



Embracing Platformless

A Revolutionary Approach to Enterprise Software Engineering



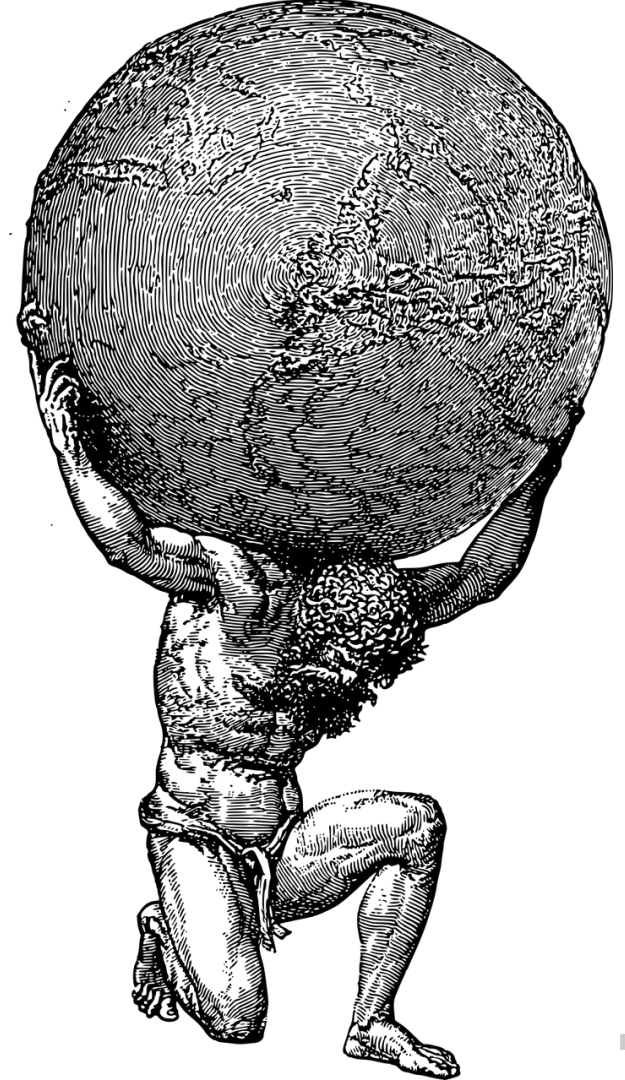
March, 2024

Asanka Abeysinghe

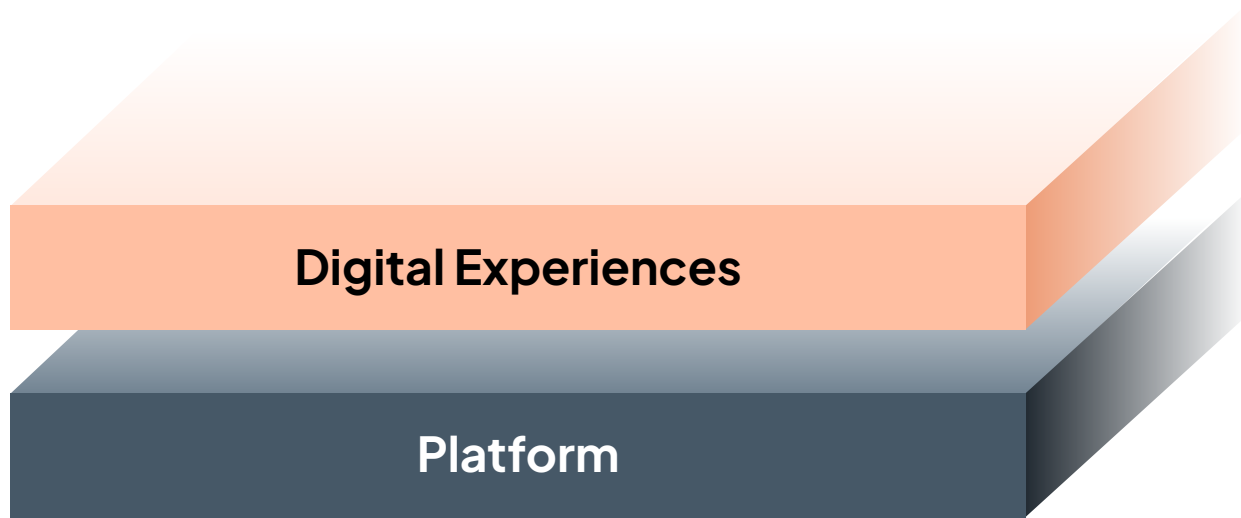
CTO, WSO2

Atlas holding the world

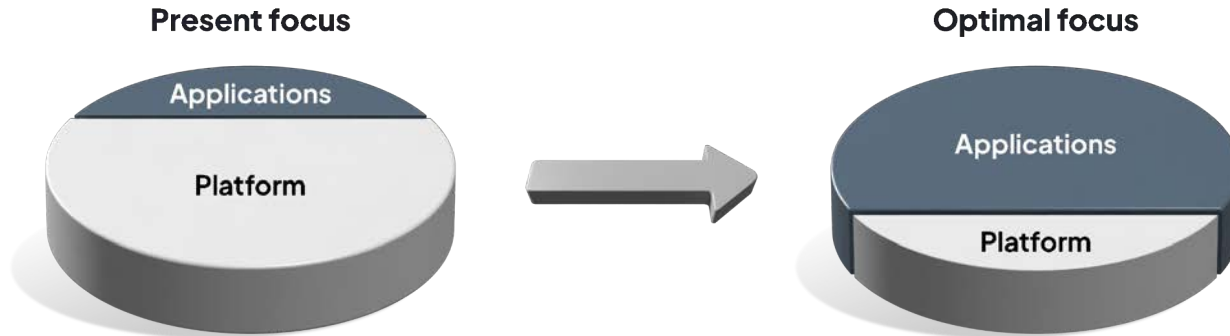
