Telecom network APIs: What do developers really want?

While technical standards have matured significantly for telecom network APIs, commercial models are still in their infancy. Our survey of 415 software application developers in the US and the UK identifies priority capabilities, preferred commercial models and perceived value for telecom APIs within this new customer base.

STL Partners Webinar

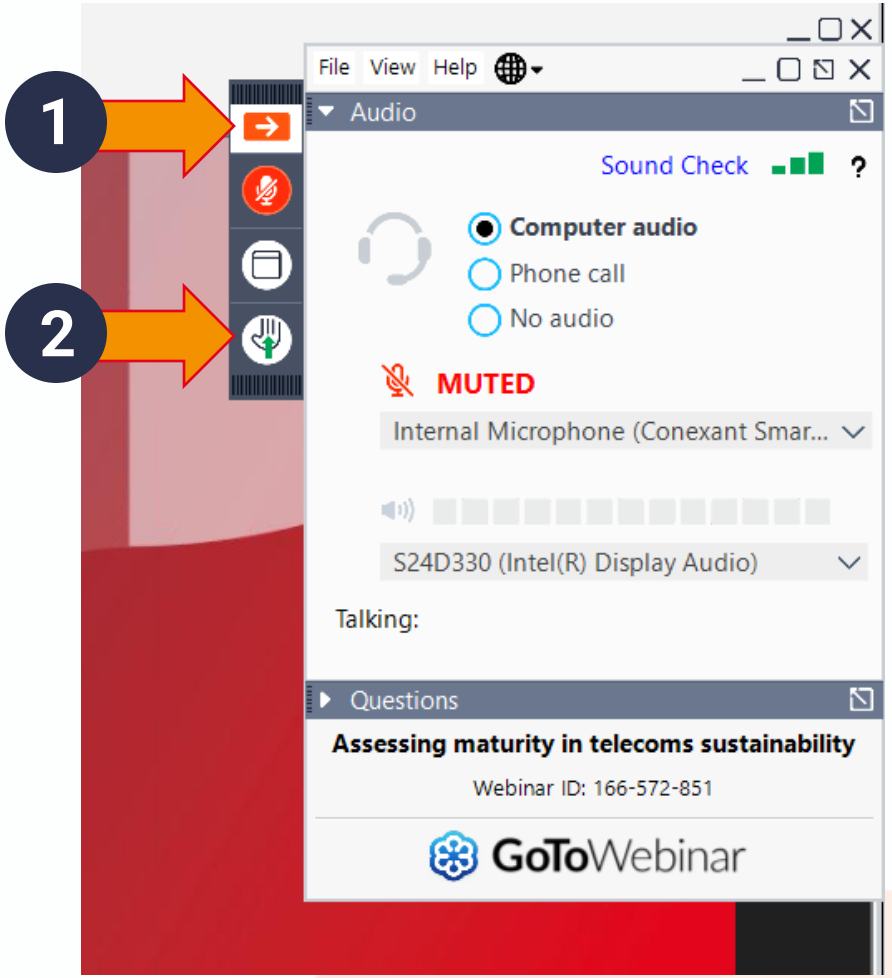
STL PARTNERS

Agenda

1	**Introductions & housekeeping**	2
2	**Overview of STL Partners developer survey**	7
3	**What do developers really want? Extract: STL Partners survey analysis**	13
4	**Q&A**	28
5	**Wrap up**	29

GoToWebinar

- You’re in listen only mode
- If you need us, please type a comment
- Feel free to type questions throughout the session for the Q&A at the end
    - Any questions that we don’t answer live will be answered offline and shared in a summary Q&A document
- We’ll send you the slides and a recording shortly after the session, please do share with colleagues



Introduction



DARIUS LLOYD

Consulting Director & Enterprise Lead

STL Partners

STL has extensive experience in network APIs and been advising businesses on this for almost 17 years

Unrivalled expertise and experience…

Supported a Tier-1 North American operator to develop their 5G and MEC API strategy

Defined the API aggregation strategy for a global NEP

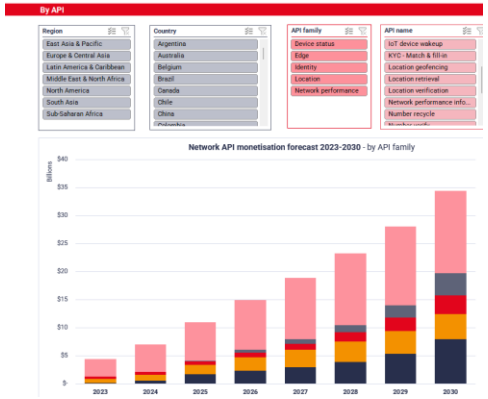
Identified growth opportunities in network embedded services for a global SI

Evaluated the role of a CPaaS provider in the telco API exposure space

Insights from 200+ interviews with enterprises and developers

Team of experts: leading industry analysts and consultants, researching telco APIs for 5+ years

…and an industry-leading knowledge centre



Forecast of telco API monetisation opportunity, split by use case, industry and region

Survey insights from 400+ software developers on the value of APIs

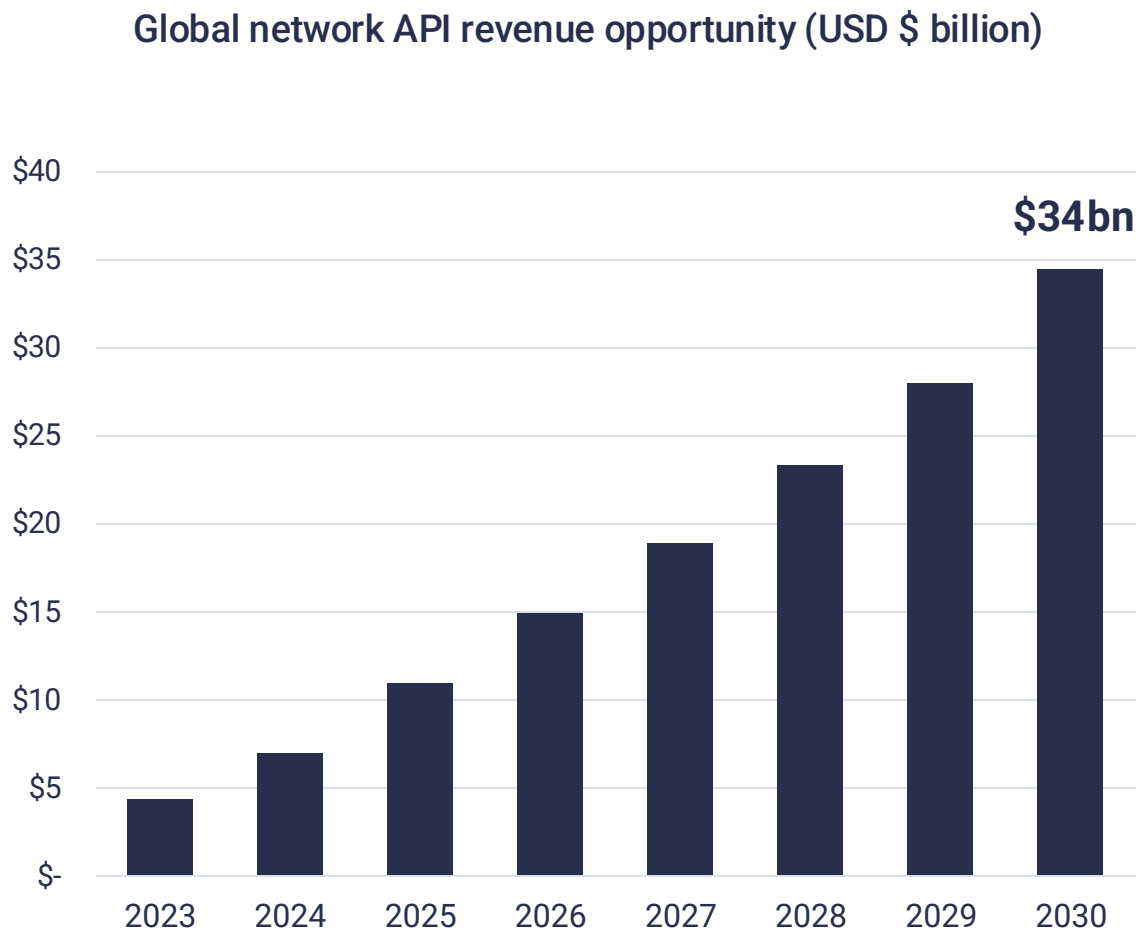


Database of use cases for data monetisation



Research hub with reports, articles and webinars on topics within APIs and NaaS

API monetisation continues to gain momentum – but telcos won't capture the $34Bn opportunity without scaling developer adoption



