

Title: OpenVault Competitive Study

**A OpenVault, LLC study report enabling attributable market insights.**

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Findings

# Introduction

The mediumroast.io will automatically generate key themes, text summaries, and detect relevant snippets from the interactions associated to a study. It is then up to you to read, digest, and find meaningful points from these interaction data and document them here. In that spirit this paragraph should be rewritten based upon your research into these data.

# Opportunity

Opportunies document the real outcomes from your research into the interactions associated to the study. It is recommended that you write a quick summary related to core things you have found.

* Transparency - Product or service plans that are completely transparent, to all stakeholders and constitutents, are easy to follow and clear in direction. Further inherent transparency enables all involved parties to build community and rally behind your target audience. The mediumroast.io enables the construction of transparent plans.
* Evidence Based - Too often product, engineering and marketing teams believe in their own vision instead of the vision of their users. This misalignment between internal and external visions is evident when plans, for products and services, lack attributable evidence. That is because it is impossible to show where key elements, leading to the vision, originated from. Easily constructing evidence based plans is a key value of the mediumroast.io.
* Community - When different groups have differing opinions on what the future holds for the product or service, the potential for community is dashed. Using both Transparency and Evidence Based plans the mediumroast.io can be the kernel needed to build up a community that is passionate about user and market needs instead of internal opinion.

# Actions

To improve completeness of this study the following actions and next steps are documented with appropriate statuses.

1. Augment your study with relevant information, add interactions and companies, and more generally have fun.|Status: In progress
2. Activate your mediumroast.io organization and create your first study.|Status: Done

Key Theme Summary Tables

# Sub-Study Identifier: 1 — Every study has the default substudy, and this is the description. We encourage you to make this substudy unique to your work.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Identifier | Type | Frequency | Source | Snippet |
| Summary Theme | Summary | N/A | 201910151126-OpenVault Competitive Study-Incognito | Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience. |
| 1 | Detailed | 157 | 201910151126-OpenVault Competitive Study-Incognito | responses from cable tech executives. |
| 2 | Detailed | 99 | 201910151126-OpenVault Competitive Study-Incognito | The Fiber Service Orchestration Solution accelerates service activation and device lifecycle management for next-generation fiber-based IP services. |
| 3 | Detailed | 90 | 201910151126-OpenVault Competitive Study-Incognito | solutions are proven in communications service provider networks globally delivering tangible operational efficiencies and service agility. |
| 4 | Detailed | 75 | 201910151126-OpenVault Competitive Study-Incognito | The Fiber Service Orchestration Solution accelerates service activation and device lifecycle management for next-generation fiber-based IP services. |
| 5 | Detailed | 74 | 201910151126-OpenVault Competitive Study-Incognito | DOCSIS and PacketCable provisioning systems followed right behind earning selection by 46% of respondents. |
| 6 | Detailed | 53 | 201910151126-OpenVault Competitive Study-Incognito | Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience. |
| 7 | Detailed | 49 | 201910151126-OpenVault Competitive Study-Incognito | bandwidth upgrade) moves and disconnects .................................................................33% Not applicable....................................................................................................................................................19.7% 8 CABLE’S FIBER OUTLOOK SURVEY REPORT Software Systems Inc. provides service orchestration software and services solutions that help fixed providers operate manage and scale next- generation in-home broadband services. |
| 8 | Detailed | 26 | 201910151126-OpenVault Competitive Study-Incognito | UI/portal/API for provisioning and activating services ............................................................................52.1% UI/portal with wholesale access network insight to help us triage subscriber service quality issues faster ..........................................................................................................................47.3% UI/portal that can give visibility into wholesaler field technician/truck roll progress installations issue troubleshooting repair etc. |
| 9 | Detailed | 26 | 201910151126-OpenVault Competitive Study-Incognito | ...........................................................................................................................34.4% Historical Lease System..................................................................................................................................10.2% Other ...................................................................................................................................................................0.5% CABLE’S FIBER OUTLOOK SURVEY REPORT 7 Finally as cablecos make this historic shift to fiber-based service they could undoubtedly use some help from wholesale fiber providers. |
| 10 | Detailed | 23 | 201910151126-OpenVault Competitive Study-Incognito | Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience. |
| 11 | Detailed | 22 | 201910151126-OpenVault Competitive Study-Incognito | CABLE’S FIBER OUTLOOK SURVEY REPORT 9 – PAGE INTENTIONALLY LEFT BLANK – |
| 12 | Detailed | 19 | 201910151126-OpenVault Competitive Study-Incognito | Also scoring relatively highly were device discovery and diagnostics (45%) and improving service quality and churn management (44%). |
| 13 | Detailed | 18 | 201910151126-OpenVault Competitive Study-Incognito | They also must activate the new fiber-based services integrate them with their existing services over HFC and manage both sets of services on both the front and back ends. |
| 14 | Detailed | 18 | 201910151126-OpenVault Competitive Study-Incognito | Also scoring relatively highly were device discovery and diagnostics (45%) and improving service quality and churn management (44%). |

# Sub-Study Identifier: default — Every study has the default substudy, and this is the description. We encourage you to make this substudy unique to your work.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Identifier | Type | Frequency | Source | Snippet |
| Summary Theme | Summary | N/A | 202005191333-OpenVault Competitive Study-Intraway | Symphonica accelerates deployment for GPON 5G small cells and Remote Phy with multiple ready use cases and deployment scenarios. |
| 1 | Detailed | 60 | 202005191333-OpenVault Competitive Study-Intraway | Integration of its assets required only a High speed data were launched in the silos and heterogeneous environments month by reusing the integration and they are transforming to eliminate third month. |
| 2 | Detailed | 60 | 202005191333-OpenVault Competitive Study-Intraway | Symphonica accelerates deployment for GPON 5G small cells and Remote Phy with multiple ready use cases and deployment scenarios. |
| 3 | Detailed | 52 | 202005191333-OpenVault Competitive Study-Intraway | izzi’s OLT Network massive efﬁciencies. |
| 4 | Detailed | 38 | 202005191333-OpenVault Competitive Study-Intraway | Symphonica accelerates deployment for GPON 5G small cells and Remote Phy with multiple ready use cases and deployment scenarios. |
| 5 | Detailed | 36 | 202005191333-OpenVault Competitive Study-Intraway | By providing an independent means of modifying process ﬂows with API- based abstraction and its codeless approach was further able to reduce cost and accelerate time to market for new services for izzi. |
| 6 | Detailed | 30 | 202005191333-OpenVault Competitive Study-Intraway | The growing CSP Kafka Symphonica is highly available Java with a Spring Boot stack and didn’t intend to limit itself to Monterrey and scalable with all components reuses open components from Netﬂix either; after a successful launch there running in active/active mode. |
| 7 | Detailed | 23 | 202005191333-OpenVault Competitive Study-Intraway | It is designed to allow CSPs to automate service lifecycle management without investing in time-consuming and budget-heavy projects. |
| 8 | Detailed | 19 | 202005191333-OpenVault Competitive Study-Intraway | izzi’s OLT Network massive efﬁciencies. |
| 9 | Detailed | 14 | 202005191333-OpenVault Competitive Study-Intraway | Looking Ahead As more operators pursue 5G IoT and other next-generation service strategies their major growth opportunities will arise from the solutions they can provide over new high performance networks. |
| 10 | Detailed | 14 | 202005191333-OpenVault Competitive Study-Intraway | that provides loops conditionals and the TM Forum Information Framework Integration with two existing systems protocol libraries like HTTP SSH which provided business entity from different vendors resulting from Netconf and more. |
| 11 | Detailed | 12 | 202005191333-OpenVault Competitive Study-Intraway | The design studio simpliﬁes the deployed in Kubernetes that enable a with its customers to overcome the conﬁguration of the southbound continuous deployment approach. |

Key Themes by Sub-Study

These are the themes for every sub-study that you elected to include in the report. The format for each theme section covering summary and detailed/discrete themes includes the theme identifier and description/definition, a fun theme fortune, the themes tags, and a listing of quotes. Note these data are pulled from the system, and if you'd like to modify them you would need to modify them in the system prior to generating this report. Additionally, if you make changes to this report they aren't reflected in the system.

# Sub-Study Identifier: 1 — Every study has the default substudy, and this is the description. We encourage you to make this substudy unique to your work.

## Summary Theme

This is the summary theme for the entire sub-study. Using natural language processing mediumroast.io has detected the associated tags and quotes matched to the tags. It is a generalization of the sub-study and accompanies the discrete detailed themes.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** A truck rolls out services and broadband to customers in the home and network for improved quality and service. [system generated]

**Tags:** *battle control differentiation home broadband network | broadband services | customer care | customer experience | device management | differentiation home broadband network operations automation | home network | service providers | service quality | smart home | truck rolls | user services*