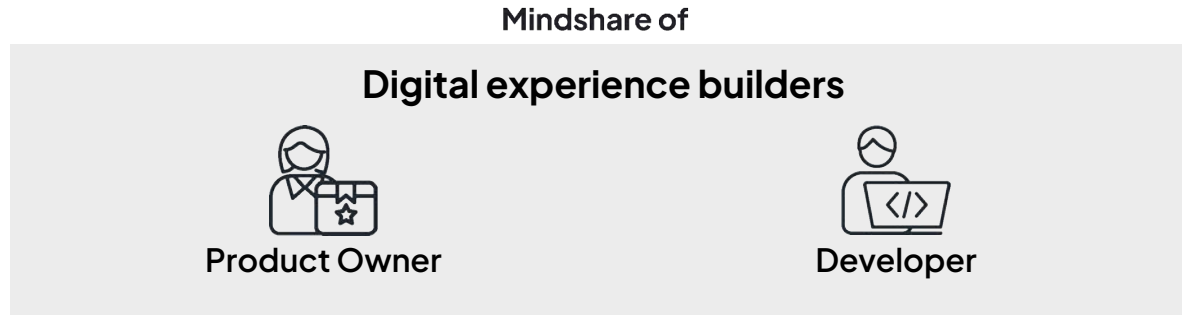
“Atlas is the God of strength and endurance. In Greek mythology, he is known as the Titan who carries the heavens upon his shoulders.”



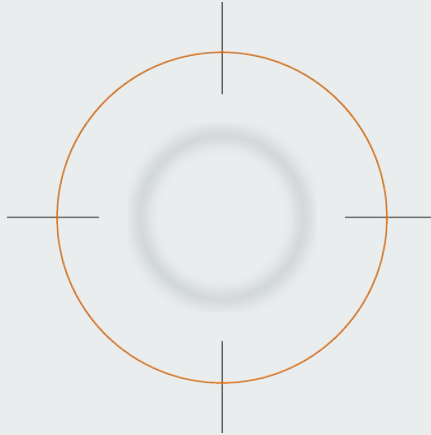
In the enterprise, the platform is Atlas



Distraction!



