



# THE PROBLEM(S) WITH WEBASSEMBLY

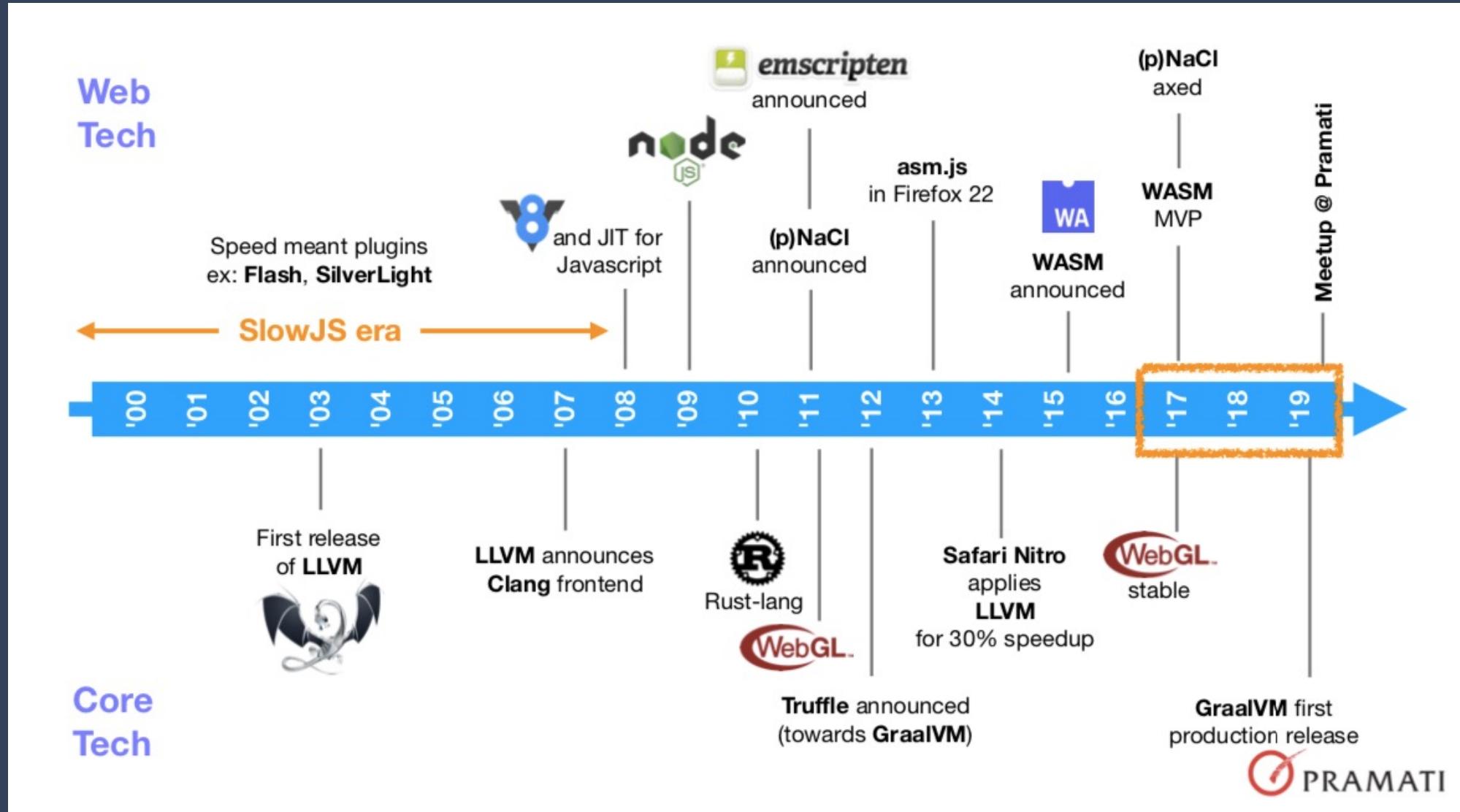
And why I'm still optimistic  
about it



Hi, I'm Divya

Senior Tech Evangelist @ SUSE,  
Advisor to Avesha Inc  
CNCF Ambassador

# Why WebAssembly?





# What is Wasm?

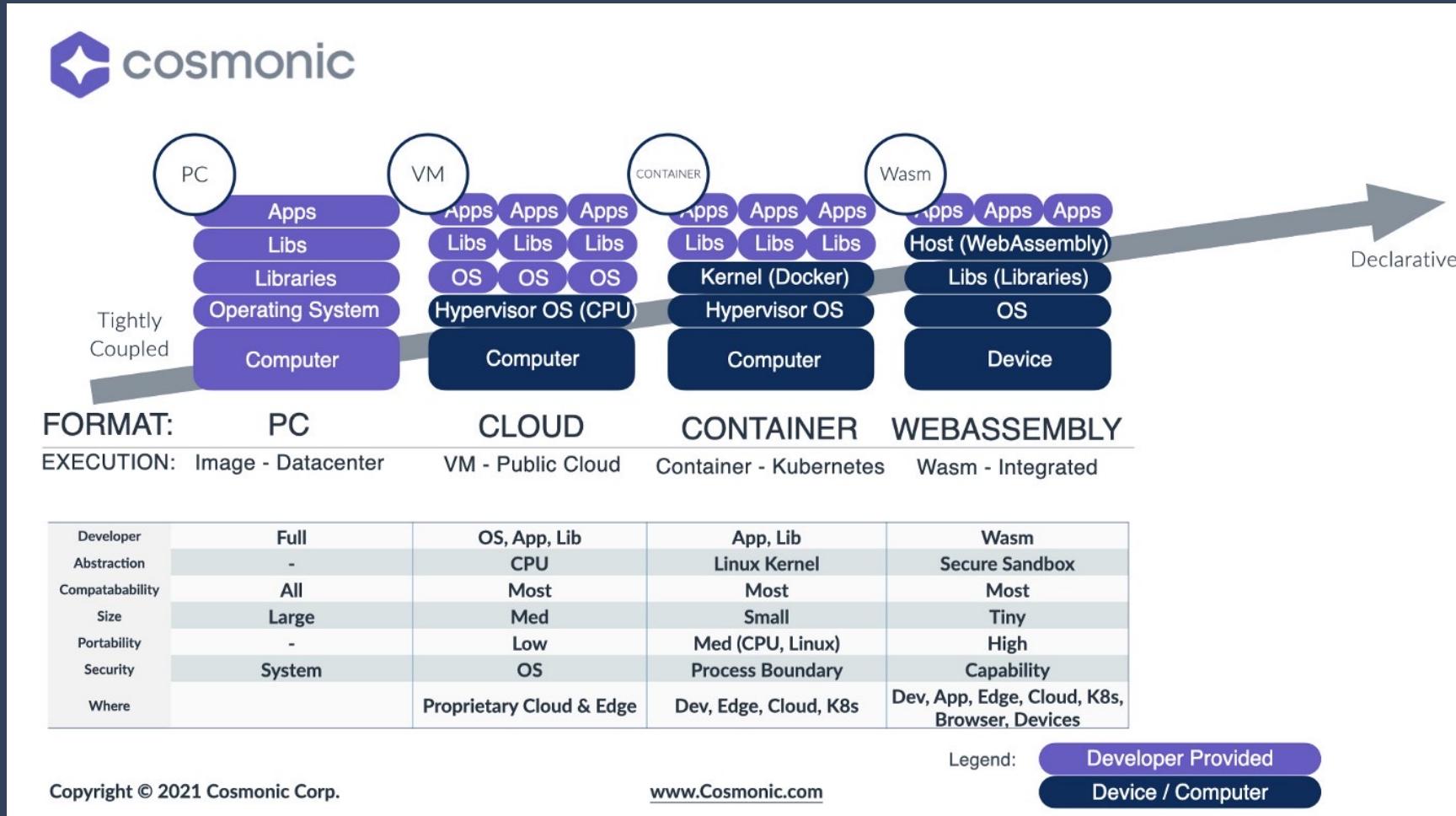
**“WebAssembly (abbreviated *Wasm*) is a binary instruction format for a stack-based virtual machine. Wasm is designed as a portable compilation target for programming languages, enabling deployment on the web for client and server applications.”**

-- <https://webassembly.org>

Q1. Why are we reinventing  
the wheel?



