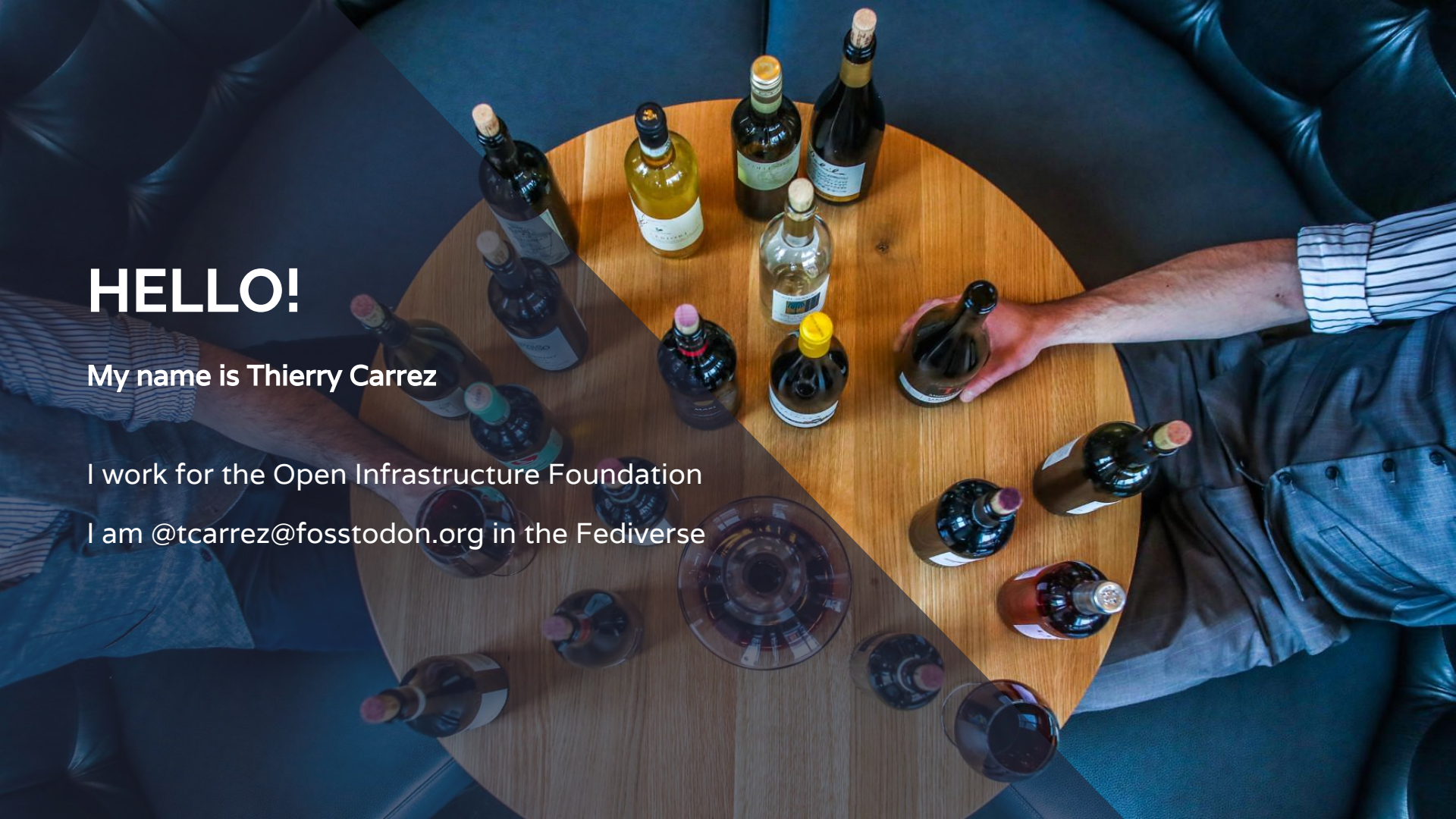
THE ROLE OF OPEN INFRASTRUCTURE IN DIGITAL SOVEREIGNTY



HELLO!

