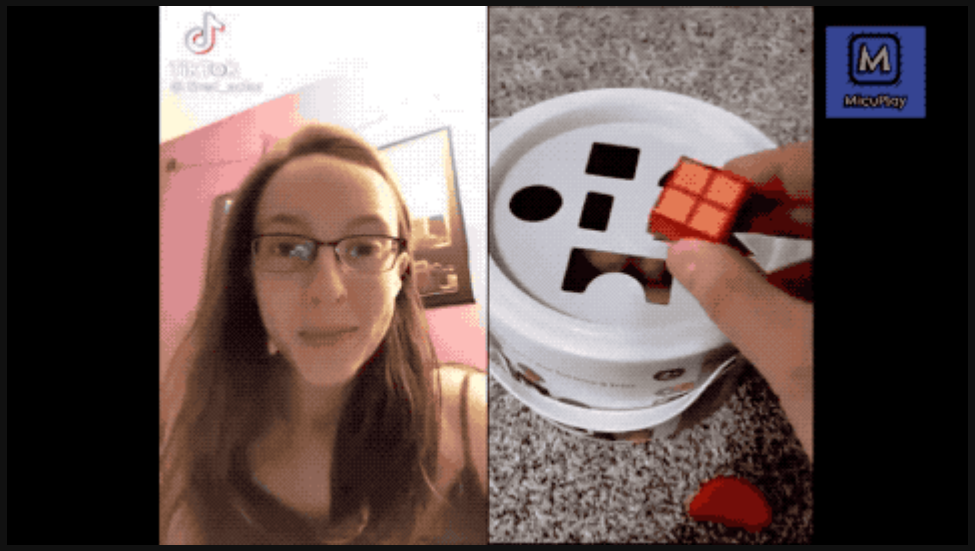
Stealth DevEx Startup

So what is DevEx?

So what is DevEx?

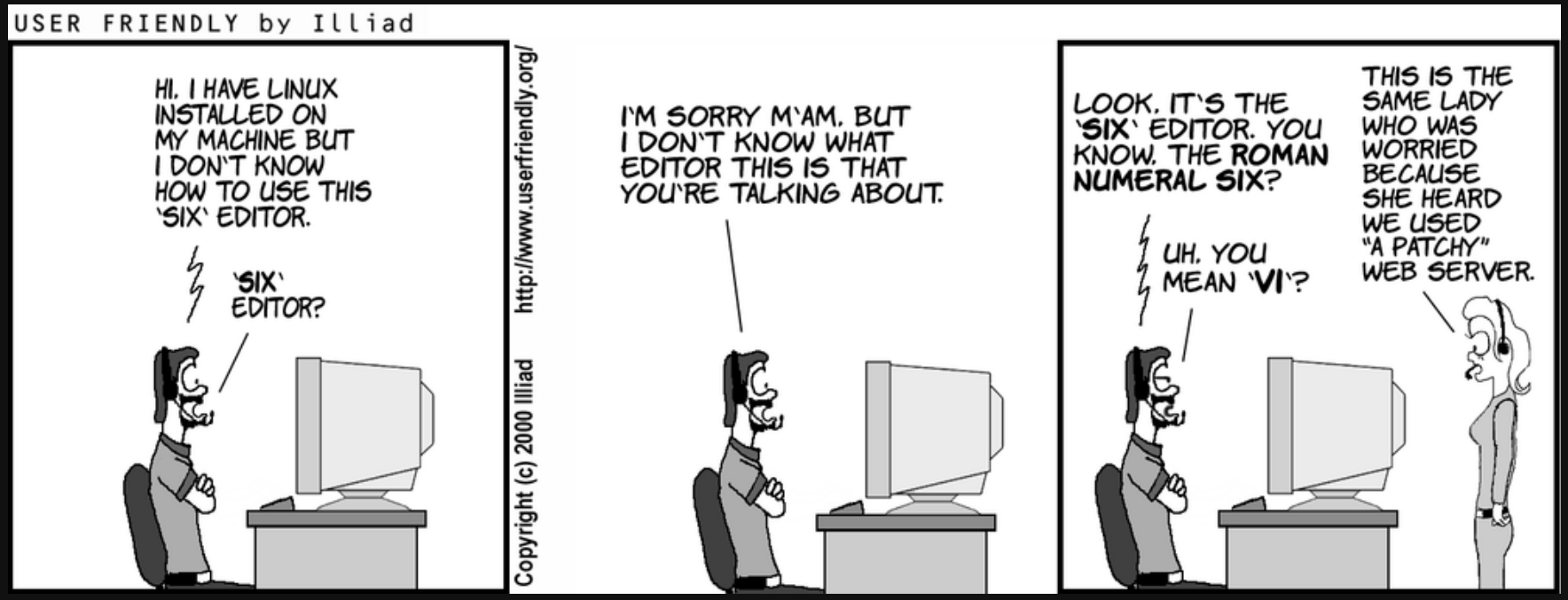
DevEx encompasses the journey of developers as they learn and deploy technology. When successful, it focuses on eliminating obstacles that hinder a developer or practitioner from achieving success in their endeavors.