# Server side story



Source: <https://cosmonic.com/blog/kubecon-eu-2021-webassembly-keynote-cloud-native-and-wasm-better-together/>

# The front end story



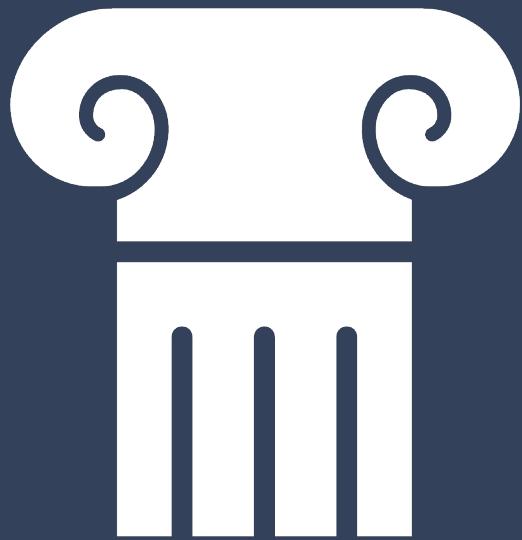


## Q2. What about the DevEx?

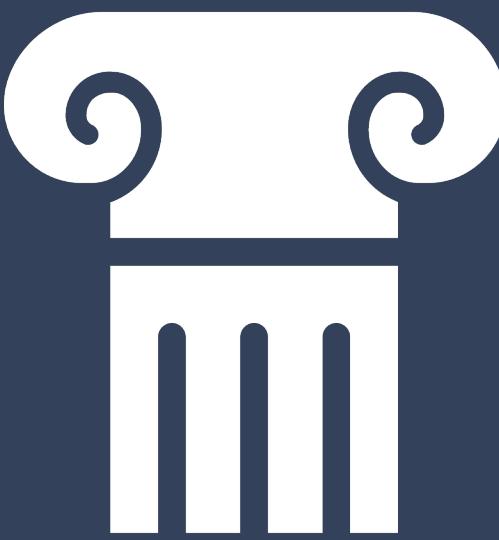


2.  A  B  C  D  E
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46.  A  B  C  D  E
47.  A  B  C  D  E
48.  A  B  C  D  E
49.  A  B  C  D  E