My name is Thierry Carrez

I work for the Open Infrastructure Foundation

I am @tcarrez@fosstodon.org in the Fediverse

DIGITAL SOVEREIGNTY

WHY IT MATTERS, AND HOW TO ENABLE IT

SOFTWARE IS
EATING THE WORLD

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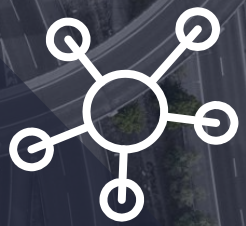
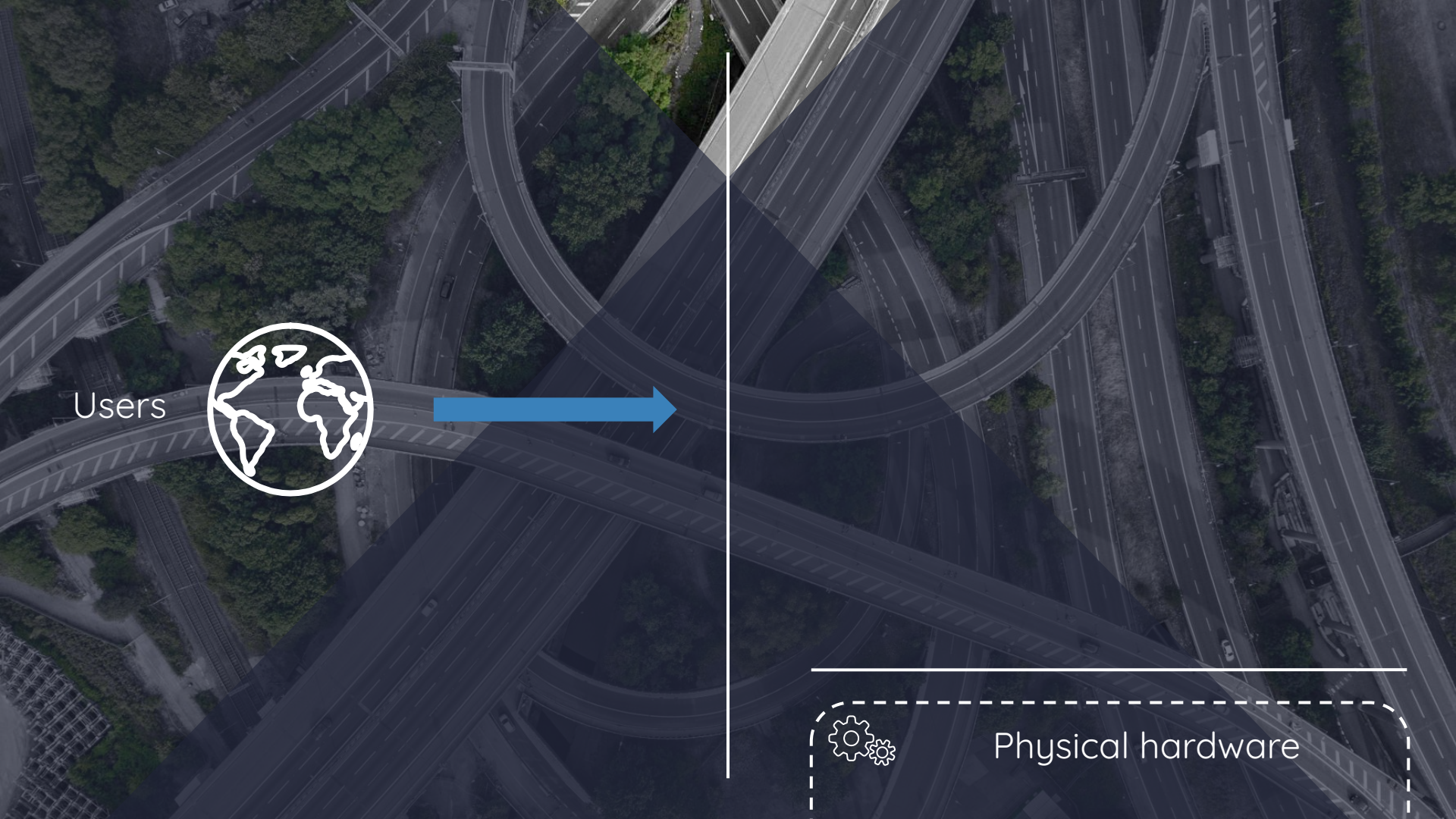
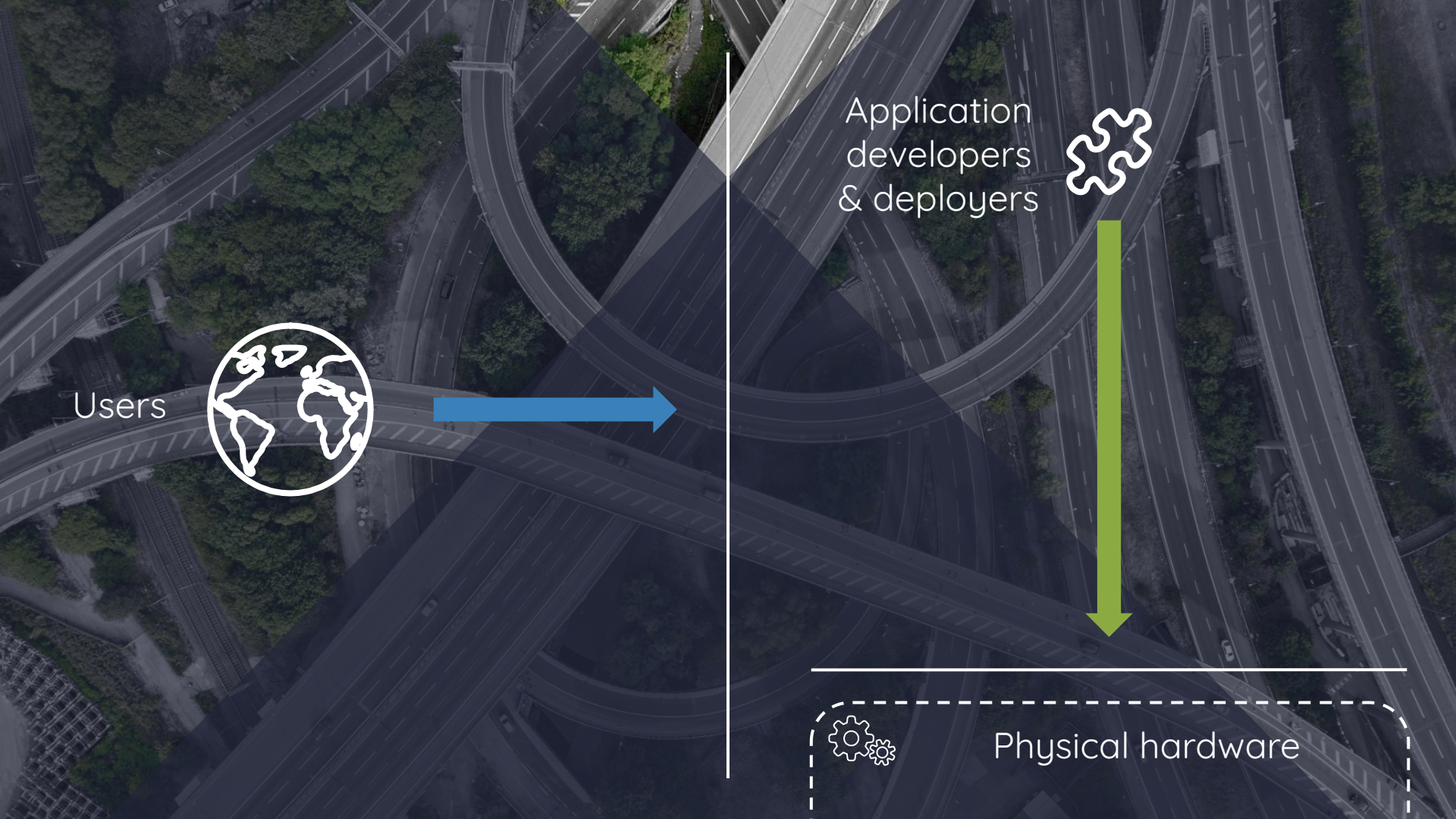
EATING THE WORLD
- Disrupt or be disrupted