DevEx is about more than the traditional UI/UX focus



The evolution of the IDE

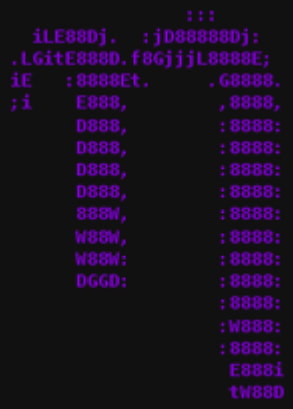
Before the 1990s



REF: O'Reilly "Learning the vi and Vim Editors"

The evolution of the IDE

Before the 1990s



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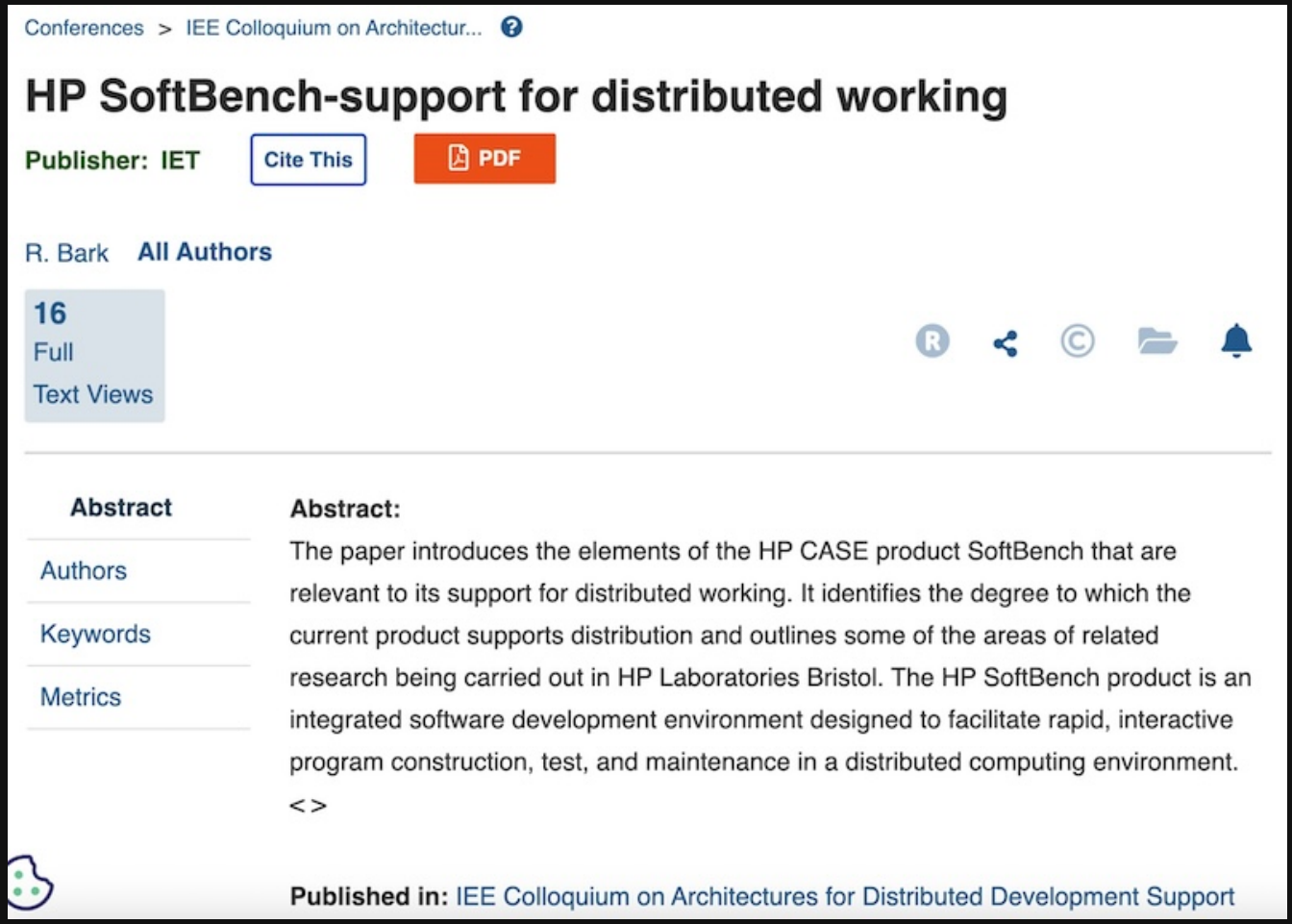

