TELCO FORGE

The Challenge of Adjacent Markets

Executive Discussions on Growth, Profit, National Security and more.

A TelcoForge Leaders' Meeting Report

Feb 2025

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INTRODUCTION

TelcoForge is holding monthly meetings mainly for C-level and SVP-level professionals from as diverse an array of stakeholders as possible. These meetings take place under Chatham House Rules to enable senior professionals to speak frankly. However, we capture the anonymised ideas and outcomes for the wider industry to digest and act upon.

After the inaugural discussion in January (you can view a report of that here), there were two key issues which people had highlighted and which we wanted to explore in more depth:

-What has prevented many telcos from successfully entering into adjacent markets?

-What has prevented large-scale telcos from being as agile as other large organisations?

The two topics may well be interconnected. Certainly there is a history of telecoms providers aiming to grow into new markets.

Examples include AT&T offering home automation services; the spate of 'mobile money' launches in the 2010s; and acquisitions and divestments of media companies. Meanwhile booms in, for example, the app economy and mobile media have largely not been monetised by the telcos.

Is this a case of consistent bad luck or are there other, structural forces at work here?

And can we realistically change that?

In February 2025, over the course of two one-hour calls, around a dozen executives from different parts of the industry and different geographies shared the following insights.

EXECUTIVE SUMMARY

During the last two decades, telcos have struggled to penetrate adjacent markets such as cloud computing, datacentre services, IoT, and media. Around a dozen executives taking part in the meetings creating this report identified a variety of factors which affect different telco players to greater or lesser extents:

- **Structural factors**, including a reliance on core connectivity business models and a lack of diversified expertise, limit their ability to compete.
- **Operational and business process** misalignment preventing innovative ventures taking off.
- The **lack of global scale** and specialisation preventing telcos from being able to compete with specialist companies.
- **Regulatory disharmony** and competing national interests preventing international consolidation or economies of scale.

However, there was a lack of clear consensus about whether telecoms providers should be attempting to expand into adjacent areas in the first place. This highlighted a difference in philosophy between:

- Those who view telcos as fundamentally utilities who should act like it and focus on improving profitability by cost cutting.
- Those who want to build their companies and gain more value by taking positions further up the service stack.

Investors often apply pressure for profitability, leading to retrenchment into core connectivity services instead of expansion.

Although there are significant challenges facing the industry, there were a number of opportunities identified which might benefit telecoms providers.

- While the existing telecoms ecosystem is not well designed to help service propositions reach global scale, today there are **some precedent**s for how this may change.
- **AI inferencing** at the network edge may offer an opportunity, particularly for localised and sovereign AI applications. Offering services leveraging companies' private data would be particularly appropriate.
- Governments are increasingly interested in improving **national security** through partnerships with telecom providers. This opens opportunities for telcos to offer governments secure, resilient network services and collaborate on defence and public sector projects.
- Regulatory bodies in regions like Europe may **introduce reforms** that facilitate cross-border collaboration and industry consolidation.

ADJACENCY - A DOUBLE ISSUE

The problem statement was set out very clearly by one panellist as follows:

> If you look at the telcos getting into adjacent markets they've tried multiple times and they have not been very successful. With the datacentre business, telcos went fully into it 15, 20 years ago, then most of them sold everything. Maybe you have one or two that went global and succeeded...
>
> There are some businesses where they did well and then they're stepping out gradually, for example submarine cables. 20 years ago it was all telcos, today it's 80% hyperscalers. Same with the satellite business..

In other words, telecoms providers have two problems. One is a difficulty with growing into new areas, which may be relatively obvious.

The other, which is perhaps more insidious, is to do with retrenchment into 'core competencies'. While there are some good reasons for doing this in the short term, that focus on the core has reduced the breadth of in-house competencies and therefore increased the reliance on others for anything which expands beyond those areas.

FUNDAMENTALS

The problem of growing into adjacent markets isn't a new one. Indeed, there have been some limited successes.