### Theme Quotes

* Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience.Service activation configuration and decreasing fallout .........................................................................54.5% Device discovery and diagnostics.................................................................................................................44.5% CPE rollout and management (CPE plug & play zero-touch provisioning) ..........................................51.8% Adding another network vendor or upgrading to new technology g. XGS-PON2 DAA Full Duplex DOCSIS).................................................................................................31.9% Improving service quality and churn management ..................................................................................44% Reducing truck rolls ........................................................................................................................................28.8% As cable operators make the shift to a DAA framework they must make corresponding changes to their operational processes.With over 20 years’ experience we’ve helped global providers like Globe Orange and Digicel accelerate and innovate in-home broadband services with our modular productized suite of software platforms.Also scoring relatively highly were device discovery and diagnostics (45%) and improving service quality and churn management (44%).
* Capabilities to look for Look for a device management solution that offers: A single dashboard that enables standards-based carrier-grade multi-technology device management for all devices Complete visibility of all devices regardless of function vendor or technology so network and device performance issues can be pinpointed and resolved before they affect service or lead to costly truck rolls Near real-time traffic monitoring event and resource utilization Remote troubleshooting tools and automated tasks that improve first-time call resolution decrease call-handling time and reduce technical escalations CBRS Opportunity Guide 05 Customer service representative (CSR) dashboards that improve your understanding of how CSRs are engaging with customers including insights into average call handling time and resolution rates Robust flexible and scalable device management that provides everything needed to manage all customer care issues network elements and devices from any vendor right out of the box with no need for additional modules Manage Quality of Service to Reduce Truck Rolls Get deeper network insights improve network operations processes and reduce truck rolls.Our solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT and 5G FWA To find out more about how the Digital Experience Management Solution can help you get the most out of CBRS today and tomorrow visit www.incognito.com/solutions/fixed-wireless- internet-service-providers/ About Software Systems Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.Capabilities to look for Look for a device management solution that offers: Technology-agnostic device management that can be used to monitor and manage all elements in your access network whether they are delivering services over 4G 5G cable fiber or CBRS through a single centralized system Flexible standards-based interfaces that provide more visibility and control of all CPEs 4G LTE devices 5G devices and IoT devices Centralized control of all gateways access points access parameters CPEs and end-user QoE Proactive measurement of QoS levels in real-time throughout your network Support for your CBRS trial today and the ability to seamlessly scale horizontally tomorrow to support massive device volumes integrate innovative IoT devices and support upcoming modern architectures like USP TR-369 Centralize Control to Deliver a High-quality Customer Experience Proactively resolve issues maintain QoS and ensure the network is always delivering an optimal QoE based on information from all connected devices.With more efficient device management your network operations and customer care teams can become a profit center rather than a cost center.
* Software Systems provides service orchestration and device management solutions that help fixed broadband service providers manage the next-generation broadband experience.As a result more devices are going to be added to the network magnifying all the typical management scenarios faced by fixed broadband service providers including the delivery of devices their activation monitoring and management as well as all the unforeseen technical issues needed to be resolved by customer care network operations and field engineering.The solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data 5G FWA DEVICE MANAGEMENT 12 Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT 4G LTE and 5G FWA With proven FWA remote device management deployments at leading global operators such as Globe in the Philippines a Nordic multi-country mobile operator a South African mobile operator and Claro Brazil is the trusted technology partner for your 5G FWA implementation.'s productized platforms allow cable fiber and fixed wireless operators to manage in- home business and IoT services and devices providing extensive automation and analytics to reduce operating costs and improve the user experience.
* © Analysys Mason Limited 2018 5: Operations automation of the home networks is key to win the battle for control of home Winning the battle for control and differentiation in the home broadband network with operations automation | 17 Figure 5.1: Fixed service providers’ strategic Virtualisation initiatives requiring (NFV SDN and cloud) operations automation in the home [Source: Analysys Mason 2018] Broadband 5G and Wi-Fi Fixed–wireless Operations automation in the home IPTV and IoT and video on smart home demand As the battle for video supremacy continues the bigger battle for control of the home network is evolving.The next frontier for customer differentiation and operational improvements will be enabled by preventing the experience issues in the first place and highlighting the underlying symptoms even before service quality degradation © Analysys Mason Limited 2018 5: Operations automation of the home networks is key to win the battle for control of home Winning the battle for control and differentiation in the home broadband network with operations automation | 18 impacts customer experience.© Analysys Mason Limited 2018 4: Empowered customer care and self-care capabilities can deliver a superior customer experience Winning the battle for control and differentiation in the home broadband network with operations automation | 16 Operations automation of the home networks is key to win the battle for control of home The capabilities discussed in Section 3 and 4 will deliver immediate direct and indirect benefits to operators.© Analysys Mason Limited 2018 4: Empowered customer care and self-care capabilities can deliver a superior customer experience Winning the battle for control and differentiation in the home broadband network with operations automation | 14 modernize them to reach ‘digital standards’.
* With over 25 years of cable engineering and telecommunications experience Patrick is responsible for engineering quality assurance and product management for a suite of products including our Broadband Command Center (BCC) device provisioning platform.'s solution: Broadband Command Center (BCC) Broadband Command Center (BCC) our DOCSIS device provisioning solution provisions the access devices—the cable modems.To help you understand how these challenges and opportunities could affect your business we askedDirector of Product Lifecycle Management Patrick Kinnerk what it means to have a DOCSIS 4.0-enabled network and howDOCSIS provisioning and management solution can help.We have an engine that builds those files for our operator customers that looks at the versions of DOCSIS that are in use on the network both on the CMTS infrastructure side and on the access device that goes in the home— the CP equipment which is the cable modem.
* home digital experience beyond the gateway.This will greatly reduce the costs associated with sending truck rolls.Know what is happening – Operations Dashboard: Service providers must have holistic visibility of network operations with advanced data diagnostics from devices and networks.Provide proactive care – KPI Analytics: Service providers need a current view of critical insights to improve proactive care remote diagnostics and service optimization.
* content filtering and other parental controls online Managed Wi-Fi – Commercial and standards-based Wi- backup and home surveillance; Fi optimization like wireless mesh improving the home Offer subscribers a degree of self-service through web and small business network experience portals and mobile apps; IoT device onboarding and lifecycle management – Expand service offerings and manage the connected Service provider control of IoT devices to offer services home and IoT offerings; such as smart home automation Improve your customer service with improved Mass telemetry – Deliver personalized services using diagnostics monitoring and firmware management; real-time deep edge intelligence and improving customer care applications Reduce the number of technical support calls from subscribers issue escalations to senior network Virtualized third-party applications – Evolve from operations personnel and field technician truck rolls; firmware-based third-party software on a gateway or CPE to containerized applications which can be rapidly Remove the burden of subscriber manual CPE deployed configuration; Roll-out services with an automated deployment process.USP provides the standards-based platform for next generation operator services such as managed Wi-Fi third- party applications wireless meshes smart-home automation IoT and customer self-care.With the advent of smart home technology operators need a way to control the connected home business model.About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* Expand broadband services Deliver competitive mass market broadband services over fixed LTE network.Improve quality of experience Enhance quality of experience while reducing the burden on customer care and field engineering.Improved service monitoring Improve the in-home experience thanks to remote customer premise equipment visibility and management.No insights into CPE device To improve customer quality of experience the operator status required a carrier-grade remote device management solution Negatively impacted that offers extensive analytic and diagnostic capabilities and customer experience supports proactive management of CPE devices.
* By viewing the home network as an area for differentiation service providers have been able to improve their Net Promotor Scores by 10-40 points reduce service calls by 30-60% reduce truck rolls by up to 30% and increase the number of customers subscribed to premium broadband tiers by 45%.The Digital Experience Solution features support for the Broadband Forum’s User Services Platform (USP) standard.Delivering quality Wi-Fi services in the home.While it’s imperative to develop a highly efficient Wi-Fi network and continue to look for ways to reduce operational costs service providers also need to continue to invest and innovate around broadband services to improve the customer experience and drive ARPU.
* By offering a unified approach to device management using TR-069 and TR-369 and offering the ability to deploy third-party virtualized applications on home and SME CPEs and gateways.solution allows service providers to leverage investments in common tools across ACS and USP – self-care tools service quality management and KPI analytics – and deliver managed services such as network security smart home automation traffic prioritization and parental controls using virtualized containers.SOLUTION OVERVIEW Digital Experience Solution Building better-connected smart home services through strategic partnerships and USP innovation The explosion of connected devices in the home The Broadband Forum User Services Platform today which use various technologies such as (USP) specification sets out capabilities to Wi-Fi IoT mesh and anything 'smart' presents enable Wi-Fi optimization virtualized services new challenges to operators — how to maintain on the gateway and automation and provides seamless always-on connectivity.Smart Home as a service market is expected to grow to $109 billion by 2025 Impact on Service Providers and Vendors There is emerging competition from operators digital companies and new breeds of home automation service providers.Service Providers Need to prioritize adaptive self-optimizing connectivity throughout the home Need to support service diagnostics and performance measuring as well as the provisioning of new service and applications to CPEs all while managing customer privacy and data security Vendors Need to develop market-ready applications to generate new opportunities Greater focus on developing partnerships Enabling smart home solutions from third-party suppliers USP Solution Overview Page 2 User Services Platform (USP) The User Services Platform (USP) is a new device management standard that enables a faster scalable and more secure way of managing the full lifecycle of connected devices and provides the platform to support the delivery of next-generation virtualized services.
* New BCC Central Management Service provides Streamline operations and customize provisioning based software tool to manage and configure multiple BCC on device type location speed quality or other criteria.walled garden or blocked access) Service Fit Export reports on potential rogue devices for simplified reporting and documentation Firmware Management Service Reduce OPEX and improve QoE with automated DOCSIS firmware management Easily see when firmware packages are available and which devices require these updates Orchestrate bulk firmware updates with automated operations Avoid service interruption with flexible scheduling options Simplify the update process and enhance visibility with an intuitive user interface www.incognito.com 4 About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.Service Firmware Management Fraud Management Automate DOCSIS configuration file management to to improve security support lawful intercept.
* offers advanced data analytics for proactive care Leveraging network intelligence is critical to improving operations.solution offers holistic near real-time data collection and analytics from the access network connected devices and digital experience to equip operators with visibility into the status of the in-home network the health of devices network wide and application performance.transforms the data from your network into real-time insights leverages this intelligence to automate the resolution of technical issues and enables proactive broadband performance management to ensure customer experience and SLA adhereence.'s cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.Even as the digital home evolves 's DX solution will continue to be the single source for your unified device management needs with a platform that boasts a future-proofed architecture.solution takes care of your network requirements today while providing you with a window to the future.
* Example: cost efﬁciencies in an emerging market For a service provider in an emerging market consider the example highlighted by Analysys Mason in their paper “Winning the battle for control and differentiation in the home broadband network with operations automation”.ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.Up to 80% Up to 32% Up to 6% of calls are escalated of calls yield a truck roll of residential customers call to specialized where mean time customer care where average engineers to repair is days handle time is 8 minutes 70% of customer issues are Wi-Fi related Business impacts Lengthy customer service High operational costs; Increased customer representative calls with extended issue resolution frustration; poor experience; a lack of immediate resolution; times; home visit risk of churn which impacts impacts experience and inconvenience net promoter score operational costs Download the White Paper “Winning the battle for control and differentiation in the home broadband network with operations automation” Analysys Mason.When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.
* For efficient device deployment and service provisioning CBRS platforms must be able to exchange customer information and other network data with these critical back-office systems.Go beyond the idea that CBRS is a technology stack and consider how CBRS network requirements fit into your overall device management system and operations from day one.Why You Can’t Take a Siloed Approach with CBRS Device Management Winning your bid for a Citizens Broadband Radio Service (CBRS) Priority Access License (PAL) is great news for your business whether you’re an MNO cable company telco operator or enterprise.A standards-based carrier-grade device management platform is designed and built for multi-vendor multi-technology environments making it easy to optimize device management.

## Detailed Themes

Here are the discrete themes for the sub-study. Since we need enough unique tags to check the individual interactions in the sub-study for relevant text snippets and quotes you may find discrete themes without quotes. We do not strike them from the report because we believe it is important to see what the mediumroast.io detected for transparency purposes.

### Detailed Theme Identifier: 1

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** A mason explains the benefits of automation to his customers and their operations. [system generated]

**Tags:** *analysys mason | automation | care | customer | experience | operations | operator | savings*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* responses from cable tech executives.
* – to survey cable operators about 24% of the responses came from their fiber build-out strategies.
* Almost one-half the responses came from cable to that comprehensive 51-question or about 47% came from companies executives involved in network survey look at what cable’s fiber- producing at least $1 billion in revenue planning operations or engineering.
* Cable executives view network virtualization (e.g.

**Frequency:** *99*

##### 202001010000-OpenVault Competitive Study-Incognito

* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* Whether they are MNOs cable companies telecom operators or enterprises the next order of business will be to deploy infrastructure and conduct network trials in preparation for the introduction of commercial services.
* For example cable operators will be able to avoid having to pay MVNO fees to mobile operators by transitioning to CBRS for their fixed wireless services.
* Capabilities to look for Look for a device management solution that offers: Technology-agnostic device management that can be used to monitor and manage all elements in your access network whether they are delivering services over 4G 5G cable fiber or CBRS through a single centralized system Flexible standards-based interfaces that provide more visibility and control of all CPEs 4G LTE devices 5G devices and IoT devices Centralized control of all gateways access points access parameters CPEs and end-user QoE Proactive measurement of QoS levels in real-time throughout your network Support for your CBRS trial today and the ability to seamlessly scale horizontally tomorrow to support massive device volumes integrate innovative IoT devices and support upcoming modern architectures like USP TR-369 Centralize Control to Deliver a High-quality Customer Experience Proactively resolve issues maintain QoS and ensure the network is always delivering an optimal QoE based on information from all connected devices.

**Frequency:** *99*

##### 202202020000-OpenVault Competitive Study-Incognito

* 's productized platforms allow cable fiber and fixed wireless operators to manage in- home business and IoT services and devices providing extensive automation and analytics to reduce operating costs and improve the user experience.
* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* Thanks to the features of 5G the technology promises to be helpful in places where fiber or cable broadband is not prevalent or neglected such as rural areas due to prohibitive installation and maintenance costs.
* These operators have networks in high ARPU markets and are implementing 5G FWA in urban and suburban areas where cable has become obsolete for data-intensive broadband services.

**Frequency:** *99*

##### 201806120842-OpenVault Competitive Study-Incognito

* Over 300 customers worldwide including Cox Claro Globe Foxtel and Singtel leverage solutions to fast-track the introduction of innovative broadband services over fiber LTE and cable technologies while delivering a great customer experience.
* This means operators must take a hard look at every customer touchpoint and journey and 6 FTTP: fiber to the premises; FTTC: fiber to the cabinet.
* cord-cutting in cable/IPTV services) and growing costs of 3 Network function virtualization (NFV) software-defined networking (SDN) and cloud technologies.
* Exceptional customer support KPI performance can bolster the CEI score Many operators are linking the senior executives’ variable remuneration to the level of improvement in customer experience being delivered to the customers and how it is helping reduce customer churn.

**Frequency:** *99*

##### 202101111255-OpenVault Competitive Study-Incognito

* There are a lot more fiber nodes and there's a special kind of fiber node required for that so it's a big expense for the cable operators.
* So to stay competitive CableLabs came up with their 10G campaign meaning 10-Gigabit bandwidth.
* They've got a combination of fiber and coaxial cable outside the plant to take care of.
* DOCSIS 4.0: What It Means for Your Business and How Can Help DOCSIS 4.0—touted as the foundation to 10G and next-generation cable services—is real it's coming and like all innovations it brings opportunities and challenges.

**Frequency:** *99*

##### 202202031523-OpenVault Competitive Study-Incognito

* Cable service providers: Cable service providers are continuously looking for ways to enter the wireless market and generate new revenue opportunities.
* With CBRS cable operators have a chance to deploy stand- alone mobile networks.
* The advent of transformational technologies such as 5G will unleash a vast array of groundbreaking digital services that will enable consumers and industries in new ways.
* It is critical for WISPs incidents and make the (wireless internet service providers) to monitor necessary services changes for these to ensure adherence to the rules and their clients.

**Frequency:** *99*

##### 202201240843-OpenVault Competitive Study-Incognito

* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* The gateway several years as there are over 1 billion TR-069 installations can be managed by a different OSS system using TR-369 globally as of 2018 (source: Broadband Forum).
* For or TR-069 and the cable modem is managed by another this reason a unified device management solution that system using DOCSIS or SNMP.
* Consider the scenario of both gateway and DOCSIS TR-069 devices will remain in operator networks for cable modem residing in the same device.

**Frequency:** *99*

##### 202104161355-OpenVault Competitive Study-Incognito

* Over 200 customers worldwide leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* This service provider needed a Lengthy customer support multi-access technology solution to support residential calls services over DSL fiber and LTE fixed wireless access.
* Expand broadband services Deliver competitive mass market broadband services over fixed LTE network.
* However in order to be successful they must be able to ensure top-class customer support and service quality as their cable DSL and FTTx counterparts.

**Frequency:** *99*

##### 202103021317-OpenVault Competitive Study-Incognito

* The report is based on a survey of more than 100 telecom executives from across the globe.
* According to survey respondents the USP technology is seen as a key development to help them deliver managed Wi-Fi service and improve Wi-Fi optimization run virtualized services on CPE devices and deliver smart home/IoT managed services.
* The Future of the Connected Home Summary of the future telco-connected home 2021 survey report In partnership with 02 | The Future of the Connected Home Survey Overview As more people bring their work education and entertainment activities into their homes it’s clear that broadband connectivity has very much become essential to everyday life.
* Delivering quality Wi-Fi services in the home.