Conferences > IEE Colloquium on Architectur...

HP SoftBench-support for distributed working

Publisher: IET Cite This PDF

R. Bark **All Authors**

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Abstract
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Abstract:
The paper introduces the elements of the HP CASE product SoftBench that are relevant to its support for distributed working. It identifies the degree to which the current product supports distribution and outlines some of the areas of related research being carried out in HP Laboratories Bristol. The HP SoftBench product is an integrated software development environment designed to facilitate rapid, interactive program construction, test, and maintenance in a distributed computing environment.
< >

Published in: IEE Colloquium on Architectures for Distributed Development Support

REF: https://ieeexplore.ieee.org/document/182074

The evolution of the IDE

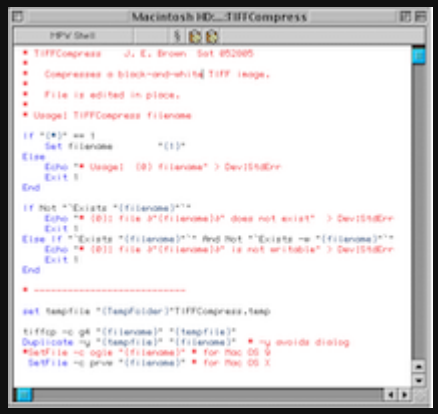
Before the 1990s

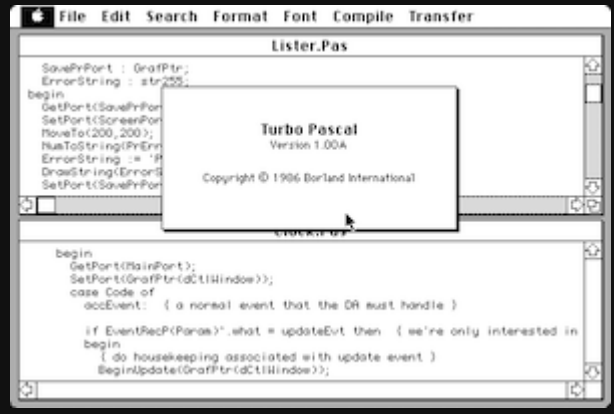
"...the use of an IDE was not well received by developers since it would fence in their creativity."

REF: *Computerwoche* ("Computer Week", German counterpart of American magazine *Computer World*), 1995.