Source: STL Partners Network API monetisation forecast, April 2024

Almost 80 operators have signed up to GSMA's Open Gateway*

Singtel, du, Centillion, SoftBank, kpn, Telekom, viettel, AIS, axiata, KDDI, Omantel, orange, true, TIM, stc, CK Hutchison, zain, telenor, BT, NTT docomo

Last updated: May 2025

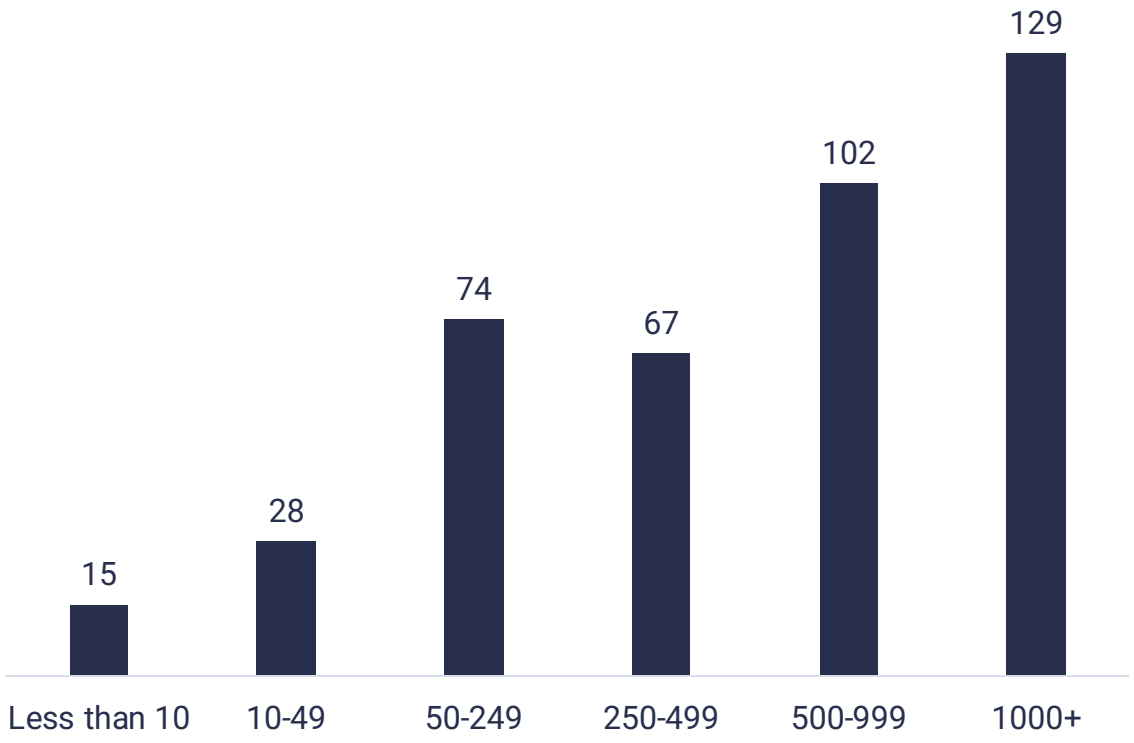
**non-exhaustive*

Agenda

1	Introductions & housekeeping	2
2	Overview of STL Partners developer survey	7
3	What do developers really want? Extract: STL Partners survey analysis	13
4	Q&A	28
5	Wrap up	29

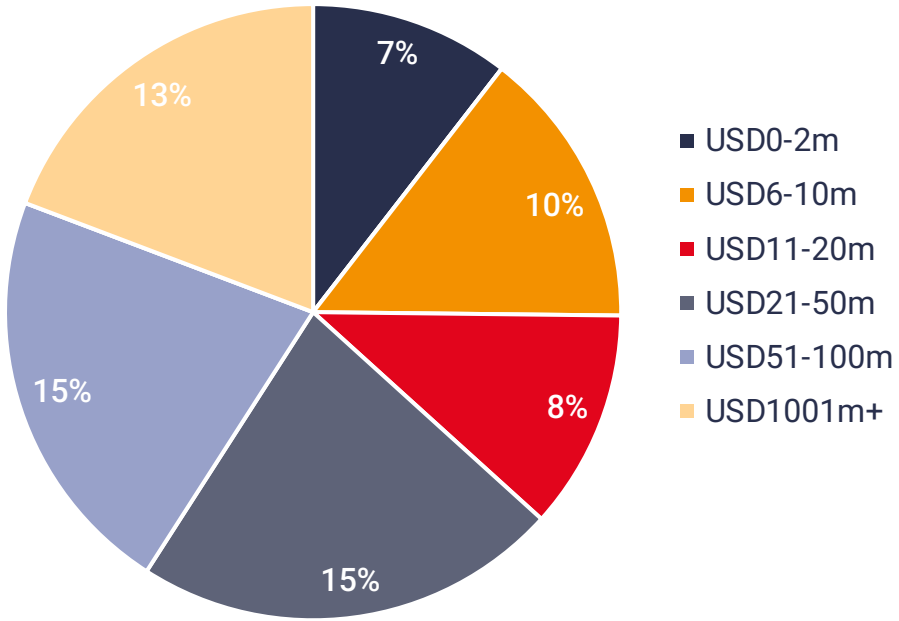
We surveyed software application developers working across a range of medium and large organisations

How many people are employed in your organisation?



N=415

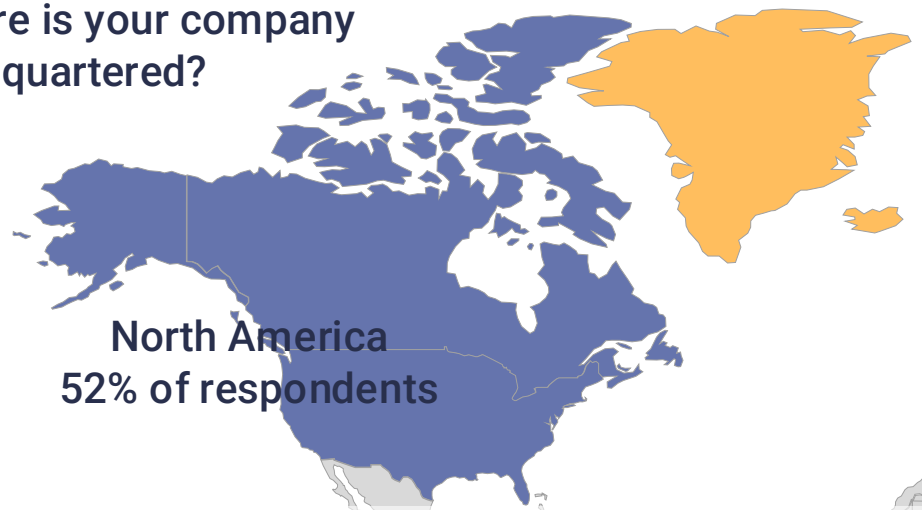
What was the revenue of your company in the last financial year (USD, in millions)?