**Frequency:** *99*

##### 202106221211-OpenVault Competitive Study-Incognito

* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast- track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* A recent industry survey found that 75% of service providers plan to deploy USP into their networks within the next 12 months USP Technical Description Controllers and Agents The User Services Platform is a system of Controllers and Agents enabling remote manipulation of software and hardware capabilities.
* SOLUTION OVERVIEW Digital Experience Solution Building better-connected smart home services through strategic partnerships and USP innovation The explosion of connected devices in the home The Broadband Forum User Services Platform today which use various technologies such as (USP) specification sets out capabilities to Wi-Fi IoT mesh and anything 'smart' presents enable Wi-Fi optimization virtualized services new challenges to operators — how to maintain on the gateway and automation and provides seamless always-on connectivity.
* Traditional firmware upgrades require a device reboot A standardized approach to lifecycle management without any firmware upgrades Launch market pilots and evaluate services and measure service uptake very quickly Launch new virtualized services on customer premise equipment Take advantage of a complete USP ecosystem and build a better connected home experience Vendors Gives partners a tested and proven way to work with operators Provides a new service delivery channel Access to wider service provider market Vendor- and technology-agnostic platform Secure services – vendors are tested and securely deployed throughplatform Strengthen market position against competitors About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next-generation broadband experience.

**Frequency:** *99*

##### 202011081502-OpenVault Competitive Study-Incognito

* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* Deployed in more than150 cable networks globally Broadband Command Center is renowned for its flexibility reliability and extensive feature set.
* Accelerate service rollout of triple-play services spanning Protect services with built-in security features to multi-vendor and multi-standard technologies including prevent denial of service (DoS) CPE cloning and other IPv6 IPTV DOCSIS 3.1 SIP and PacketCable 2.0. hacking attacks.
* the provisioning platform to ensure cable modem configurations match activated subscriber services Extreme scalability to support network expansion and Automate validation of configuration files used by the efficient use of resources CMTS-CM system to reduce the risk of service interruption High-availability DHCP server supports millions of Java-based management interface accessible from any subscriber devices unlimited number of DHCP relays per operating system server in distributed deployments Wizards and templates for streamlined workflows with Weighted DHCP servers optimize use of available IP diagnostic and reporting tools address space Full-Featured DHCPv4 and DHCPv6 support Multi-level security Simultaneously report packet counters for DHCPv4 and Manage administrator and user rights with access DHCPv6 packets for network monitoring provisioning privileges access control lists and delegation limits system health checks troubleshooting Simplify DHCPv6 Prefix Delegation IPv6 and Flexible configuration and integration options reconfigurations with centralized control Simplified access to subscriber data with integration to Support CableLabs DHCP options registry including third-party OSS platforms including LDAP databases configuration and provisioning of DOCSIS and SOAP CLI CORBA APIs and XML APIs PacketCable devices over IPv6 Leverage Java interface automatic transfer from third- Expose address allocations over BCC API so that party OSS or direct retrieval from centralized back-end northbound IPAM systems can automatically track database utilization of IPv4 and IPv6 resources www.incognito.com 2 Broadband Command Center DNS SERVICE CONFIGURATION FILE MANAGEMENT Authoritative DNS supporting VoIP Dynamic file generation provisioning FQDN requirements Static file store Integrated clustering DNS PROXY SERVICE CONFIGURATION FILE Eliminate dynamic DNS updates in large domains MANAGEMENT PROXY Remove synchronization errors Network protocol support for dynamic Responds to DNS requests using the DHCP server and static provisioning information Integrated clustering DHCP SERVICE MULTIMEDIA PROVISIONING SERVICE High Performance DHCP Software High Performance VoIP Provisioning 1:1 Failover PacketCable and SIP Terminals DOCSIS Provisioning 1:1 Failover Independent and clustering based scalability Multiple API models supported Independent and clustering based scalability DNS Configuration File Management Service Supports high-security domain name Removes the need to track and store large resolution authoritative DNS zone transfers numbers of static files by dynamically and simplified DNS administration.

**Frequency:** *99*

##### 202102091229-OpenVault Competitive Study-Incognito

* Customer success is central to our business that's why were are focused on delivering prompt and complete responses to ensure everything keeps running smoothly.
* 's cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.
* 's solution provides out-of-the-box TR-069 ACS and TR-369 (USP) support for unified device management flexible yet robust northbound interfaces to ease integration to B/OSS systems and big data platforms and a comprehensive network operations dashboard allowing you to go to market effectively from the start!
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.

**Frequency:** *99*

##### 202201240809-OpenVault Competitive Study-Incognito

* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.
* | Privacy Policy
* Learn more at www.incognito.com/solutions/digital-experience www.incognito.com Copyright © 2022 Software Systems Inc. All Rights Reserved.
* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.

**Frequency:** *99*

##### 202202031526-OpenVault Competitive Study-Incognito

* Let’s take interoperation with business support systems (BSS) and operations support systems (OSS) as an example.
* With access to 3.5 GHz spectrum you have new opportunities to enhance wireless coverage and capacity in existing markets and to tap into new markets by offering in- demand 5G and IoT services.
* Why You Can’t Take a Siloed Approach with CBRS Device Management Winning your bid for a Citizens Broadband Radio Service (CBRS) Priority Access License (PAL) is great news for your business whether you’re an MNO cable company telco operator or enterprise.
* It has almost certainly never been used in production environments or in conjunction with other network technologies devices or systems.

**Frequency:** *99*

### Detailed Theme Identifier: 2

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Oss was one of the first companies to respond to a survey of respondents about its fiber optic services. [system generated]

**Tags:** *cable | came | executives | fiber | oss | respondents | responses | services | survey*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* The Fiber Service Orchestration Solution accelerates service activation and device lifecycle management for next-generation fiber-based IP services.
* ..............................................................63.4% DOCSIS and PacketCable provisioning systems .......................................................................................46.2% Vendor-agnostic Element Management .....................................................................................................47.8% Managing device firmware .
* services to their subscribers for a while or just began offering such But operators in other parts of services in the past year.
* Also scoring relatively highly were device discovery and diagnostics (45%) and improving service quality and churn management (44%).

**Frequency:** *90*

##### 202001010000-OpenVault Competitive Study-Incognito

* Our solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT and 5G FWA To find out more about how the Digital Experience Management Solution can help you get the most out of CBRS today and tomorrow visit www.incognito.com/solutions/fixed-wireless- internet-service-providers/ About Software Systems Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* Capabilities to look for Look for a device management solution that offers: Multi-vendor device management that reduces deployment service provisioning and customer onboarding time Advanced Auto Configuration (ACS) with User Services Platform (USP) technology support that eliminates complex testing and future-proofs your investment Zero-touch onboarding and provisioning of all CPEs regardless of technology or vendor Monitoring and management of any device anywhere in the network over fixed 4G LTE 5G and CBRS (private LTE) broadband networks Extensible support for devices over a variety of access technologies through a single unified device management system including support for FTTx xPON cable xDSL and fixed- wireless via protocols such as TR-069 TR-369 SNMP and MQTT for IoT services Save Time and Money with Automated Device Discovery Avoid surprises during device onboarding and service provisioning by eliminating on-demand fetching which is hard to track down and affects performance.
* Choose the Right Device Management Solution Partner All device management solutions are not created equal.
* A single device management dashboard that provides a holistic view of all network operations and advanced device data metrics and enables automated troubleshooting of service issues will streamline device management processes.

**Frequency:** *90*

##### 202202020000-OpenVault Competitive Study-Incognito

* 5G FWA DEVICE MANAGEMENT 13
* 5G FWA DEVICE MANAGEMENT 08 Verizon's home wireless broadband offering is being sold as 5G Home.
* Remote device management is crucial for the performance of 5G FWA services.
* 5G FWA DEVICE MANAGEMENT 07 With this in mind the decision to find the right device management partner is vital and not one that operators should not overlook when outlining their 5G FWA strategy.

**Frequency:** *90*

##### 201806120842-OpenVault Competitive Study-Incognito

* Further new technologies and devices not only require new operational tools such as automated device management.
* These benefits occur due to the implementation of automated remote device management assisted troubleshooting for Tier 1 customer care agents and customer self-care apps.
* Operators need new-generation device management platforms that can support automated lifecycle management (test install configure monitor replace/terminate) of these heterogenous set of devices especially those providing services over multiple access networks in order to eliminate the high costs of managing these devices manually and the risks of causing an adverse impact to end customers.
* Customers primarily identify themselves with their device brand and streaming service and increasingly lack loyalty towards the broadband service provider.

**Frequency:** *90*

##### 202101111255-OpenVault Competitive Study-Incognito

* 's solution: Broadband Command Center (BCC) Broadband Command Center (BCC) our DOCSIS device provisioning solution provisions the access devices—the cable modems.
* With over 25 years of cable engineering and telecommunications experience Patrick is responsible for engineering quality assurance and product management for a suite of products including our Broadband Command Center (BCC) device provisioning platform.
* To help you understand how these challenges and opportunities could affect your business we askedDirector of Product Lifecycle Management Patrick Kinnerk what it means to have a DOCSIS 4.0-enabled network and howDOCSIS provisioning and management solution can help.
* Most important is what I like to call our intelligent file provisioning system which automatically detects these versions of DOCSIS and ensures the configuration is accurate for the device that's in use—we have to support that in the field.

**Frequency:** *90*

##### 202202031523-OpenVault Competitive Study-Incognito

* FWA will prove to be an essential use case for 5G and CBRS.
* Fixed Wireless Access (FWA) providers: Service providers no longer must choose between fixed broadband and mobile capacity.
* A comprehensive device management approach and vendor extension support Automated in-built device discovery: When starting a CBRS trial one does not want any surprises.
* Device communication: Device communication is key to maintaining proper signal quality.

**Frequency:** *90*

##### 202201240843-OpenVault Competitive Study-Incognito

* from telecom operators.
* USP will be span 5G fixed wireless CPEs and STBs.
* USP TR-369 service enablement builds on the widely deployed TR-069 along with critical new functionality including: Real-time monitoring telemetry and bulk statistics collections for big data processing AI and machine learning; Enhanced service provisioning authentication configuration of residential and SMB device lifecycle management; Upgradeability—firmware and security patches; Virtualization—“dockerized” containers for device management and lifecycle management of third-party applications; TLS connections improving security; Wi-Fi Alliance Certified Data Elements with 130+ KPIs; Device:2 data model (TR-181) unifying disparate IoT and vendor proprietary protocols and backwards compatibility with TR-069; Device proxy (translation) between non-USP IoT protocols such as ZigBee Zwave and Bluetooth.
* This requires a new management platform which offers remote visibility and management of gateways CPEs and connected devices regardless of device type or network access technology.

**Frequency:** *90*

##### 202104161355-OpenVault Competitive Study-Incognito

* 5G FWA Readiness 's solution provides a centralized approach to manage different FWA technologies including 5G PAGE 2 Copyright © 2021 Software Systems Inc. All Rights Reserved.
* Discover how global operators are leveraging the solution to solve their biggest FWA networking challenges.
* The Digital Experience solution provides zero-touch provisioning and remote management of customer premises equipment allowing operators to easily monitor and manage subscriber devices and services over fixed 4G LTE 5G and private wireless (CBRS) broadband networks.
* Many operators are now innovating their operations to leverage FWA access technology as this market offers new revenue opportunities.

**Frequency:** *90*

##### 202103021317-OpenVault Competitive Study-Incognito

* The DX solution offers unified support for residential and IoT device management with USP controller capability for next-generation TR-369 devices.
* With the home network now so vital to supporting the high-quality broadband services and applications we use every day the report seeks to shed light on how operators are managing complexity within the connected home the enablement of value-added services the need for open standards to enable a better-connected world.
* Establishing reliable broadband performance and innovating service offerings around the connected home ecosystem will be key factors in operators' differentiation and revenue generation strategies.
* When it comes to offering new value-added services to customers the top priorities for service providers are applications that deliver online protection and parental controls while remote technical support and application prioritization controls follow closely behind.

**Frequency:** *90*

##### 202106221211-OpenVault Competitive Study-Incognito

* By offering a unified approach to device management using TR-069 and TR-369 and offering the ability to deploy third-party virtualized applications on home and SME CPEs and gateways.solution allows service providers to leverage investments in common tools across ACS and USP – self-care tools service quality management and KPI analytics – and deliver managed services such as network security smart home automation traffic prioritization and parental controls using virtualized containers.
* USP is expected to become the target architecture for remote device management over the course of the next decade but will co-exist with current Auto Configuration Server (ACS) TR-069 device management tools for many years.
* Traditional firmware upgrades require a device reboot A standardized approach to lifecycle management without any firmware upgrades Launch market pilots and evaluate services and measure service uptake very quickly Launch new virtualized services on customer premise equipment Take advantage of a complete USP ecosystem and build a better connected home experience Vendors Gives partners a tested and proven way to work with operators Provides a new service delivery channel Access to wider service provider market Vendor- and technology-agnostic platform Secure services – vendors are tested and securely deployed throughplatform Strengthen market position against competitors About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next-generation broadband experience.
* Service providers will benefit from business process and investment re-use by leveraging the unified device management platform supporting ACS and USP.

**Frequency:** *90*

##### 202011081502-OpenVault Competitive Study-Incognito

* SOLUTION OVERVIEW Broadband Command Center DOCSIS Provisioning Solution Industry’s Leading Independent DOCSIS Provisioning Solution Broadband Command Center is the industry’s leading independent DOCSIS provisioning solution offering end-to-end device provisioning management and multi-standard support (DOCSIS PacketCable SIP IPv6) in a single software platform.
* New BCC Central Management Service provides Streamline operations and customize provisioning based software tool to manage and configure multiple BCC on device type location speed quality or other criteria.
* Service Firmware Management Fraud Management Automate DOCSIS configuration file management to to improve security support lawful intercept.
* history for law enforcement compliance Lowers operational costs through configuration Facilitates the implementation of new services such automation as DNS opt-out by providing a fast and simple way Reduces human error with minimal manual processes to associate a client device to a subscriber account and reduces deployment errors via Peer Review and Approval mechanism Fraud Management Ensures faster deployment by configuring once vs.