**How do you make the platform
disappear from focus?**



Dark matter and dark energy

Earth appears to be platformless



IT'S BACK!

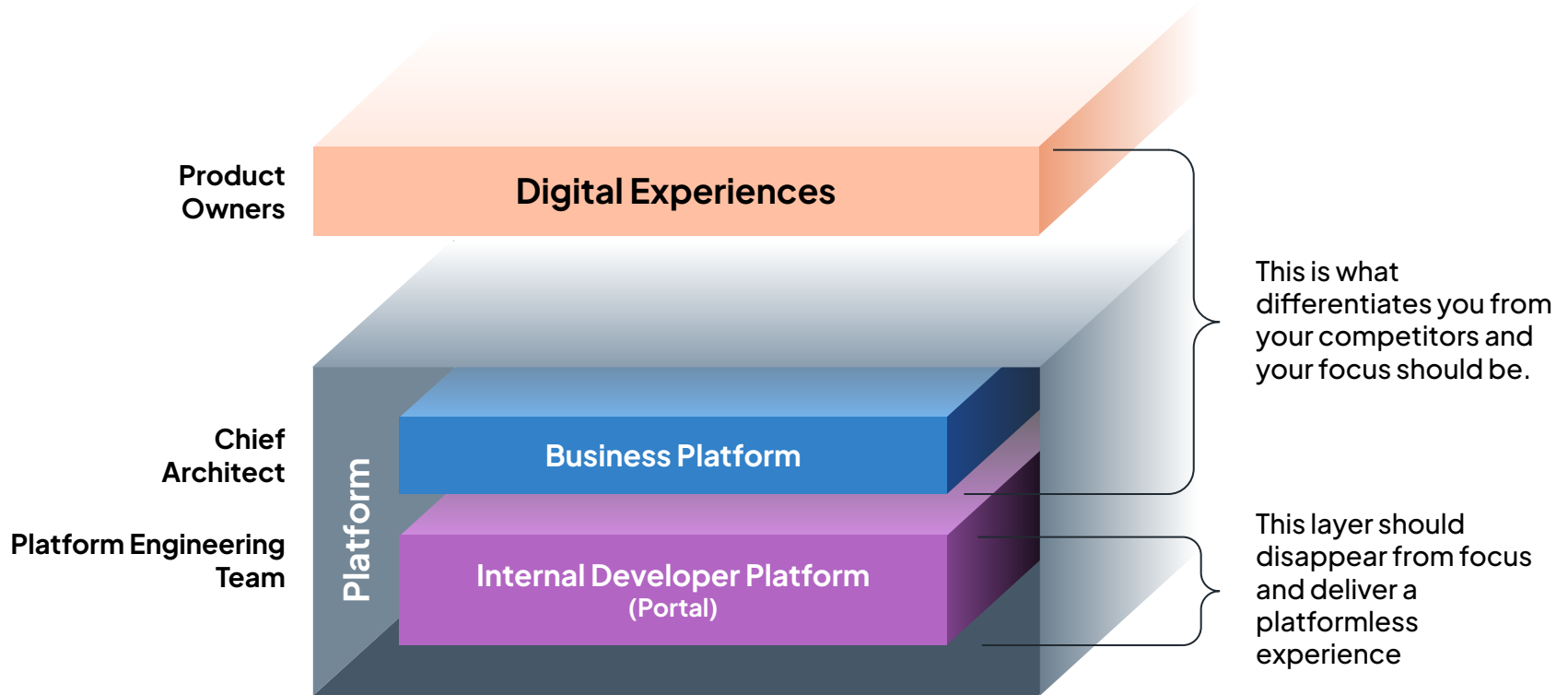
WSO2con2024

May 7-9 | Hollywood, FL, USA

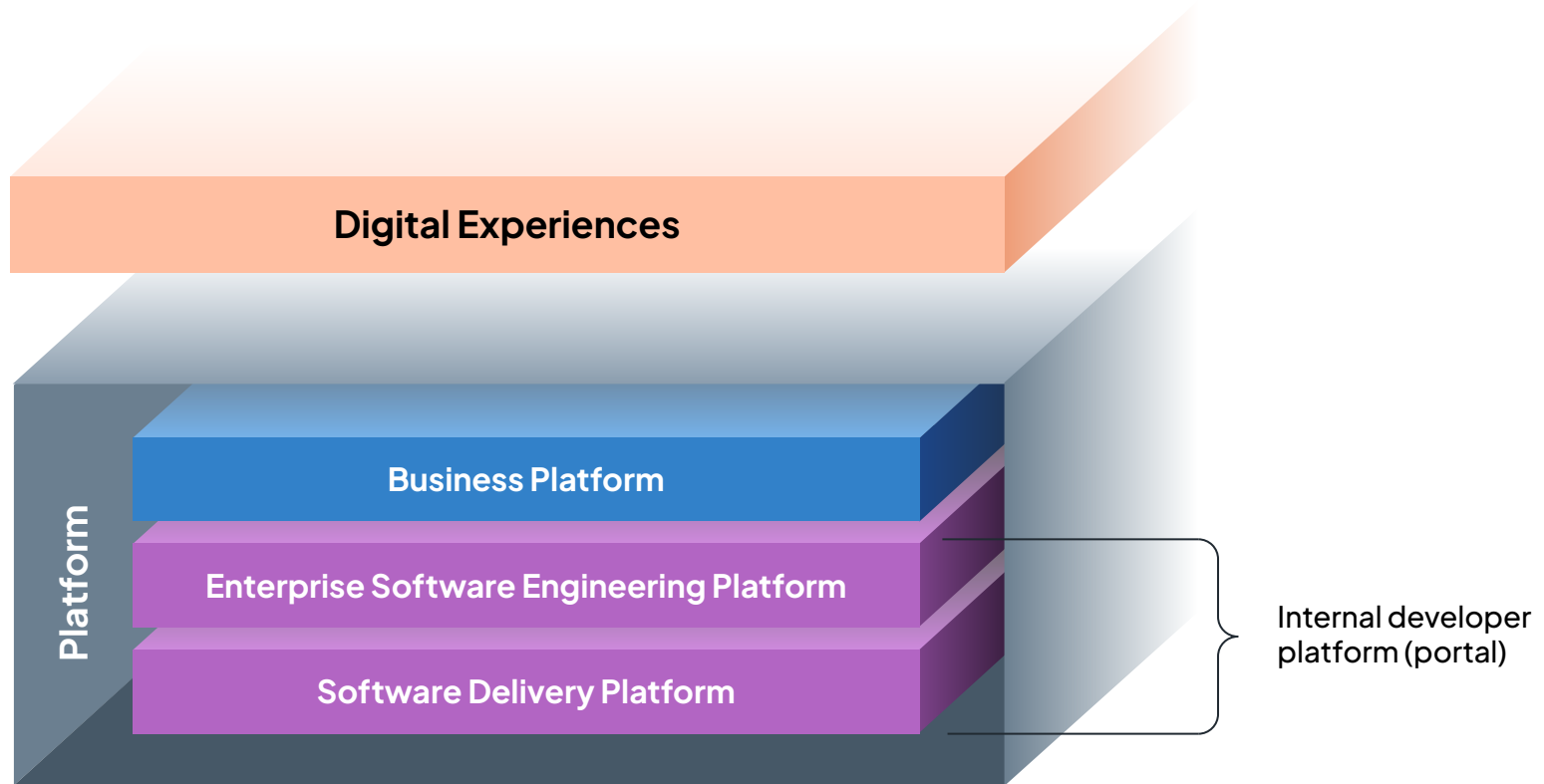
wso2con.com

<https://wso2.com/wso2con/2024/>

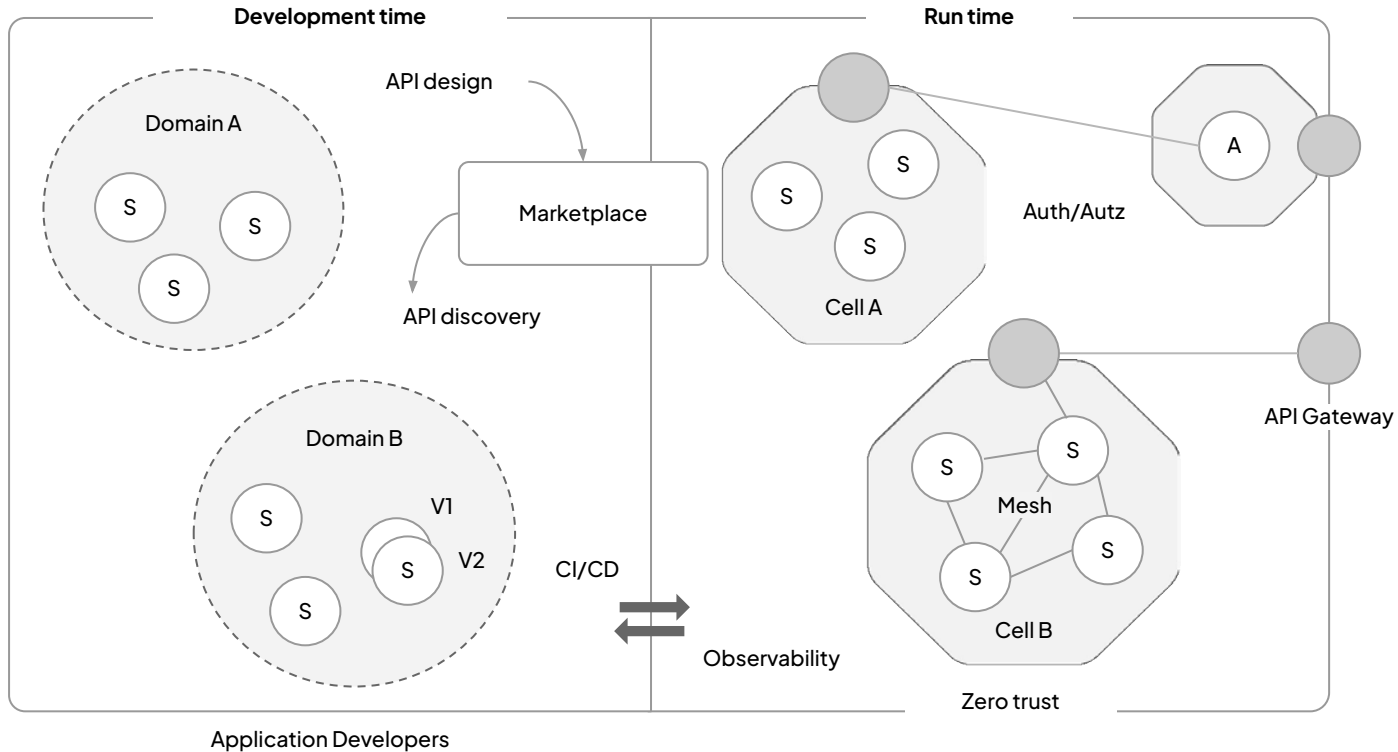
Platforms



What should the Internal Developer Platform deliver?



IDP facilitates enterprise software engineering



Enterprise software engineering becomes platformless

API-First

network services are the fundamental building blocks of all modern software



Cloud Native Middleware

runtime infrastructure for building and running secure, scalable cloud native distributed systems



Developer Experience

passionate developers creating awesome digital experiences



Platform Engineering

internal developer platforms supporting full software delivery lifecycle



Enterprise collaboration is now platformless

Before

- **Setup**
 - Select and deploy email (SMTP server, spam tools, antivirus, ...), chat server, calendar, file shares
 - Set up shared authentication with LDAP and integrate
 - Install multiple clients
- **Operate system**
 - Software maintenance
 - Spam & antivirus maintenance
 - Backup and restore
- **Use (with difficulty)**

With  or



- **Setup**
 - Add DNS records (fully automated for most registrars)
 - Add your users
- ~~Operate system~~
- **Use**
 - Discuss etiquette
 - Discuss sharing
 - Discuss knowledge management