Base: Respondents reporting company revenues; N=286
No respondent reported company revenues of USD3-5mn or USD101-1,000mn
Source: STL Partners application developer survey, November 2024

Respondents from companies headquartered in Europe were more likely to develop applications for an international customer base

Where is your company headquartered?



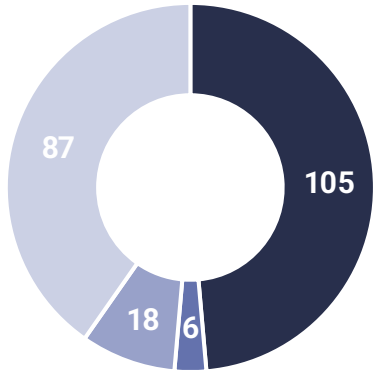
North America
52% of respondents

Europe
47% of respondents

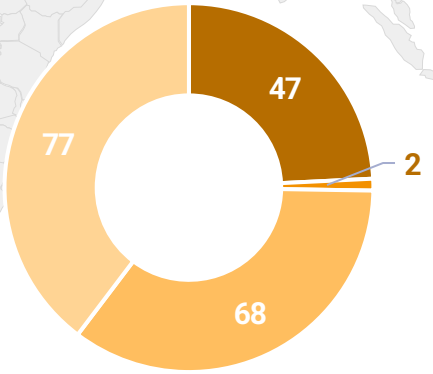
Rest of world
1% of respondents

We surveyed software application developers based in the UK, so most European companies are likely to be headquartered in the UK.

Where are your applications typically used? (Number of respondents)



- Within our local country
- Within a single country abroad
- Within a few countries in the same region (e.g., Europe)
- In multiple regions of the world



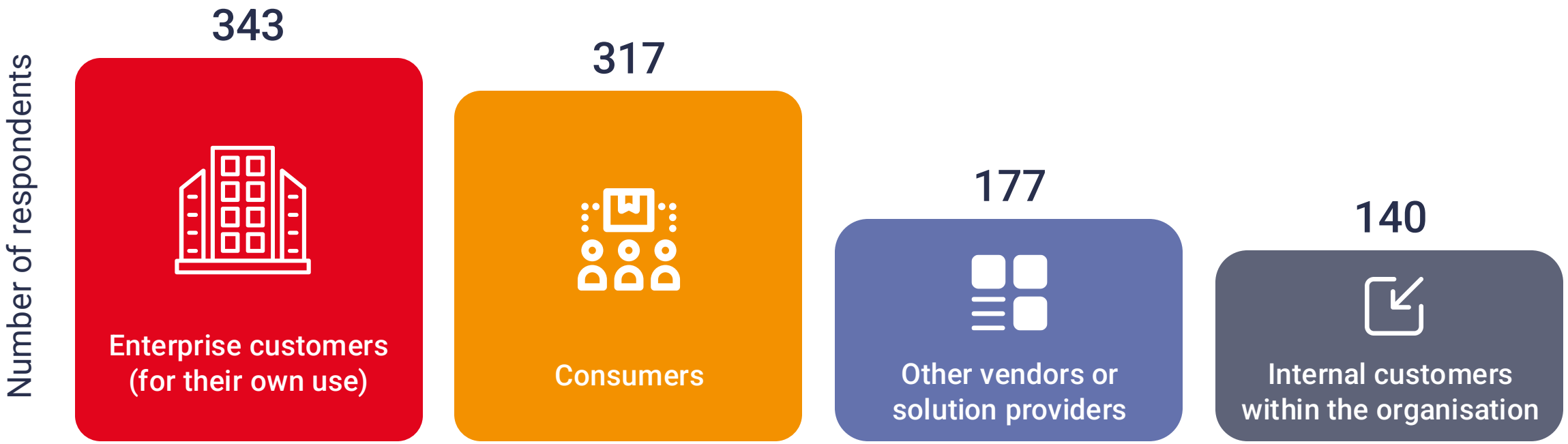
- Within our local country
- Within a single country abroad
- Within a few countries in the same region (e.g., Europe)
- In multiple regions of the world

Source: STL Partners application developer survey, November 2024
N=415

Most application developers are working with both the enterprise and consumer markets

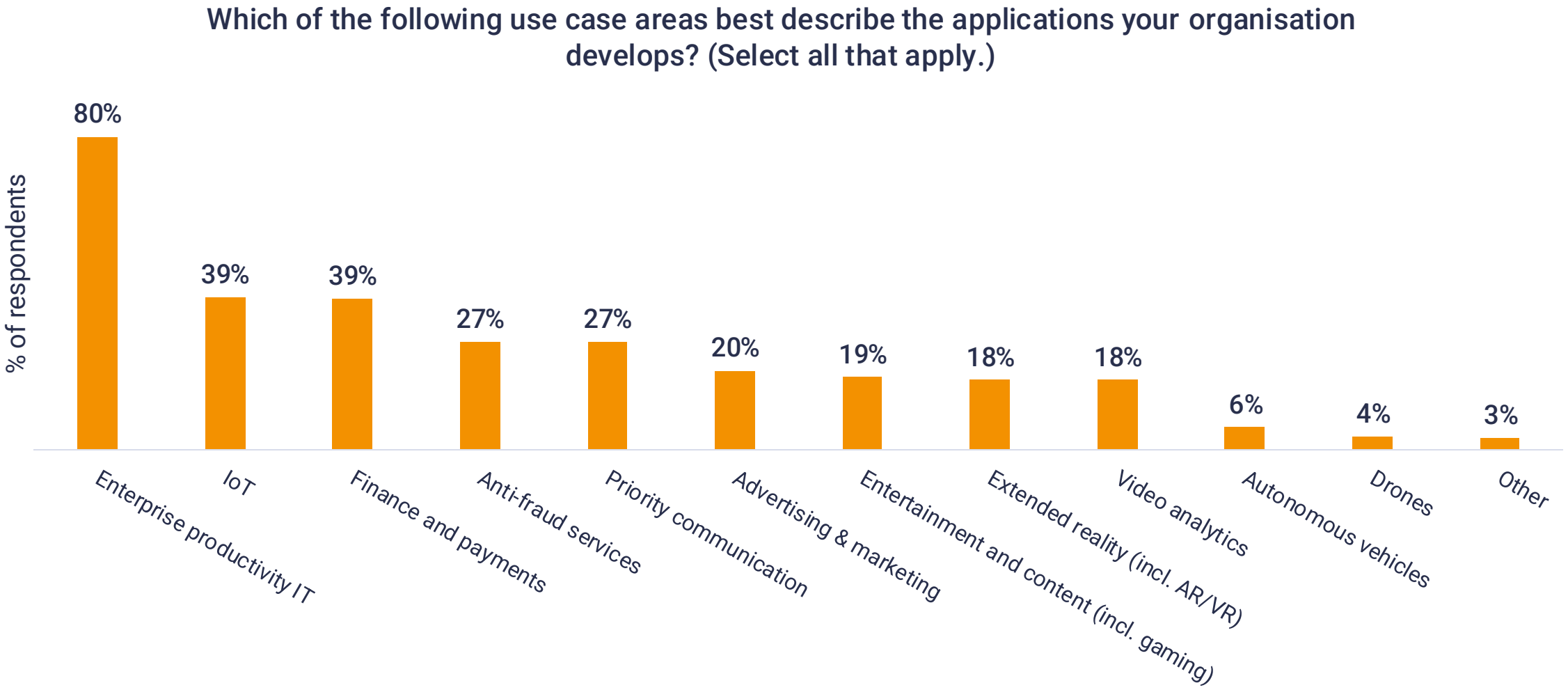
Which of the following customer segments do you target as end customers for your applications? (Select all that apply.)