**Frequency:** *90*

##### 202102091229-OpenVault Competitive Study-Incognito

* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.
* 's cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.
* 's DX Solution offers different deployment options to meet your needs The DX Solution supports a variety of deployment options including on-prem cloud-based or as a SaaS offering to address the needs of any sized operator and provide access to a carrier-grade unified device management platform.
* WhyDX SaaS Solution is the Next Big Thing in Cloud-based ACS CHECKLIST In the wake of escalating financial pressures and customers demanding more from their broadband services a greater number of operators are choosing to deploy cloud-based Auto Configuration Server (ACS) solutions.

**Frequency:** *90*

##### 202201240809-OpenVault Competitive Study-Incognito

* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.
* Remote device management to reduce operational costs and improve customer experience Software partnered with Analysys Mason to research the challenges that emerging market operators face in supporting residential ﬁxed broadband subscribers.
* This infographic highlights key research and analysis ﬁndings where remote device management automates and augments operational processes and digital care channels to reduce costs and improve the customer experience.
* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.

**Frequency:** *90*

##### 202202031526-OpenVault Competitive Study-Incognito

* With access to 3.5 GHz spectrum you have new opportunities to enhance wireless coverage and capacity in existing markets and to tap into new markets by offering in- demand 5G and IoT services.
* A standards-based carrier-grade device management platform is designed and built for multi-vendor multi-technology environments making it easy to optimize device management.
* Why You Can’t Take a Siloed Approach with CBRS Device Management Winning your bid for a Citizens Broadband Radio Service (CBRS) Priority Access License (PAL) is great news for your business whether you’re an MNO cable company telco operator or enterprise.
* A CBRS device management solution that’s not field-hardened can also make it more time-consuming and difficult to add new devices and to change provisioning parameters.

**Frequency:** *90*

### Detailed Theme Identifier: 3

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Fwa is a service offered by mobile operators to connect devices to the internet. [system generated]

**Tags:** *5g fwa device | broadband | fwa device management | offering | operators | services*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* solutions are proven in communications service provider networks globally delivering tangible operational efficiencies and service agility.
* Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience.
* technologies like Full Duplex DOCSIS They aim to offer faster broadband Extended Spectrum DOCSIS and speeds slash operational costs deliver next-gen passive optical network advanced video services like UHD/4K (PON); the shift to distributed access TV boost bandwidth capacity support architecture (DAA); the virtualization new wireless offerings such as 5G of network functions; and the roll-out improve service reliability and perhaps of 5G wireless and small cells.
* Beyond digging up the streets and installing new fiber lines in the ground or stringing them from utility pole to pole cablecos must protect the new lines from harm add new devices to support them and thread them into their existing HFC plant.

**Frequency:** *75*

##### 202001010000-OpenVault Competitive Study-Incognito

* CBRS Opportunity Guide 07
* CBRS Opportunity Guide 01 CBRS Devices by the Numbers >50 LTE/5G CBRS wireless handsets on the market and growing 55 CBRS devices have completed the OnGo Alliance certification process and are now OnGo® Certified Devices 117 CBRS devices and 180 end-user devices have been authorized by the Federal Communications Commission (FCC) including smartphones routers customer premises equipment (CPE) and more 4000 to 5000 CBRS devices are being deployed in the U.S. per week 100000 CBRS access points were deployed in the U.S. by November 2020 Simplify Deployment and Provisioning The release of the 3.5 GHz spectrum offers a significant opportunity to extend existing networks to deliver more broadband coverage and capacity to end-users and support the expected explosion of 5G-enabled connected devices.
* HOW TO GET THE MOST OUT OF CBRS TODAY AND TOMORROW An Software Systems Guide INFO@INCOGNITO.COM Thinking Beyond Spectrum Based on initial activity it's safe to say that the use of unlicensed 3.5 GHz spectrum across North America will exceed expectations.
* And because CBRS spectrum offers the potential to be leveraged more cost-effectively than regulated spectrum there is a significant opportunity to offload traffic from current networks to increase profit margins on all services.

**Frequency:** *75*

##### 202202020000-OpenVault Competitive Study-Incognito

* But before we get to that point we already have an idea of the services that generate revenue which depend on two main factors: a network connection and a device to deliver the service.
* Can operators profitably deliver faultless services through 5G FWA networks and devices?
* TeraGo is confident it could get up to 10Gbps using 5G FWA making it an attractive and competitive proposition for customers that could alternatively choose a fiber connection.
* Software Systems provides service orchestration and device management solutions that help fixed broadband service providers manage the next-generation broadband experience.

**Frequency:** *75*

##### 201806120842-OpenVault Competitive Study-Incognito

* We advise clients on regulatory matters help shape spectrum policy and develop spectrum strategy support multi-billion dollar investments advise on operational performance and develop new business strategies.
* Enabled by the software-based disaggregation of vertically integrated proprietary devices these platforms: allow real time zero-touch provisioning of network and service capabilities into the home network environment support new revenue generating use cases such as cloud DVR and storage simplify and improve the management of customer devices and home networks (e.g.
* Operators need new-generation device management platforms that can support automated lifecycle management (test install configure monitor replace/terminate) of these heterogenous set of devices especially those providing services over multiple access networks in order to eliminate the high costs of managing these devices manually and the risks of causing an adverse impact to end customers.
* They are using a large variety of connected devices to access these services and to automate their homes using smart Internet of Things (IoT) devices such as smart speaker/AI assistants smart lighting and home security.

**Frequency:** *75*

##### 202101111255-OpenVault Competitive Study-Incognito

* So part of what DOCSIS 4.0 does is focus on new technology to increase upstream bandwidth to get to the true 10G type of service that a fiber connection could provide.
* Extended Spectrum DOCSIS (ESD) Because Full Duplex DOCSIS is very expensive there are other parts of the spec that operators may turn to like Extended Spectrum DOCSIS which opens up additional downstream frequencies.
* So our system needs to be able to live in that kind of an environment where there's a mixture of devices old devices new devices old infrastructure new infrastructure and be able to deliver accurate files every time we're configuring it.
* They tend to get the initial equipment from the vendors so they can do their lab trials and plan a field trial.

**Frequency:** *75*

##### 202202031523-OpenVault Competitive Study-Incognito

* DownloadCBRS Technology Guide to learn what you need to consider for your CBRS project
* CBRS spectrum can be used to boost LTE speed which can help enterprises in setting up private networks.
* A locked-in devices to support CBRS.
* Enhanced service quality: CBRS oriented devices may have varying speeds.

**Frequency:** *75*

##### 202201240843-OpenVault Competitive Study-Incognito

* Consider the scenario of both gateway and DOCSIS TR-069 devices will remain in operator networks for cable modem residing in the same device.
* What devices use TR-369?
* You can further extend digital channels by management and data collection standard and get supplementing your customer care solutions with TR- perspectives from global service providers on the business 369 USP and/or TR-069 ACS retrieved device data value that User Services Platform could deliver visit which previously was a key integration challenge for ’s USP Insights page.
* Subscribers ACS and USP can run alongside each other with USP will be enabled to perform self-service functions such as managing the TR-369 devices and ACS managing TR- changing a Wi-Fi password run a speed test perform 069 and SNMP devices.

**Frequency:** *75*

##### 202104161355-OpenVault Competitive Study-Incognito

* The Digital Experience solution provides zero-touch provisioning and remote management of customer premises equipment allowing operators to easily monitor and manage subscriber devices and services over fixed 4G LTE 5G and private wireless (CBRS) broadband networks.
* Holistic network visibility What's more the solution facilitates remote management of CPE devices and automates the configuration of devices.
* With increased visibility into KPI analytics the satisfaction operator is able to proactively monitor devices and network- Deliver high-quality service wide service quality.
* Costly escalations to technical teams INCOGNITO SOLUTION BenefitsDigital Experience solution proactively detects and addresses connectivity issues while also empowering 30% reduction in CSR call customer care teams with direct insights into subscriber home handling times networks.

**Frequency:** *75*

##### 202103021317-OpenVault Competitive Study-Incognito

* USP is the next-generation standards-based platform that enables faster more efficient and reliable monitoring controlling and management of connected devices and Wi-Fi networks in real-time.
* The report found that 63% of service providers expect to have Smart Wi-Fi available in 25% of their networks within the next three years.
* In fact over 75% of service providers surveyed said they plan to implement USP into their networks within the next 12 months.
* With personal devices such as smartphones and tablets already commonplace this growth will come from connected entertainment devices for example smart TVs and speakers and smart home devices including appliances security and lighting.

**Frequency:** *75*

##### 202106221211-OpenVault Competitive Study-Incognito

* A recent industry survey found that 75% of service providers plan to deploy USP into their networks within the next 12 months USP Technical Description Controllers and Agents The User Services Platform is a system of Controllers and Agents enabling remote manipulation of software and hardware capabilities.
* provides service orchestration software solutions to help service providers manage the next-generation broadband experience.
* Market Trends and Service Provider Challenges With the number of connected smart devices and broadband usage going up connectivity issues and increased Wi-Fi strain are a threat to disrupting life in the home.
* USP Solution Overview Page 3 Figure 1 – Digital Experience Solution Architecture As shown in Figure 1 ACS and USP controllers will co-exist in a hybrid deployment model supporting current TR-069 devices and services while introducing new TR-369 services over time allowing service providers to continue to drive service innovation.

**Frequency:** *75*

##### 202011081502-OpenVault Competitive Study-Incognito

* Deployed in more than150 cable networks globally Broadband Command Center is renowned for its flexibility reliability and extensive feature set.
* walled garden or blocked access) Service Fit Export reports on potential rogue devices for simplified reporting and documentation Firmware Management Service Reduce OPEX and improve QoE with automated DOCSIS firmware management Easily see when firmware packages are available and which devices require these updates Orchestrate bulk firmware updates with automated operations Avoid service interruption with flexible scheduling options Simplify the update process and enhance visibility with an intuitive user interface www.incognito.com 4 About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* Multimedia Provisioning Service DHCP Service Provisions accurate PacketCable and SIP Automatically manages dynamic IPv4 and multimedia configurations by managing IPv6 address allocation DNS records and subscribers devices and associated DOCSIS terminal configurations based configuration data.
* Leverage lease audit records in CLS to identify cloned configuring once per cluster devices and reduce risk of fraud Zero-touch BCC ecosystem configuration through Automatically detect and inspect suspected MAC spoofing automated discovery of BCC services - no need to when devices appear across multiple DHCP servers and configure specific interface information for BCC services CMTS gateways during an overlapping time period Improved security through a delegated administration Easily review gateway and lease histories to filter out model enabling only authorized personnel to implement legitimate cases (such as node splits) from cloned devices BCC configuration changes Improve quality of service for paying customers by blocking illegitimate devices from accessing your network BCC Central Management through configurable means (e.g.

**Frequency:** *75*

##### 202102091229-OpenVault Competitive Study-Incognito

* Are you ready to get started?
* 's cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.
* offers advanced data analytics for proactive care Leveraging network intelligence is critical to improving operations.solution offers holistic near real-time data collection and analytics from the access network connected devices and digital experience to equip operators with visibility into the status of the in-home network the health of devices network wide and application performance.
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.

**Frequency:** *75*

##### 202201240809-OpenVault Competitive Study-Incognito

* Example: cost efﬁciencies in an emerging market For a service provider in an emerging market consider the example highlighted by Analysys Mason in their paper “Winning the battle for control and differentiation in the home broadband network with operations automation”.
* Up to 80% Up to 32% Up to 6% of calls are escalated of calls yield a truck roll of residential customers call to specialized where mean time customer care where average engineers to repair is days handle time is 8 minutes 70% of customer issues are Wi-Fi related Business impacts Lengthy customer service High operational costs; Increased customer representative calls with extended issue resolution frustration; poor experience; a lack of immediate resolution; times; home visit risk of churn which impacts impacts experience and inconvenience net promoter score operational costs Download the White Paper “Winning the battle for control and differentiation in the home broadband network with operations automation” Analysys Mason.
* | Privacy Policy
* Learn more at www.incognito.com/solutions/digital-experience www.incognito.com Copyright © 2022 Software Systems Inc. All Rights Reserved.

**Frequency:** *75*

##### 202202031526-OpenVault Competitive Study-Incognito

* Naturally you’ll want to get a proof of concept (PoC) for CBRS device deployment and service provisioning going so you can get to field trials and commercial service as quickly as possible.
* CBRS spectrum has only recently become available.
* Learn More For additional insight into how to get the most out of CBRS today and tomorrow read our technology guide and explore the many benefits of the Digital Experience Solution.
* To help you better understand those benefits we’ll take a closer look at what it takes to efficiently manage the large number of devices in CBRS networks in an upcoming blog.

**Frequency:** *75*

### Detailed Theme Identifier: 4

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Cbrs provides a guide on how to get the most out of your wireless network. [system generated]

**Tags:** *cbrs spectrum | devices | get | guide | networks | service*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* The Fiber Service Orchestration Solution accelerates service activation and device lifecycle management for next-generation fiber-based IP services.
* When rolling out DAA (Remote PHY Remote MAC/PHY) what is your company seeking to address with its provisioning approach?
* ..............................................................63.4% DOCSIS and PacketCable provisioning systems .......................................................................................46.2% Vendor-agnostic Element Management .....................................................................................................47.8% Managing device firmware .
* Beyond digging up the streets and installing new fiber lines in the ground or stringing them from utility pole to pole cablecos must protect the new lines from harm add new devices to support them and thread them into their existing HFC plant.