"If you look at, let's say, SK Telecom in Korea. SKT have done a very good job at being more than a telco within Korea. They have datacentres, they have submarine cables, they have clouds that run in Korea. But taking that global has failed. You see it in AI, I mean, they went and tried to build their own chips to do AI. They built their own LLMs and they used that within the local context, but they failed to go outside of their country."

Others participants pointed to the success of NTT running an international datacentre business; Orange growing an enterprise security arm; and Bharti's investment in OneWeb giving them a foothold in the satellite industry. However, these successes tend to be the exception. Participants were keen to share their insights on why that was.

One observed, "The most important thing is - nobody understands what the market is. Try to feed consumers more ChatGPT, Netflix, they cannot digest more data, period. The only thing that's going to digest more data and grow at an exponential path is automated systems, automated cars, trucks, vans, drones, maintenance bots. I don't understand why people don't see this."

Ironically, some do see this... but that doesn't stop them from having difficulties converting that into success.

"it's definitely a cultural thing," said one participant. "Hans at Verizon did a fabulous job. Six years ago, he started to invest in things like robotics and drones and bot companies. But culturally, they did not have the business process to support those markets. And they were early, they were pioneers. But they didn't know how to model it and build the sales team around getting that out to market."

That cultural element can't be overstated. Familiarity with their existing processes - which generate significant revenues still - leads to a limited ability to focus elsewhere.

"Obviously the telcos have their turf. I mean, wherever they have spectrum and licenses that they own that asset, the fibre and the infrastructure, they own that. When it comes to services, it's a different story though."

While the assembled participants agreed that there was a struggle with growing into adjacent markets, not everyone agreed that this should be thought of as a problem.

"All the discussions around 'how can we make telcos more agile, how can we allow them to move into related sectors?' are nonsensical. It just isn't going to happen and it doesn't make sense from a business point of view from where they are."

That view is fairly unequivocal; some might say, fairly defeatist. However, that view is based on the lessons of the past, whether that's in mapping, rich messaging or other areas.

"It makes much more sense for all those kinds of things to be developed by one, two, three companies at a global basis than by an individual telco. And I think that's the underlying issue."

It's not entirely clear that that should be the final word on the subject, however. It would be quite possible for service providers to be, for example, national-scale providers of a service developed internationally. After all that is, at heart, what telecoms networks are. So why not do that for related areas?