Note: *The survey explicitly excluded developers working solely on in-house applications for their own organisation and the majority were building ready-made SaaS applications.*



Source: STL Partners application developer survey, November 2024
N=415

Almost all application developers are focused on enterprise productivity, with IoT and payments also prominent



Source: STL Partners application developer survey, November 2024
N=415

Questions STL Partners included in the survey covered three key domains

The profile of your organisation

1. Type of application development (bespoke or ready-made)
2. Customer segment focus
3. Degree of experience with APIs
4. Types of APIs typically used in the organisation
5. HQ location
6. Countries where applications are used
7. Company size (employees and revenues)
8. Industry vertical coverage of application development
9. Application use case areas

Assessing usage of APIs

1. Primary functionality of APIs in applications
2. Source of external data / services
3. Typical level of payment
4. Typical charging model for paid APIs
5. Preference of charging model
6. Pricing level (per transaction, per subscription)
7. Current access channels
8. Adoption challenges for new APIs
9. Perceived leaders in customer experience
10. Capabilities worth paying a premium for

Familiarity with telecom APIs

1. Degree of familiarity with telecom API categories and standardisation initiatives
2. Definition of the term “network APIs”
3. Degree of importance of connectivity for applications developed
4. Perceived value of greater control over underlying connectivity for applications
5. Attractiveness of telecom API capabilities
6. Perceived barriers of adopting new telecom APIs
7. Ranking of preferred channel for accessing telecom APIs

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Agenda

1	Introductions & housekeeping	2
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4	Q&A	28
5	Wrap up	29

In this extract, we will cover three C's of API monetisation



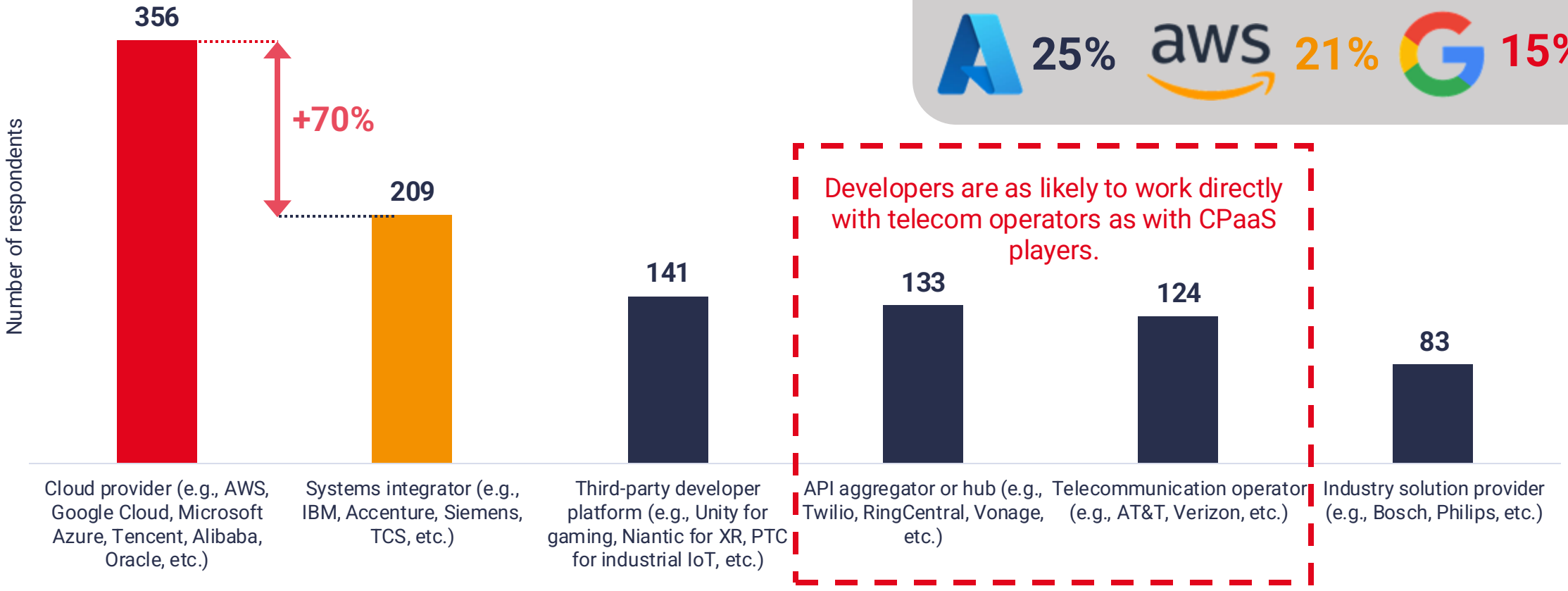




Channel | **Capabilities** | **Commercials**

Developers are 70% more likely to access third-party APIs via cloud providers' platforms than anywhere else

What are the current primary channels through which you access third-party/external APIs? (Select all that apply.)



HCPs held all podium positions for API experience

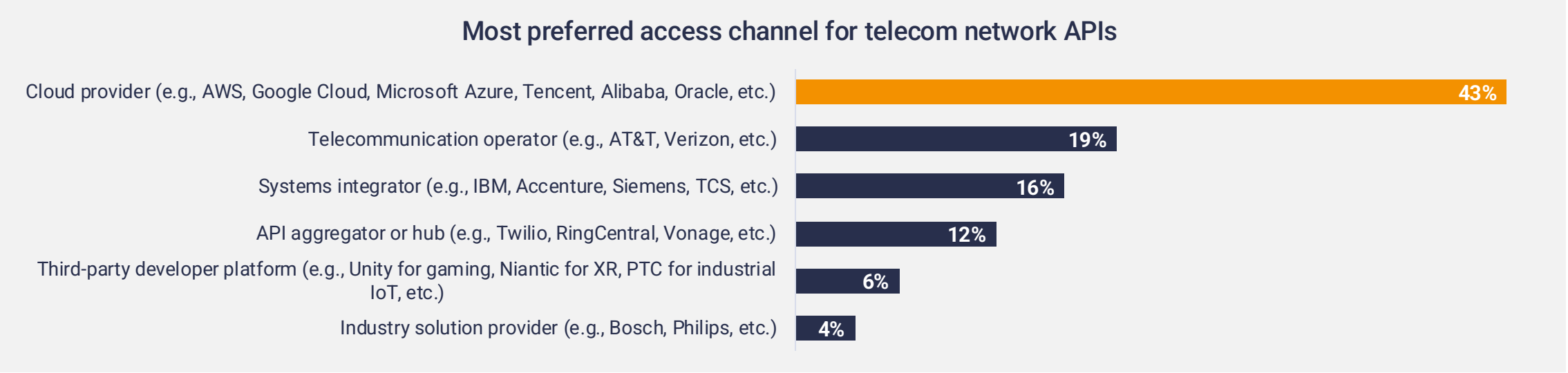
Which organisation(s) provides the best experience for API usage (e.g., in their platform, documentation, SDKs)?

25% 21% 15%

Source: STL Partners application developer survey, November 2024
N=415

Hyperscalers are also developers preferred channel for telecom APIs, but hyperscaler marketplaces are passive – who will *drive* adoption?