The evolution of the IDE

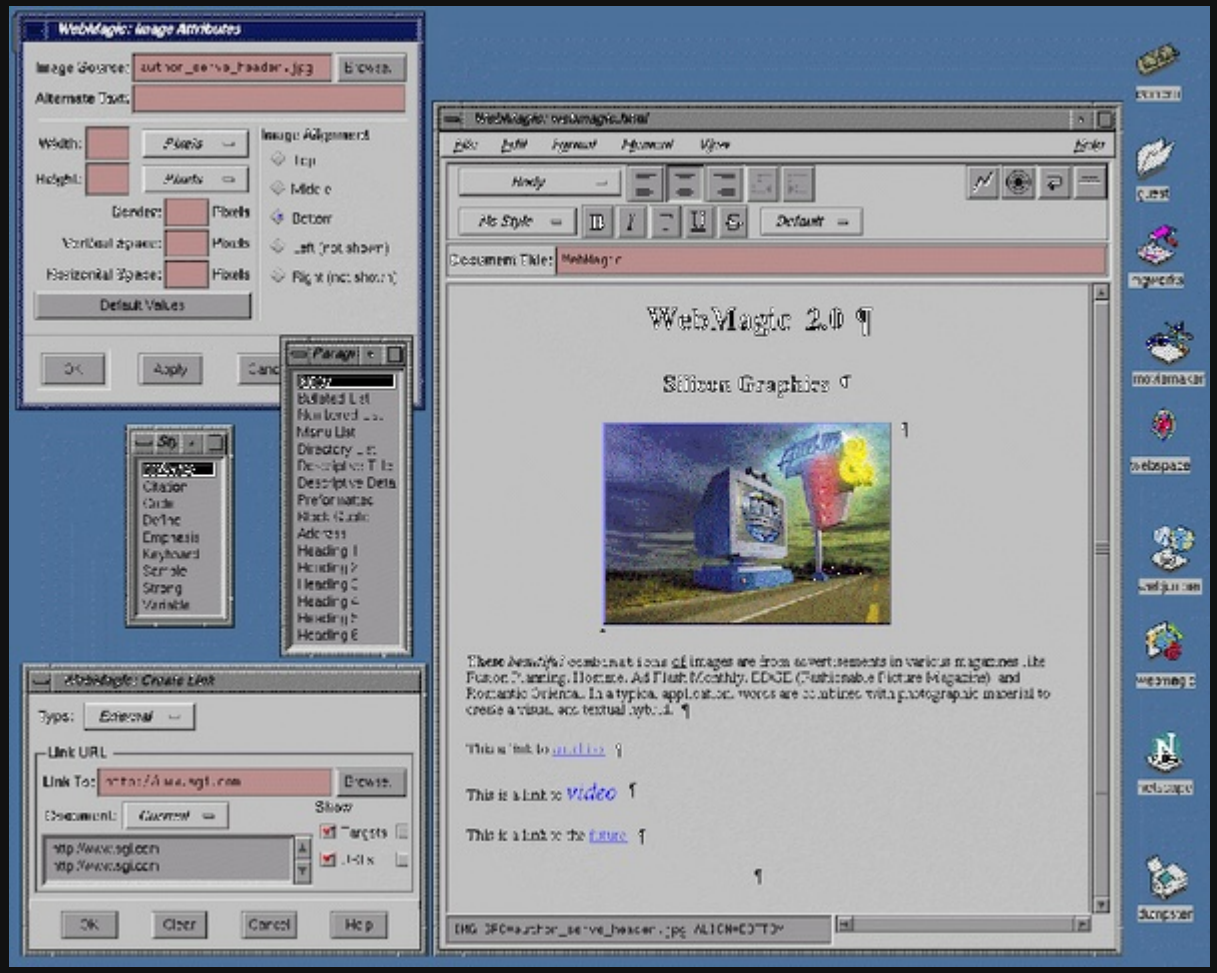
Before the 1990s





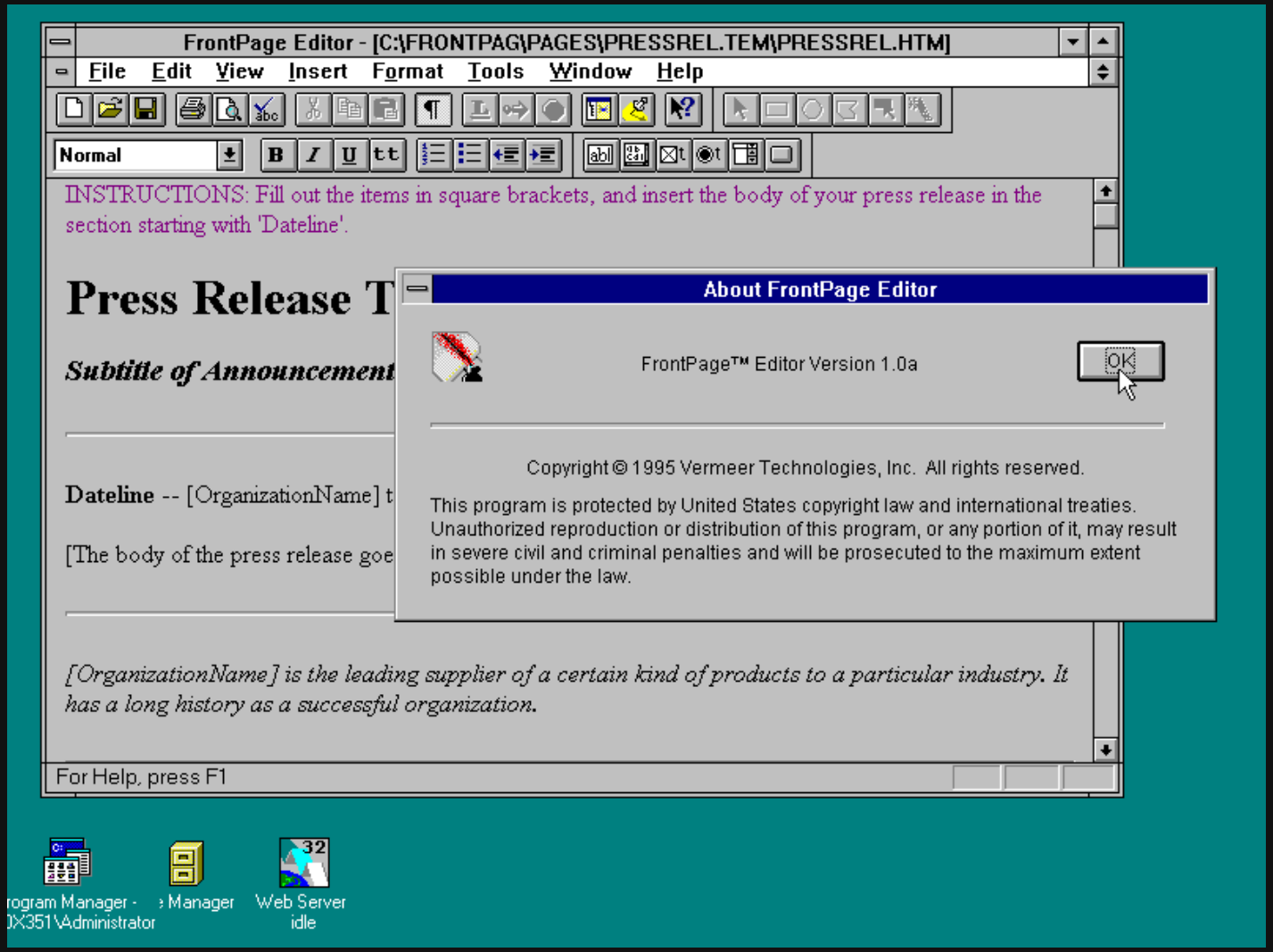
The evolution of the IDE

The Web and the 1990s



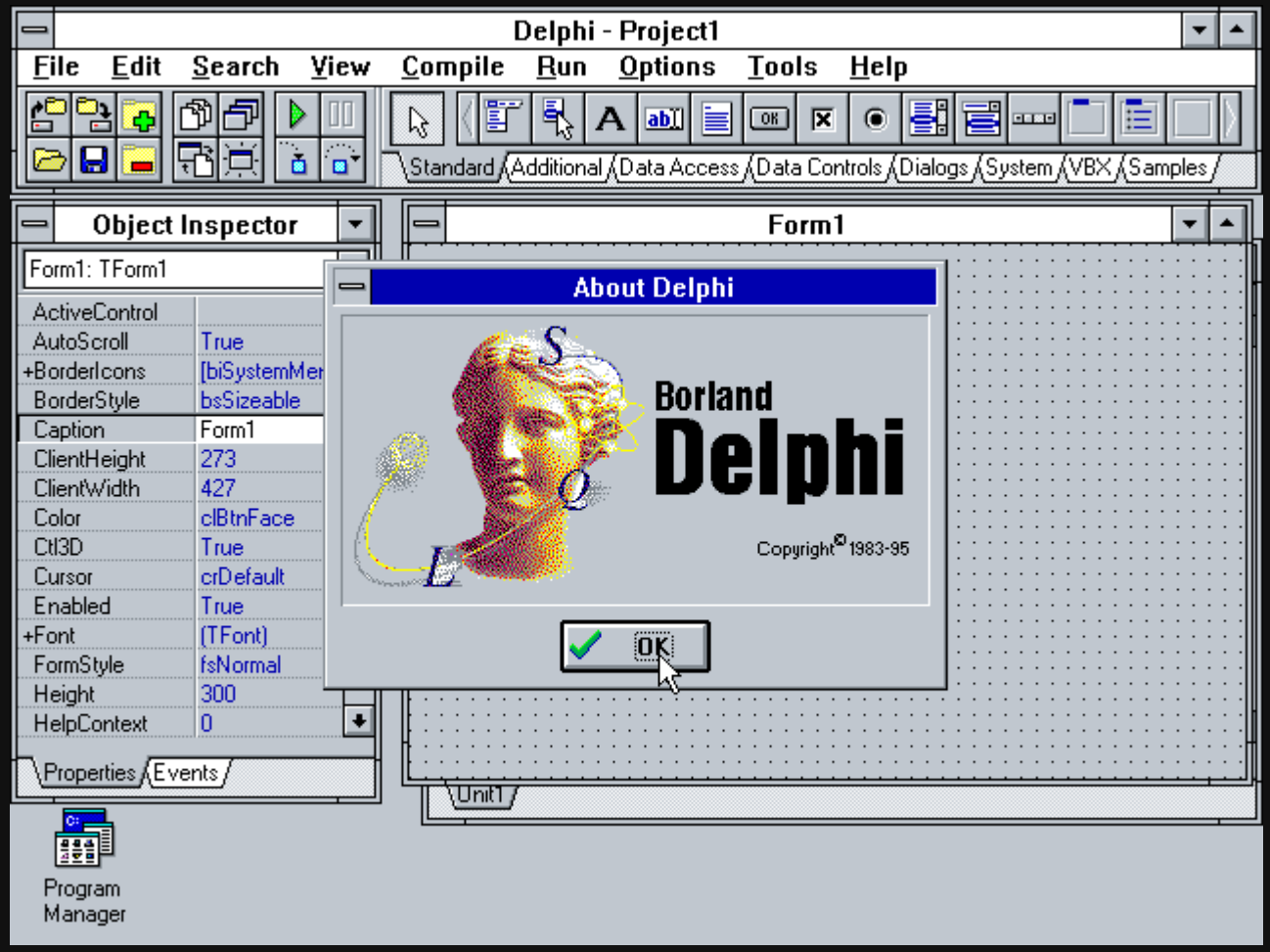
The evolution of the IDE

The Web and the 1990s



The evolution of the IDE

Cross-platform and the 1990s



The evolution of the IDE

Early iterations

(Late 1990s to Early 2000s)

- Macromedia Dreamweaver in late 1997 (what was it called before?)
- Visual Studio in late 1997
- FrontPage 2000 in 1999
- Netbeans in 2000
- Eclipse in 2001 (IBM kickstarted)

The evolution of the IDE

Feature & Usability Advancements

Mid-2000s to 2010s

- IntelliJ IDEA
- Eclipse
- Visual Studio

The evolution of the IDE

Lightweight and Cloud-Based

2010s to Now

- Sublime Text, Atom, VSCode (lightweight)
- AWS Cloud9, GitHub Codespaces, Gitpod (cloud-based)

IDEs are a result of DevEx

Things we never knew we needed...

- Code completion
- Syntax highlighting
- Debugging
- VCS integration (no more FTPing files around)
- Multi-language support
- Framework integration
- Pair programming

DevEx is a Key Differentiator

- Critical differentiator for attracting & retaining top talent
- Ensures high levels of team performance and product quality
- More engaged and productive development team
- Demonstrated commitment to DevEx enhances brand reputation + CSAT
- Directly impacts bottom line by enabling quicker time to market

