Capturing the $34 billion market: how can telcos drive developer adoption of network APIs?

STL Partners webinar

26th September 2024

In partnership with:



Red Hat

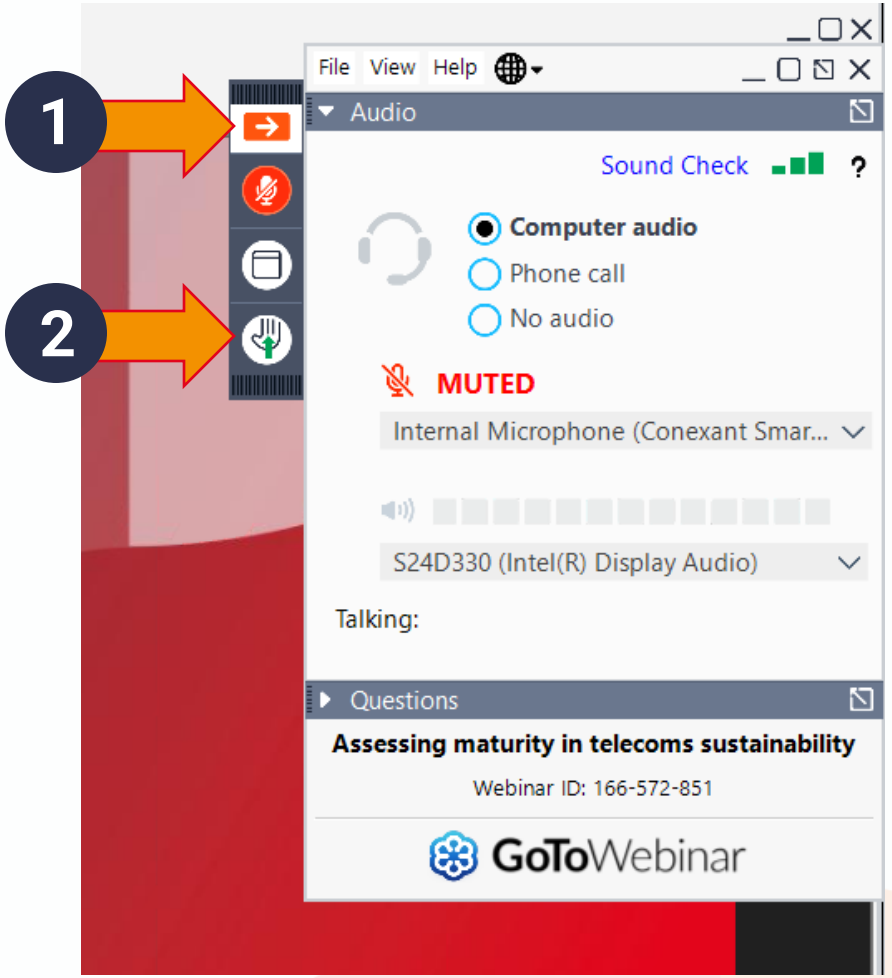
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Agenda

1. Introduction and housekeeping
2. STL presentation: How can telcos drive developer adoption of network APIs?
3. Red Hat presentation: Building an ecosystem for network APIs
4. Panel discussion and Q&A
5. Wrap up

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- We’ll send you the slides and a recording shortly after the session, please do share with colleagues



Our speakers



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HANEN GARCIA

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Red Hat



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ANUP CHATHOTH

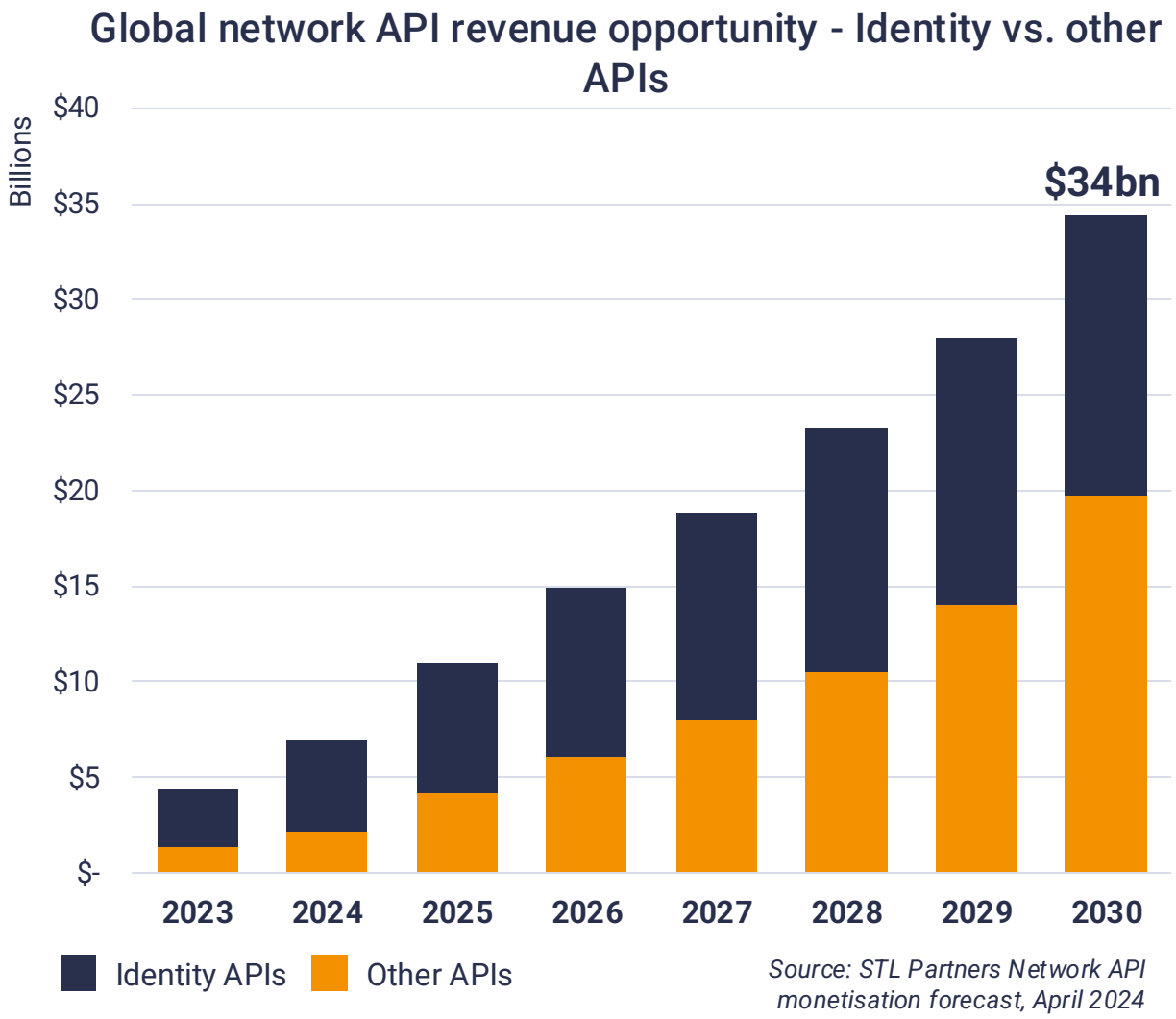
Director, DevEdge - T-Mobile's API monetization platform

T-Mobile

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Across the industry, momentum continues to build on the network API opportunity



