Nokia's enterprise ambitions reveal a great deal about how it views future opportunities

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In October 2018, Nokia announced the formation of a new division that will focus on the enterprise market. The new division will launch on 1 January 2019. The announcement, which follows a similar move by Huawei, shows that Nokia no longer feels that the operator channel is sufficient for selling to enterprises; it also needs to sell directly, or through other channels. The news also suggests that Nokia does not expect operator spend on 5G networks to drive revenue growth.

The new division will target around 4000 enterprises

Nokia provided the following details to support the formation of the new division.

- Enterprise products are already generating around 5% of Nokia's revenue (EUR270 million in 3Q 2018) and this is growing by 18% per year.
- The division's focus will be on "providing telco-grade networking capabilities largely leveraging our existing products and services." Products to be sold could include private LTE networks.
- Nokia said that it "would not go deep into the enterprise market", but instead plans to target about 4000 organisations. This target market may sound small, but it is roughly three times the size of that for Vodafone Global Enterprise. Presumably, Nokia justifies this target as it will be selling a relatively narrow product portfolio, unlike global operators.
- Nokia believes that the potential addressable market for its enterprise solutions is worth USD22 billion; this is small relative to the global mobile business, but significant for Nokia.

Nokia is reducing its reliance on operators as both customers and channels to market

Nokia, along with Huawei and Ericsson, has an extremely large budget for research and development (R&D) (EUR4.9 billion in 2017 (21% of its revenue)). For comparison, the telecoms operator with the largest R&D spend, AT&T, spends less than a third of this figure each year.

However, it seems likely that spending on connectivity research will result in diminishing returns, as it has done in other technology fields. For example, a study found that, for Intel, the number of researchers required today to double chip density every 2 years "is more than 18 times larger than the number required in the early 1970s".[1] In other words, Moore's law has been observed only because of a massive increase in R&D resources. It seems likely that spending on 5G development has far-exceeded spending on GSM research, and yet the incremental

1 Bloom, Jones, Van Reenen and Webb (2018), "Are Ideas Getting Harder to Find?", https://web.stanford.edu/~chadj/IdeaPF.pdf

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benefit gained from developing 5G technologies will be lower than that from GSM development. In the face of this, Nokia may decide to direct increased attention away from connectivity research and onto other areas.

As Nokia is well aware, much of the potential value from 5G is not in connectivity itself but in the processes that this connectivity enables. For example, 5G connectivity in a warehouse or factory will enable much greater automation but connectivity itself will capture only a small share of value.

Nokia will have new products to sell from its R&D division that will benefit from the introduction of 5G technology. Under the previous structure, Nokia would be heavily reliant on operators as a sales channel, but by creating an enterprise division, Nokia is effectively saying that this operator channel is not sufficient.

The introduction of the new division gives an indication of Nokia’s expectation for 5G spending

Most operators (with a few exceptions such as Tele2) have said that capex spend will remain at similar levels as today. Furthermore, flat mobile connectivity revenue and declining share prices (at least for some operators such as Telefónica and Vodafone) do not create the space for operators to increase spending on networks.

On a recent investor call, Vodafone’s new CEO Nick Read said, “I think the industry spends enough on capex at the moment”. He also remarked that he did not want to enter an “arms race” for network investment.

As a result, Nokia is unlikely to see a short-term increase in spend on 5G networks. The cycle of spend on 5G “will peak in 7 years or 8, I’d say potentially 10 [years’ time]” according to Rajeev Suri, Nokia CEO, during the 3Q 2018 investor call.

There has historically been a spike in spending when new technology generations have been introduced. Such a spike is not expected for 5G, but Nokia states that the investment in the enterprise division is not a response to this. On the investor call mentioned above, Suri said, “it’s just a follow-through of the success of our strategy in diversification. I think it’s nothing to do with the fact that do I see less optimism for 5G”. However, it is hard not to conclude that at least part of the driver behind this new emphasis on enterprise is the need to grow in new markets in the face of flat or only slowly increasing network spend.

Effort will be required to recruit and support partners, and to manage potential conflicts

Nokia understands that the challenges of building a global enterprise business are considerable. Even if it is to rely on local partners (such as systems integrators) as a channel, a substantial effort will be needed to recruit and support these partners.

Nokia will also need to manage potential channel conflict. It will need a clear position on who it will sell to. It must develop a policy for managing conflict, especially where it is either directly competing with telecoms operators, or where its channel partners are also in conflict with each other (or even perceived conflict).

Nokia’s creation of an enterprise division is a logical progression given its desire for growth and the limitations of operators as a channel for its products. Delivering the desired growth will require considerable effort and will take time; even if the current 18% growth rate is sustained, it would take until 2023 for enterprise to represent more than 10% of Nokia’s sales.

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