**Frequency:** *74*

##### 202001010000-OpenVault Competitive Study-Incognito

* Capabilities to look for Look for a device management solution provider that offers a: Proven standards-based solution that you can leverage to reduce the risks and costs associated with extending your network with CBRS Full-featured vendor- and access technology-agnostic solution that provides complete management of all devices in your network Carrier-grade solution that delivers the robustness flexibility to respond and predictable performance required to enable your next step with your CBRS deployment whatever that may be CBRS Opportunity Guide 06 TrustDigital Experience Solution Get more and do more with the standards-based carrier-grade device management solution that fits your needs today and tomorrow.Digital Experience Solution is a next-generation remote device management platform that supports zero-touch provisioning and remote management of any CPE device regardless of network technology.
* A custom solution may not address network-wide requirements can lock you in to specific non-standard device management processes and may also create inefficiencies.
* Choose the Right Device Management Solution Partner All device management solutions are not created equal.
* Addressing the Device Management Challenge With a large number of devices from multiple vendors in your CBRS network deployment provisioning and onboarding can be complicated time-consuming and costly.

**Frequency:** *74*

##### 202202020000-OpenVault Competitive Study-Incognito

* 's Digital Experience Solution is a next-generation remote device management platform that supports zero-touch provisioning and remote management of any device regardless of network technology.
* Remote device management is crucial for the performance of 5G FWA services.
* 5G FWA DEVICE MANAGEMENT 13
* The solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data 5G FWA DEVICE MANAGEMENT 12 Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT 4G LTE and 5G FWA With proven FWA remote device management deployments at leading global operators such as Globe in the Philippines a Nordic multi-country mobile operator a South African mobile operator and Claro Brazil is the trusted technology partner for your 5G FWA implementation.

**Frequency:** *74*

##### 201806120842-OpenVault Competitive Study-Incognito

* Further new technologies and devices not only require new operational tools such as automated device management.
* These benefits occur due to the implementation of automated remote device management assisted troubleshooting for Tier 1 customer care agents and customer self-care apps.
* Operators need new-generation device management platforms that can support automated lifecycle management (test install configure monitor replace/terminate) of these heterogenous set of devices especially those providing services over multiple access networks in order to eliminate the high costs of managing these devices manually and the risks of causing an adverse impact to end customers.
* Enabled by the software-based disaggregation of vertically integrated proprietary devices these platforms: allow real time zero-touch provisioning of network and service capabilities into the home network environment support new revenue generating use cases such as cloud DVR and storage simplify and improve the management of customer devices and home networks (e.g.

**Frequency:** *74*

##### 202101111255-OpenVault Competitive Study-Incognito

* So our system needs to be able to live in that kind of an environment where there's a mixture of devices old devices new devices old infrastructure new infrastructure and be able to deliver accurate files every time we're configuring it.
* 's solution: Broadband Command Center (BCC) Broadband Command Center (BCC) our DOCSIS device provisioning solution provisions the access devices—the cable modems.
* With over 25 years of cable engineering and telecommunications experience Patrick is responsible for engineering quality assurance and product management for a suite of products including our Broadband Command Center (BCC) device provisioning platform.
* To help you understand how these challenges and opportunities could affect your business we askedDirector of Product Lifecycle Management Patrick Kinnerk what it means to have a DOCSIS 4.0-enabled network and howDOCSIS provisioning and management solution can help.

**Frequency:** *74*

##### 202202031523-OpenVault Competitive Study-Incognito

* Most of the new LTE devices have network for various parameters the same range of acceptable values which that have an impact on QoE may affect connectivity and customer irrespective of device vendors experience.
* Untested devices solution with one vendor using may end up costing much more.
* Enhanced service quality: CBRS oriented devices may have varying speeds.
* Devices will also need to be validated across multiple vendors.

**Frequency:** *74*

##### 202201240843-OpenVault Competitive Study-Incognito

* This requires a new management platform which offers remote visibility and management of gateways CPEs and connected devices regardless of device type or network access technology.
* 369 capable devices from hardware vendors is still in its early stages.
* For or TR-069 and the cable modem is managed by another this reason a unified device management solution that system using DOCSIS or SNMP.
* USP TR-369 service enablement builds on the widely deployed TR-069 along with critical new functionality including: Real-time monitoring telemetry and bulk statistics collections for big data processing AI and machine learning; Enhanced service provisioning authentication configuration of residential and SMB device lifecycle management; Upgradeability—firmware and security patches; Virtualization—“dockerized” containers for device management and lifecycle management of third-party applications; TLS connections improving security; Wi-Fi Alliance Certified Data Elements with 130+ KPIs; Device:2 data model (TR-181) unifying disparate IoT and vendor proprietary protocols and backwards compatibility with TR-069; Device proxy (translation) between non-USP IoT protocols such as ZigBee Zwave and Bluetooth.

**Frequency:** *74*

##### 202104161355-OpenVault Competitive Study-Incognito

* Holistic network visibility What's more the solution facilitates remote management of CPE devices and automates the configuration of devices.
* No insights into CPE device To improve customer quality of experience the operator status required a carrier-grade remote device management solution Negatively impacted that offers extensive analytic and diagnostic capabilities and customer experience supports proactive management of CPE devices.
* fixed broadband services Aggressive launch timelines INCOGNITO SOLUTION Dealing with competitive pressures By selecting ’s productized Digital Experience solution the operator is able to streamline the provisioning and lifecycle management of LTE and 5G devices over their Benefits fixed wireless network.solution offers a highly Launch in 7 business days scalable vendor-agnostic platform that enables quick CPE Responsive to market device onboarding regardless of vendor type simplified changes device management and holistic service monitoring.
* Technical issues often resulted in home visit to INCOGNITO SOLUTION perform signal test 's Digital Experience solution provides device Benefits configuration and network visibility to solve technical issues proactively and enable the efficient roll out of new LTE Improved customer services.

**Frequency:** *74*

##### 202103021317-OpenVault Competitive Study-Incognito

* The DX solution offers unified support for residential and IoT device management with USP controller capability for next-generation TR-369 devices.
* The Digital Experience Solution features support for the Broadband Forum’s User Services Platform (USP) standard.
* USP is the next-generation standards-based platform that enables faster more efficient and reliable monitoring controlling and management of connected devices and Wi-Fi networks in real-time.
* To achieve these results service providers are placing a greater emphasis on improving service diagnostics and performance measuring provisioning new services to existing devices and data security/privacy when it comes to CPE management.

**Frequency:** *74*

##### 202106221211-OpenVault Competitive Study-Incognito

* Service Providers Need to prioritize adaptive self-optimizing connectivity throughout the home Need to support service diagnostics and performance measuring as well as the provisioning of new service and applications to CPEs all while managing customer privacy and data security Vendors Need to develop market-ready applications to generate new opportunities Greater focus on developing partnerships Enabling smart home solutions from third-party suppliers USP Solution Overview Page 2 User Services Platform (USP) The User Services Platform (USP) is a new device management standard that enables a faster scalable and more secure way of managing the full lifecycle of connected devices and provides the platform to support the delivery of next-generation virtualized services.
* USP is expected to become the target architecture for remote device management over the course of the next decade but will co-exist with current Auto Configuration Server (ACS) TR-069 device management tools for many years.
* Digital Experience Solution The Digital Experience (DX) Solution provides a unified platform to support both ACS (TR- 069 SNMP MQTT) and USP (TR-369) device management architectures powering new service provider use cases such as multi-AP mesh networking virtualized applications in the home or SMB gateways smart home IoT automation and managed Wi-Fi.
* The proxied devices may be connected via technologies other than USP such as ZigBee or Zwave With USP multiple Controllers can manage the same device with strict access control rules to ensure security and data protection.

**Frequency:** *74*

##### 202011081502-OpenVault Competitive Study-Incognito

* SOLUTION OVERVIEW Broadband Command Center DOCSIS Provisioning Solution Industry’s Leading Independent DOCSIS Provisioning Solution Broadband Command Center is the industry’s leading independent DOCSIS provisioning solution offering end-to-end device provisioning management and multi-standard support (DOCSIS PacketCable SIP IPv6) in a single software platform.
* tasks reduce errors and OPEX Reduce risk of misconfigurations by provisioning files to lowest common denominator Reduce risk of configuration errors when new DOCSIS devices register Configure remote PHY and remote MAC/PHY to CCAP core Track CMTS version DOCSIS TLV parameter version and DOCSIS CM version while building and validating service Automatically perform IP configuration of remote configuration files PHY devices directing them to the CCAP core using a Automatically detect version information sent through CableLabs DHCP option definition.
* Service Firmware Management Fraud Management Automate DOCSIS configuration file management to to improve security support lawful intercept.
* New BCC Central Management Service provides Streamline operations and customize provisioning based software tool to manage and configure multiple BCC on device type location speed quality or other criteria.

**Frequency:** *74*

##### 202102091229-OpenVault Competitive Study-Incognito

* Learn how 's solution stands out from the crowd and why our platform is the perfect option for your remote device management needs today and into the future.
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.
* Even as the digital home evolves 's DX solution will continue to be the single source for your unified device management needs with a platform that boasts a future-proofed architecture.solution takes care of your network requirements today while providing you with a window to the future.
* 's DX Solution offers different deployment options to meet your needs The DX Solution supports a variety of deployment options including on-prem cloud-based or as a SaaS offering to address the needs of any sized operator and provide access to a carrier-grade unified device management platform.

**Frequency:** *74*

##### 202201240809-OpenVault Competitive Study-Incognito

* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.
* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.
* Remote device management to reduce operational costs and improve customer experience Software partnered with Analysys Mason to research the challenges that emerging market operators face in supporting residential ﬁxed broadband subscribers.
* This infographic highlights key research and analysis ﬁndings where remote device management automates and augments operational processes and digital care channels to reduce costs and improve the customer experience.

**Frequency:** *74*

##### 202202031526-OpenVault Competitive Study-Incognito

* A CBRS device management solution that’s not field-hardened can also make it more time-consuming and difficult to add new devices and to change provisioning parameters.
* It automatically discovers new devices and can easily read and write device parameters so new devices can be quickly and easily added to the system and reconfigured when necessary.
* A standards-based carrier-grade device management platform is designed and built for multi-vendor multi-technology environments making it easy to optimize device management.
* Longer term there can also be additional development costs to adapt the CBRS platform to support new devices and technologies.

**Frequency:** *74*

### Detailed Theme Identifier: 5

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** A new solution for device management from vendors. [system generated]

**Tags:** *device management | devices | may | new | platform | remote | solution | vendors*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* DOCSIS and PacketCable provisioning systems followed right behind earning selection by 46% of respondents.
* ..............................................................63.4% DOCSIS and PacketCable provisioning systems .......................................................................................46.2% Vendor-agnostic Element Management .....................................................................................................47.8% Managing device firmware .
* Service activation configuration and decreasing fallout .........................................................................54.5% Device discovery and diagnostics.................................................................................................................44.5% CPE rollout and management (CPE plug & play zero-touch provisioning) ..........................................51.8% Adding another network vendor or upgrading to new technology g. XGS-PON2 DAA Full Duplex DOCSIS).................................................................................................31.9% Improving service quality and churn management ..................................................................................44% Reducing truck rolls ........................................................................................................................................28.8% As cable operators make the shift to a DAA framework they must make corresponding changes to their operational processes.
* Overall ISBE’s prime role in promoting the providers with less than $500 million survey again this year a large majority in annual revenue accounted for of the survey responses came from nearly 40% of the replies.

**Frequency:** *53*

##### 202001010000-OpenVault Competitive Study-Incognito

* With more efficient device management your network operations and customer care teams can become a profit center rather than a cost center.
* Capabilities to look for Look for a device management solution that offers: Multi-vendor device management that reduces deployment service provisioning and customer onboarding time Advanced Auto Configuration (ACS) with User Services Platform (USP) technology support that eliminates complex testing and future-proofs your investment Zero-touch onboarding and provisioning of all CPEs regardless of technology or vendor Monitoring and management of any device anywhere in the network over fixed 4G LTE 5G and CBRS (private LTE) broadband networks Extensible support for devices over a variety of access technologies through a single unified device management system including support for FTTx xPON cable xDSL and fixed- wireless via protocols such as TR-069 TR-369 SNMP and MQTT for IoT services Save Time and Money with Automated Device Discovery Avoid surprises during device onboarding and service provisioning by eliminating on-demand fetching which is hard to track down and affects performance.
* In addition to network device deployment you'll have to consider customer onboarding and service provisioning.
* Device certifications are progressing but have not reached the critical mass needed to make deployment and provisioning easy.

**Frequency:** *53*

##### 202202020000-OpenVault Competitive Study-Incognito

* 's Digital Experience Solution is a next-generation remote device management platform that supports zero-touch provisioning and remote management of any device regardless of network technology.
* With the pandemic Bell Canada saw a 40 percent increase in the traffic of their WHI users a sign of how hungry households are for the connectivity a trend that is unlikely to change.
* A key challenge will be managing CPE devices located in the home or office so operators must have an effective strategy to support installation activation configuration diagnostics and firmware updates.
* Fixed broadband penetration rates in 2020 by region 40 9 30 4 20 15 2 10 5 0 Africa Asia Pacific Europe Americas Worldwide Therefore thanks to 5G FWA operators can reach more homes and offices faster with speeds and latencies nearly comparable to fiber – but at a fraction of the cost.