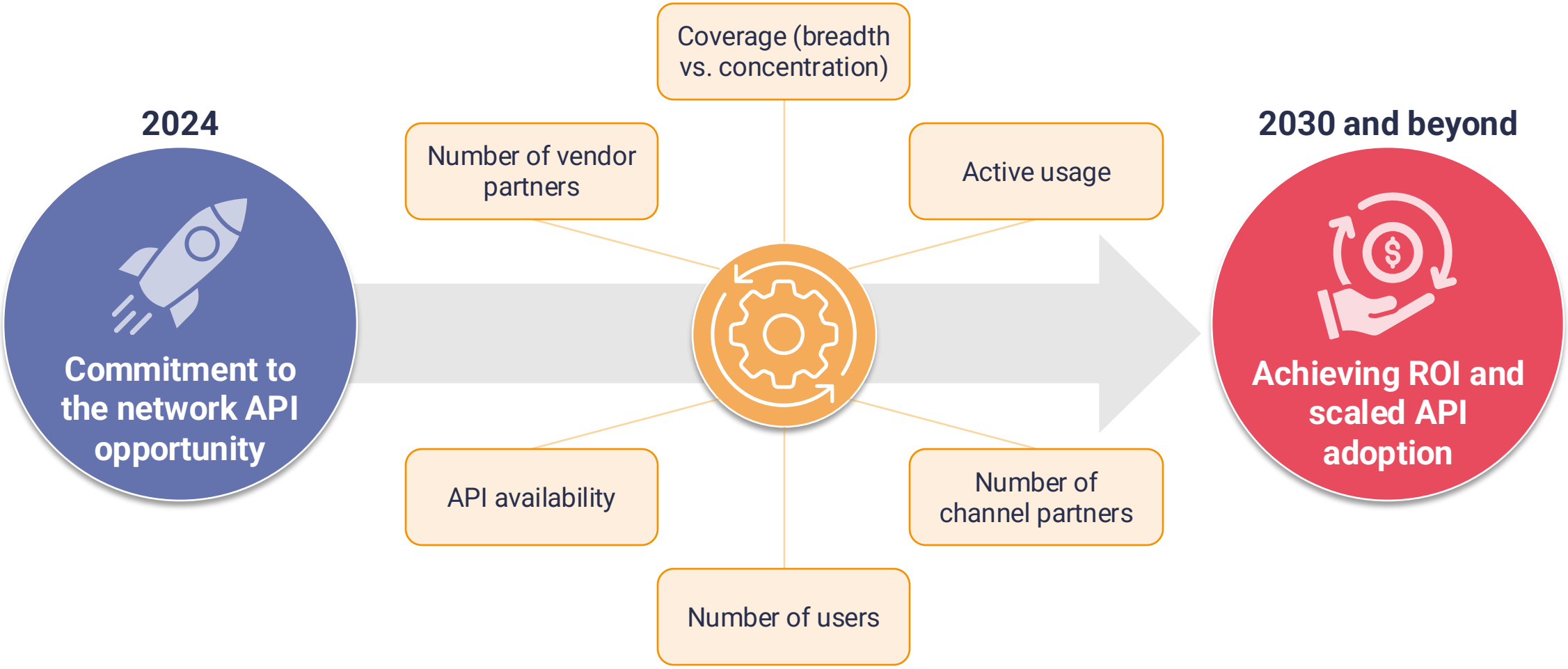
Source: STL Partners Network API monetisation forecast, April 2024

Over 50 operators have signed up to GSMA's Open Gateway*

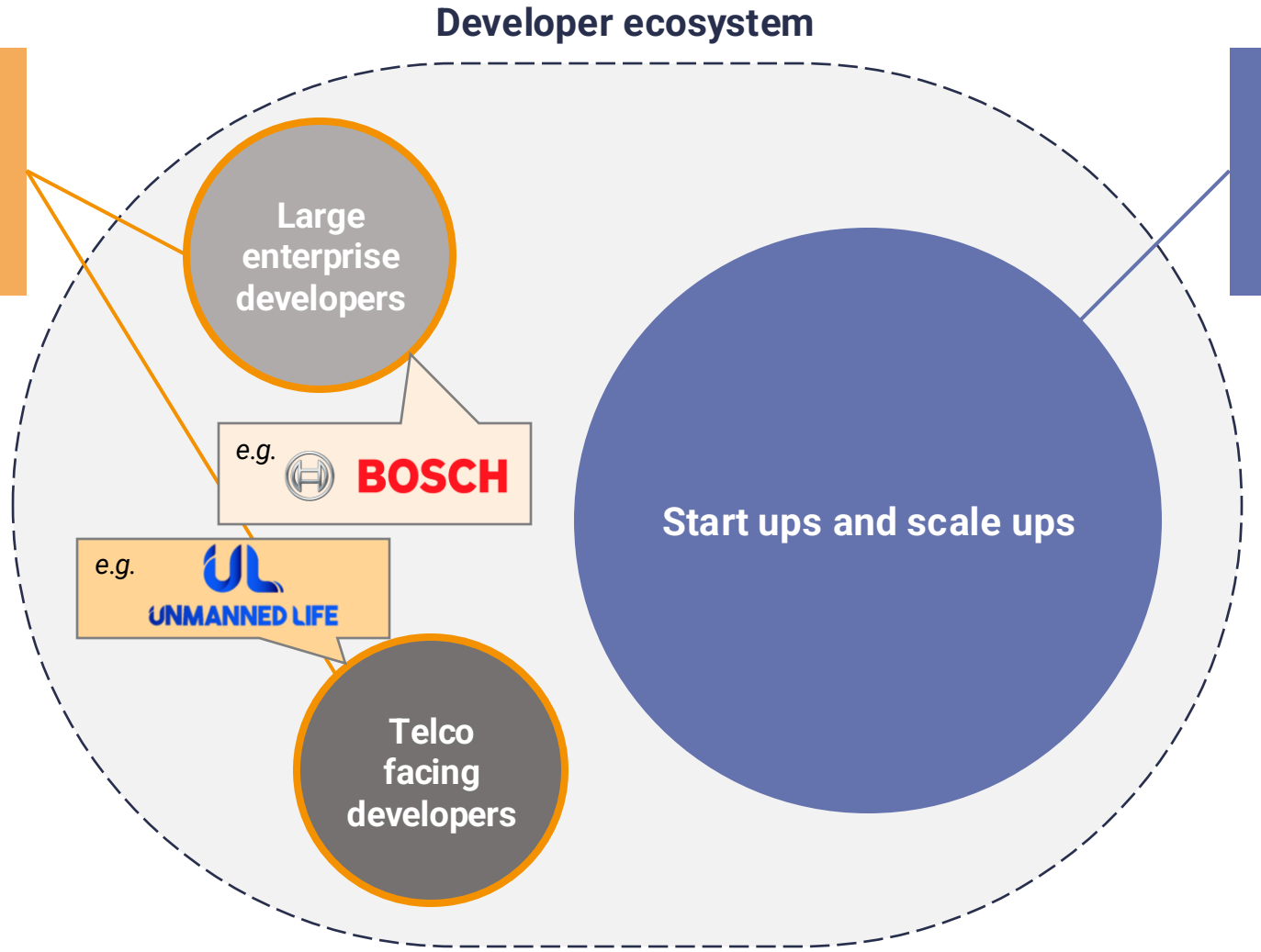
Recent announcement: Twelve leading operators forming joint venture with Ericsson

*non-exhaustive

Scaling network APIs is not just about revenues, telcos must consider other leading indicators that help measure 'success'



The developer ecosystem is diverse; telcos must address the specific challenges and pain points faced by different groups



Aware of network APIs and see the benefits for their applications

Understand network APIs to be an enabler for more advanced applications e.g. drones

Familiar with network APIs due to in-house development capability or 1-to-1 telco engagement

Focus on innovation e.g. understanding new use cases, commercial models

Require greater education to understand network APIs and its capabilities

Used to "best efforts" connectivity and are not aware of the concept of network APIs

Lack understanding of the types of network APIs that can enable better application outcomes

Disconnected to the telco and has limited budget and innovation resources

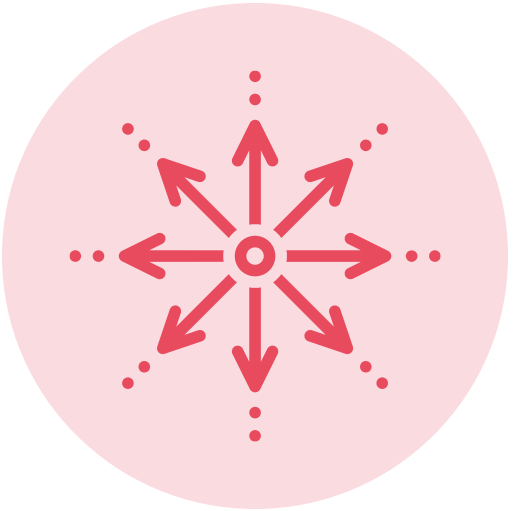
To drive developer demand, telcos must address technical, commercial and GTM barriers for network API adoption



Provide a seamless “developer experience”



Develop a winning commercial and pricing model



Develop a targeted and meaningful distribution channel strategy

Operators should prioritise usability and accessibility, leveraging principles from successful platform players

Simple self-service model

Seamless and intuitive onboarding e.g. one-click set up via portal

Reducing access complexity e.g. via unified API interface

Easy integration

Direct and automated configuration for API calls

Broad compatibility with developer codes and frameworks



Support & enablement

Helpful documentation (e.g. quick start guides) & on-demand support

Provides supporting infrastructure e.g. security mgmt., identity mgmt.