# Great Developer Experience



Onboarding curve



Tooling ecosystem



Awareness & Education



# ONBOARDING

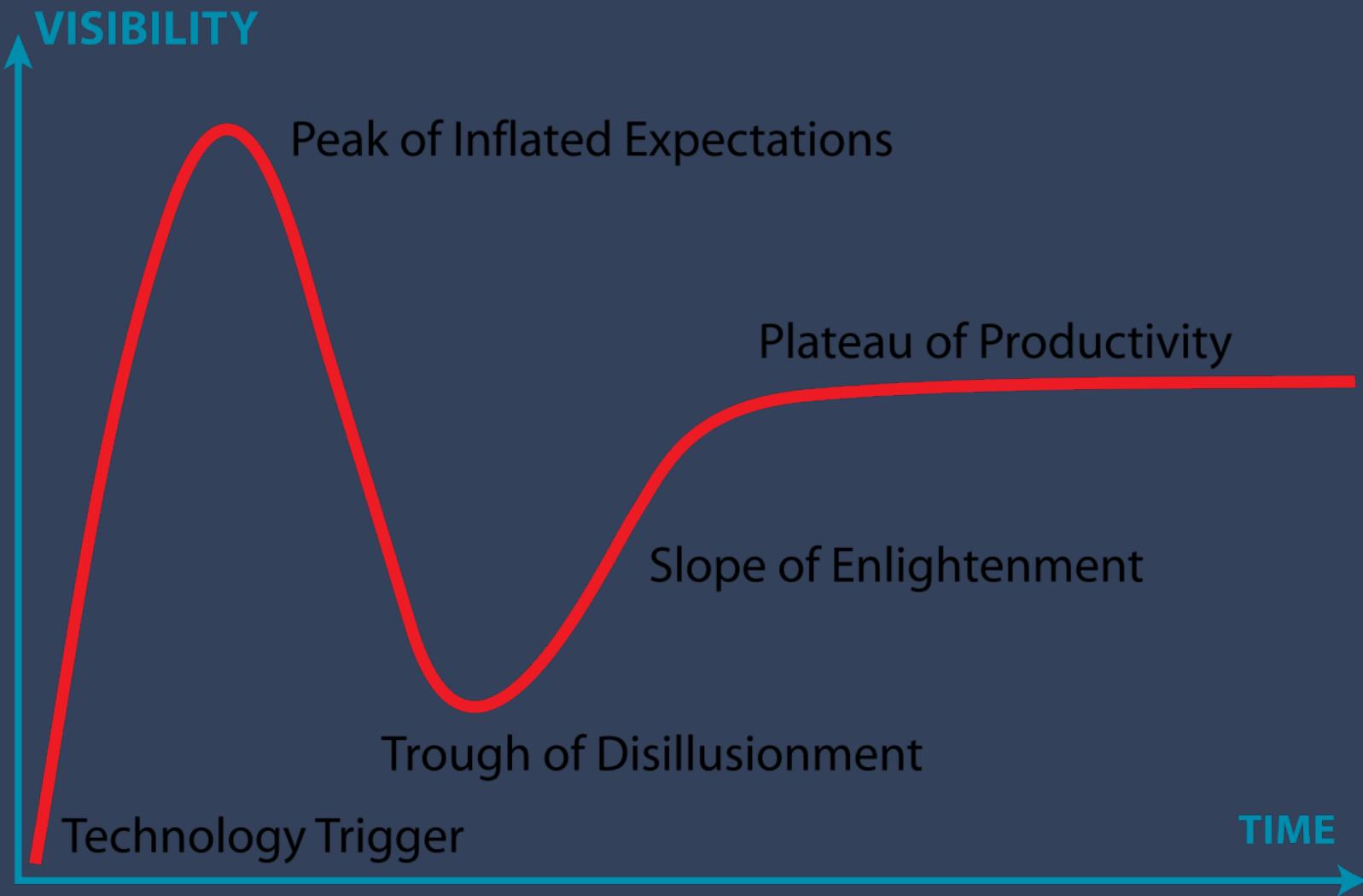
Language	Core	Browser	WASI	Spin SDK
JavaScript	✓	✓	✗	✓
Python	✓	✗	✓	✗
Java	✓	✓	✓	✗
PHP	✓	✓	✓	✗
CSS	N/A	N/A	N/A	N/A
C# and .NET	✓	✓	✓	✓
C++	✓	✓	✓	✗
TypeScript	✓	✗	✗	✓
Ruby	✓	✓	✓	✗
C	✓	✓	✓	✗
Swift	✓	✓	✓	✗
R	✗	✓	✗	✗
Objective-C	?	✗	✗	✗
Shell	N/A	N/A	N/A	N/A
Scala (JVM)	✓	✓	✓	✗
Scala (native)	✗	✗	✗	✗
Go	✓	✓	✓	✓
PowerShell	✗	✗	✗	✗
Kotlin (JVM)	✓	✓	✓	✗
Kotlin (Native)	✗	✓	✗	✗
Rust	✓	✓	✓	✓

Source: <https://www.fermyon.com/wasm-languages/webassembly-language-support>

# Tooling ecosystem



**DO YOU HAVE TIME TO TALK ABOUT  
WEBASSEMBLY**





# Welcome + Opening Remarks

*Kelsey Hightower, Google*

<https://youtu.be/wZQikdoAG1I>



# The Component Model



Thank you!