Enterprise collaboration is now platformless

Before

● Setup

- Select and deploy email (SMTP server, spam tools, antivirus, ...), chat server, calendar, file shares
- Set up shared authentication with LDAP and integrate
- Install multiple clients

● Operate system

- Software maintenance
- Spam & antivirus maintenance
- Backup and restore

● Use (with difficulty)

With  or 

● Setup

- Add DNS records (fully automated for most registrars)
- Add your users

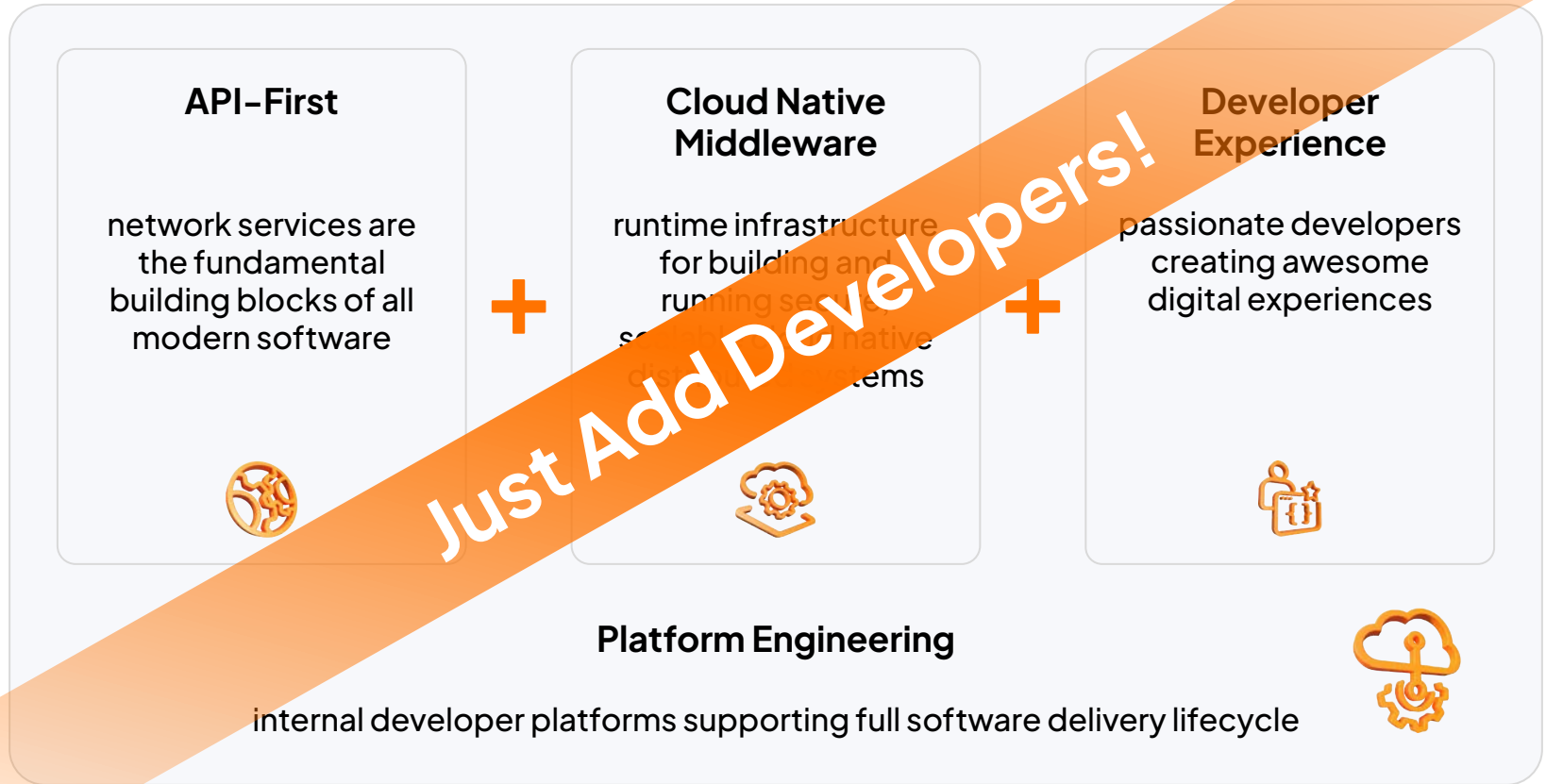
● Operate system

● Use

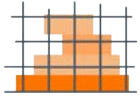
- Discuss etiquette
- Discuss sharing
- Discuss knowledge management

Just Collaborate!