Education & training

Simple, tailored messaging for developers

Embedded developer training on technical API integration

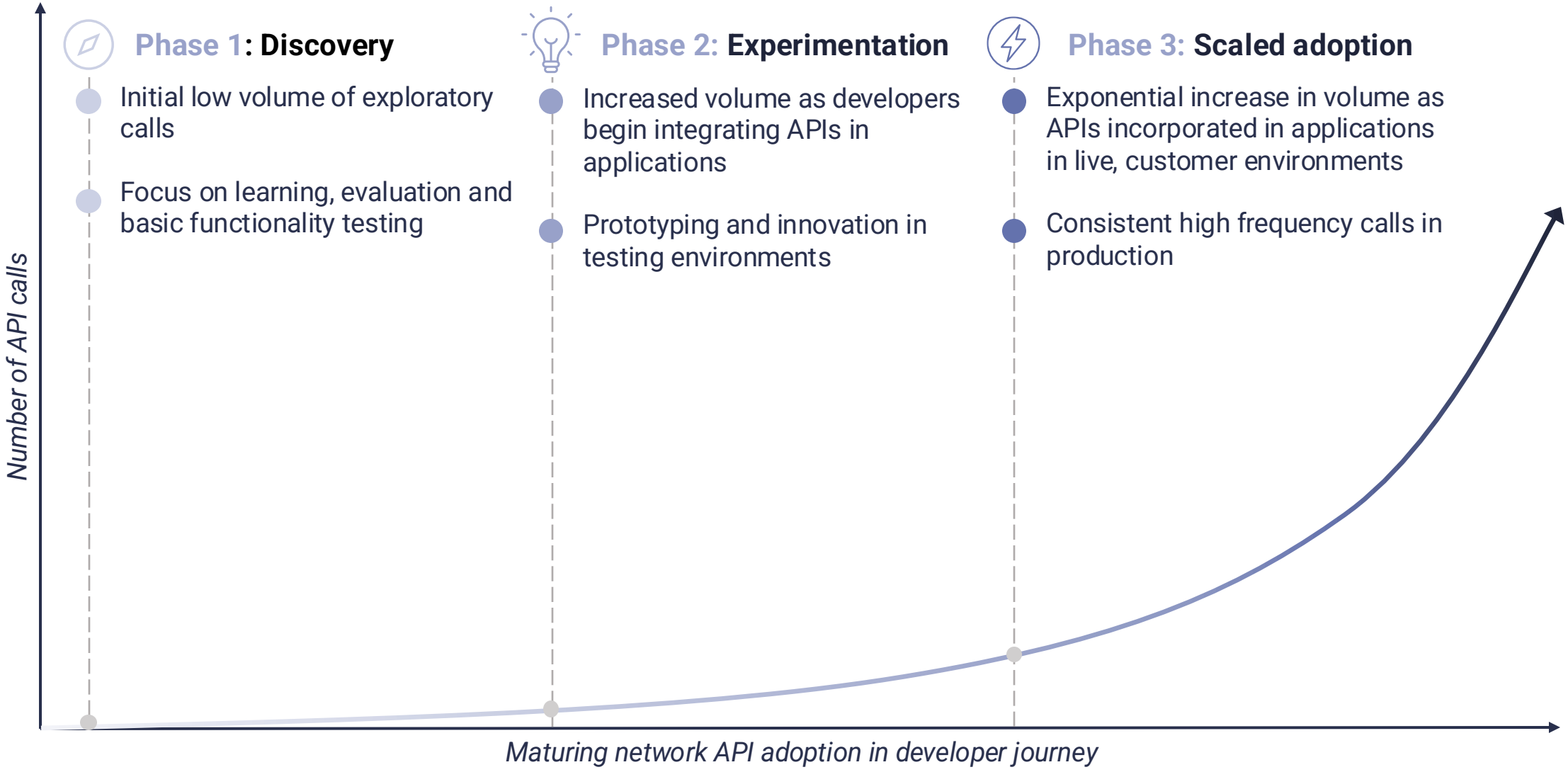
Operators will struggle to justify charging a premium for network APIs in the existing commercial market



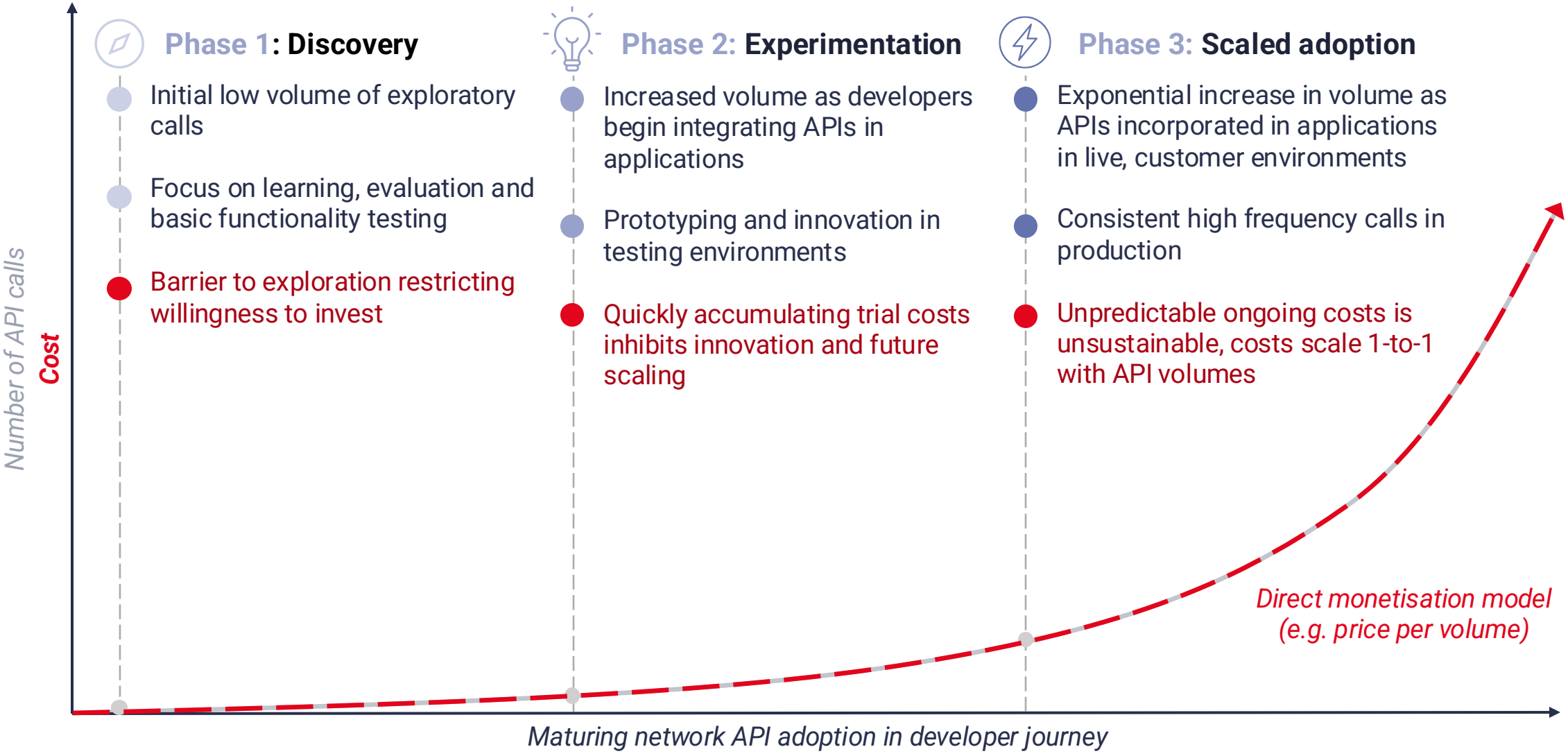
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Existing commercial market	Emerging and future market
Identity	Network performance
Location	Location
	Edge
	Device / IoT
Compete more directly on cost – difficult to justify a premium	Accessing previously black boxed capabilities – may justify premium