Dev Environment Setup

Manual configuration

Late 1990s to Early 2000s

Dev Environment Setup

Manual configuration

Late 1990s to Early 2000s

Dev Environment Setup

Manual configuration

Late 1990s to Early 2000s

Dev Environment Setup

Config Mgmt & Containerization

Mid-2000s to 2010s

Dev Environment Setup

IaC and DevOps Integration

2010s to Present

Broader Impact of DevEx

- Deployment Pipelines
- Infrastructure as Code (IaC) Practices
- Developer Efficiencies

Good DevEx == Good DevOps

- Facilitates smoother transitions between Dev and Ops
- Minimizes bottlenecks with enhanced collaboration
- Ensures feedback loops are efficient and productive
- Enables DevOps principles to take hold within an organization

What is DevOps?

the combination of practices and tools designed to increase an organization's ability to deliver applications and services faster than traditional software development processes

Core DevOps Principles

- Collaboration

Core DevOps Principles

- Collaboration
- Communication

Core DevOps Principles

- Collaboration
- Communication
- Shared Responsibility

DevEx & DevOps Alignment

- Enhanced collaboration ***via tools and processes***

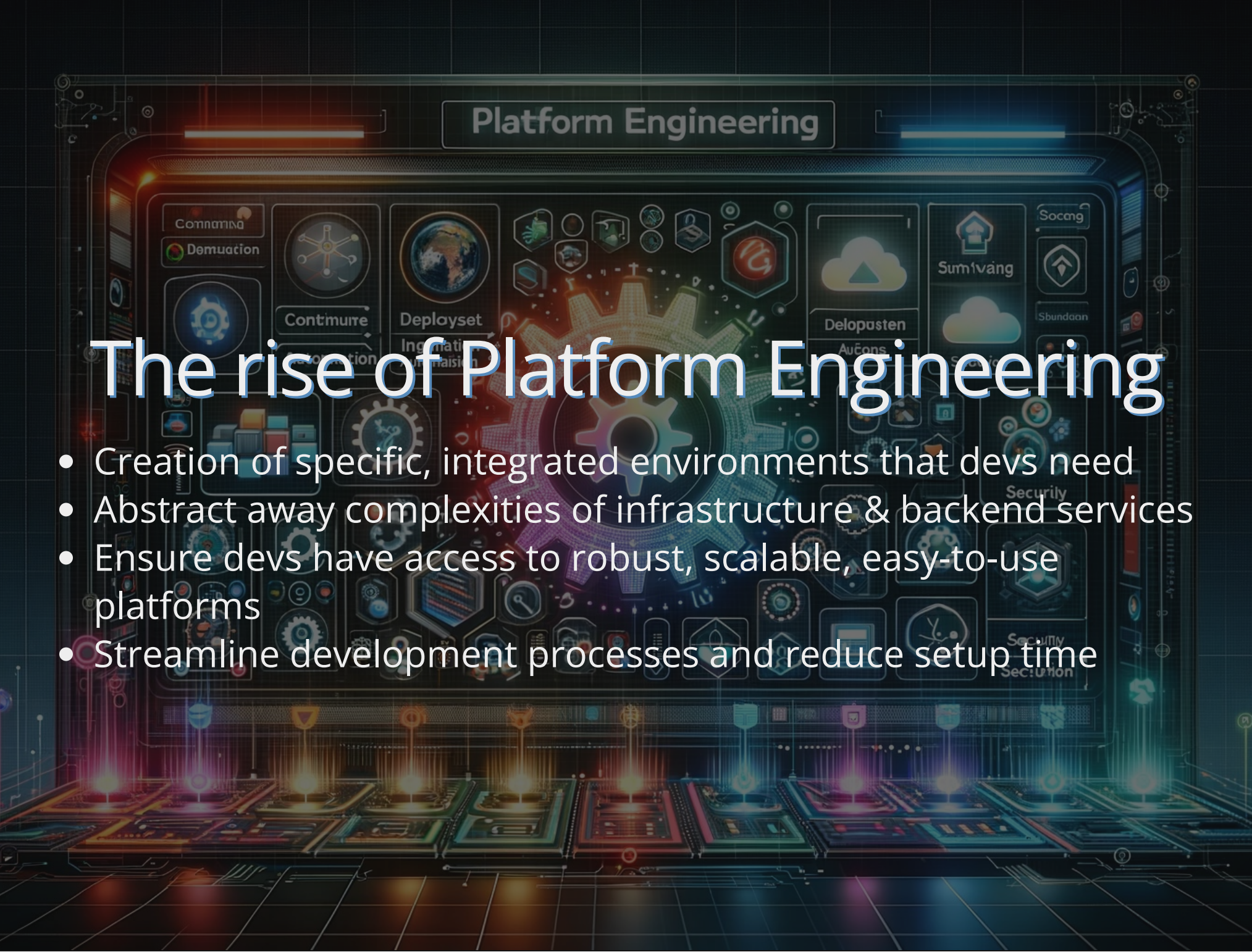
DevEx & DevOps Alignment

- Enhanced collaboration ***via tools and processes***
- Improving communication ***via streamlined info sharing and feedback***

DevEx & DevOps Alignment

- Enhanced collaboration ***via tools and processes***
- Improving communication ***via streamlined info sharing and feedback***
- Shared responsibility ***by empowering all teams with access and information***

DevEx and DevOps are One