Delivering digital experiences



Paths to platformless enterprise software engineering



Build

- **Start with a framework, e.g. Backstage**
 - And add runtime application architecture components such as API gateways / marketplaces, cell architecture, service mesh
 - Improve developer experience
- **Build with your choice of best-of-breed**
 - Including WSO2 technologies



Buy

- **SaaS Internal developer platforms**
 - Hosted Backstage providers
 - Harness
 - RedHat developer hub
 - WSO2 Choreo
 - <https://wso2.com/choreo>

Summary

- Your digital experiences define you to your customers: Software products are now part of your business
- Delivering secure, modern, cloud native digital experiences require a broad, world-class skill set
- Platformless platforms move the focus of your technical team from playing with technology to delivering awesome digital experiences

It's time to go platformless!



Explore our platformless manifesto

Platformless

Version: 0.8 (Fall-2023)

Authors

- [Sanjiva Weerawarana, Ph.D.](#) | Founder, CEO & Head of Products - WSO2 | [@sanjiva](#)
- [Paul Fremantle, Ph.D.](#) | Co-Founder, Founder CTO & Advisor - WSO2 | [@pfree](#)
- [Asanka Abeysinghe](#) | CTO - WSO2 | [@asankams](#)

Introduction

Radical simplification is at the heart of many major shifts in the enterprise application space:

- From **client-server to web and mobile**: not needing to worry about delivery and deployment of specific clients ("client-less")
- From **datacenter to cloud**: not needing to worry about hardware ("data-centre-less")
- From **app server to serverless**: not needing to care about which application server and having to manage clusters

Of course, when we talk about "less" to indicate a shift, e.g., in serverless, it doesn't really mean that there is no server. It simply means that there is such a clear boundary between the user and the provider that the user no longer needs to know about the system behind the service. For example, serverless backends still need clustering, failover, deployment, system upgrades, etc. However, the user of serverless doesn't see any of that; they simply write and deploy code.

Now the need for radical simplification in enterprise software engineering is driving the next major shift: from **platforms** to **"platformless."**

The Problem with Platforms

Recently we have seen the rise of enterprise software delivery platforms. Often these build on Kubernetes or other cluster management systems, together with DevOps pipelines and monitoring and management systems among many other aspects. These platforms are incredibly powerful and allow organizations to deploy applications at scale and speed. More importantly, they enable updates to be deployed, rolled out incrementally, and rolled back if necessary.

Platforms allow massive agility in improving application function and performance — which are characteristics closely associated with business success.

However, platforms have introduced their own challenges. They require large, highly-skilled platform engineering teams, and the skills are hard to find. Each platform requires many complex choices and links between multiple systems: DevOps pipelines, deployment management, monitoring and management systems, network substrates, and of course the actual cluster management.

It is clear that we need a new paradigm to remove the platform from our consciousness and allow us to code, build, and deploy enterprise applications with fast deployment, continuous integration and rollout, and world-class monitoring and management - but with no need to see and manage the platform itself.



Weerawarana, S., Fremantle, P. & Abeysinghe, A. (2023, November 6). Platformless. WSO2 GitHub. <https://github.com/wso2/reference-architecture/blob/master/platformless.md>

Openly available under CC BY 4.0 - contributions and enhancements welcome via pull request!

Let's connect



<https://blog.architect2architect.com>



<https://muckrack.com/asankaabeysinghe/>



asankaa AT WSO2.com



<https://www.linkedin.com/in/asankaabeysinghe/>



@asankama



Question Time!