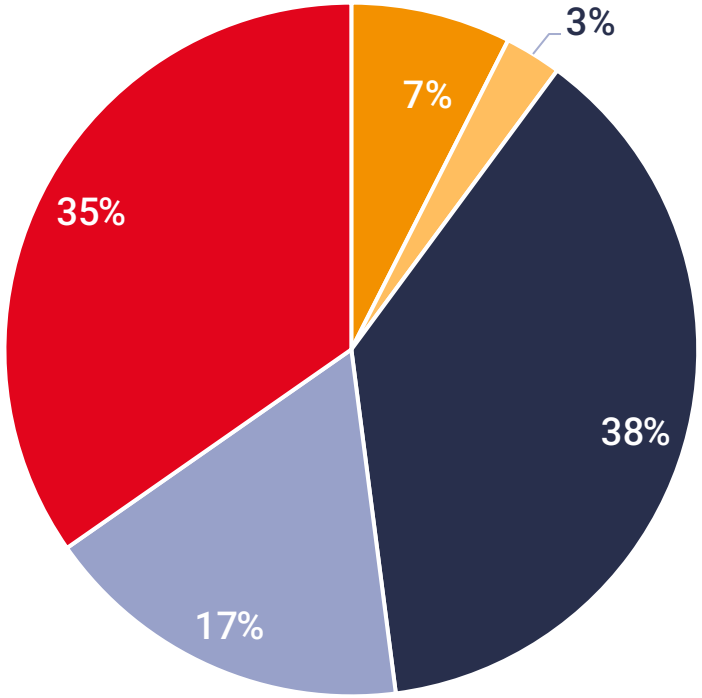
- Hyperscalers are the most crucial partners in the API economy…
- … but current relationships focus on passive marketplaces – at this early stage of the market, **who will drive the education?**
- Telcos must also work with systems integrators and develop their own direct channels, alongside the relationships they have established already with aggregator hubs.
- Telecom operators must be prepared to offer all API capabilities across multiple channels in order to meet developers where they want to consume.



Source: STL Partners application developer survey, November 2024
N=415

Successfully reaching developers requires a balancing act: Education on new capabilities of telecom APIs, but fitting into existing access models

What do you understand by the term 'network APIs'?
STL Partners' analysis of free text responses

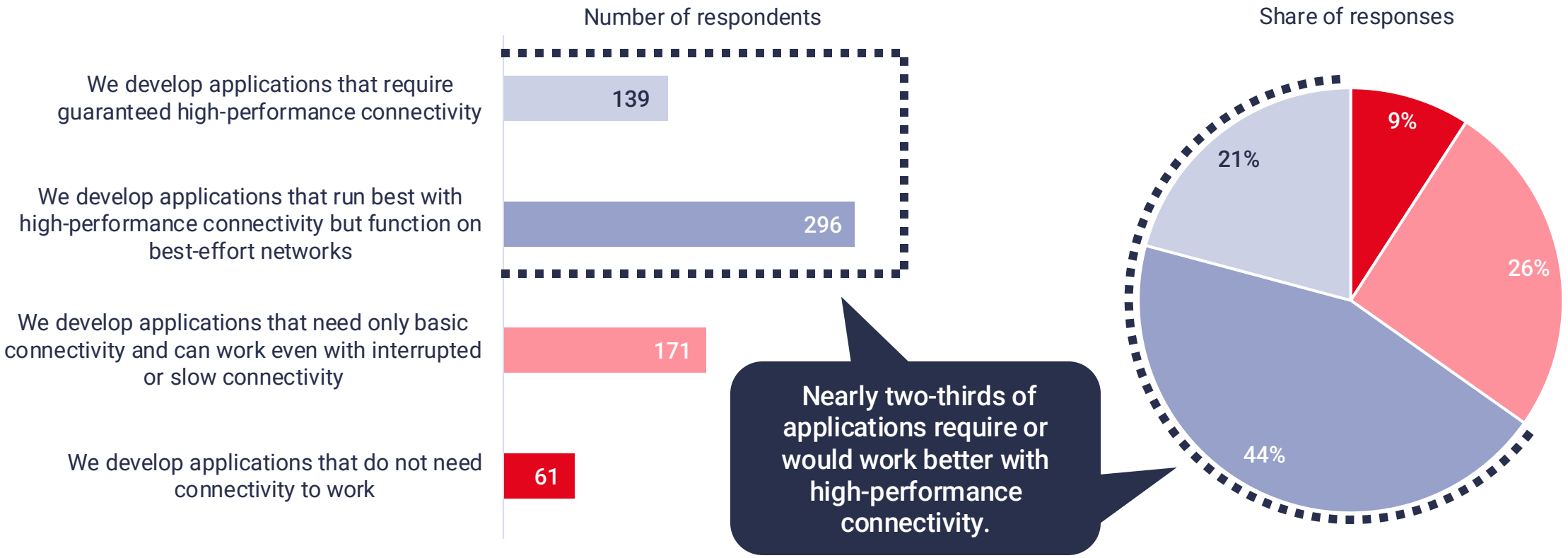


- APIs that enable developers to access and manage telecom network information and capabilities (e.g., on 4G and 5G)
- APIs that are specifically related to telecom networks (e.g., for SMS, voice)
- APIs that enable communication and/or data exchange between different applications over one or many networks
- APIs that enable access to network functions (not specifically telecom networks)
- Other/unclear

Source: STL Partners application developer survey, November 2024
N=415

There is a clear opportunity to provide higher-performance connectivity to application developers...

How important is connectivity for the applications you typically develop? (If you develop multiple types of applications, select all that apply.)



Source: STL Partners application developer survey, November 2024
N=415

There is clear interest among developers for the capabilities telcos are building around differentiated connectivity

Top three most attractive telecom network capabilities for developers

(% of respondents)



54%

Accessing information on how the network is currently performing (e.g., latency, jitter)



50%

Understanding the status of devices connected to the network



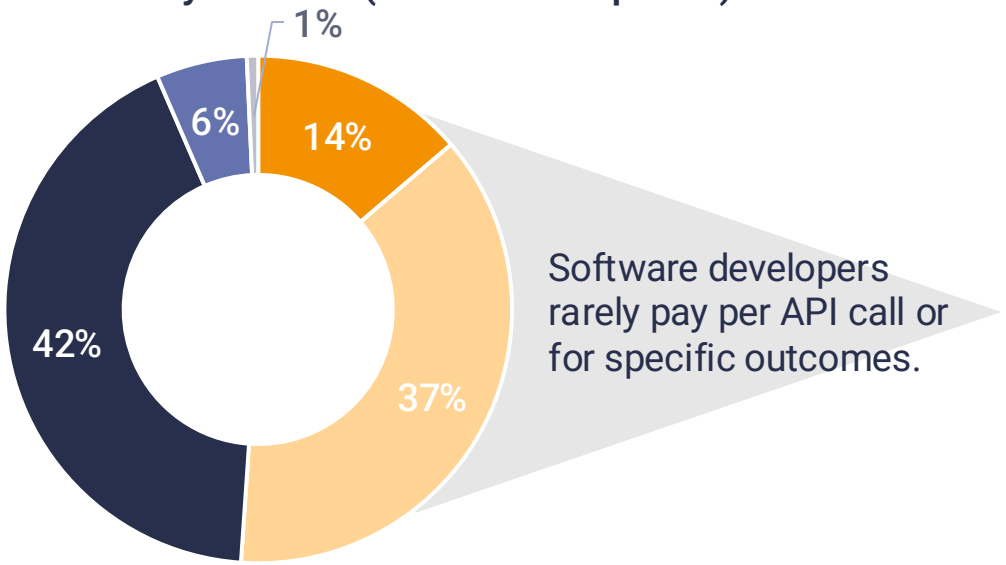
44%

Specifying and guaranteeing the performance level of the network for a period of time

