



xVu™ Service Assurance Solution



Business Case

2010

Mariner's xVu Solution



Presentation Flow

- Executive Summary
- The Top Five Reasons to Invest in Quality of Experience
- Business Case Assumptions
- Projected Results
- Five-Year Benefits Summary
- Summary and Conclusions

*Note: The case profiled is based on data of several real customers, not one specific account.

Mariner's xVu Proposal



Executive Summary

Management of the customer experience is the most critical determinant of success to an IPTV deployment.

65% of customer **churn** is driven by quality of experience (QoE) issues

xVu targets the key drivers of the customer experience:

Quality of the viewing experience
The effectiveness of the customer support team

Operations costs (**Opex**), if not understood and managed, can be the “**slow leak**” on an IPTV business case

Based on real customer data, a Telco can realize a **6 fold return** on their **xVu** investment within the **first year**

Mariner welcomes the opportunity to further explore the significance of this investment.

Contact us today at sales@marinerpartners.com

Top five (5) Reasons to invest in IPTV QoE

1. Assured Quality in the Viewing Experience

The viewing experience can consist of: Broadcast stream, VOD, PVR, EPG and HD lineups. To successfully assure the quality of that experience, YOU (Service Providers) must have the ability to manage each of these components. Mariner xVu dashboards provide a comprehensive “Customer-centric” real-time view of the service to Network Operations, Help Desk and Repair, Executives and the end-users.

2. Guarantee the Smart Truck Roll

Sending out a truck to a house multiple times – often without resolving the error – is a costly endeavor. This major expense (approx. 200-400 Euros/truck roll) can be effectively managed with Next Generation IPTV Service Assurance products. Mariner xVu enables support staff to quickly & proactively confirm and isolate the nature and source of the issue & initiate the appropriate course of action – often saving unnecessary truck rolls. (E.g. Smart Reboot or Smart Truck Roll).

3. Optimize the ROI from your Channel Lineup & VoD Portfolio

In the perspective of a leading IPTV service provider, the challenge of selecting/finalizing the next month’s channel and VoD lineup consists of: pulling viewer stats, compiling excel spreadsheets, and reviewing the reports to come to a conclusion – a manual process, often taking three or more days to complete. Track real time customer activities at the viewing level with Mariner xVu solution. Optimize content packaging and tune marketing programs based upon detailed viewing statistics.

“Customer-centric” Dashboards

NetworkVu



Network Operations

SupportVu



Help Desk Portal

ExecVu



Executive Dashboard

HomeVu



Self-Service Portal

Guarantee the “Smart” Truck Roll



Declare Zero Tolerance to Churn



Top five (5) Reasons to invest in IPTV QoE

4. Reduce Customer Churn and STB Churn

Declare zero tolerance for all quality of experience (QoE) induced churn. Studies have shown that over 65% of customer churn is driven by the service quality experience. Having the ability to proactively manage viewer base, isolate issues and ensure a smart response are all benefits of the Mariner xVu solution. Also substantially reduce the “speculative swap” that drives high volumes of stb churn, creating huge expense.

5. Proactively monitor your End-to-End IPTV Network

Over 70% of IPTV troubles are in the “Last Mile”, the access and in the home. Traditional network based monitoring systems fail to effectively monitor issues in the home and in the last mile. Mariner xVu provides insights in the last mile’s blind spot, represents it clearly and triggers informed actions. The objective of xVu is to allow the Service Operator to determine in 5 minutes or less the source of every single QOE based impairment. xVu’s NetworkVu and SupportVu dashboards offers customized views into service performance by neighborhood, region, channel, headend, and other perspectives as needed, enabling rapid triangulation of sources of problems.

“Customer-centric” Dashboards

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Business Case Assumptions



Installed Base of:

- 30,000 HouseHolds (STBs)
- Year over Year Growth = TBD
- Installs based on Churn Replacement =7,200 /yr (24%)

Repair

- Repair calls – 3 per customer per year
- Average loaded cost of a truck roll is 250.00 USD
- 1 out of 5 Help Desk calls result in a dispatched truck roll (20%)
- 20% of installs require a second truck roll to “get it right”

Churn

- Annual churn rate on IPTV customer base is 24% with 65% driven by QoE

Set Top Box

- Average cost to recycle a STB is 125.00 USD
- STB Speculative Swap = 30%

xVu Benefits

- Average improvement in effectiveness with xVu is 20%
- xVu will eliminate 20% of truck rolls
- xVu will eliminate 20% of the churn cost due to QoE
- xVu will improve repair time by 10%
- xVu will reduce speculative STB swapping by 50%