**Frequency:** *53*

##### 201806120842-OpenVault Competitive Study-Incognito

* Our model shows that even a moderate (~20%) reduction in field installation costs with zero-touch provisioning where an operator uses remote CPE configuration and custom scripts to automate the provisioning process for the eligible new customer installations can provide a significant boost 3–2.6×) to the business case for the automation for both operator profiles.
* Section 3 provides a further quantitative analysis of these approaches and the potential direct operational benefits that operators could achieve such as: opex savings call avoidance to the contact center improvements in average call handling times in the contact center reduction and avoidance of escalations of issues to more expensive operations engineers reduction and avoidance of truck rolls.
* Operational KPI Improvements Figure 3.2: KPI Support call volume to call center 50% reduction improvements of a Tier 1 Tier 1 – average call handling time 3 mins shorter operator in the developed Asia–Pacific after a Tier 1 to Tier 2 escalations 60% reduction complete automation-driven Tier 2 – average call handling time 4 mins shorter transformation of customer Truck rolls/field visits 40% reduction care/network operations (support/troubleshooting) [Source: Analysys Mason 2018] Our research showed that even though these improvements are attainable with transformation projects over a long timeframe operators can still achieve significant benefits immediately by deploying point solutions today.
* Manual processes are prone to errors and the risk of performing inaccurate analysis or making an incorrect configuration change is typically high and could lead to service disruption lost revenue and customer churn.

**Frequency:** *53*

##### 202101111255-OpenVault Competitive Study-Incognito

* 's solution: Broadband Command Center (BCC) Broadband Command Center (BCC) our DOCSIS device provisioning solution provisions the access devices—the cable modems.
* Below Patrick shares his thoughts on the following topics: DOCSIS 4.0 pains and drivers Consumer demands—upstream needs and latency The needs of operators—system impacts Full Duplex DOCSIS and Node+0 Extended Spectrum DOCSIS 's solution—Broadband Command Center (BCC) BCC customer benefits DOCSIS 4.0 pains and drivers DOCSIS 4.0 is really about bandwidth.
* With over 25 years of cable engineering and telecommunications experience Patrick is responsible for engineering quality assurance and product management for a suite of products including our Broadband Command Center (BCC) device provisioning platform.
* Check out our solution page to learn more aboutBroadband Command Center.

**Frequency:** *53*

##### 202202031523-OpenVault Competitive Study-Incognito

* Simplified deployment and management solution with Mass device automation and updates hamper zero-touch provisioning and speed and scale.
* It is also complementary to Wi-Fi.
* CBRS has the option to offer service effectively to rural and suburban markets without reusing mobile capacity.
* FWA will prove to be an essential use case for 5G and CBRS.

**Frequency:** *53*

##### 202201240843-OpenVault Competitive Study-Incognito

* For or TR-069 and the cable modem is managed by another this reason a unified device management solution that system using DOCSIS or SNMP.
* Consider the scenario of both gateway and DOCSIS TR-069 devices will remain in operator networks for cable modem residing in the same device.
* However service providers are looking to stay ahead of the curve so there is active interest in TR-369 Can I use TR-369 with DOCSIS or other protocols?
* USP TR-369 service enablement builds on the widely deployed TR-069 along with critical new functionality including: Real-time monitoring telemetry and bulk statistics collections for big data processing AI and machine learning; Enhanced service provisioning authentication configuration of residential and SMB device lifecycle management; Upgradeability—firmware and security patches; Virtualization—“dockerized” containers for device management and lifecycle management of third-party applications; TLS connections improving security; Wi-Fi Alliance Certified Data Elements with 130+ KPIs; Device:2 data model (TR-181) unifying disparate IoT and vendor proprietary protocols and backwards compatibility with TR-069; Device proxy (translation) between non-USP IoT protocols such as ZigBee Zwave and Bluetooth.

**Frequency:** *53*

##### 202104161355-OpenVault Competitive Study-Incognito

* Holistic network visibility What's more the solution facilitates remote management of CPE devices and automates the configuration of devices.
* To Low-touch training for CSRs reduce the average handle time for customer support calls with limited technical the operator wanted to automate and digitize the interactions knowledge between call center agents and home broadband users.
* The Digital Experience solution provides zero-touch provisioning and remote management of customer premises equipment allowing operators to easily monitor and manage subscriber devices and services over fixed 4G LTE 5G and private wireless (CBRS) broadband networks.
* Technical issues often resulted in home visit to INCOGNITO SOLUTION perform signal test 's Digital Experience solution provides device Benefits configuration and network visibility to solve technical issues proactively and enable the efficient roll out of new LTE Improved customer services.

**Frequency:** *53*

##### 202103021317-OpenVault Competitive Study-Incognito

* To achieve these results service providers are placing a greater emphasis on improving service diagnostics and performance measuring provisioning new services to existing devices and data security/privacy when it comes to CPE management.
* By viewing the home network as an area for differentiation service providers have been able to improve their Net Promotor Scores by 10-40 points reduce service calls by 30-60% reduce truck rolls by up to 30% and increase the number of customers subscribed to premium broadband tiers by 45%.
* Request a session today: www.incognito.com/usp-consultation Copyright © 2021 Software Systems Inc. All Rights Reserved.
* With the home network now so vital to supporting the high-quality broadband services and applications we use every day the report seeks to shed light on how operators are managing complexity within the connected home the enablement of value-added services the need for open standards to enable a better-connected world.

**Frequency:** *53*

##### 202106221211-OpenVault Competitive Study-Incognito

* USP is expected to become the target architecture for remote device management over the course of the next decade but will co-exist with current Auto Configuration Server (ACS) TR-069 device management tools for many years.
* Service Providers Need to prioritize adaptive self-optimizing connectivity throughout the home Need to support service diagnostics and performance measuring as well as the provisioning of new service and applications to CPEs all while managing customer privacy and data security Vendors Need to develop market-ready applications to generate new opportunities Greater focus on developing partnerships Enabling smart home solutions from third-party suppliers USP Solution Overview Page 2 User Services Platform (USP) The User Services Platform (USP) is a new device management standard that enables a faster scalable and more secure way of managing the full lifecycle of connected devices and provides the platform to support the delivery of next-generation virtualized services.
* USP Solution Overview Page 5
* Wi-Fi networking lights IoT Service Elements via an IoT proxy to Controllers - what needs to be managed is not necessarily on the agent.

**Frequency:** *53*

##### 202011081502-OpenVault Competitive Study-Incognito

* SOLUTION OVERVIEW Broadband Command Center DOCSIS Provisioning Solution Industry’s Leading Independent DOCSIS Provisioning Solution Broadband Command Center is the industry’s leading independent DOCSIS provisioning solution offering end-to-end device provisioning management and multi-standard support (DOCSIS PacketCable SIP IPv6) in a single software platform.
* the provisioning platform to ensure cable modem configurations match activated subscriber services Extreme scalability to support network expansion and Automate validation of configuration files used by the efficient use of resources CMTS-CM system to reduce the risk of service interruption High-availability DHCP server supports millions of Java-based management interface accessible from any subscriber devices unlimited number of DHCP relays per operating system server in distributed deployments Wizards and templates for streamlined workflows with Weighted DHCP servers optimize use of available IP diagnostic and reporting tools address space Full-Featured DHCPv4 and DHCPv6 support Multi-level security Simultaneously report packet counters for DHCPv4 and Manage administrator and user rights with access DHCPv6 packets for network monitoring provisioning privileges access control lists and delegation limits system health checks troubleshooting Simplify DHCPv6 Prefix Delegation IPv6 and Flexible configuration and integration options reconfigurations with centralized control Simplified access to subscriber data with integration to Support CableLabs DHCP options registry including third-party OSS platforms including LDAP databases configuration and provisioning of DOCSIS and SOAP CLI CORBA APIs and XML APIs PacketCable devices over IPv6 Leverage Java interface automatic transfer from third- Expose address allocations over BCC API so that party OSS or direct retrieval from centralized back-end northbound IPAM systems can automatically track database utilization of IPv4 and IPv6 resources www.incognito.com 2 Broadband Command Center DNS SERVICE CONFIGURATION FILE MANAGEMENT Authoritative DNS supporting VoIP Dynamic file generation provisioning FQDN requirements Static file store Integrated clustering DNS PROXY SERVICE CONFIGURATION FILE Eliminate dynamic DNS updates in large domains MANAGEMENT PROXY Remove synchronization errors Network protocol support for dynamic Responds to DNS requests using the DHCP server and static provisioning information Integrated clustering DHCP SERVICE MULTIMEDIA PROVISIONING SERVICE High Performance DHCP Software High Performance VoIP Provisioning 1:1 Failover PacketCable and SIP Terminals DOCSIS Provisioning 1:1 Failover Independent and clustering based scalability Multiple API models supported Independent and clustering based scalability DNS Configuration File Management Service Supports high-security domain name Removes the need to track and store large resolution authoritative DNS zone transfers numbers of static files by dynamically and simplified DNS administration.
* Broadband Command Center Network Deployment Broadband Command Center Modem CMTS OSS/BSS www.incognito.com 3 Value-Added Capabilities Central Management Service Central Lease Service (CLS) New software tool and lightweight user interface to Accelerate and simplify Lawful Intercept look-up processes manage and configure multiple BCC clusters with CLS Alleviates the need for lengthy and error-prone manual Compiles historical and active lease data from Broadband configuration Command Center Replaces CLI-based scripting to configure BCC clusters Simplifies LI without overloading DHCP that typically required significant scripting expertise.
* Features and Benefits Reliable and accurate device provisioning to accelerate Leverage latency and reliability improvements of DOCSIS 3.1 service uptake BCC is DOCSIS 3.1 compatible supporting all new Improve service uptime with high-availability configuration parameters that go into DOCSIS 3.1 configuration files Assure service availability with 1:1 primary-to-secondary Configurable client classes simplify development of DHCP deployment DOCSIS 3.1 files dynamically deploying provisioning Multiple integration models ensures that OSS systems parameters to improve latency and reliability while are in sync with device provisioning reducing operational requirements.

**Frequency:** *53*

##### 202102091229-OpenVault Competitive Study-Incognito

* We are proud to offer our customers access to 24/7 available support resources our online knowledge center and an easy-to-use trouble ticketing system to help accelerate the resolution of technical issues and keep you operational.
* WhyDX SaaS Solution is the Next Big Thing in Cloud-based ACS CHECKLIST In the wake of escalating financial pressures and customers demanding more from their broadband services a greater number of operators are choosing to deploy cloud-based Auto Configuration Server (ACS) solutions.
* 's cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.

**Frequency:** *53*

##### 202201240809-OpenVault Competitive Study-Incognito

* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.
* | Privacy Policy
* Learn more at www.incognito.com/solutions/digital-experience www.incognito.com Copyright © 2022 Software Systems Inc. All Rights Reserved.
* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.

**Frequency:** *53*

##### 202202031526-OpenVault Competitive Study-Incognito

* Also at some point your network operations center (NOC) will need to get involved in managing CBRS deployments.
* A CBRS device management solution that’s not field-hardened can also make it more time-consuming and difficult to add new devices and to change provisioning parameters.
* For efficient device deployment and service provisioning CBRS platforms must be able to exchange customer information and other network data with these critical back-office systems.
* Naturally you’ll want to get a proof of concept (PoC) for CBRS device deployment and service provisioning going so you can get to field trials and commercial service as quickly as possible.

**Frequency:** *53*

### Detailed Theme Identifier: 6

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Dhcp command line configuration with docs in the center. [system generated]

**Tags:** *bcc | command center | configuration | dhcp | dns | docsis 40 | provisioning*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience.
* ’s turn-key pre-integrated fiber solution not only provides multi-play bundled services such as hybrid video (IPTV OTT) Internet and VoIP but lays the foundation to fulfill new business models such as smart home IoT and mobile backhaul.
* bandwidth upgrade) moves and disconnects .................................................................33% Not applicable....................................................................................................................................................19.7% 8 CABLE’S FIBER OUTLOOK SURVEY REPORT Software Systems Inc. provides service orchestration software and services solutions that help fixed providers operate manage and scale next- generation in-home broadband services.
* With over 20 years’ experience we’ve helped global providers like Globe Orange and Digicel accelerate and innovate in-home broadband services with our modular productized suite of software platforms.

**Frequency:** *49*

##### 202001010000-OpenVault Competitive Study-Incognito

* To manage and maintain QoS and QoE levels that adhere to service level agreements your network operations managers will need full visibility of all devices connected to access points and to the on-premises Wi-Fi network in a broadband-connected home or business.
* As your trials give way to commercial service you'll need to consider other devices that enable service delivery such as gateways that may be connected to both a modem and a set-top-box or home automation devices that communicate data and video to end-user handheld devices.
* By delivering better-performing more secure and flexible broadband connectivity your subscribers can enjoy data-rich applications and services at home and at work.
* Our solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT and 5G FWA To find out more about how the Digital Experience Management Solution can help you get the most out of CBRS today and tomorrow visit www.incognito.com/solutions/fixed-wireless- internet-service-providers/ About Software Systems Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.