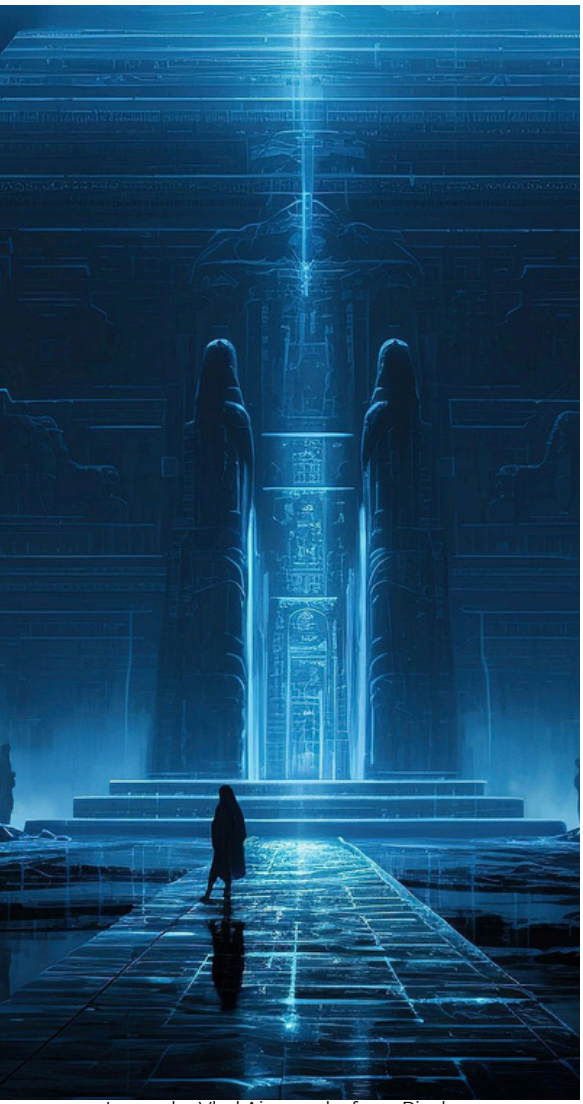

Image by Vlad Aivazovsky from Pixabay

Visitors to MWC this year could have seen the GSMA's Open Gateway stand where they highlighted uses in practice of the network APIs that have been under development for the last few years. Whether that's helping AI locate taxi pick-up customers or supporting a service driving cars remotely, there are opportunities which, on a small scale, are delivering revenue for the telcos.

This is something which is happening to an extent in ASEAN with IoT-based services.

"I think some are in fact becoming domain experts... in healthcare, agriculture, and maybe smart media," commented one participant.

There are practical challenges, however: "In certain cases, the business is really specific, they probably need to spend maybe 10 to 100s of millions on a particular domain. Getting back the money, the ROI, will be difficult unless you find something that's scalable."

Put a pin in that point. There are other elements which make difficulties in getting into adjacent markets and staying there, not least of which is the appetite for long-term investments outside their core business. As one commentor pointed out, "Data is still the bread and butter. They still have not evolved out of their comfort zone."

SCALE AND HYPERSCALE

As mentioned above, the telecoms industry has service providers who are limited geographically, making for a plethora of companies who can't scale to compete with global companies.

"There's about 600 mobile telcos in the world and probably 300 fixed. So there's a thousand of them roughly, and there's one Google Maps. And so the odds of each of them developing something as good as or better than Google Maps, when Google Maps just has to do it once globally, is zero."

It's not immediately obvious why this should be, however. In the 2000s we saw a global race by telecoms brands expanding across all sorts of markets, notably from European carriers like Vodafone, Telefonica, Orange, Telenor, Teliasonera and T-Mobile. Competition for spectrum in auctions was rife. At that time, would it have been outlandish to imagine consolidation globally in the hands of a few operator groups, operating within individual countries much like Microsoft's local offices? Probably not, so long as national interests were served.

Even taking on board the plethora of players in the telecoms world, we don't have to take that argument at face value. There's no a priori reason why telcos should develop a service individually. Indeed, the telecoms industry is served by a huge array of industry bodies, standards organisations and alliances. It's thanks to this coordination that telcos can deliver interoperable global services such as voice, SMS and data. This is helpful but a slow process.

This could, in theory, also apply to services. During the last couple of decades the GSMA, for example, has tried to coordinate the industry to deliver services at global scale. Examples such as OneAPI and the RCS messaging service 'Joyn' have been slow and notable failures to deliver a service to market.

However, that may be more a reflection of the process and execution of those activities than anything else. The latest Open Gateway programme, delivered in coordination with the Linux Foundation which has a long history of coordinating such programmes, is two years in from initial announcement and has live services out in the field generating revenues today. So failure isn't pre-ordained.

We can see a second model for achieving global reach in Singtel's Paragon service. Launched in 2022, Singtel has created a blueprint for delivering enterprise services across cloud, edge and service orchestration which other telcos can use to provide a consistent service experience for customers in any country that adopts their blueprint. This provides customers with the simple seamless experience they would encounter buying from a global company. If this was taken as a model, we might even see a forum develop to share and scale services across telcos globally, where everyone can enjoy network effects from engaging.

REGULATORY QUESTIONS

National regulatory variations are related but separate to the scale challenge. While differences in regulation certainly make it harder to scale – for example, using different frequency allocations from one country to the next – pressures for regulators are slightly different based on the need to reflect national priorities.

