

Problem Statement

An operator is interested in understanding what is the **operating cash flow (OCF) opportunity by installing different fiber deep technologies to brownfield MDUs in a market**. They have a hypothesis that different fiber deep technologies will have different take rates.

High Level Assumptions

The following network topology, revenue and cost assumptions are used for this use case:

- Revenue assumptions (OCF calculations over 5 yr. period)
 - ARPU is not changing due to new technology
 - The take rate changes for different technologies
Organic: stays at 40%, FTTB: increases from 50% to 60% FTTU: starts at 70% and reaches 90% in 3 years
 - ARPU per customer is \$70; WACC - 12%
- Topology assumptions
 - Brownfield MDU - 60 buildings, 8 units/building
 - Current status - Brownfield HFC N+5 DOCSIS3.0 node
 - Downstream/Upstream growth - 45%/30%
- Major Cost Assumptions (*Note: Costs are illustrative only*)
 - RPD Node: \$5k; OLT: \$20k; Broadband Service Group Cost: \$13k per node; Aerial Construction: \$20k/mile; UG Construction: \$50k/mile; CIN cost: \$50/HHP; FDX CPE: \$200; FDX Node: \$8K; MDU drop cost: \$250

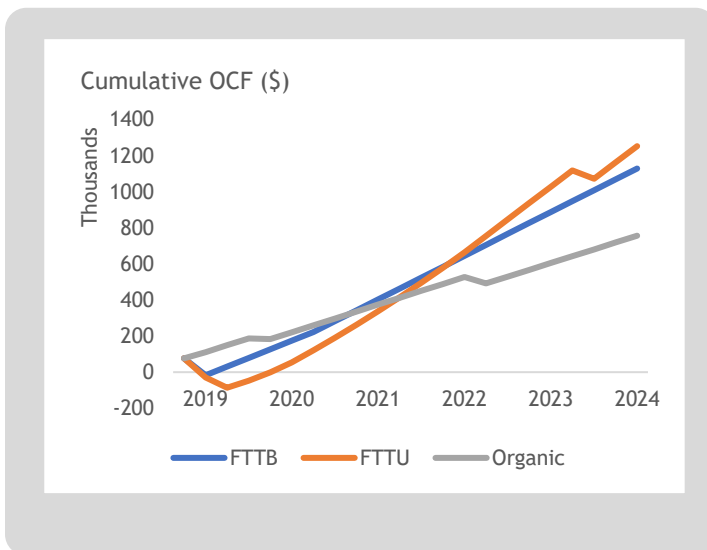
MDU strategies evaluated:

- Take rate impact
- Revenue kept constant YOY
- $OCF = Revenue - CapEx - OpEx$
- Technology options
 - Organic node splits
 - Fiber deep to Building (FTTB)
 - Fiber to the unit (FTTU)

Scope of the Analysis

An operator is evaluating different brownfield MDU deployment options and their impact on the operating cash flow over 5 years (assuming a typical MDU agreement is 5-year period). They understand that the take rate with fiber properties are higher and are also operationally less expensive. But there are different CapEx needs based on the technology upgrade path. This use case evaluates the MDU strategy based on 5-year operating cash flow.

An analysis is conducted using AP-Jibe to provide the total OCF generated for each upgrade scenario above over a 5-year period.



Results and Conclusions

Caution: These results are based on our high-level assumptions for illustrative purposes only. Actual results may vary based on each operator's environment.

These different scenarios provide very detailed output in AP-Jibe. We summarized cumulative OCF for different cases. Some of the decisions that can be derived from such analysis include:

- Higher take-rate for FTTU can result in significantly higher OCF overshadowing initial investments
- While initial cost of FTTB is higher - total OCF may over take Organic case within 3-years

Such analysis from AP-Jibe can be used by the operator for their MDU strategies and convince their technology and business leaders to invest in certain technology upgrade strategy.

For more information on this application note contact us at contact@fpinno.com or +1-919-444-2270