Source: STL Partners application developer survey, November 2024
N=415

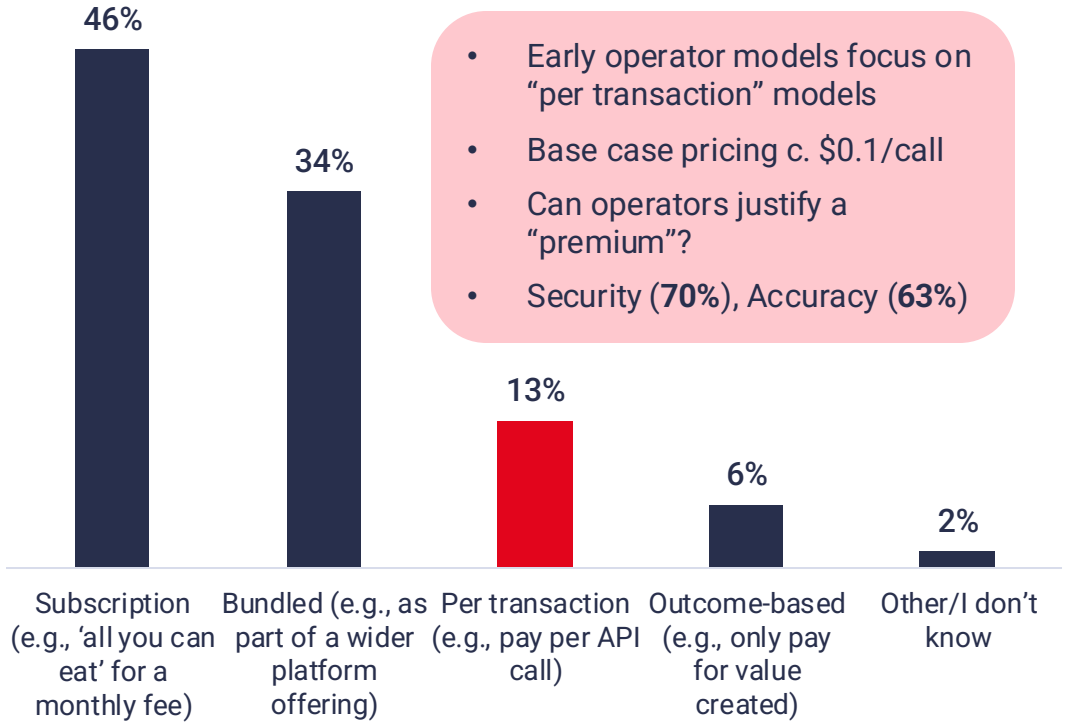
Most developers expect to pay for access to some APIs, and nearly half expect to use subscription services

What best describes the typical payment for external APIs you use? (Select one option.)



Base: All respondents; N=415

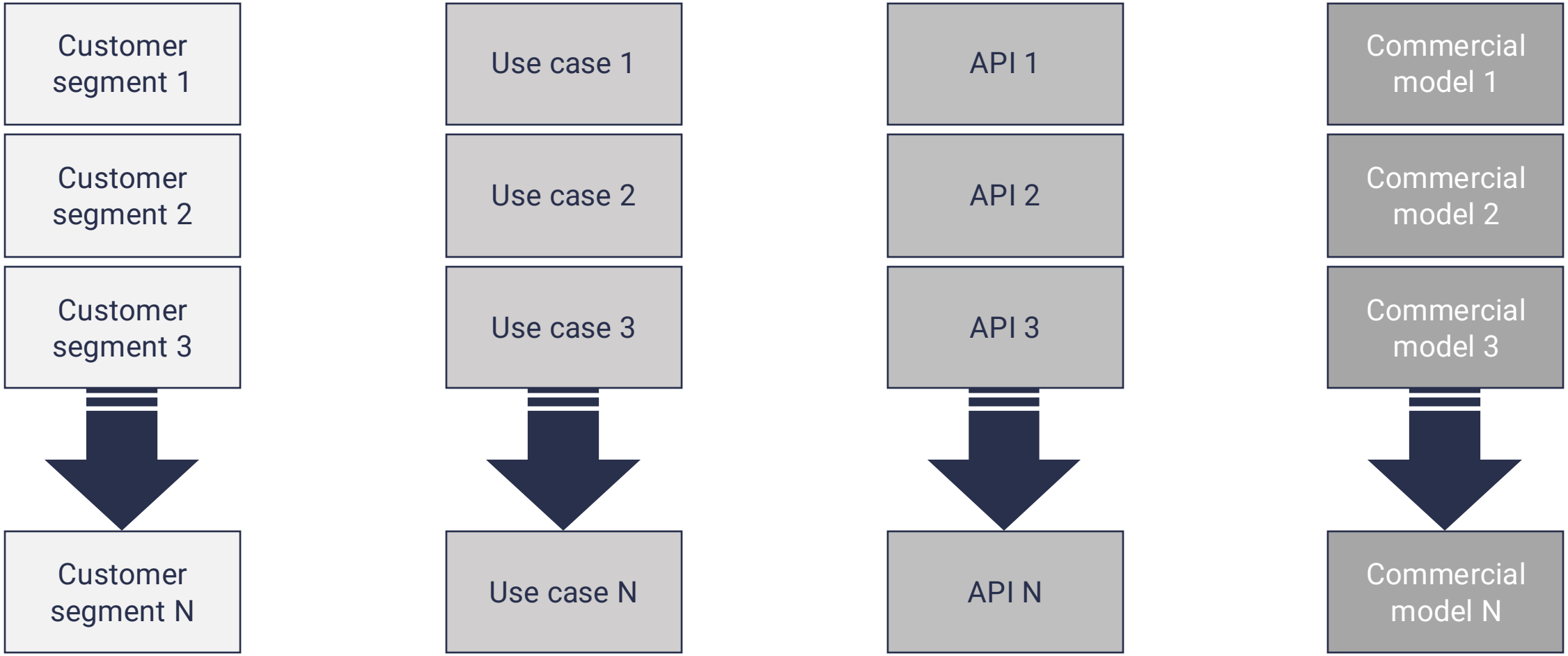
When using APIs that require payment for usage, how are you typically charged? (Select one option.)



- Early operator models focus on "per transaction" models
- Base case pricing c. $0.1/call
- Can operators justify a "premium"?
- Security (**70%**), Accuracy (**63%**)

Base: Respondents using paid APIs. N=382
Source: STL Partners application developer survey, November 2024

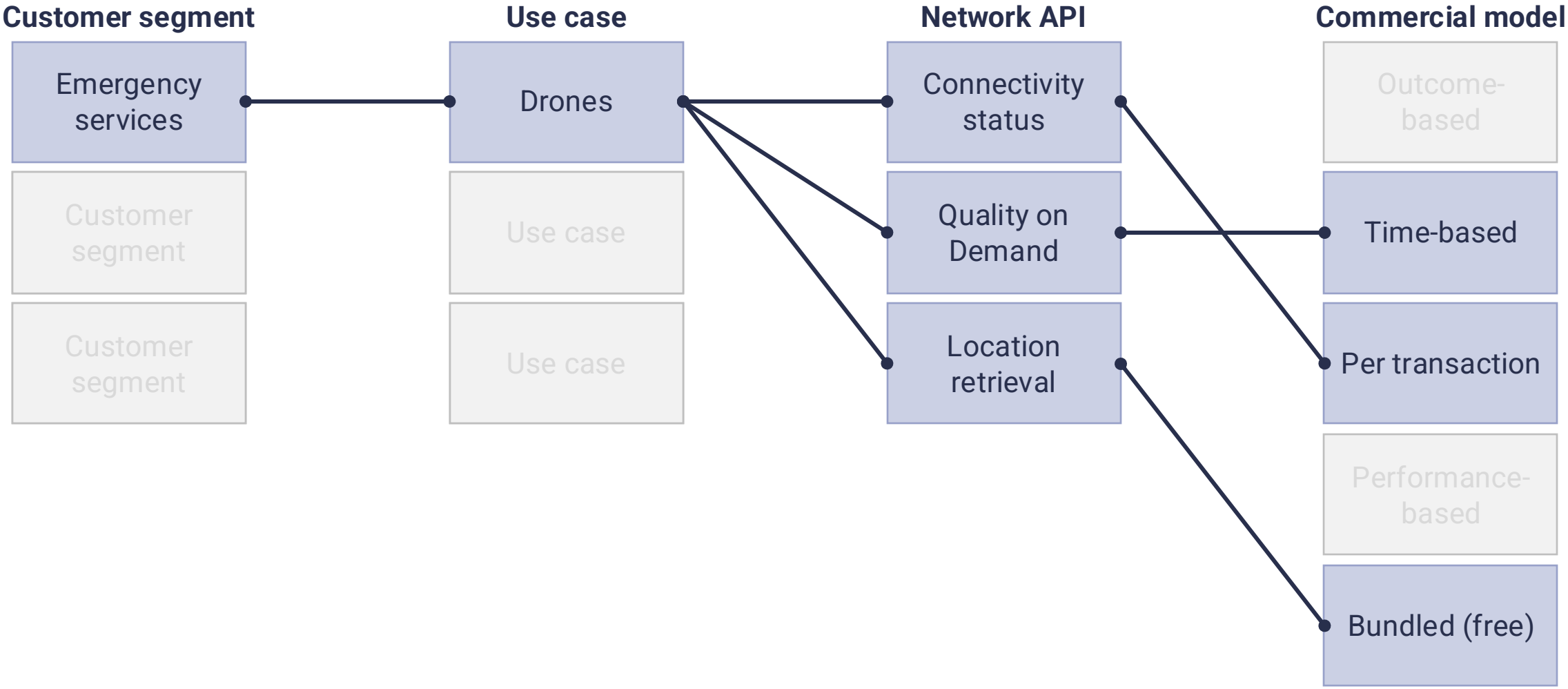
Commercial models will vary across customer segments, use cases and different APIs involved...



