Telecom Ecosystem Group – Notes of Colloquium Session

Held November 16th, 2020

The Telecom Ecosystem Group is an initiative by a group of industry veterans concerned about innovation in Telco/CSP (Communications Service Provider) infrastructure. This appears to be an industry-wide dilemma that has the aspects of a cultural problem. It is most obvious in the diminishing participation in the sector by small and medium sized vendors and the key role that they play in innovation. But it is a real problem for the larger vendors and governments as well. And the Telcos and CSPs face the prospect of withering competition coming from other sectors with healthy innovation ecosystems.

A white paper analyzing the problem was published in July 2020. Feedback to this paper resulted in a range of ideas including the possibility of a code of conduct framework to encourage change through the adoption of best practices for telco engagement with vendors. A colloquium to gather feedback was held under Chatham House Rules in November 2020 addressing issues around funding, innovation, competition, and procurement. Participants included individuals from leading telcos as well as small and medium sized vendors.

This document is a raw summary of comments made by participants during this session. Following the colloquium, discussions on the feedback resulted in a set of planned next steps that are summarized at the end of this document.

Funding

It has become very difficult for start-ups in the telecom sector to attract funding and larger vendors also need an adequate return to justify investment in new products.

- Need to make the entire pipeline work. When telcos buy from start-ups there are log-jams of 2-3 years to get acceptance for their product, after which they are sent to work with big vendors which can take another year. How do we shorten/accelerate this process and help start-ups survive until they get revenue?
- GSMA100 is a good initiative, although note that they have found fewer than 100 start-ups to recognize/give awards to.
- If 10 operators put in $10m each, you would get a $100m fund easily and maybe if operators were behind this, it would encourage VCs to put in matching funds.
- Agree that whole ecosystem needs to be healthy – the growing interest in ORAN, cloud-native mobile infrastructure and COTS hardware for radio is creating demand for new blood and people able to innovate at different layers – this naturally encourages smaller players.
- Need to define key areas/objectives that the industry can focus on rather than having a broad-church approach. What are the 3 areas of innovation that are critical for telco – are they e.g. COTS-based routing, ORAN? Having a focus on these areas would help [linked to a chat comment that we're still missing a definition of a target ecosystem].
- Creating an environment in these critical spaces and recognition that start-ups need funding is key to persuading people to invest.
- Should funding be allocated to technologies that are completely 'out there' and disruptive – i.e. are not an immediate answer to a problem – TCP/IP was the example given, and although there was argument that it might not be the best example, the issue remains that

some innovation comes out of the blue, it's use case is not immediately apparent, so how should it be funded?

- How do you allocate funds to lab trials? Should you make it clear you expect to be paid? MNOs need to pay earlier, even if it's only small amounts. But the prevailing expectation is that trials are free. Telcos have become addicted to the free approach that has evolved in the interaction between large vendors and telcos. And thus, are no longer used to working with disaggregated approaches from smaller suppliers.
- Or are free PoCs the least of operators' worries given that they are likely to be increasingly wrong-footed by the OTT players? Will this lead to pressure for change and a healthier relationship with innovative start-ups?
- There are two different types of funding for lab and field trials. Start-ups often help R&D departments get money for internal projects but this doesn't send a good message to VCs since it doesn't lead to sales.
- You need the right contact person inside the operator to get investment and sometimes the DNA of the start-up doesn't fit.

Innovation Processes

Diminishing participation by smaller vendors in the telecom ecosystem, coupled with industry consolidation and geopolitical pressures impacting the global industry, has significantly reduced vendor diversity, thereby reducing competition and the potential for innovation in the sector.