Not least of those priorities is viewing telecoms as an important piece of national security infrastructure. This is one of the principal reasons why the pace of telecoms global consolidation has slowed – if a country's communications infrastructure was ultimately controlled by foreign multinationals it would create significant risks.

Nowhere is this better exemplified than in Europe, where the European Commission and national governments would, one might think, lead towards a more unified approach. However, according to contacts behind the scenes in Brussels this is not the case.

"They are not even sure whether, in the new regulatory approach that the European Commission is going to propose in the second quarter of 2025, whether this will indeed facilitate consolidation. Likely they will have to strike a difficult balance between the magic of keeping up competition and the magic of the single market making it possible to operate at a larger scale. And we do not yet know the outcome of that. I have the impression that my Commission counterparts have not landed on a specific balancing point."

Changing the rules around consolidation is certainly a possibility, so that elements that need to be protected as a matter of national security are protected, but with scope for other elements to be consolidated internationally.

"That's one of the things they are experimenting with in Belgium, for example. So you split the types of businesses and you look at what you can do, where you can work together with others and the parts that you need to keep for yourself."

However, this is so far limited in its scope.

"I must say that the debate seems to be a bit locked into opposing positions without trying to find a reasonable kind of middle ground."

GROWTH VS PROFIT

"The last few years have offered a number of shocks to those states with the most telecoms infrastructure and the most ability to invest in further telecoms evolution. First COVID, then the war in Ukraine and instability elsewhere have caused nations to rethink some of the things they felt were axiomatic. In this environment, some of our executives argued that, telcos may actually benefit from being stable, cautious providers rather than disruptors.

"In fact, the opposite. They just need to be trusted, tried, and steady entities that keep churning away. What you don't want is operators that are so agile, they break things."

This is where a debate about the identity and mission of telecoms providers comes to the fore. While growth might be desirable, investors fundamentally want to see a return on their investment. This can be accomplished by growth, but margins can also be improved by cutting costs, as we see with utility companies.

"How many utility companies have leapt into other sectors? How many water companies now also make computing systems?" One person asked rhetorically.

In fact, there are utility companies - principally energy suppliers - who have done just that, getting into supplying broadband for their customers.

"If you look at the energy providers that have gone digital, well, they do it as a side activity, and they are struggling big time to integrate it back into their traditional business. Even more so than the telcos probably."

By contrast, a focus on sustainability can drive cost savings. It is unlikely to be transformative for the business, but a 10% reduction in overall energy usage would give a useful ROI.

"The current cost of electricity, I think, is about 3% or 4% of network OpEx, which is worth doing. And obviously, we should do it. But it really is minor tinkering."

There is, of course, another area where there is intense interest in the industry at present, seemingly both for cost savings and growth...

Image by TyliJura from Pixabay

THE AI OPPORTUNITY?

Participants were very much divided on the nature of the opportunity AI might bring to the telecoms industry. There is consensus that there is an opportunity; however, there was debate whether this is an opportunity to expand into a nascent market or to improve profits by further cost-cutting.

The AI-RAN Alliance has a useful classification which we are bastardising here for clarity:

- Telco for AI, where the capabilities of the network are made available for AI services. This is the model which we have been discussing so far, where there may be opportunities for expanding into adjacent services.

- AI for Telco, which is using AI capabilities to improve the performance of the telecoms network. This is where we might, for example, see cost savings by predicting better when to turn off different elements in the network.

(There is a third category, “AI and Telco”. This was not discussed in our context, but it is running both AI and telecoms workloads over the same physical infrastructure, thereby sharing resources and making the most of the available compute and storage).

AI for Telco

Unsurprisingly, this is very much more familiar territory for the telecoms industry. We have been using a variety of models to analyse, predict and optimise traffic, interference and other elements for over a decade. Meanwhile, the use of AI and chatbots to reduce costs in customer service environments is well understood; less so in field force optimisation, but this too is an emerging field.