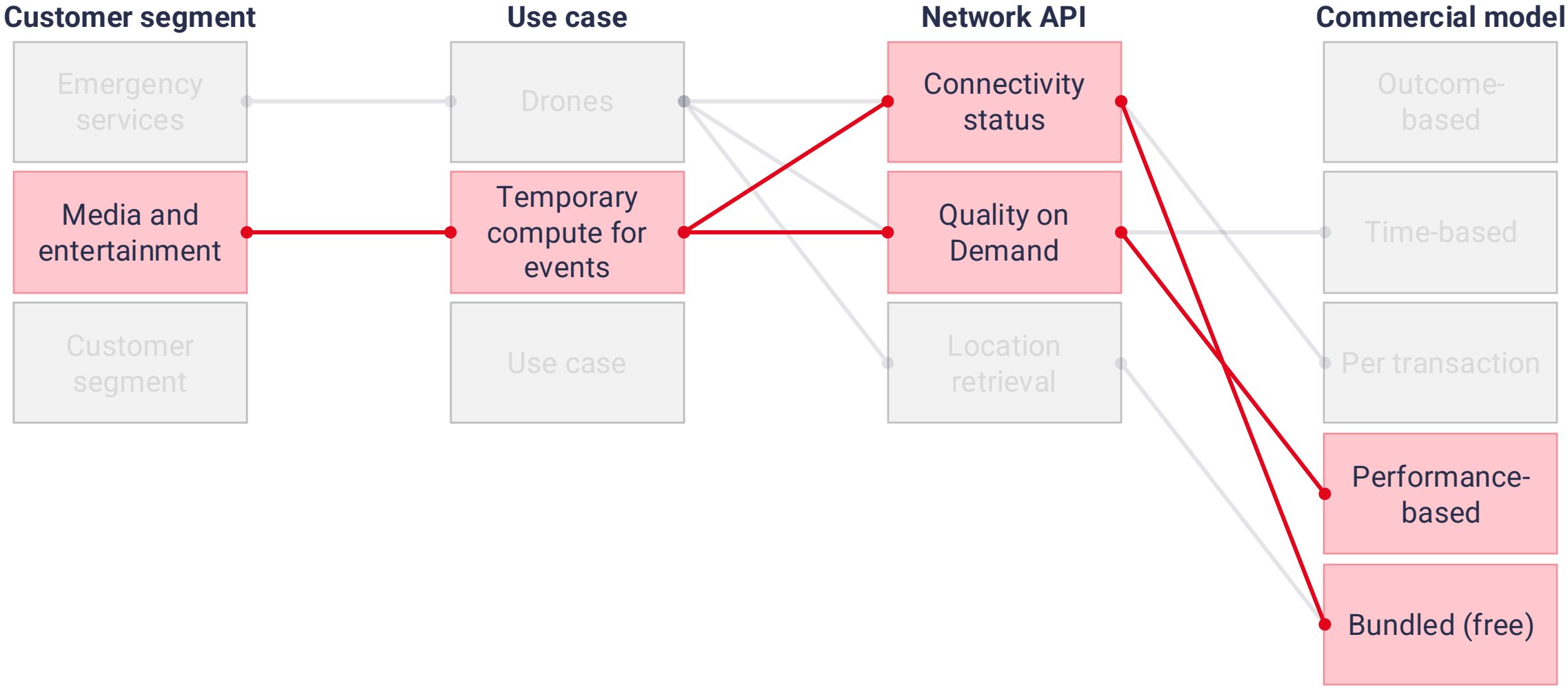
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Commercial models will vary across customer segments, use cases and different APIs involved...