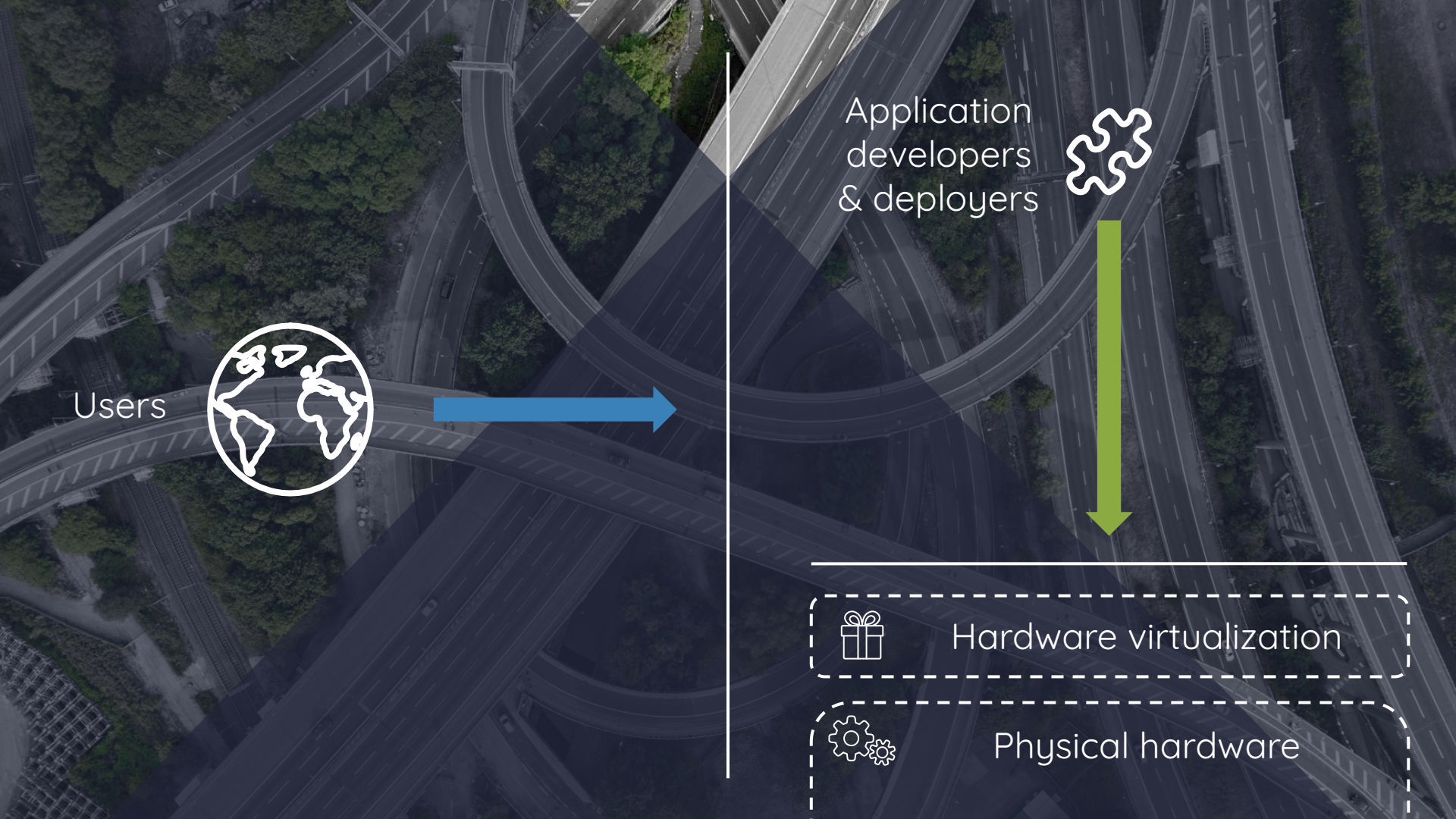
Users

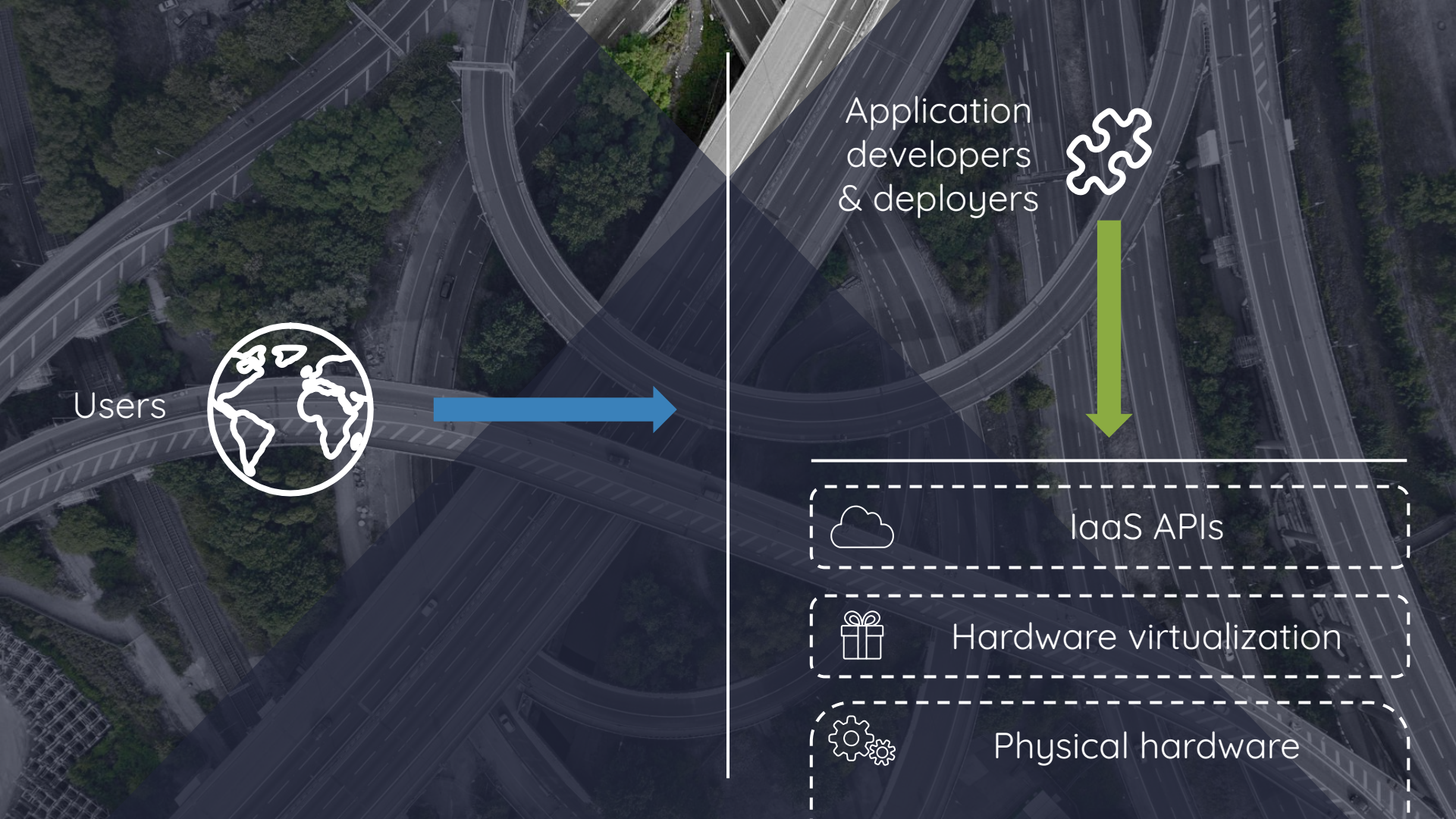
Applications

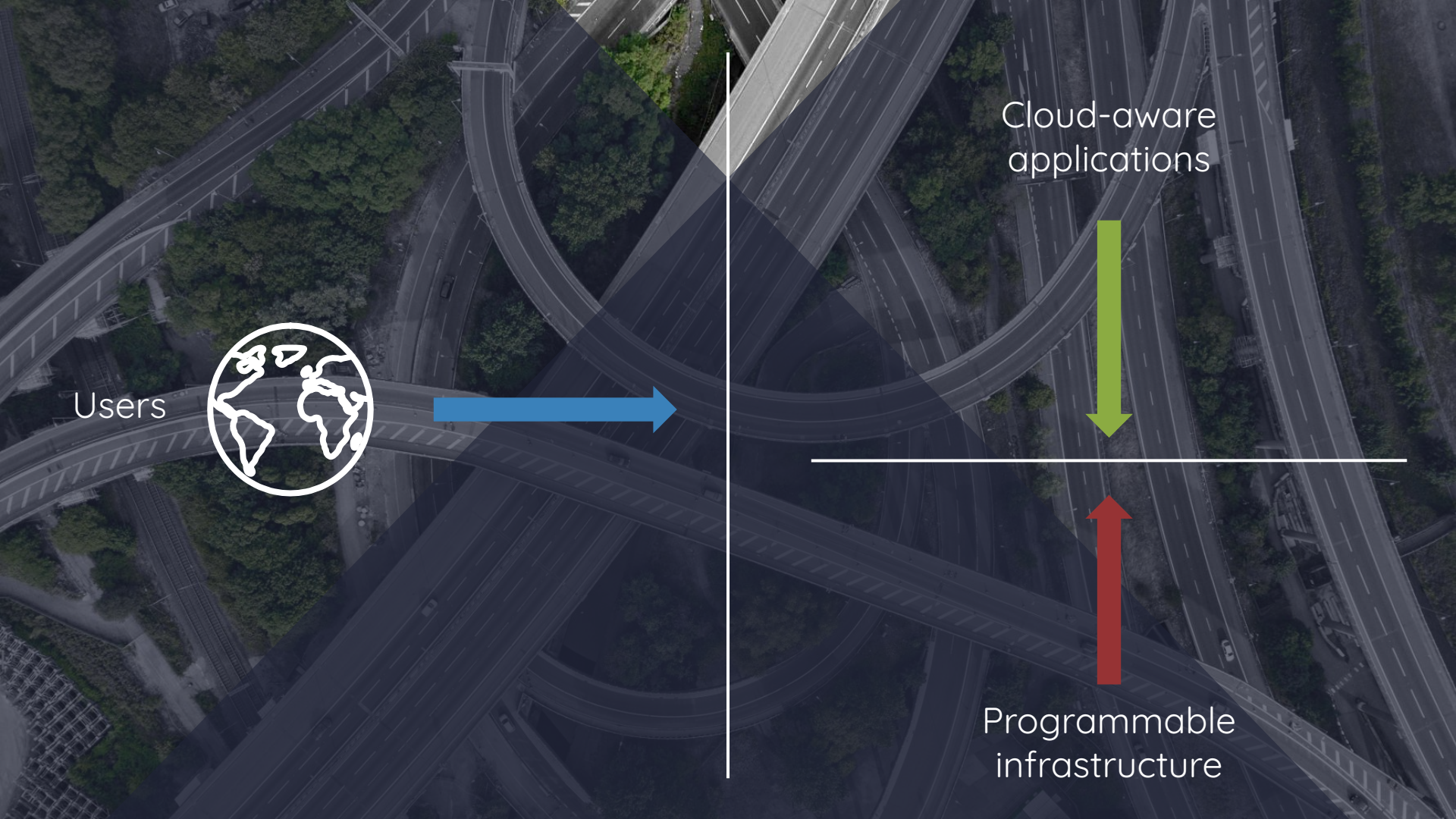



Users
Physical hardware


Users
Application
developers
& deployers
Physical hardware


Users
Application
developers
& deployers
Hardware virtualization
Physical hardware


Users
Application developers & deployers
IaaS APIs
Hardware virtualization
Physical hardware


Users
Cloud-aware applications
Programmable infrastructure

SOFTWARE IS
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- Disrupt or be disrupted
- Programmable infrastructure is necessary to get the desired velocity
- Maintaining in-house programmable infrastructure is hard
- Hyperscale clouds are American or Chinese

THE EUROPEAN CHALLENGE

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- Data is the basic resource of the 21st century
- How to control access to it?
- How to reduce our geopolitical vulnerability?
- How to enforce progressive privacy laws?
- How to tap into a vibrant ecosystem with no giant?