The rise of Platform Engineering

- Creation of specific, integrated environments that devs need
- Abstract away complexities of infrastructure & backend services
- Ensure devs have access to robust, scalable, easy-to-use platforms
- Streamline development processes and reduce setup time

Self-Service Platforms

- Empower developers to control their needs with necessary tools
- Leverage automation, templates, policies with agility
- Accelerate development, enhance productivity, and foster autonomy and innovation

Better Practices

- Empower with the right tools
- Encourage Cross-functional Teams
- Implement Feedback Loops
- Focus on Automation
- Invest in Training and Development

DevEx Impact

Productivity

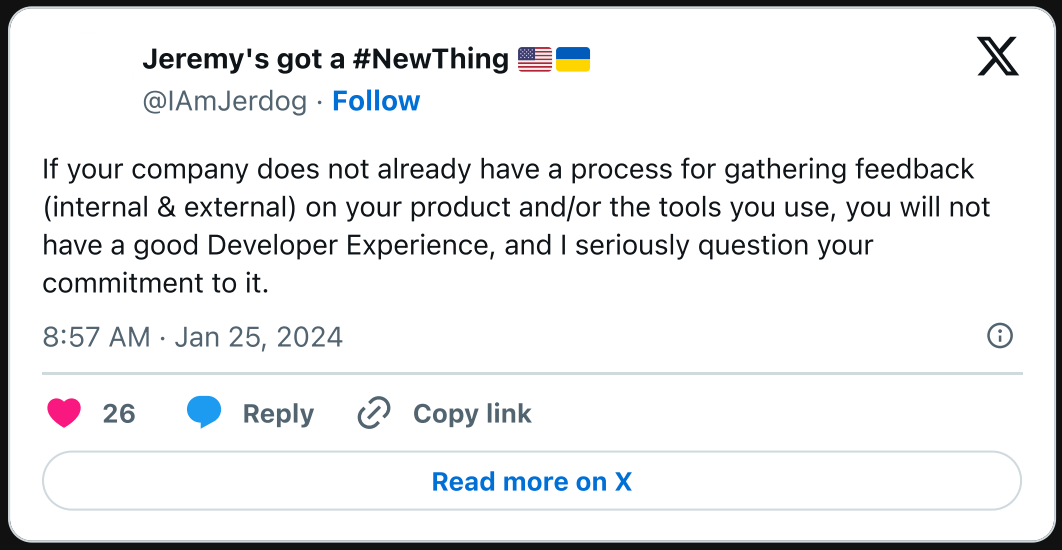
- Streamlined Development Environments
- Integrated and Automated Toolchains
- Efficient Collaboration Platforms

DevEx Impact

Morale

- Autonomy and Empowerment
- Recognition and Achievement
- Reduced Frustration and Burnout
- Learning and Growth Opportunities

DevEx reflects an organizations values



Jeremy's got a #NewThing 🇺🇸🇺🇦

@IAmJerdog · **Follow**

If your company does not already have a process for gathering feedback (internal & external) on your product and/or the tools you use, you will not have a good Developer Experience, and I seriously question your commitment to it.

8:57 AM · Jan 25, 2024

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DevEx is...

“ruthlessly eliminating barriers (and blockers) that keep your developers from being successful”

Thank You.

https://bit.ly/DevWeekSF-Virtual

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