Monetisation models cannot scale costs for developers as they scale their adoption



Monetisation models cannot scale costs for developers as they scale their adoption



API providers must consider indirect models which encourage early exploration and long-term adoption

Phase 1: Discovery

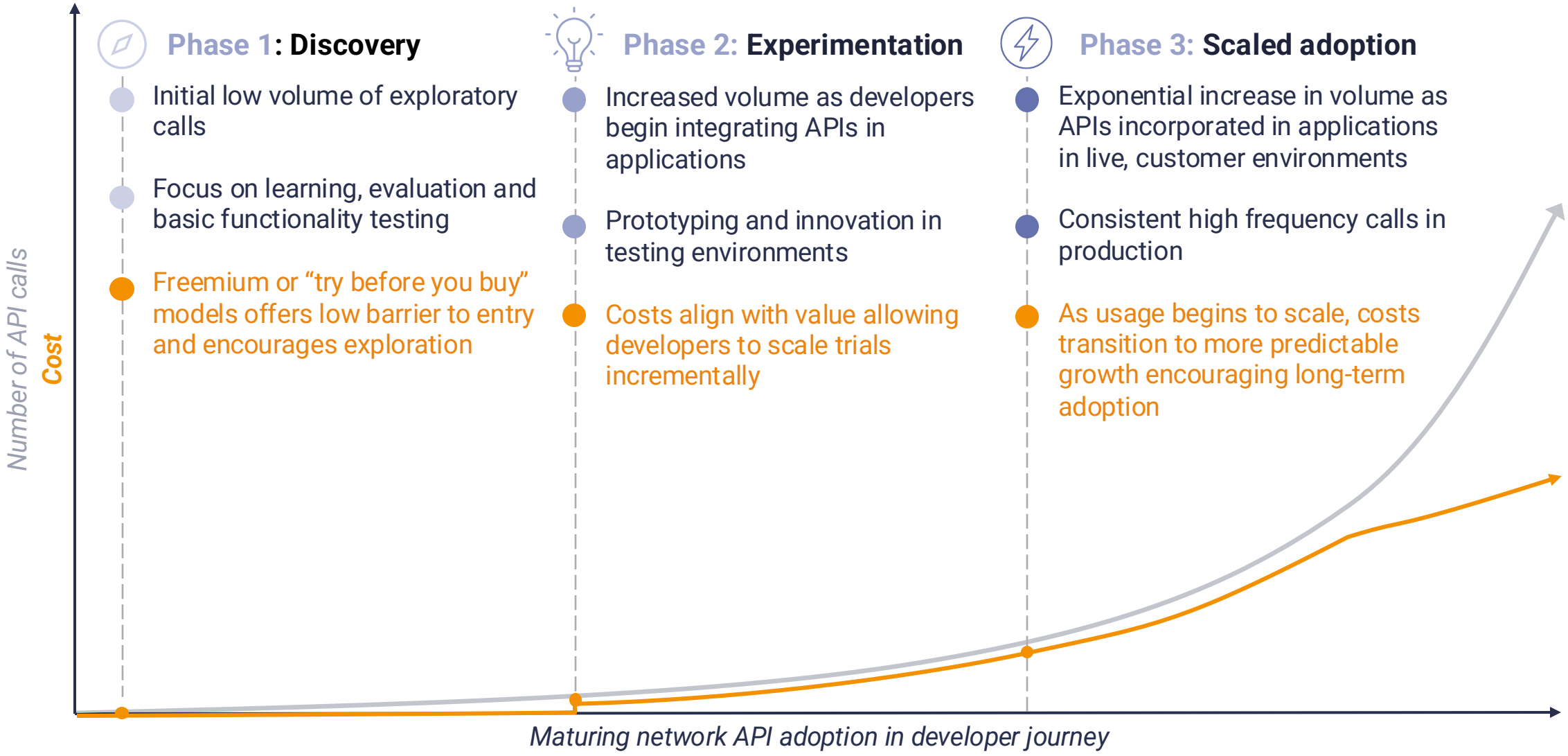
- Initial low volume of exploratory calls
- Focus on learning, evaluation and basic functionality testing
- Freemium or "try before you buy" models offers low barrier to entry and encourages exploration

Phase 2: Experimentation

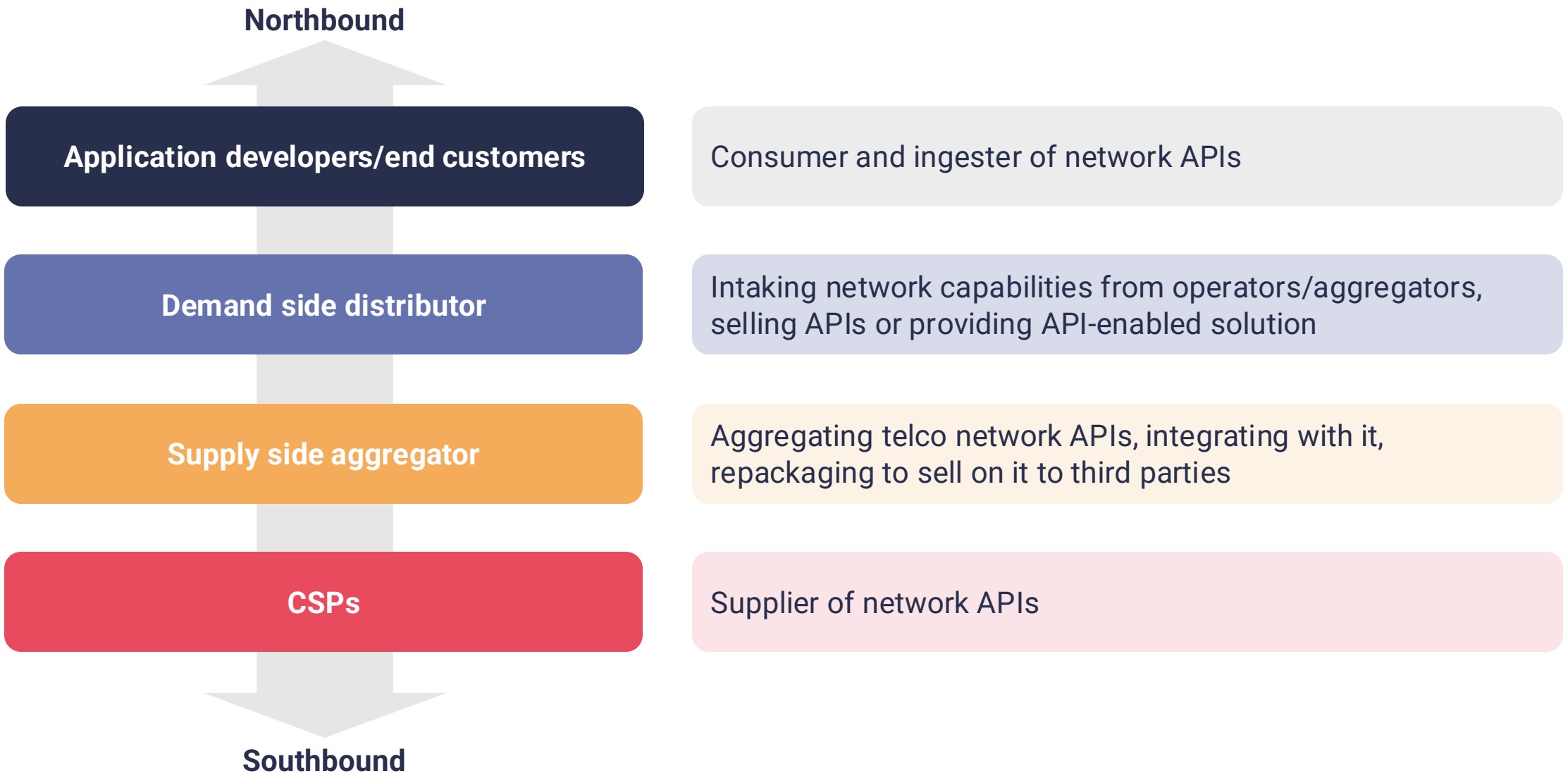
- Increased volume as developers begin integrating APIs in applications
- Prototyping and innovation in testing environments
- Costs align with value allowing developers to scale trials incrementally