INITIAL RESPONSE

➔ Mandating locally-operated systems

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- ➔ Describing and cataloguing service properties (Gaia-X)

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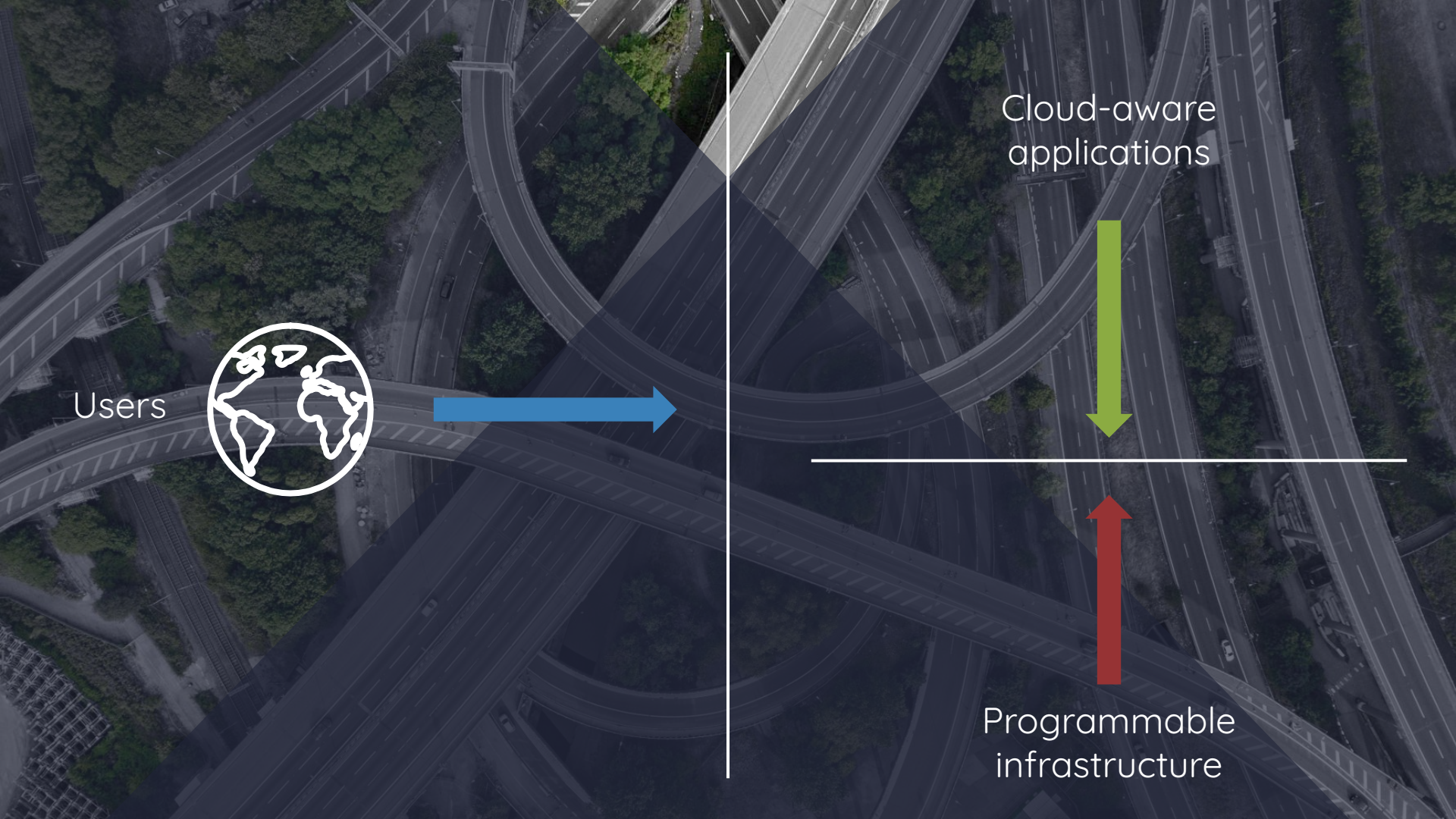
- ➔ Describing and cataloguing service properties (Gaia-X)
- ➔ Those were all easily co-opted by hyperscalers

OPEN INFRASTRUCTURE

WHAT IT IS, AND WHY IT CAN HELP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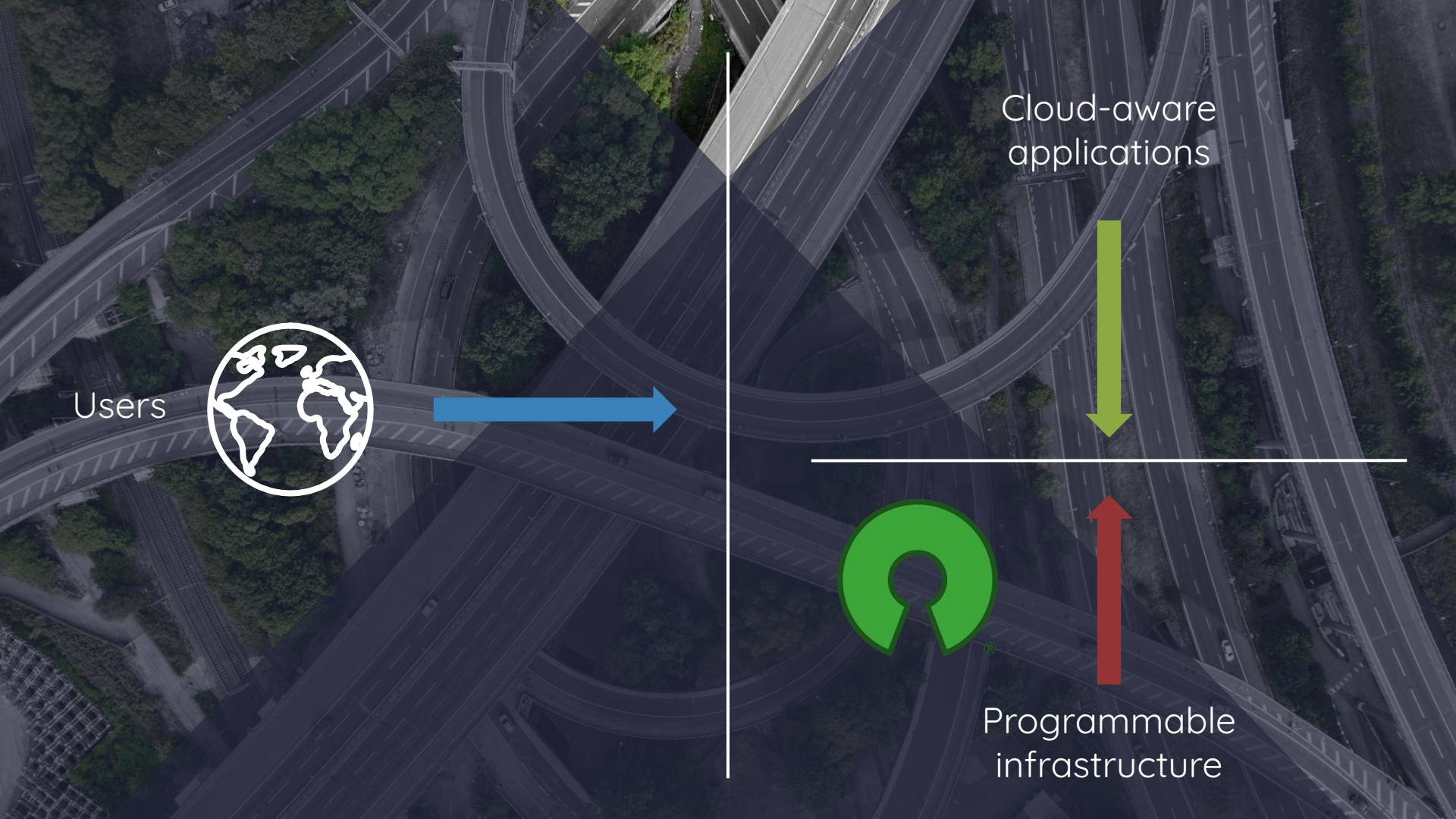
Users
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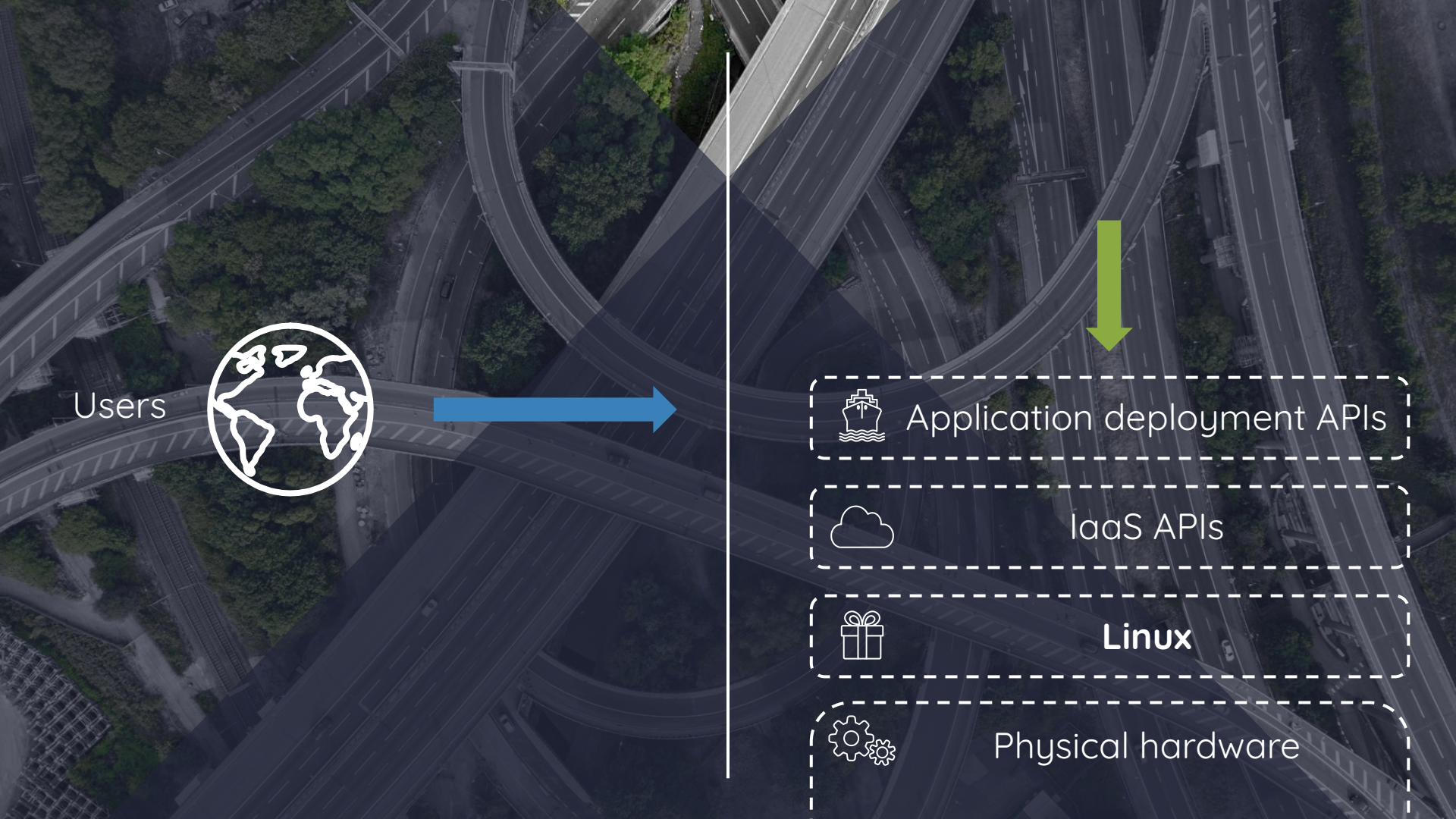
Users