**Frequency:** *49*

##### 202202020000-OpenVault Competitive Study-Incognito

* 5G FWA DEVICE MANAGEMENT 08 Verizon's home wireless broadband offering is being sold as 5G Home.
* It is forecast that by 2024 they will be more than 1.4 billion connected devices worldwide equaling a compound annual growth rate (CAGR) of 14 percent as consumers continue to invest in more devices and smart home services.
* According to IDC video streaming home surveillance and security and smart speakers will be the main drivers of this growth.
* Since network rollout is much faster T-Mobile has to address the bottleneck in the installation process when home devices become connected to the network and services.

**Frequency:** *49*

##### 201806120842-OpenVault Competitive Study-Incognito

* Smart home and home automation use cases around IoT/connected devices in the home is expected to explode in the coming years and competition will emerge from a diverse ecosystem of players including operators digital companies and a new breed of home automation service providers.
* They are using a large variety of connected devices to access these services and to automate their homes using smart Internet of Things (IoT) devices such as smart speaker/AI assistants smart lighting and home security.
* Use cases such as connected thermostats water heaters smart lighting solutions smart energy smart water and home security are being considered.
* There is fierce competition between many different players and ecosystems including network/connectivity providers web-scale players and smart home solution providers to conquer the digital home network market.

**Frequency:** *49*

##### 202101111255-OpenVault Competitive Study-Incognito

* We have an engine that builds those files for our operator customers that looks at the versions of DOCSIS that are in use on the network both on the CMTS infrastructure side and on the access device that goes in the home— the CP equipment which is the cable modem.
* DOCSIS 4.0: What It Means for Your Business and How Can Help DOCSIS 4.0—touted as the foundation to 10G and next-generation cable services—is real it's coming and like all innovations it brings opportunities and challenges.
* So part of what DOCSIS 4.0 does is focus on new technology to increase upstream bandwidth to get to the true 10G type of service that a fiber connection could provide.
* It includes quality of service and a whole bunch of things; a typical DOCSIS configuration for a cable modem might have many dozens— maybe upwards of 100 different—parameters included in the file.

**Frequency:** *49*

##### 202202031523-OpenVault Competitive Study-Incognito

* home digital experience beyond the gateway.
* It is critical for WISPs incidents and make the (wireless internet service providers) to monitor necessary services changes for these to ensure adherence to the rules and their clients.
* Cable service providers: Cable service providers are continuously looking for ways to enter the wireless market and generate new revenue opportunities.
* The right solution can enable service providers to easily scale horizontally to support massive device volumes innovate with IoT device integration and support upcoming modern architectures like User Services Platform (USP) leveraging TR-369.

**Frequency:** *49*

##### 202201240843-OpenVault Competitive Study-Incognito

* With the advent of smart home technology operators need a way to control the connected home business model.
* content filtering and other parental controls online Managed Wi-Fi – Commercial and standards-based Wi- backup and home surveillance; Fi optimization like wireless mesh improving the home Offer subscribers a degree of self-service through web and small business network experience portals and mobile apps; IoT device onboarding and lifecycle management – Expand service offerings and manage the connected Service provider control of IoT devices to offer services home and IoT offerings; such as smart home automation Improve your customer service with improved Mass telemetry – Deliver personalized services using diagnostics monitoring and firmware management; real-time deep edge intelligence and improving customer care applications Reduce the number of technical support calls from subscribers issue escalations to senior network Virtualized third-party applications – Evolve from operations personnel and field technician truck rolls; firmware-based third-party software on a gateway or CPE to containerized applications which can be rapidly Remove the burden of subscriber manual CPE deployed configuration; Roll-out services with an automated deployment process.
* USP provides the standards-based platform for next generation operator services such as managed Wi-Fi third- party applications wireless meshes smart-home automation IoT and customer self-care.
* In January 2018 the Broadband Forum Connected Home Council ratified the USP 1.0 standard (TR-369) and a 1.1 amendment to the USP specification occured in Fall 2019.

**Frequency:** *49*

##### 202104161355-OpenVault Competitive Study-Incognito

* Improved service monitoring Improve the in-home experience thanks to remote customer premise equipment visibility and management.
* Technical issues often resulted in home visit to INCOGNITO SOLUTION perform signal test 's Digital Experience solution provides device Benefits configuration and network visibility to solve technical issues proactively and enable the efficient roll out of new LTE Improved customer services.
* Solution Case Studies: Fixed Wireless Access Digital Experience Solution OVERVIEW Fixed wireless access (FWA) is a great way for service providers to extend their network and offer fixed broadband services to more residential customers.
* This means having the ability to remotely monitor and manage CPE devices analyze network KPIs diagnose home Wi-Fi network problems and support customers facing technical issues.

**Frequency:** *49*

##### 202103021317-OpenVault Competitive Study-Incognito

* Delivering quality Wi-Fi services in the home.
* 03 | The Future of the Connected Home Key Findings and Analysis Managing the connected home is key to improving quality of experience.
* 05 | The Future of the Connected Home The need for standards to drive our connected world.
* With the home network now so vital to supporting the high-quality broadband services and applications we use every day the report seeks to shed light on how operators are managing complexity within the connected home the enablement of value-added services the need for open standards to enable a better-connected world.

**Frequency:** *49*

##### 202106221211-OpenVault Competitive Study-Incognito

* Allows Service Providers to Build a Better Connected Home Experience How?
* Smart Home as a service market is expected to grow to $109 billion by 2025 Impact on Service Providers and Vendors There is emerging competition from operators digital companies and new breeds of home automation service providers.
* To capitalize on the connected home service providers and vendors must take a fully comprehensive approach.
* SOLUTION OVERVIEW Digital Experience Solution Building better-connected smart home services through strategic partnerships and USP innovation The explosion of connected devices in the home The Broadband Forum User Services Platform today which use various technologies such as (USP) specification sets out capabilities to Wi-Fi IoT mesh and anything 'smart' presents enable Wi-Fi optimization virtualized services new challenges to operators — how to maintain on the gateway and automation and provides seamless always-on connectivity.

**Frequency:** *49*

##### 202011081502-OpenVault Competitive Study-Incognito

* walled garden or blocked access) Service Fit Export reports on potential rogue devices for simplified reporting and documentation Firmware Management Service Reduce OPEX and improve QoE with automated DOCSIS firmware management Easily see when firmware packages are available and which devices require these updates Orchestrate bulk firmware updates with automated operations Avoid service interruption with flexible scheduling options Simplify the update process and enhance visibility with an intuitive user interface www.incognito.com 4 About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* Accelerate service rollout of triple-play services spanning Protect services with built-in security features to multi-vendor and multi-standard technologies including prevent denial of service (DoS) CPE cloning and other IPv6 IPTV DOCSIS 3.1 SIP and PacketCable 2.0. hacking attacks.
* Leverage lease audit records in CLS to identify cloned configuring once per cluster devices and reduce risk of fraud Zero-touch BCC ecosystem configuration through Automatically detect and inspect suspected MAC spoofing automated discovery of BCC services - no need to when devices appear across multiple DHCP servers and configure specific interface information for BCC services CMTS gateways during an overlapping time period Improved security through a delegated administration Easily review gateway and lease histories to filter out model enabling only authorized personnel to implement legitimate cases (such as node splits) from cloned devices BCC configuration changes Improve quality of service for paying customers by blocking illegitimate devices from accessing your network BCC Central Management through configurable means (e.g.
* Multimedia Provisioning Service DHCP Service Provisions accurate PacketCable and SIP Automatically manages dynamic IPv4 and multimedia configurations by managing IPv6 address allocation DNS records and subscribers devices and associated DOCSIS terminal configurations based configuration data.

**Frequency:** *49*

##### 202102091229-OpenVault Competitive Study-Incognito

* 's cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.
* offers advanced data analytics for proactive care Leveraging network intelligence is critical to improving operations.solution offers holistic near real-time data collection and analytics from the access network connected devices and digital experience to equip operators with visibility into the status of the in-home network the health of devices network wide and application performance.
* Even as the digital home evolves 's DX solution will continue to be the single source for your unified device management needs with a platform that boasts a future-proofed architecture.solution takes care of your network requirements today while providing you with a window to the future.
* Page 1 's Customer Success team offers dedicated support and access to unique expertise all day every day With Customer Success teams located worldwide (in North America CALA Europe and Asia) is well poised to provide service providers with the expertise and support they are looking for to ensure a successful cloud-based ACS deployment.

**Frequency:** *49*

##### 202201240809-OpenVault Competitive Study-Incognito

* Example: cost efﬁciencies in an emerging market For a service provider in an emerging market consider the example highlighted by Analysys Mason in their paper “Winning the battle for control and differentiation in the home broadband network with operations automation”.
* Up to 80% Up to 32% Up to 6% of calls are escalated of calls yield a truck roll of residential customers call to specialized where mean time customer care where average engineers to repair is days handle time is 8 minutes 70% of customer issues are Wi-Fi related Business impacts Lengthy customer service High operational costs; Increased customer representative calls with extended issue resolution frustration; poor experience; a lack of immediate resolution; times; home visit risk of churn which impacts impacts experience and inconvenience net promoter score operational costs Download the White Paper “Winning the battle for control and differentiation in the home broadband network with operations automation” Analysys Mason.
* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.
* | Privacy Policy

**Frequency:** *49*

##### 202202031526-OpenVault Competitive Study-Incognito

* Naturally you’ll want to get a proof of concept (PoC) for CBRS device deployment and service provisioning going so you can get to field trials and commercial service as quickly as possible.
* With access to 3.5 GHz spectrum you have new opportunities to enhance wireless coverage and capacity in existing markets and to tap into new markets by offering in- demand 5G and IoT services.
* Device Management Gets Messy Almost every service provider in the world operates in a multi-vendor multi- technology and multi-system environment.
* For efficient device deployment and service provisioning CBRS platforms must be able to exchange customer information and other network data with these critical back-office systems.

**Frequency:** *49*

### Detailed Theme Identifier: 7

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** A home with a smart phone and internet service provider connected to it [system generated]

**Tags:** *connected home | service providers | services | smart home | wifi*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* bandwidth upgrade) moves and disconnects .................................................................33% Not applicable....................................................................................................................................................19.7% 8 CABLE’S FIBER OUTLOOK SURVEY REPORT Software Systems Inc. provides service orchestration software and services solutions that help fixed providers operate manage and scale next- generation in-home broadband services.
* DOCSIS and PacketCable provisioning systems followed right behind earning selection by 46% of respondents.
* ..............................................................63.4% DOCSIS and PacketCable provisioning systems .......................................................................................46.2% Vendor-agnostic Element Management .....................................................................................................47.8% Managing device firmware .
* With service providers gain a unique operational competitive advantage with an accelerated deployment model in weeks coupled with extensive process automation and the capability to easily integrate and co-exist with legacy OSS and BSS systems.

**Frequency:** *26*

##### 202001010000-OpenVault Competitive Study-Incognito

* The company is a division of the Lumine Group a portfolio of Constellation Software Inc. the largest independent software company in Canada.
* Our solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT and 5G FWA To find out more about how the Digital Experience Management Solution can help you get the most out of CBRS today and tomorrow visit www.incognito.com/solutions/fixed-wireless- internet-service-providers/ About Software Systems Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* HOW TO GET THE MOST OUT OF CBRS TODAY AND TOMORROW An Software Systems Guide INFO@INCOGNITO.COM Thinking Beyond Spectrum Based on initial activity it's safe to say that the use of unlicensed 3.5 GHz spectrum across North America will exceed expectations.
* As you plan your next steps with CBRS consultations with the right device management software provider can make a world of difference.

**Frequency:** *26*

##### 202202020000-OpenVault Competitive Study-Incognito

* The company is a division of the Lumine Group a portfolio of Constellation Software Inc. the largest independent software company in Canada.
* If you would like to learn more aboutFWA solution or discuss the findings of this report in more detail please contact the team at info@incognito.com or visit 's 5G FWA solution page at www.incognito.com/solutions/fixed-wireless-internet- service-providers/ About Software Systems Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* Software Systems provides service orchestration and device management solutions that help fixed broadband service providers manage the next-generation broadband experience.
* According to GSA there are currently more than 22 manufacturers of 5G FWA devices including recognized companies such as Huawei ZTE Samsung Greenpacket Casa Systems and Blinq Networks offering CPEs for outdoor and indoor deployments as well as hotspot access points.

**Frequency:** *26*

##### 201806120842-OpenVault Competitive Study-Incognito

* Software Systems Inc. provides software and services to help service providers manage and monetize broadband services.
* 5177472 © Analysys Mason Limited 2018 All rights reserved.
* 7 This research and white paper was commissioned by Software.
* Reskilling could include developing some of the automations using the platform and API capabilities of the operational software.

**Frequency:** *26*

##### 202101111255-OpenVault Competitive Study-Incognito

* The needs of operators—system impacts Like every major version of DOCSIS this involves both hardware and software systems at the cable operators.
* This means there's a fiber node and there are zero amplifiers and that's typically not how cable systems are built today.
* They'll be happy to stay where they are for a little while longer and they'll let the larger Tier 1 operators do the initial trials get their systems upgraded.
* I should really say it impacts hardware firmware and software—all three things.

**Frequency:** *26*

##### 202202031523-OpenVault Competitive Study-Incognito

* Adherence to regulations Stable connection SINR (signal-to-interference-plus-noise ratio) A solution that can measure is a key metric for LTE systems.
* When it comes to taking on a new deployment consultations with the right device management software vendor can make a world of difference.
* LTE devices need to be tested and need to be interoperable.
* CBRS has the option to offer service effectively to rural and suburban markets without reusing mobile capacity.