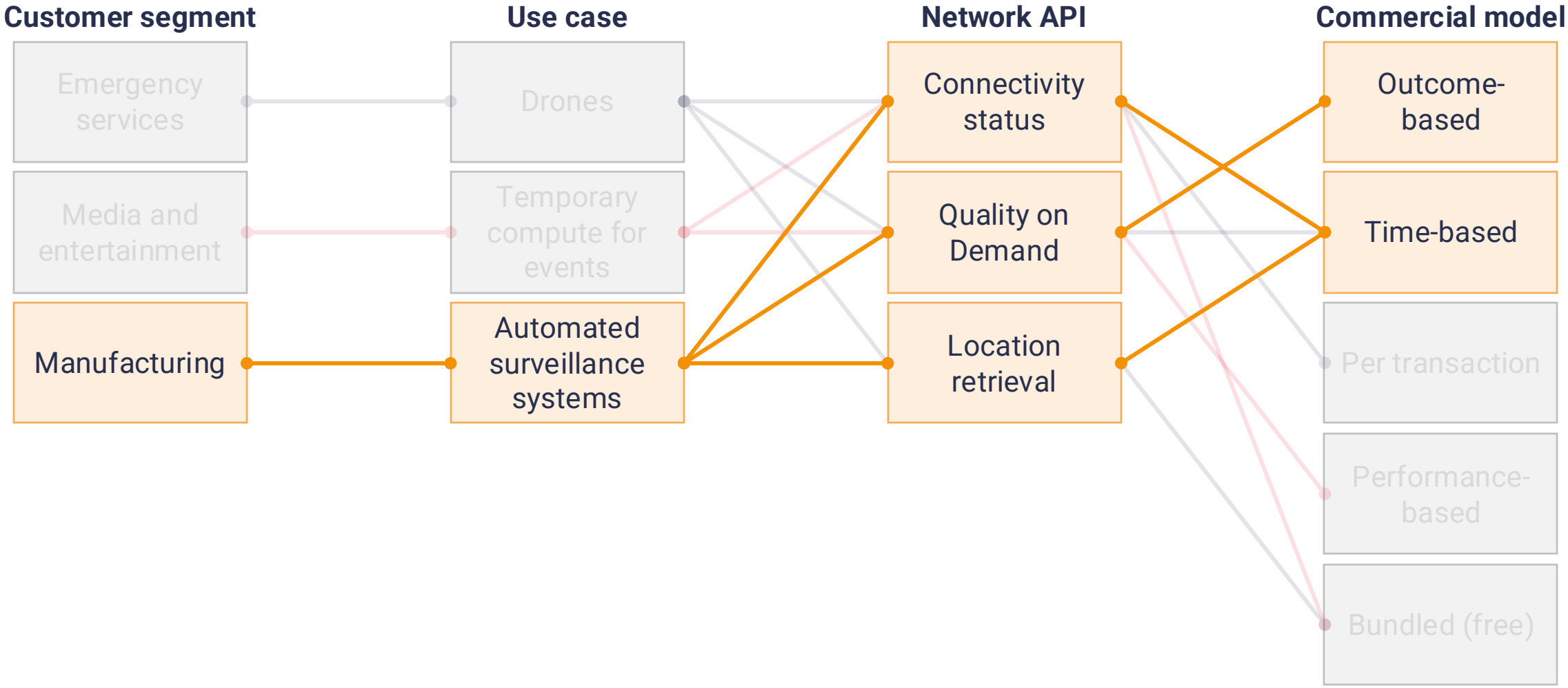




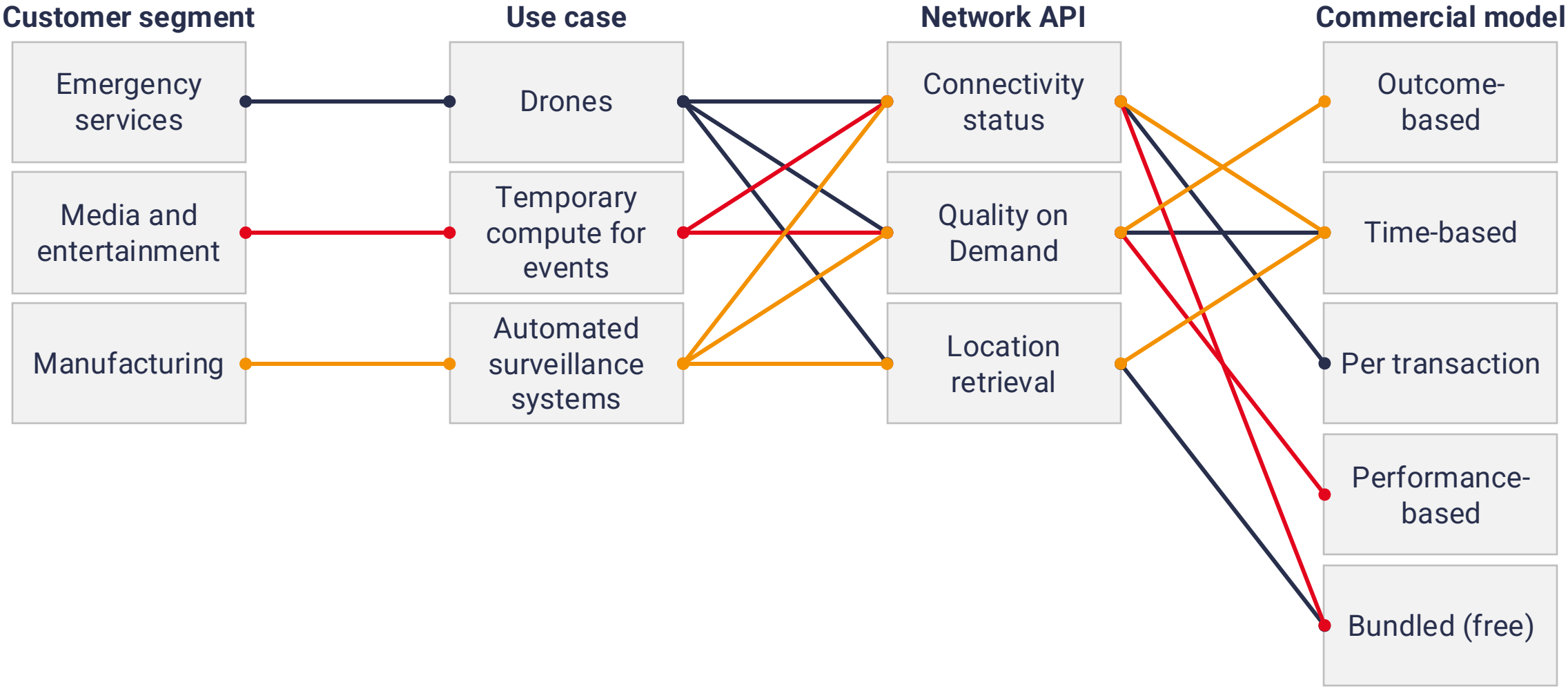
Commercial models will vary across customer segments, use cases and different APIs involved...



Commercial models will vary across customer segments, use cases and different APIs involved...



… creating complexity for operator teams and capabilities to manage efficiently



Four key takeaways from the webinar



Build targeted “active” channels to reach diverse developers



Telcos must be *accountable* for education



There’s demand for NaaS APIs, beyond identity and anti-fraud



Operators should build for complex future commercial models

Agenda

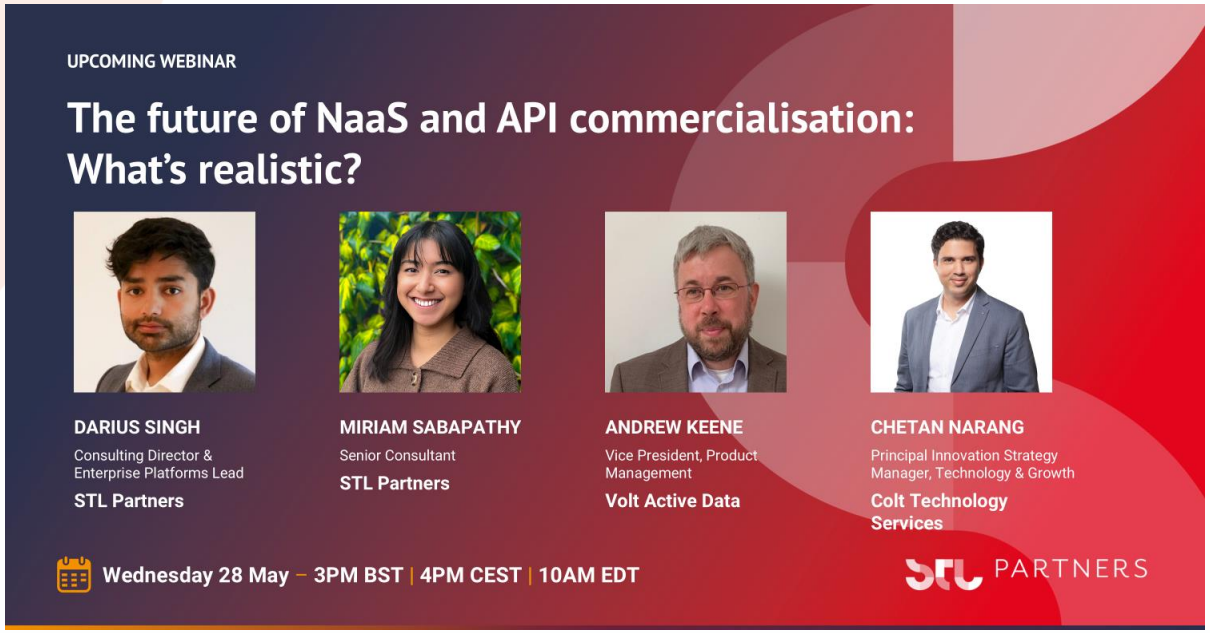
1	Introductions & housekeeping	2
2	Overview of STL Partners developer survey	7
3	What do developers really want? Extract: STL Partners survey analysis	13
4	Q&A	28
5	Wrap up	29

Agenda

1	Introductions & housekeeping	2
2	Overview of STL Partners developer survey	7
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4	Q&A	28
5	Wrap up	29

Upcoming webinar

Wednesday 28 May
3PM BST | 4PM CEST | 10AM EDT



[Link to register here]

Scan the QR code to register

Questions? Get in touch!

Reach out directly to the author with your questions



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