

Cable access business transformation opportunities

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Introduction

Cable operators are going through major business transformations lately to get control over their costs (90% of them coming from their access networks comprising of facilities, outside plant, and in-home networks) and gain additional revenues to maintain healthy margins. The yin and the yang between the cost and the revenue centers are discussed in [1], where we recommend developing a long-term TCO-based plan. Cost optimization is only one side of the access business transformation coin. We recommended in [2] that the operator should develop a portfolio of smarter revenue-generating bandwidth services to retain a decent Capital Intensity Ratio. In this blog, we want to highlight the risk-based balancing act the operators need to consider in their access business transformation.

Opportunities

First, looking at the revenue opportunities, the traditional triple play revenues are constantly at risk. You may ask, the customer needs are not increasing at the same rate as the speed offering increases. I got it. Tell this to your customer who is choosing between your product and the other who is offering 2 Gbps or 5 Gbps at the same price. Whether we like it or not **the gap between the need versus speed is growing** and the revenue per sub per Mbps is going down. This product-based planning as opposed to needs-based planning is changing the fundamentals of access transformation methodologies (point in case the Tom Cloonan QoE-based access planning).

Also, the cable operators are underutilizing their capabilities - namely customer relations, the end-to-end infrastructure, the service infrastructure, etc. How can an operator create a win-win opportunity by playing to their above strengths? It

is logical for the **operator to evolve from these bandwidth reselling to offering high-value revenue-generating verticals**. Telecom for Wellness (T4W) opportunities such as Aging in Place and Telehealth are two such opportunities, as we have analyzed in [3], [4]. Such opportunities, if executed with conviction, will **add higher margin opportunities to your portfolios**, reinvigorate the workforce, and reuse the existing infrastructure to its next level [5].

Second, looking from a cost optimization point of view, the cable operators are facing varied linear and non-linear access upgrade options [1], [6] to keep up with the transformation needs. The short-term and long-term cost variance can create havoc in the cost center's financial and operational ([6], [7]) strategies. To avoid these pitfalls, **the operator needs to look into long-term implications from 360° points of view, as specified by our SOFT (Services, Operations, Financial, and Technical) framework** in [9]. To find the best long-term option, the operator needs to look at the transformation options from the optimal deployment point of view. This optimality could be done by exhaustively searching for the best solutions for a given transformation duration or by applying some of the business transformation goals (we call them greedy algorithms) as presented in [8], [9].

In addition to the existing cost and revenue options we have been presenting to the cable operator community, we recommend that they **use the current differentiators to leap-frog the competition by taking proper architectural steps** as highlighted in [10].

Recommendations

All of the above business transformation options will come with some level of risk and a proportionate opportunity, as shown below.



Transformation option	Risks	Opportunities
Traditional products	Decreasing revenue per bit, no differentiators	Table stake offering
Access upgrade optimization	SOFT planning, long-term vision	Long-term optimal upgrades (reduce regrettable investments)
Smart bit pipes	Non-traditional market segments, uncomfortable initial investments	Higher revenue per bit, strong differentiators
Future architectures	Applicable to only greenfield, initial spending	Lock in future deployments

Of course, the rewards will depend on what level of risks are the operators willing to take. For example, staying status-quo with traditional products will reduce the top line significantly in this hyper-competitive environment. At a minimum an operator can do is to perform long-term access transformation optimization, by meeting the product needs. This will be what we call the regrettable spend reduction. The next step for the operator is to find which portfolio of opportunities (such as T4W) they are willing to invest in. Here, more so than the other options the risk can be disproportionate to the reward if played to the operator's strength. As a final recommendation, we advise the operators to invest in strengthening their future differentiating architectures to open them for next-generation opportunities.

For additional thought-provoking discussions reach me at sudheer@duketechsolutions.com

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