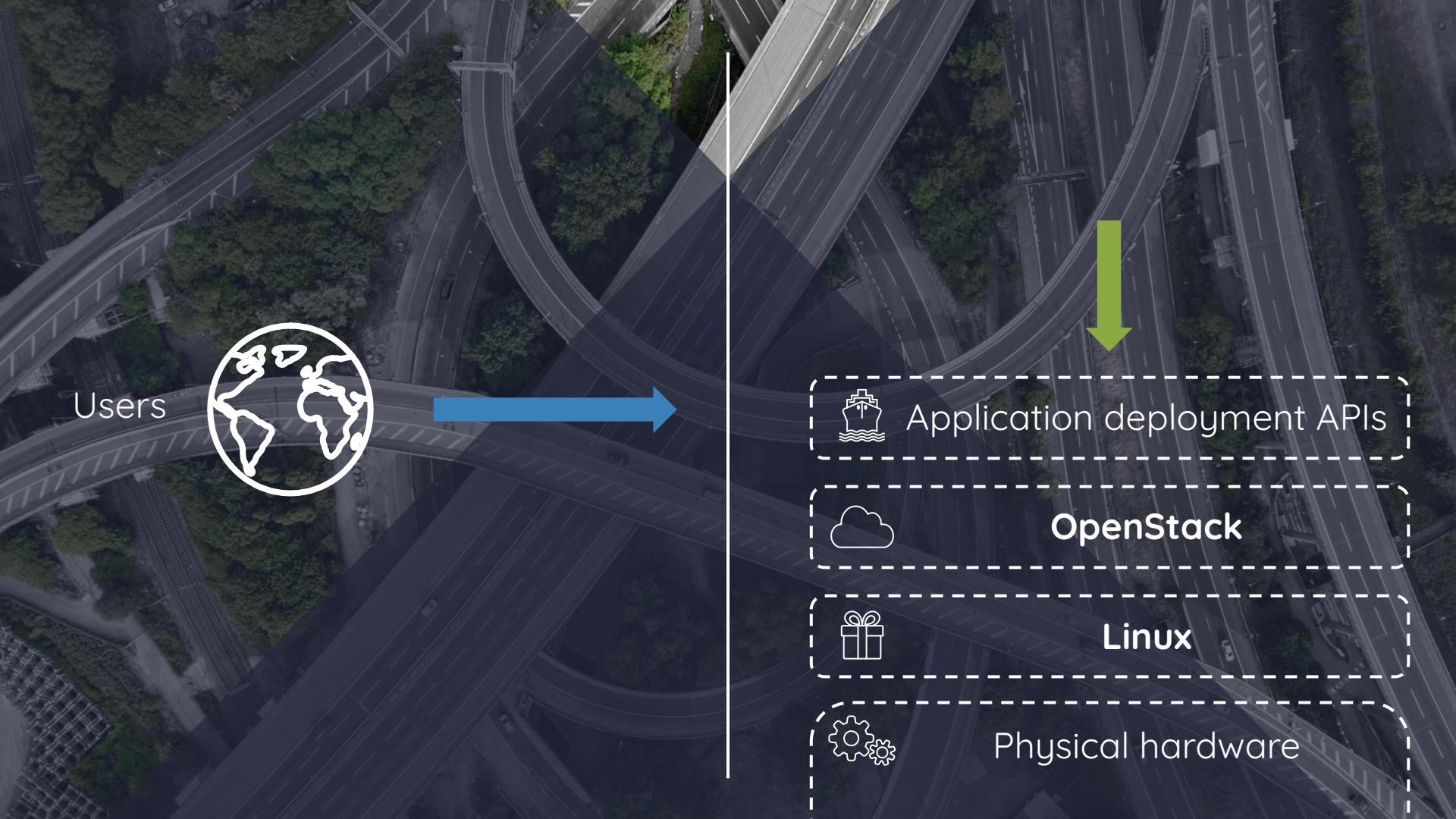
Application deployment APIs

IaaS APIs

Hardware virtualization

Physical hardware


Users
Application deployment APIs
IaaS APIs
Linux
Physical hardware


Users
Application deployment APIs
OpenStack
Linux
Physical hardware

Users
Kubernetes
OpenStack
Linux
Physical hardware

Users

LOKI

Kubernetes

OpenStack

Linux

Physical hardware

MAKING
INFRASTRUCTURE
TECHNOLOGY
ACCESSIBLE TO ALL

PERMISSIONLESS INNOVATION

INDEPENDENCE

TRANSPARENCY

INTEROPERABILITY