Phase 3: Scaled adoption

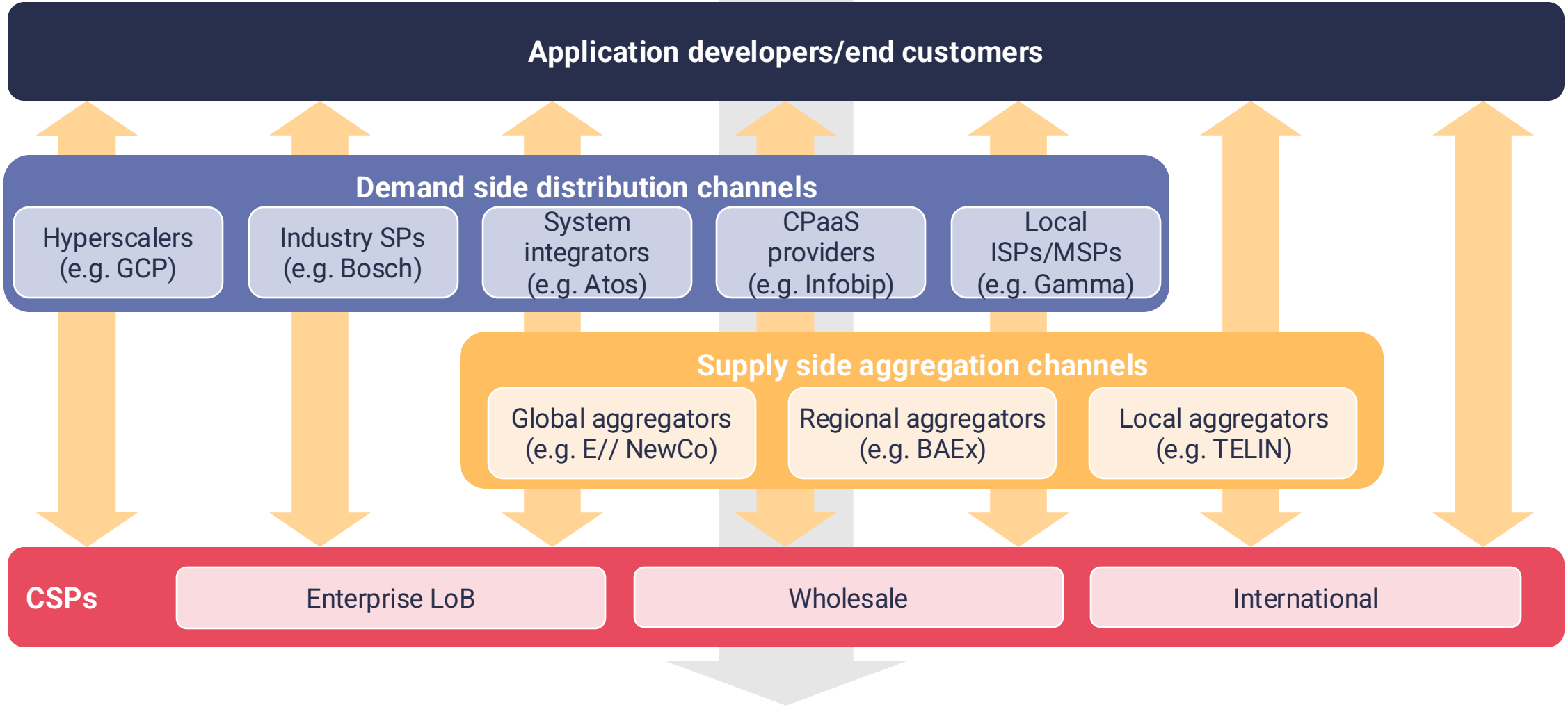
- Exponential increase in volume as APIs incorporated in applications in live, customer environments
- Consistent high frequency calls in production
- As usage begins to scale, costs transition to more predictable growth encouraging long-term adoption



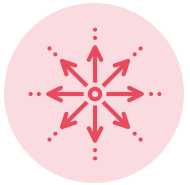
There are four main roles you can play within the network API ecosystem



Telcos will need to use multiple routes to market to increase their distribution reach with developers

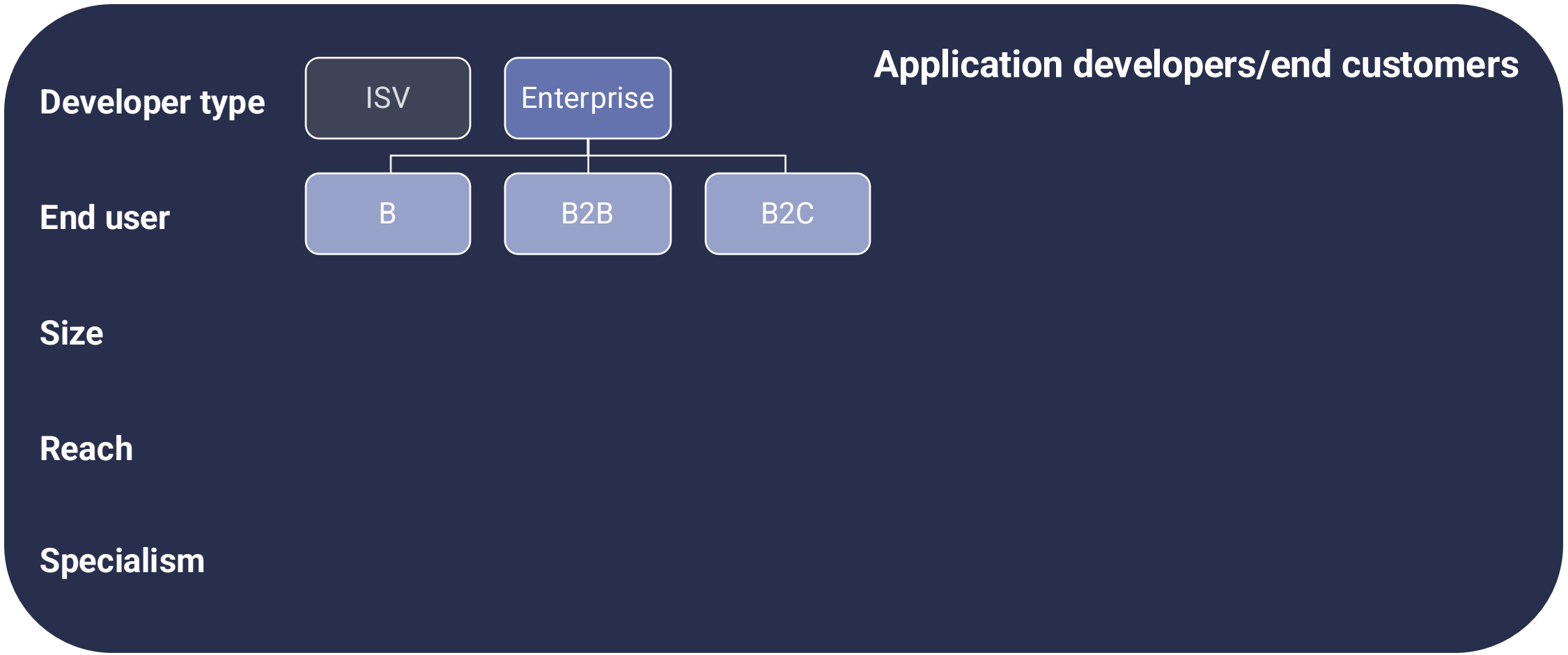


“Application developers” is not a homogenous group – which developers are we trying to target?