Projected Results – Calculations



| xVu Benefits | Formula |
|--|---|
| 1. Reduction in Unnecessary Truck Rolls (From Help Desk Calls) | $30,000 \text{ HH} \times 3 \text{ calls /customer /yr} \times 20\% \text{ trucks dispatched} \times 250\text{USD} \times 20\% \text{ truck rolls eliminated (xVu)} = 900,000 \text{ USD}$ |
| 2. Reduction in Unnecessary Truck Rolls (From New Installs) | $30,000 \text{ HH} \times 24\% \text{ annual churn} \times 20\% \text{ second truck roll} \times 250\text{USD} \times 20\% \text{ truck rolls eliminated (xVu)} = 72,000 \text{ USD}$ |
| 3. Decreased Repair Time (On Necessary “Smart Truck Rolls”) | $30,000 \text{ HH} \times 3 \text{ calls /customer /yr} \times 20\% \text{ trucks dispatched} \times 80\% \text{ necessary truck rolls} \times 250\text{USD} \times 10\% \text{ repair time improvement (xVu)} = 360,000 \text{ USD}$ |
| 4. Reduction of QoE-Based Churn (Churn Management Improvement) | $30,000 \text{ HH} \times 24\% \text{ annual churn} \times 65\% \text{ QoE related} \times 250 \text{ USD} \times 20\% \text{ cost of churn eliminated (xVu)} = 234,000 \text{ USD}$ |
| 5. STB Speculative Swap Reduction (Churn Management Improvement) | $30,000 \text{ HH} \times 3 \text{ calls /customer /yr} \times 20\% \text{ trucks dispatched} \times 30\% \text{ speculative STB swap} \times 125\text{USD} \times 50\% \text{ reduction (xVu)} = 337,500 \text{ USD}$ |

Total Projected Year One Savings = 1,903,500 USD
or 63.45 USD per Household

xVu Five-Year Benefit

xVu Benefit Calculator

Assuming the Following Information:

| | |
|----------------------|--------|
| # of Households | 30,000 |
| # of Set Top Boxes | 30,000 |
| Customer Growth Rate | 1% |
| Annual Rate of Churn | 24% |



Five Year Benefit Projection:

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
|--------------------------------------|---------------------|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Customers (Households) | 30,000 | 30,300 | 30,603 | 30,909 | 31,218 | N/A |
| Set Top Boxes | 30,000 | 30,300 | 30,603 | 30,909 | 31,218 | N/A |
| Benefits: | | | | | | |
| Truck Rolls – Trouble | \$900,000 | \$ 909,000 | \$918,090 | \$927,270.9 | \$936,543.61 | \$4,590,904.51 |
| Truck Rolls – Install | \$72,000 | \$72,720 | \$73,447.20 | \$74,181.67 | \$74,923.49 | \$367,272.36 |
| Truck Roll – Repair Time Improvement | \$360,000 | \$363,600 | \$367,236 | \$370,908.36 | \$374,617.44 | \$1,836,361.80 |
| Churn Improvement – Customers | \$234,000 | \$236,340 | \$238,703.40 | \$241,090.43 | \$243,501.33 | \$1,193,635.16 |
| Churn Improvement – STB | \$337,500 | \$340,875 | \$344,283.75 | \$347,726.59 | \$351,203.86 | \$1,721,589.20 |
| Total | \$ 1,903,500 | \$1,922,535 | \$1,941,760.35 | \$1,961,177.95 | \$1,980,789.73 | \$9,709,763.03 |

Assumptions*:

| | |
|------------------------------------|--------|
| Repair | |
| Cost per Truck Roll | \$ 250 |
| Repair Calls (per customer/year) | 3 |
| Truck Rolls – Dispatched | 20% |
| 2nd Truck Roll – Install | 20% |
| Churn | |
| QoE Related Churn | 65% |
| Set Top Box | |
| Cost per STB Recycle | \$125 |
| STB Speculative Swap | 30% |
| xVu Benefits | |
| Elimination of Truck Rolls (xVu) | 20% |
| Elimination of Cost of Churn (xVu) | 20% |
| Repair Improvement Time (xVu) | 10% |
| STB Speculative Swap Reduction | 50% |

*Taken from a reference customer

Mariner's xVu Proposal



Summary & Conclusions

- Investment of \$320,000 in xVu = first year projected saving of 1,903,500 USD (six fold return)
- Validation of the business case assumptions is key
- For a relatively modest investment (relative to the network infrastructure and IPTV-readiness expense), xVu-powered QoE delivers very solid returns
- Network probes and Robots do not deliver this insight or these benefits

Mariner welcomes the opportunity to make this a reality for your IPTV deployment.

Contact us today!

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