cleura

OVHcloud

orange™ Business Services

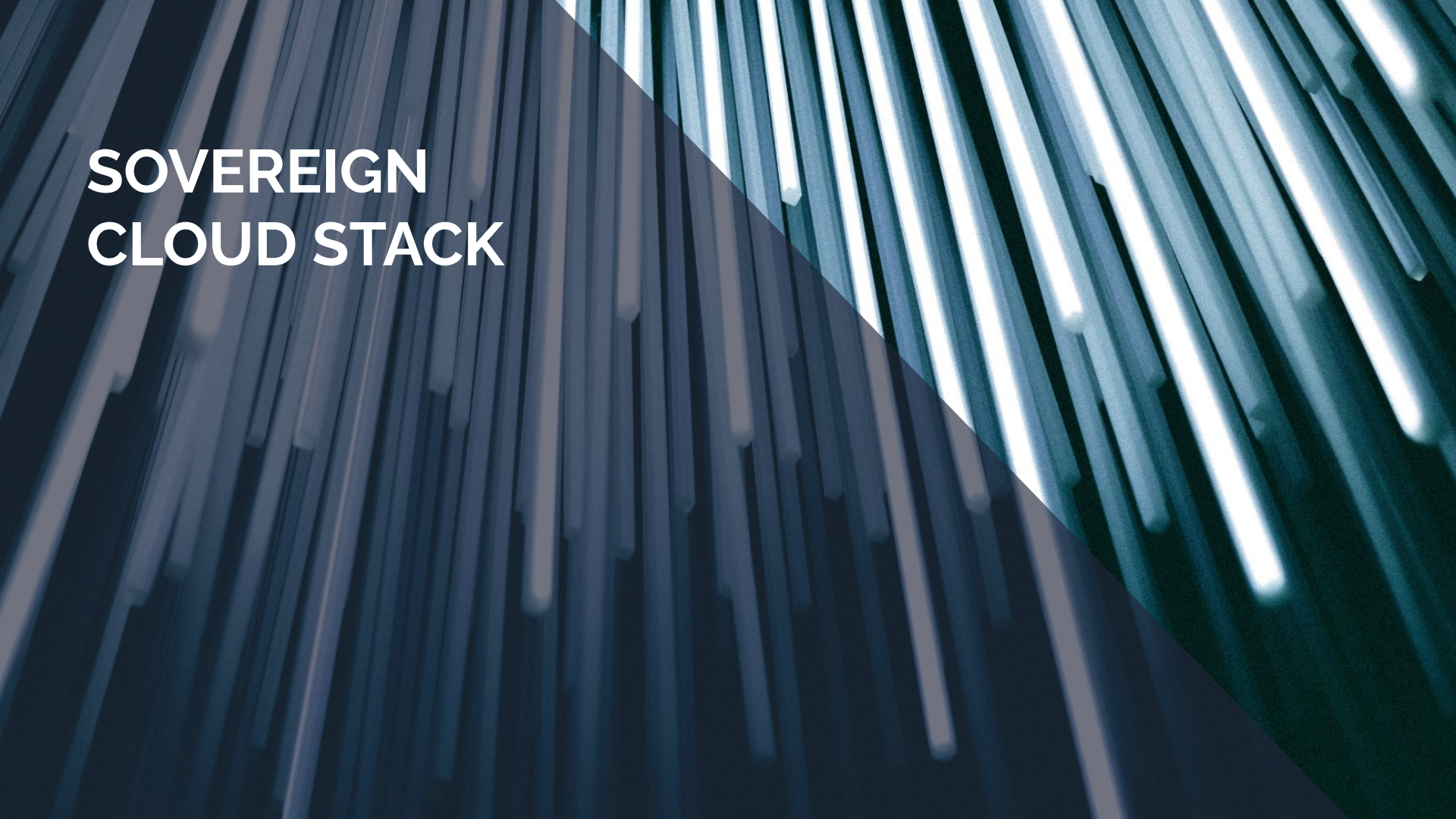
binero

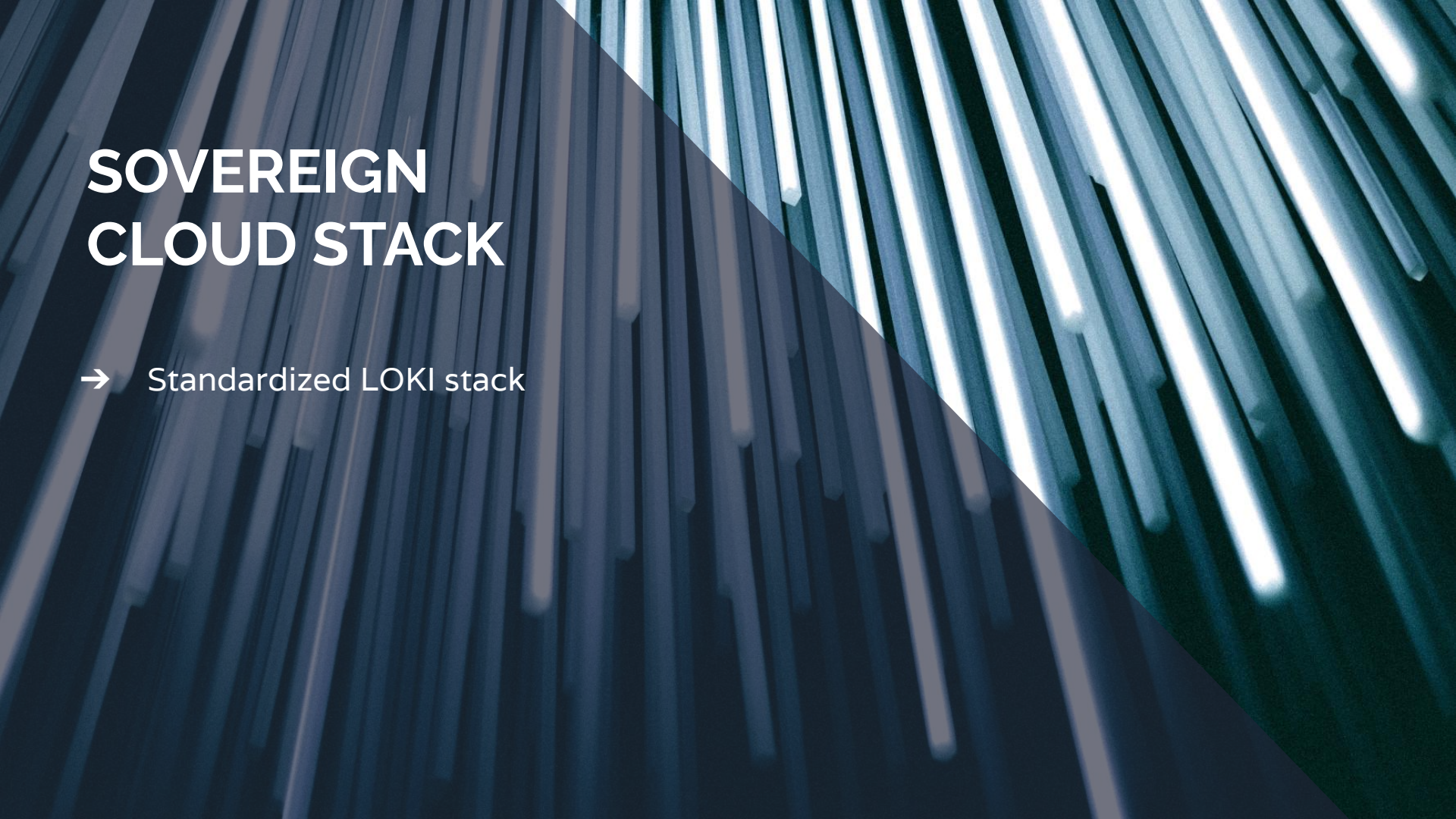
exaion GROUPE EDF

infomaniak

CloudFerro

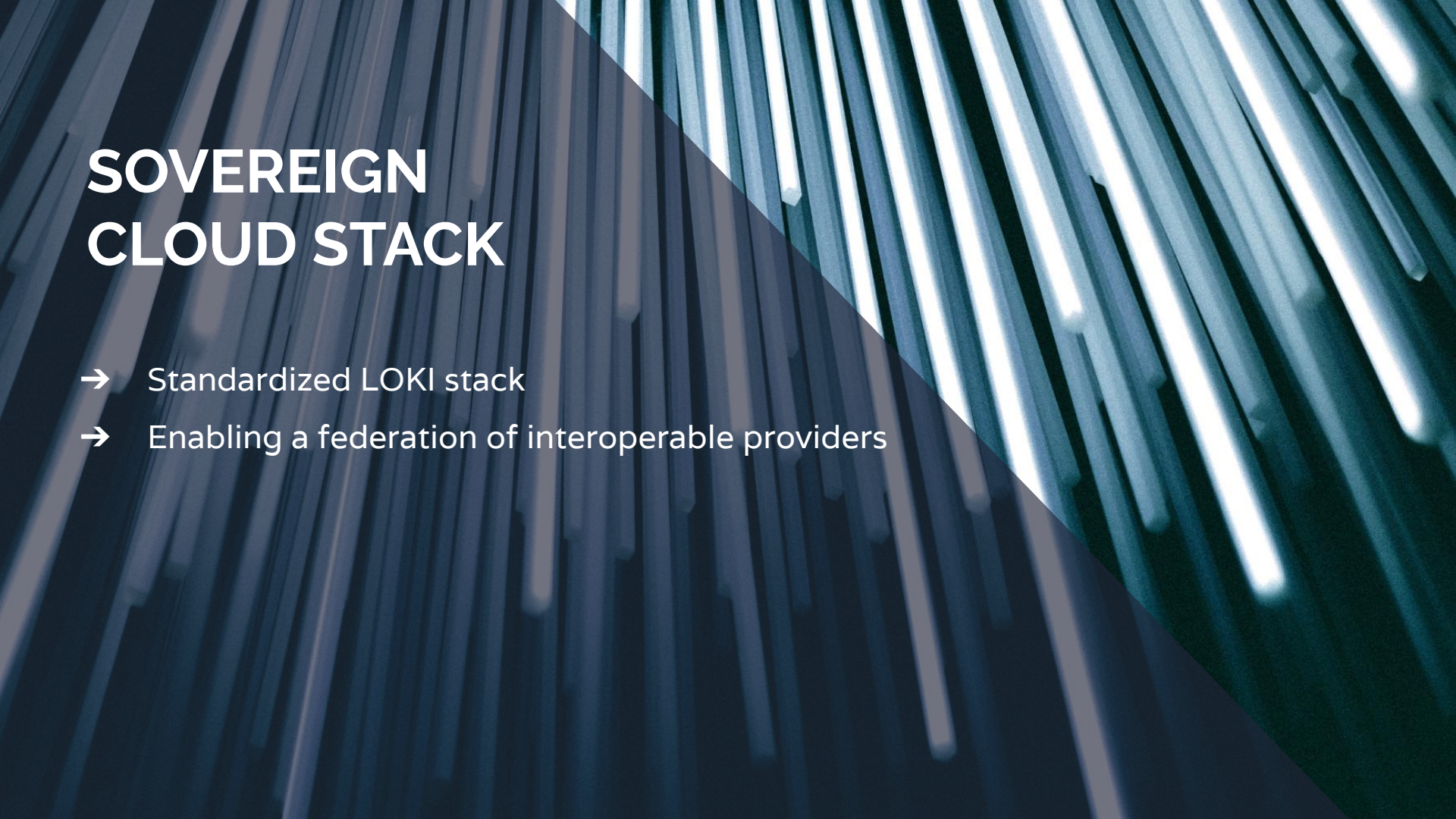
elastx


SOVEREIGN
CLOUD STACK



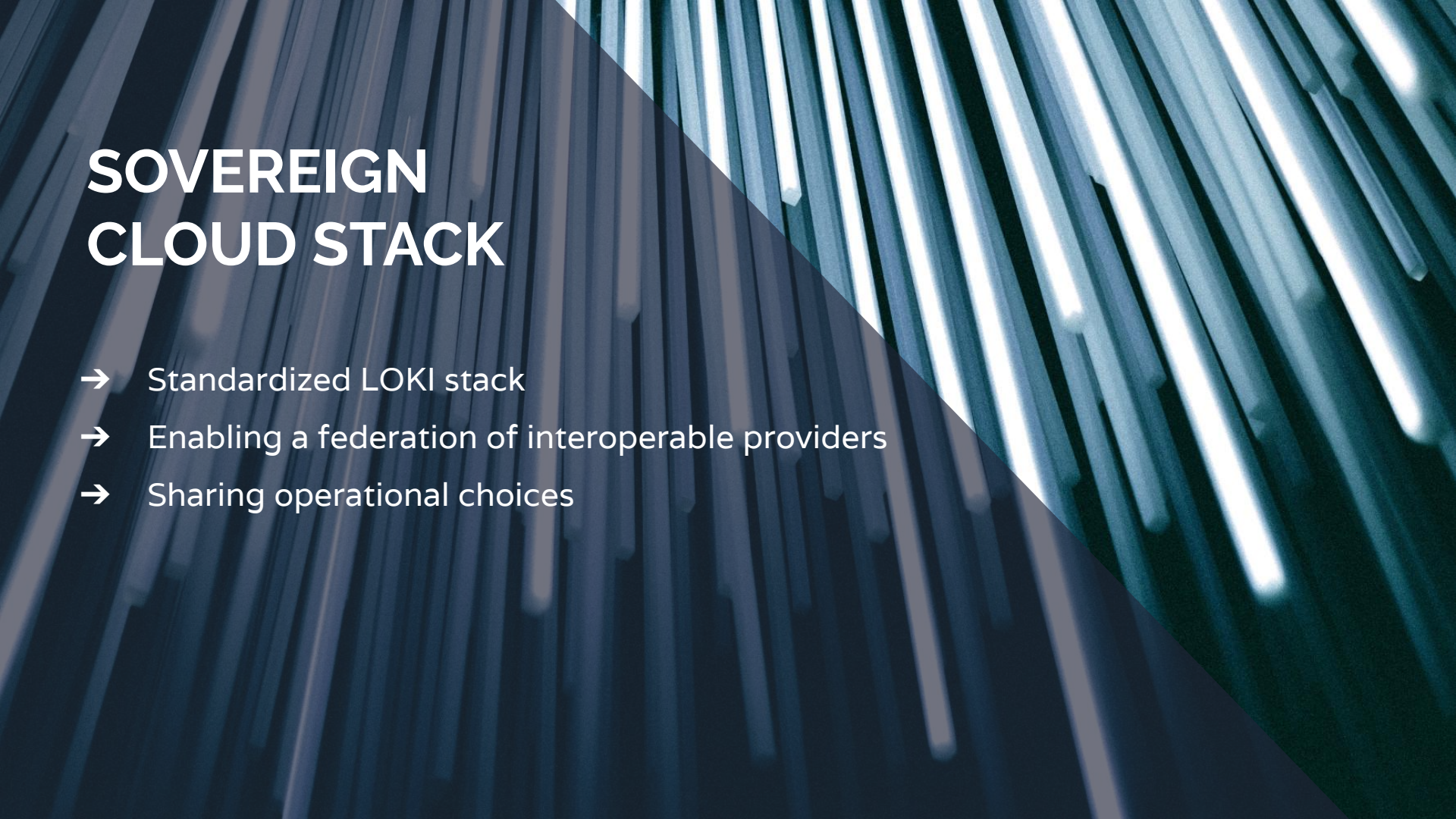
SOVEREIGN CLOUD STACK

- Standardized LOKI stack



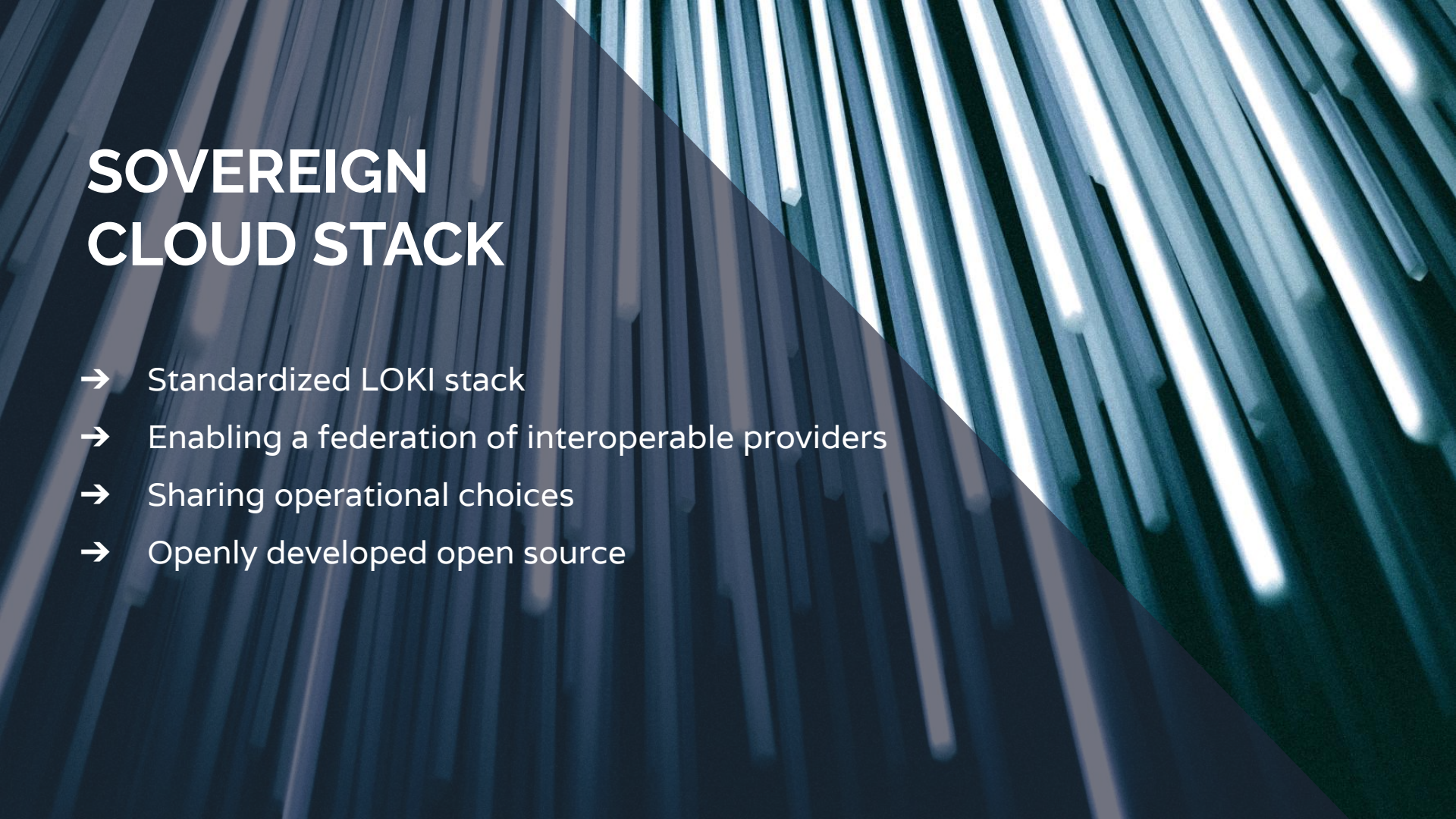
SOVEREIGN CLOUD STACK

- ➔ Standardized LOKI stack
- ➔ Enabling a federation of interoperable providers