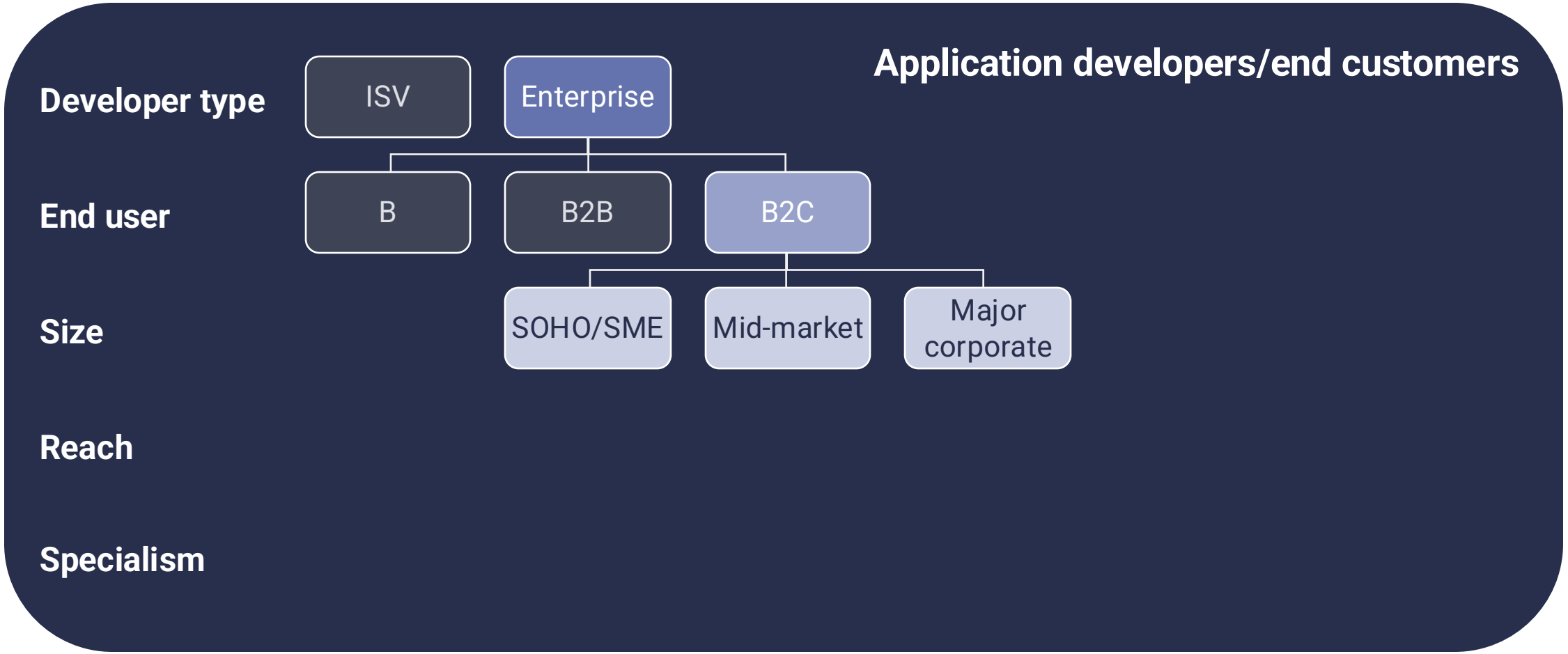


Developer type	ISV	Enterprise	Application developers/end customers
End user			
Size			
Reach			
Specialism			