As a result, this received less attention - being considered more or less a given. As one person noted, “We know how to run a more efficient network with it given the right tools." and another added, "It’s becoming more and more apparent that 6G will be AI-native." Having said that, this may not be as much a given as many on the panel think. Undoubtedly there is an opportunity for AI to help telcos do many of the things they are already doing in a more efficient way. However, to quote Henry Ford, the producer of the Ford Model T:

“If I had asked people what they wanted, they would have said faster horses."

We are, arguably, at the ‘faster horses’ stage. However, AI opens up the doors to do things in radically different ways from what we are accustomed to. At that point it will be fascinating to see how that changes the game.

Telco for AI

This was the heart of contention among participants. One proposed area of opportunity lies at the network edge. After years of discussion around edge computing with limited payback for telcos, this might ultimately become a growth area.

As one participant predicted:

“Big LLMs and hyperscale is going to fall off a cliff. That's going to happen probably within the next six to nine months. But where it's going to just skyrocket is on inferencing., very much at the edge and very much sovereign to the communities it serves. You're going to see European countries first enable use of sovereignty of data for processing and inferencing of AI at the edge.”

While this certainly seems appealing, it depends on telecoms providers being in a position to seize that opportunity, not only in terms of their technology readiness but also in having the operational and commercial flexibility to seize upon it effectively. As in the case of Verizon’s work on robotics mentioned earlier, mindset and operational capabilities may be the key determinant of whether telecoms providers or other players are in a position to take up the opportunity.

What’s more, performing processing towards the edge of the network is, arguably, less an expansion into a new service are than performing the role of a utility, delivering the plumbing for AI services to run on top of. That may be a good business, but most of the value lies further up the service stack. As a result, some experts suggested “The key is the data. But how do you get the data? With LLMs, they train using all the data from the internet."

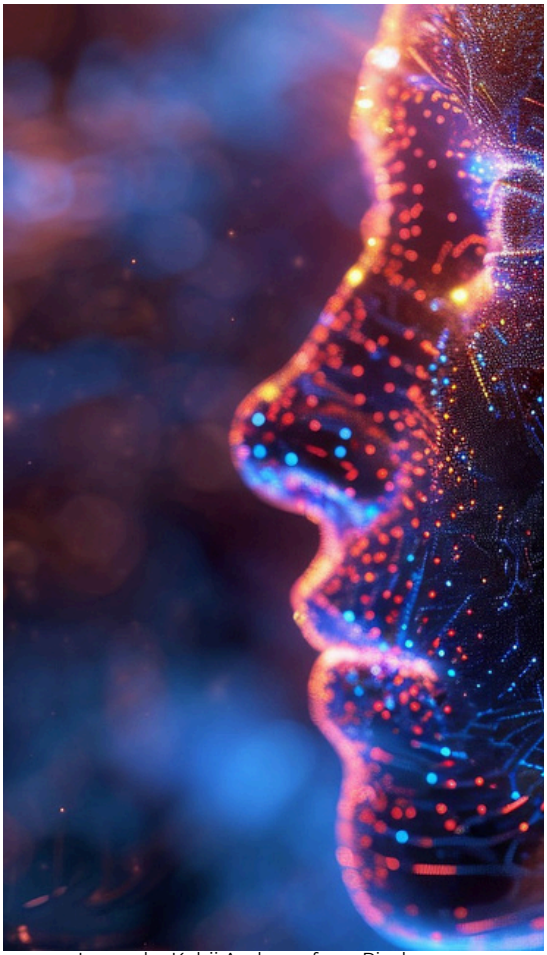

Image by Kohji Asakawa from Pixabay

While that may be true, telecoms companies are famously data-rich and may be in a unique position. As was noted, “There’s still a lot of untapped data out there, data coming from sensors. Most of this data is not on the public domain."

Participants suggested that there may be an opportunity to combine capabilities in local AI processing with connectivity to provide greater value than connectivity alone.

"I think that’s the way for a telco to package both of these — the connectivity plus the AI plus the data."