SOVEREIGN CLOUD STACK

- ➔ Standardized LOKI stack
- ➔ Enabling a federation of interoperable providers
- ➔ Sharing operational choices



SOVEREIGN CLOUD STACK

- ➔ Standardized LOKI stack
- ➔ Enabling a federation of interoperable providers
- ➔ Sharing operational choices
- ➔ Openly developed open source

SUMMARY

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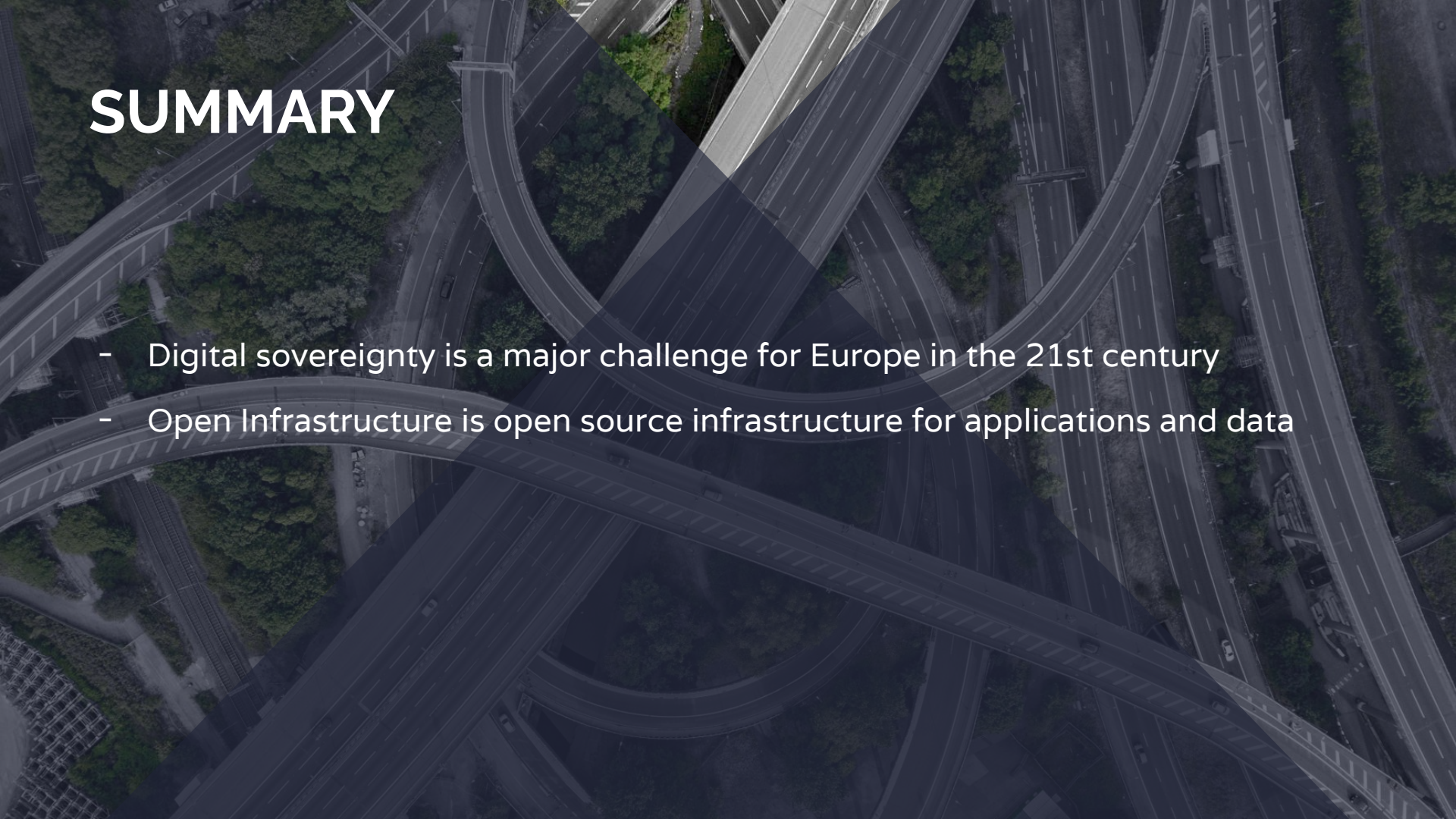
- Digital sovereignty is a major challenge for Europe in the 21st century



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- Open Infrastructure is open source infrastructure for applications and data
- OpenInfra enables independence, transparency and interoperability
- Have a look at OpenInfra-powered providers and Sovereign Cloud Stack

THANKS!

Learn more at:

https://openinfra.dev
https://scs.community

Questions?

You can reach me at @tcarrez@fosstodon.org in the Fediverse
Or email me at thierry@openinfra.dev

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