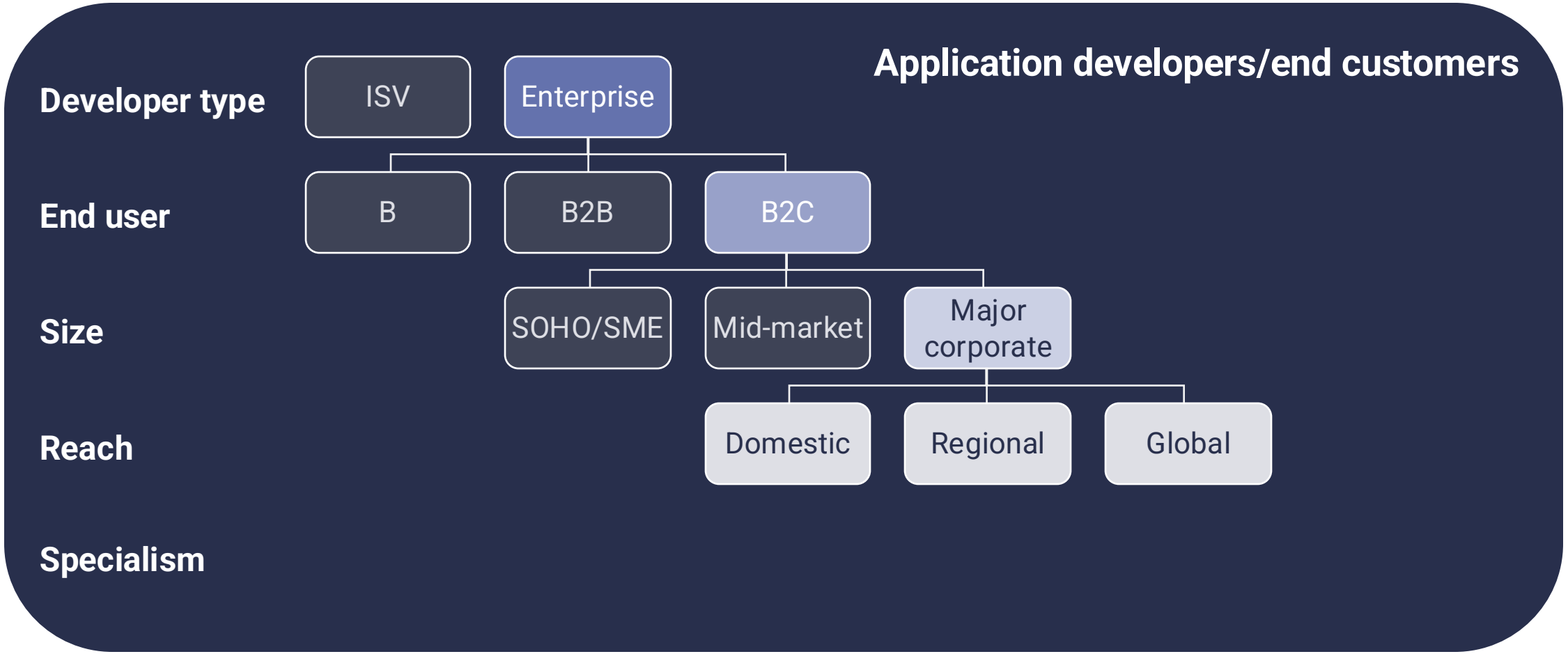
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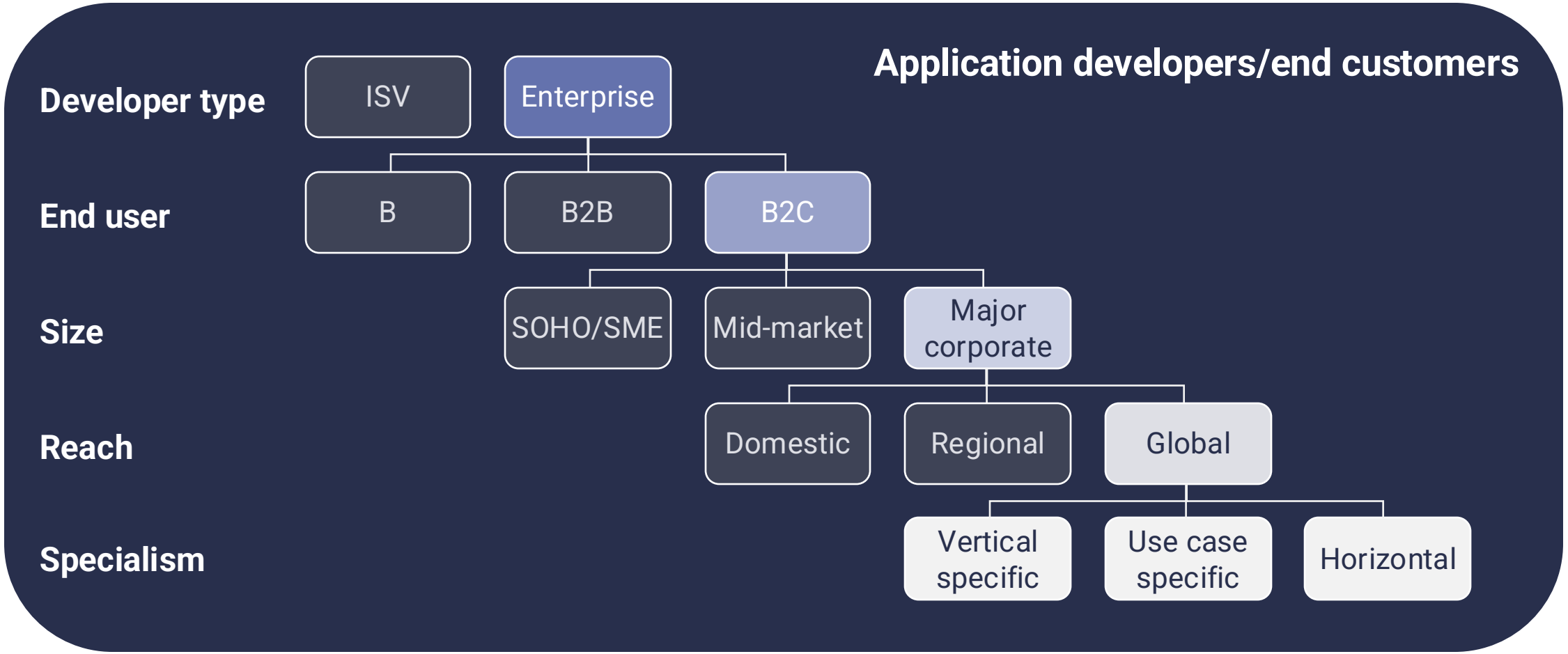
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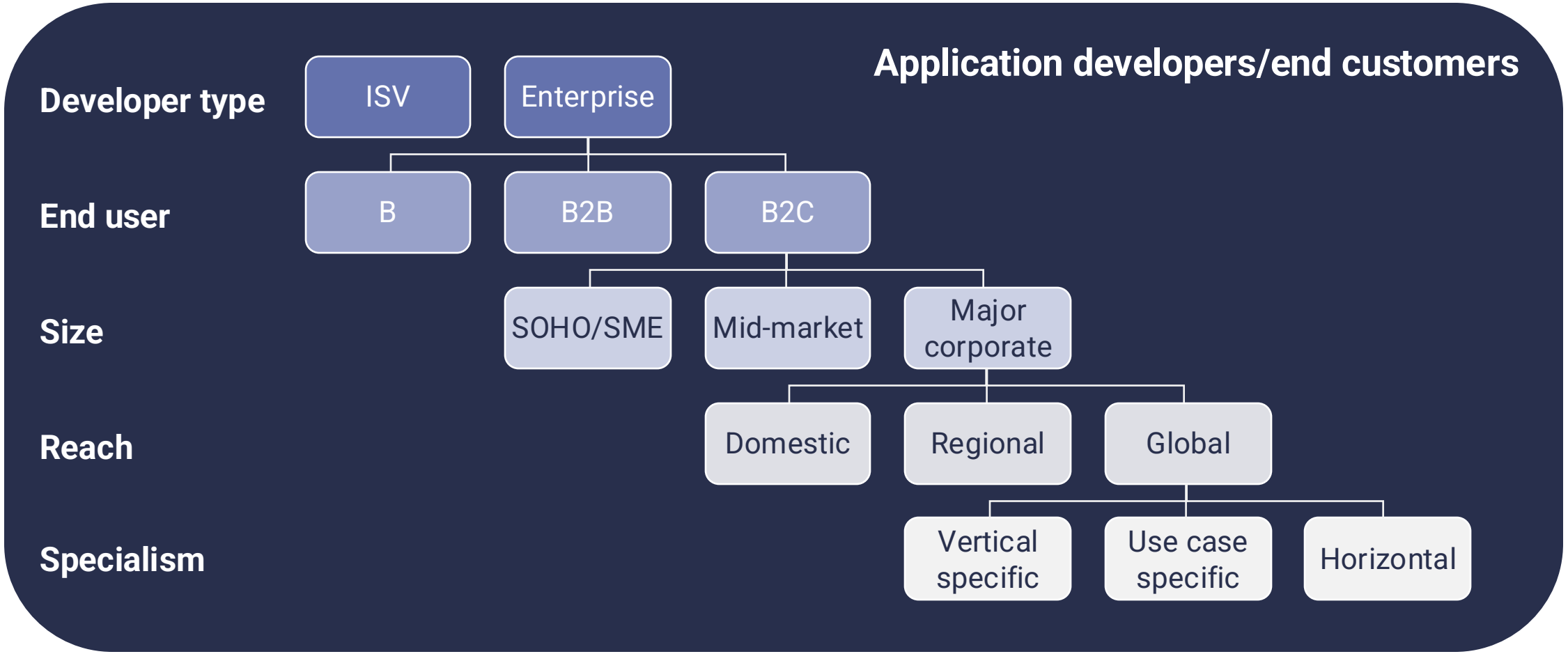
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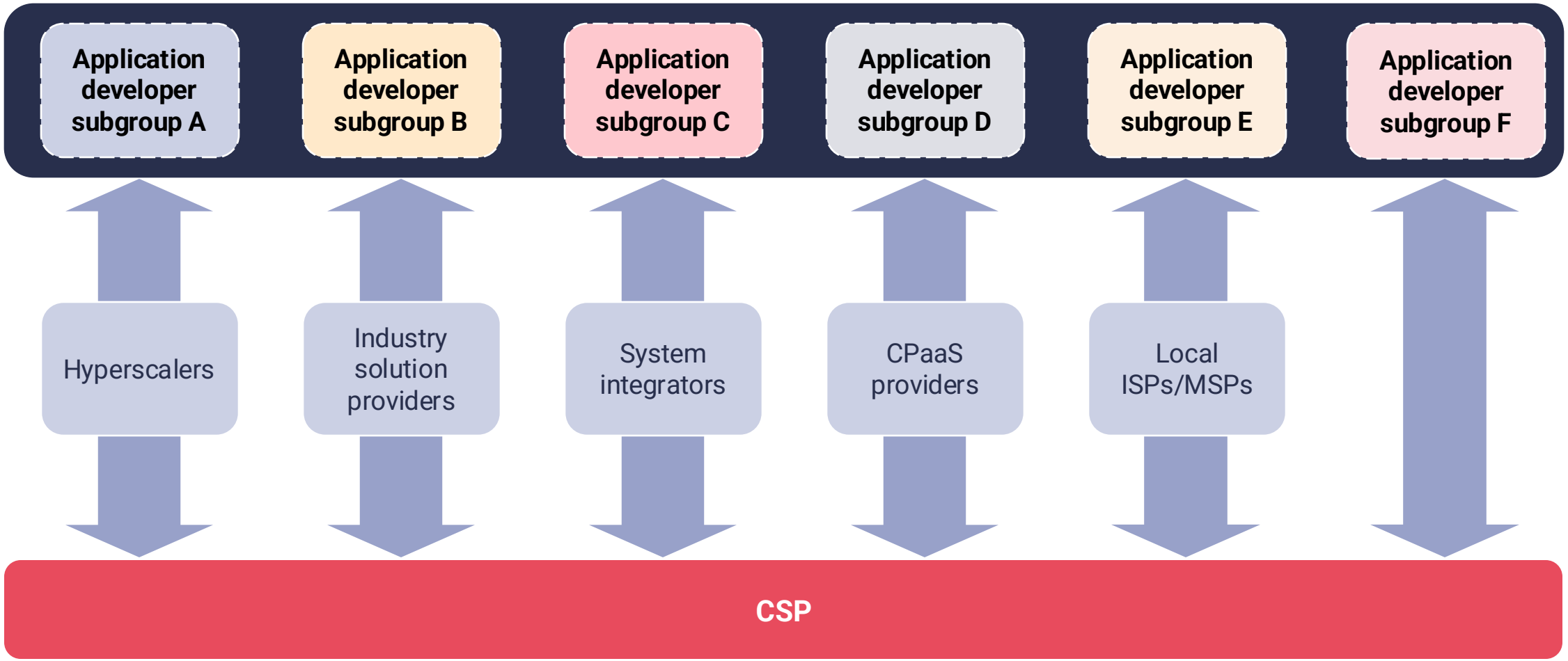
"Application developers" is not a homogenous group – which developers are we trying to target?



"Application developers" is not a homogenous group – which developers are we trying to target?