- How do you create innovation in a decreasingly diverse environment?
- How do you scale PoCs – doing a PoC for one telco is one thing, but it's difficult to scale to multiple PoCs as a small company. Yet you don't want your innovation to be locked into a single telco. Need a concept of an 'independent customer' for a PoC but that runs up against the operator's desire for a customized solution.
- PoCs are now no different to internships in investment banks – they favour large vendors who will agree because PoCs increase customer contact time and lock competitors out.
- Operators feel that start-ups are asking them to place a bet that will be well-rewarded if the start-up makes it big. The problem is that whatever bets they placed in the early days of mobile with lots of growth made money and that created a certain culture
- In those days, it was possible for small groups within telcos to have their own budgets with which they could foster innovation. Now things are tougher so all spend is centrally controlled again. The structure within operators needs to be changed to re-introduce innovation. A high proportion of the technical people in many western telcos are happy with what we're proposing but encounter organisational and cultural resistance.
- We need a business case that shows that if we spend EUR100K in the next 3 years, we'll get EUR10m in 10 years.
- We agree that the following issues are important:
    - Allocating funds for lab and field trials
    - Even small amounts of money demonstrate some kind of commitment. If a telco lab. can't find $1000, it isn't likely to fund a $1M trial.
    - Contracting process needs to change. Operators give the same contract to large vendors and start-ups. Start-ups have to hire outside counsel to go through the

contract. The SLA penalties alone can send them out of business. There has to be room to come to an accommodation with start-ups – more of a best effort case. Field trials place such huge obligations on vendors that drives operators to large, existing vendors.

- How many unicorns come out of the telecom infrastructure market? It's like playing the lottery – very few get rich, some will get acquired for a modest amount so don't attract top VCs and entrepreneurs.
- RFPs are humungous – there is no concept of collaborative innovation. Innovation needs investment from both sides to address a goal. Some leading, disruptive operators (e.g. Rakuten) are getting rid of the RFP process. Huge contracts and RFPs are obstacles – there needs to be discussion of how to streamline the process of onboarding start-ups.

Competition

Currently, there is not a level playing field between small and large vendors. Telcos often demand long term R&D engagement and participation in standards development, open source and other industry organisations as well as delivering proof of concepts which the telco is unwilling to pay for.

- What's the financial value of having competition – is there any research in this area that could be cited?
- Do we need government intervention to reinvigorate the market?
- Do we need clear problem statements that can lead to many different ways of solving the problem or should innovation be linked to a convincing idea – i.e. what takes the place of the RFP for vendor comparison purposes?
- How should services be dealt with i.e. when innovation needs integrating into the existing organisational landscape? VCs hate services-oriented companies because they don't scale. From a start-up perspective you have to have a repeatable product and if start-ups don't have this, it's bad for them and bad for the telco. Pure-play SIs are risk averse – they want predictability so they like products that are clearly defined – so do we need to get SIs more involved in supporting innovation? Does this produce any conflicts of interest?

Procurement

Typically, telco organisations are complex and siloed requiring multiple internal relationships to be established and tracked to fully understand and influence innovation directions and what requirements will ultimately appear in a future Request for Product. Moreover, terms and conditions and pricing requirements are often extremely onerous which renders a response from a smaller vendor impossible to contemplate.

- Procurement departments need to realise that start-ups need recurring revenues to finance innovation, even if this is small amounts. It doesn't matter so much when invoices are paid since telcos are good for the money.
- And when the start-up has come up with the innovative IP, that's when large telcos can step in to commoditise/open source it if they want to drive down the cost of big suppliers. The process of commoditising big vendors hurts small ones as well.
- Does the only other way of influencing procurement involve government?

- Procurement is just one aspect of the challenge that telcos lack ability to change, even in the face of competition from OTTs.

Next Steps

For the code of conduct framework to be adopted broadly across the industry, our next steps are all about socialising the code with a much wider audience. We'll be taking the following actions in the coming weeks:

1) Direct outreach to telcos, suppliers and government groups. Please help us in this endeavour by introducing contacts you think would be important and also promoting the LinkedIn web page to your LinkedIn social network:
2) Further colloquiums with specific groups such as suppliers and government entities.
3) Press and event engagement through TelecomTV, SDxCentral and other media platforms.
4) Discussions with VCs and venture groups of telcos on implementation.
5) Creation of a telecom start-up list to track funding and support.

Contact

If you have any questions about this document, or wish to participate in the follow-up industry discussions, please email us:

Enquire@TelecomEco.org

References

Telecom Ecosystem Group Home Page

Accelerating Innovation in the Telecoms Arena (White Paper)

Developing a Code of Conduct Framework for the Telecom Ecosystem (White Paper)

END.