This seems on the face of it to be a good opportunity. However, it would still end up in competition with AI specialists who lack that local connectivity. Would it work? Not everyone was sanguine:

"Telcos trying to get into selling AI services, competing with OpenAI and others, they’re basically nowhere."

OPPORTUNITIES

The meeting was not designed to advocate particularly for reach into adjacent markets, but rather to gain an insight into the complexities of the telecoms industry and how business, technology, operations and policy interrelate. Nevertheless, the conversation did raise some potential opportunities.

DEFENSIVE POSTURES

Astute readers will have noticed the references to global uncertainty scattered through this report. This opens up some fresh opportunities for telecoms providers to work with governments, and especially security and defence agencies, on improving the security posture of the countries they operate in.

This would, as a pleasant twist of fate, be a situation where not being a global player can be an advantage. As one contributor commented, there is a greater appetite from government bodies to find a way forward.

"Public interest arguments that are starting to play an ever greater role. Again there is a financial dimension attached to that and I don't think that they have quite cracked it. In the report that I did I said that the public will have to pay more for increased resilience in some way or another. It may not be super expensive but you will have to take it into account."

Not only that, but if a company is actively contributing to the national security stance of a country by, for example, acting as an enabler of 5G services to the military alongside their dedicated systems, this changes some of the calculus on how a nation might regulate or act against that company.

"There is a number of competition authorities who I think are clearly on the move, taking public interest more into account compared to, let's say, the demands for lively competition and consumer interest."

DATA-DRIVEN BUSINESS MODELS

If the past 30 years have been driven by leveraging the power of publicly shared data on the internet, several contributors were keen to highlight the role that private data can take in future: Something which, by its nature, telecoms players are familiar with carrying.

"Data coming from sensors, coming from the environment, is still a question mark. There's no standard, it's not in the public domain. Organisations need to invest in the sensors to collect and analyse that amount of data. A lot of applications like Google Maps, flourish because of GPS, but GPS only works outdoor. Indoors you have a lot of methods to do indoor data, but all this data is not really available in the public domain. So there's still a lot of opportunities here."

Not only that, but pressures elsewhere in the economy are starting to push different players towards thinking about how they can leverage this data of theirs in new ways.

"People are finally waking up to the value of data.. It's valuable to TexDoT (the Texas Department of Transport).. They know that the majority of the revenue for maintenance of the road is going to come from data, not from the tax on the gas they sell. The amount of gas they sell is going down because of all the electrification of vehicles which has taken place. So where are they going to go to basically maintain and sustain the roadways? It's going to be leveraging data."

INDUSTRIAL STRATEGY*

Linked to issues of national or regional sovereignty and competitiveness, a new approach to industrial policy - whether explicit or implicit - was raised in discussions. It was suggested that this might be a way to shift some of the more problematic aspects of regulation and policy over time. Participants used the example of quantum technologies in Europe - the progression from post-quantum cryptography through quantum communications and quantum computing.

"But every country in Europe individually is too small to do that all alone. So looking ahead, Brussels is going to come out with a quantum action plan and even a quantum act. What can they do in order to be ahead of the game?"

The answer is promising for companies tired of regulatory disharmony.

"You put a lot of money into the development of quantum technologies; actually coordinate back-to-back between governments, the academic and industrial communities. You use public procurement, and *you clear barriers between these 27 countries* in order to take QPD equipment certified in one country and sell it in all the internal markets."

*SORRY USA

ACKNOWLEDGEMENTS

The TelcoForge team would like to thank the senior executives for their time and insights making this report possible.

We look forward to many other constructive insights.

Leaders' Meetings take place monthly on an invitation-only basis. Executives on the invitation list have no obligation to attend but may propose an alternate participant if they are unable to join.

Please contact TelcoForge below if you would like to:

- *Nominate a colleague or be nominated to* ***join the invitation list*** *for monthly Leaders' Meetings.*
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