Each distribution channel will provide access to different subgroups of the developer community



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Building an ecosystem for network APIs

Hanen Garcia

Global Telco Solutions Manager



Building an ecosystem for network APIs

CSP’s traditional challenges for API initiatives



Developer’s adoption

Developers aren’t network operators specialists. Complexity and reachability become barriers for developer’s adoption.



Legacy systems

Most of the elements providing southbound implementation of APIs weren’t developed with an API centric approach.



Security paralysis

Security is an afterthought when it comes to software development, including APIs development.

Building an ecosystem for network APIs

Enable a digital API service architecture for CSPs



Expanding capability exposure

Cloud Native exposure of capabilities towards developers and aggregators for value-added services.

Managing API lifecycle end-to-end

Common framework and gateway for all API initiatives (LF CAMARA, TM FORUM, CAPIF, 5GFF, ONE API, etc).

Integrating southbound legacy systems

Facilitating API exposure directly from legacy functions, and infrastructure.

Building security into the pipeline

Inspection of API data anomalies to prevent attacks.

Driving developers adoption from the starting point

Seamlessly embedded into every step of the developer’s journey, empowering innovation from concept to deployment.



Code

APIs are built into the coding workflow, enhancing the quality and efficiency of the code from start to finish.



Methodology

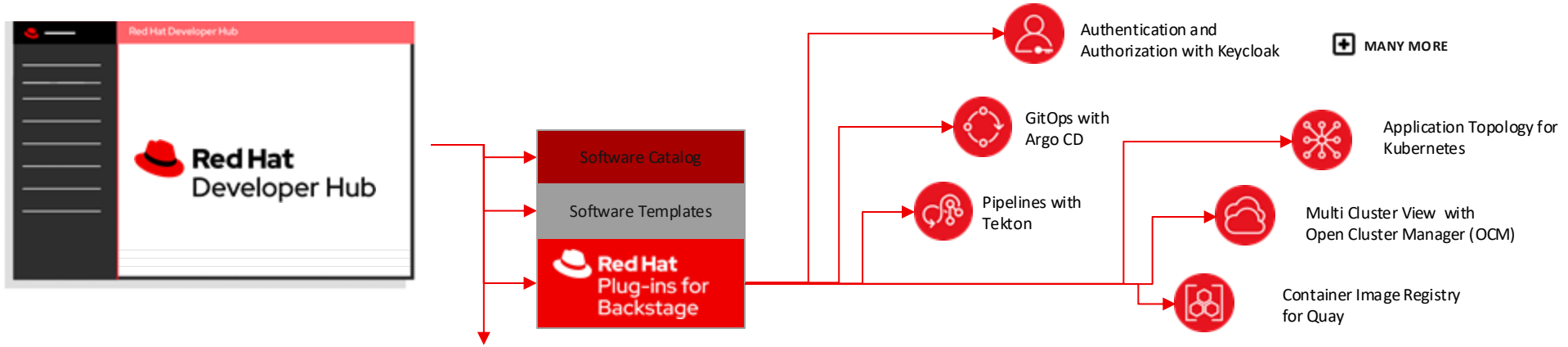
Inserted in every phase of the DevSecOps pipeline, enhancing collaboration, automation, and deployment efficiency.



Tools

API centric tools are an intrinsic part of the developer's workflow, supporting and enhancing their work at each stage of the process.

Empowering developers to deliver business value faster



Integrates with industry standards and technologies through a broad ecosystem.

git Jenkins MANY MORE

Based on Backstage, an open source platform for building developer portals.

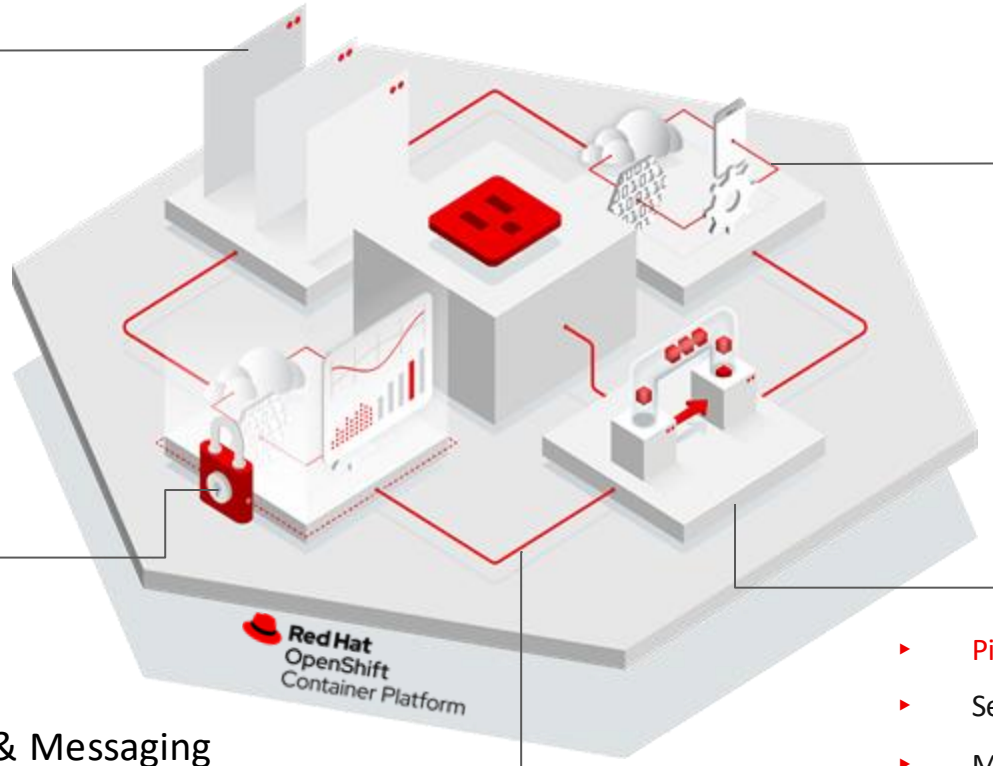
Backstage

Consistent developer experience across environments.

Physical Virtual Hybrid aws Azure IBM Cloud Red Hat OpenShift

App Runtimes & Frameworks

- Java Framework Support: Quarkus & Spring Boot
- In-memory cache: Data Grid
- Web server: JWS/Tomcat
- Node.js
- Identity & Access Management: Keycloak



Integration & Connectivity

- Comprehensive Connectors: Camel
- Microservices Orchestration: Camel
- Data Transformation: Camel
- Hybrid Connectivity: Service Interconnect

Microservices & APIs

- API Manager: 3scale
- API Designer: Apicurio
- API Registry: Apicurio
- Istio Service Mesh Extension

DevSecOps & Tooling

- Pipelines and GitOps
- Service Mesh
- Migration ToolKit for Apps
- Integrated Development Environment (IDE) Plugins
- Internal Development Portal (IDP): Developer Hub

Events & Messaging

- JMS Message Broker: AMQ Broker
- Data Streaming with Apache Kafka: AMQ streams
- Schema Registry: Apicurio
- Change Data Capture with Debezium

Building an ecosystem for network APIs

for the next generation of cloud native applications



Developer centric

Seamlessly embedded into every step of the developer's journey, empowering innovation from concept to deployment.



Modernization lever

APIs are the backbone of modernization, enabling seamless connectivity and scalability as we transform legacy systems into agile, cloud-native applications.



Security minded

Prioritize security from the start to ensure a streamlined and safe development experience — not as an afterthought.

Thank you

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Audience poll: Can operators really monetise network APIs?

1. No, this is a fantasy
2. There may be some monetizable APIs but in general APIs will be revenue enablers not revenue generating
3. Yes, there is a real growth opportunity for telcos in network APIs but only a few, big operators can aspire to this.
4. Yes, there is a real growth opportunity for operators globally.
5. Other

Our panel discussion

Moderator



DARIUS SINGH

Consulting Director & Enterprise Practice Lead

STL Partners

Panellists



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For our Q&A...

Please submit any questions using the GoToWebinar control panel



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Thank you for joining!

All registrants will be receiving the link to the recording and slides shortly to watch back or to share with colleagues, plus a Q&A write-up in due course.

For any other questions, please contact:

- Miriam Sabapathy, miriam.sabapthy@stlpartners.com
- Darius Singh, darius.singh@stlpartners.com