**Frequency:** *26*

##### 202201240843-OpenVault Competitive Study-Incognito

* www.incognito.com Copyright © 2022 Software Systems Inc.. All Rights Reserved.
* About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* The company is a division of the Lumine Group a portfolio of Constellation Software Inc. the largest independent software company in Canada.
* The widget technology underpinning ’s self-care applications helps rapidly shorten IT software development intervals and enables operators to introduce I have an ACS deployed.

**Frequency:** *26*

##### 202104161355-OpenVault Competitive Study-Incognito

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* PAGE 3 Copyright © 2021 Software Systems Inc. All Rights Reserved.
* PAGE 5 Copyright © 2021 Software Systems Inc. All Rights Reserved.
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**Frequency:** *26*

##### 202103021317-OpenVault Competitive Study-Incognito

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* Copyright © 2021 Software Systems Inc. All Rights Reserved.
* Request a session today: www.incognito.com/usp-consultation Copyright © 2021 Software Systems Inc. All Rights Reserved.
* 82% of CSPs said their top course of action to resolve Wi-Fi congestion or coverage issues is to provide Wi-Fi extenders Copyright © 2021 Software Systems Inc. All Rights Reserved.

**Frequency:** *26*

##### 202106221211-OpenVault Competitive Study-Incognito

* The company is a division of the Lumine Group a portfolio of Constellation Software Inc. the largest independent software company in Canada.
* Traditional firmware upgrades require a device reboot A standardized approach to lifecycle management without any firmware upgrades Launch market pilots and evaluate services and measure service uptake very quickly Launch new virtualized services on customer premise equipment Take advantage of a complete USP ecosystem and build a better connected home experience Vendors Gives partners a tested and proven way to work with operators Provides a new service delivery channel Access to wider service provider market Vendor- and technology-agnostic platform Secure services – vendors are tested and securely deployed throughplatform Strengthen market position against competitors About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next-generation broadband experience.
* provides service orchestration software solutions to help service providers manage the next-generation broadband experience.
* We have over 20 years of experience in helping global service providers accelerate and innovate in-home broadband services with our modular productized suite of software platforms.

**Frequency:** *26*

##### 202011081502-OpenVault Competitive Study-Incognito

* The company is a division of the Lumine Group a portfolio of Constellation Software Inc. the largest independent software company in Canada.
* walled garden or blocked access) Service Fit Export reports on potential rogue devices for simplified reporting and documentation Firmware Management Service Reduce OPEX and improve QoE with automated DOCSIS firmware management Easily see when firmware packages are available and which devices require these updates Orchestrate bulk firmware updates with automated operations Avoid service interruption with flexible scheduling options Simplify the update process and enhance visibility with an intuitive user interface www.incognito.com 4 About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* the provisioning platform to ensure cable modem configurations match activated subscriber services Extreme scalability to support network expansion and Automate validation of configuration files used by the efficient use of resources CMTS-CM system to reduce the risk of service interruption High-availability DHCP server supports millions of Java-based management interface accessible from any subscriber devices unlimited number of DHCP relays per operating system server in distributed deployments Wizards and templates for streamlined workflows with Weighted DHCP servers optimize use of available IP diagnostic and reporting tools address space Full-Featured DHCPv4 and DHCPv6 support Multi-level security Simultaneously report packet counters for DHCPv4 and Manage administrator and user rights with access DHCPv6 packets for network monitoring provisioning privileges access control lists and delegation limits system health checks troubleshooting Simplify DHCPv6 Prefix Delegation IPv6 and Flexible configuration and integration options reconfigurations with centralized control Simplified access to subscriber data with integration to Support CableLabs DHCP options registry including third-party OSS platforms including LDAP databases configuration and provisioning of DOCSIS and SOAP CLI CORBA APIs and XML APIs PacketCable devices over IPv6 Leverage Java interface automatic transfer from third- Expose address allocations over BCC API so that party OSS or direct retrieval from centralized back-end northbound IPAM systems can automatically track database utilization of IPv4 and IPv6 resources www.incognito.com 2 Broadband Command Center DNS SERVICE CONFIGURATION FILE MANAGEMENT Authoritative DNS supporting VoIP Dynamic file generation provisioning FQDN requirements Static file store Integrated clustering DNS PROXY SERVICE CONFIGURATION FILE Eliminate dynamic DNS updates in large domains MANAGEMENT PROXY Remove synchronization errors Network protocol support for dynamic Responds to DNS requests using the DHCP server and static provisioning information Integrated clustering DHCP SERVICE MULTIMEDIA PROVISIONING SERVICE High Performance DHCP Software High Performance VoIP Provisioning 1:1 Failover PacketCable and SIP Terminals DOCSIS Provisioning 1:1 Failover Independent and clustering based scalability Multiple API models supported Independent and clustering based scalability DNS Configuration File Management Service Supports high-security domain name Removes the need to track and store large resolution authoritative DNS zone transfers numbers of static files by dynamically and simplified DNS administration.
* Features and Benefits Reliable and accurate device provisioning to accelerate Leverage latency and reliability improvements of DOCSIS 3.1 service uptake BCC is DOCSIS 3.1 compatible supporting all new Improve service uptime with high-availability configuration parameters that go into DOCSIS 3.1 configuration files Assure service availability with 1:1 primary-to-secondary Configurable client classes simplify development of DHCP deployment DOCSIS 3.1 files dynamically deploying provisioning Multiple integration models ensures that OSS systems parameters to improve latency and reliability while are in sync with device provisioning reducing operational requirements.

**Frequency:** *26*

##### 202102091229-OpenVault Competitive Study-Incognito

* www.incognito.com Page 2 Copyright © 2021 Software Systems Inc. All Rights Reserved
* 's solution provides out-of-the-box TR-069 ACS and TR-369 (USP) support for unified device management flexible yet robust northbound interfaces to ease integration to B/OSS systems and big data platforms and a comprehensive network operations dashboard allowing you to go to market effectively from the start!
* Visit our DX SaaS solution page (www.incognito.com/solutions/digital-experience-saas/) or write to us at info@incognito.com to schedule your demo of DX SaaS today.
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.

**Frequency:** *26*

##### 202201240809-OpenVault Competitive Study-Incognito

* Learn more at www.incognito.com/solutions/digital-experience www.incognito.com Copyright © 2022 Software Systems Inc. All Rights Reserved.
* Remote device management to reduce operational costs and improve customer experience Software partnered with Analysys Mason to research the challenges that emerging market operators face in supporting residential ﬁxed broadband subscribers.
* | Privacy Policy
* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.

**Frequency:** *26*

##### 202202031526-OpenVault Competitive Study-Incognito

* Let’s take interoperation with business support systems (BSS) and operations support systems (OSS) as an example.
* The only way to guarantee the CBRS solution will interoperate with your back-end systems is to choose a platform that’s already proven to smoothly interoperate with the systems you use.
* If custom adaptors or extensions are needed for proprietary solutions to interoperate with existing systems costs further escalate.
* It has almost certainly never been used in production environments or in conjunction with other network technologies devices or systems.

**Frequency:** *26*

### Detailed Theme Identifier: 8

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**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Inc copyright rights reserved for software and hardware [system generated]

**Tags:** *company | copyright | inc rights reserved | software systems inc | systems inc rights*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* UI/portal/API for provisioning and activating services ............................................................................52.1% UI/portal with wholesale access network insight to help us triage subscriber service quality issues faster ..........................................................................................................................47.3% UI/portal that can give visibility into wholesaler field technician/truck roll progress installations issue troubleshooting repair etc.
* The Fiber Service Orchestration Solution accelerates service activation and device lifecycle management for next-generation fiber-based IP services.
* Service activation configuration and decreasing fallout .........................................................................54.5% Device discovery and diagnostics.................................................................................................................44.5% CPE rollout and management (CPE plug & play zero-touch provisioning) ..........................................51.8% Adding another network vendor or upgrading to new technology g. XGS-PON2 DAA Full Duplex DOCSIS).................................................................................................31.9% Improving service quality and churn management ..................................................................................44% Reducing truck rolls ........................................................................................................................................28.8% As cable operators make the shift to a DAA framework they must make corresponding changes to their operational processes.
* UI/portal with wholesale access network insight to help them triage subscriber service quality issues faster came in second with nearly one-half of respondents (47%) picking it.

**Frequency:** *26*

##### 202001010000-OpenVault Competitive Study-Incognito

* As CBRS-based services move from trials to commercial availability operations teams will be required to resolve more technical issues faster.
* Capabilities to look for Look for a device management solution that offers: A single dashboard that enables standards-based carrier-grade multi-technology device management for all devices Complete visibility of all devices regardless of function vendor or technology so network and device performance issues can be pinpointed and resolved before they affect service or lead to costly truck rolls Near real-time traffic monitoring event and resource utilization Remote troubleshooting tools and automated tasks that improve first-time call resolution decrease call-handling time and reduce technical escalations CBRS Opportunity Guide 05 Customer service representative (CSR) dashboards that improve your understanding of how CSRs are engaging with customers including insights into average call handling time and resolution rates Robust flexible and scalable device management that provides everything needed to manage all customer care issues network elements and devices from any vendor right out of the box with no need for additional modules Manage Quality of Service to Reduce Truck Rolls Get deeper network insights improve network operations processes and reduce truck rolls.
* Choose a device management solution that provides advanced monitoring filtering and visualization of massive device and network data sets that can be used to identify issues troubleshoot and automate tasks to improve first-time call resolution decrease call-handling time and reduce technical escalations.
* Capabilities to look for Look for a device management solution provider that offers a: Proven standards-based solution that you can leverage to reduce the risks and costs associated with extending your network with CBRS Full-featured vendor- and access technology-agnostic solution that provides complete management of all devices in your network Carrier-grade solution that delivers the robustness flexibility to respond and predictable performance required to enable your next step with your CBRS deployment whatever that may be CBRS Opportunity Guide 06 TrustDigital Experience Solution Get more and do more with the standards-based carrier-grade device management solution that fits your needs today and tomorrow.Digital Experience Solution is a next-generation remote device management platform that supports zero-touch provisioning and remote management of any CPE device regardless of network technology.

**Frequency:** *26*

##### 202202020000-OpenVault Competitive Study-Incognito

* As a result more devices are going to be added to the network magnifying all the typical management scenarios faced by fixed broadband service providers including the delivery of devices their activation monitoring and management as well as all the unforeseen technical issues needed to be resolved by customer care network operations and field engineering.
* These are all issues that operators cannot randomly rely on or consider a secondary aspect of implementation plans.
* The solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data 5G FWA DEVICE MANAGEMENT 12 Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT 4G LTE and 5G FWA With proven FWA remote device management deployments at leading global operators such as Globe in the Philippines a Nordic multi-country mobile operator a South African mobile operator and Claro Brazil is the trusted technology partner for your 5G FWA implementation.
* 's productized platforms allow cable fiber and fixed wireless operators to manage in- home business and IoT services and devices providing extensive automation and analytics to reduce operating costs and improve the user experience.

**Frequency:** *26*

##### 201806120842-OpenVault Competitive Study-Incognito

* The emerging market operator relies more on truck rolls/engineer visits to resolve issues than the developed market operator does due to lower costs.
* In contrast the technical issues that are filtered and escalated to Tier 2 support are more complex and will likely continue to be escalated to the field technicians for truck rolls/home visits at similar level.
* This often leads to expensive truck rolls to the customer premises.
* automated scheduled firmware updates) self-service portal with user-friendly easy-to-understand problem resolution processes and configuration options © Analysys Mason Limited 2018 3: Automation of the troubleshooting processes in the home network can deliver immediate cost benefits Winning the battle for control and differentiation in the home broadband network with operations automation | 9 Operations level Rationale Also avoiding these calls in the first place enables the operator to reduce the volume of escalations to upper support tiers and field visits/truck rolls and increases customer satisfaction Customer care empowerment Tier 1 customer care staff equipped with automated tools and processes that simplify and accelerate troubleshooting can help these agents to: handle issues faster and reduce call handling times by 19% to 33% increase FCR between 10% to 35% reducing the need for escalations to higher-cost technical support Tier 2 level Tier 2 Remote CPE diagnostic and management capabilities can provide faster resolution of problems in the Tier 2 technical level by 13% to 25% Field tech Increased call avoidance and having a greater control over CPE management in Tier 1 and Tier 2 levels help operators reduce the number of costly escalations to field tech resulting in between 10% to 25% reduction in customer visits/truck rolls for customer support and troubleshooting These improvements yield different but considerable opex saving results for the two operators over a three-year period and based on 3 million broadband subscriber base: developed market operator: opex savings in the range of 20–46% which translates into a total of USD10.9–25.3 million cost benefits emerging market operator: opex savings in the range of 18–45% and USD4.7–11.8 million total cost savings.

**Frequency:** *26*

##### 202101111255-OpenVault Competitive Study-Incognito

* 's solution: Broadband Command Center (BCC) Broadband Command Center (BCC) our DOCSIS device provisioning solution provisions the access devices—the cable modems.
* Check out our solution page to learn more aboutBroadband Command Center.
* To the operator that means if they want to support DOCSIS 4.0 there needs to be a big capital expenditure for them to upgrade on the competitor's solution.
* Also with our main competitor customers must repurchase licensing with every major version upgrade so there's a commercial impact to upgrading major versions of their solution.

**Frequency:** *26*

##### 202202031523-OpenVault Competitive Study-Incognito

* This will greatly reduce the costs associated with sending truck rolls.
* Take action – CSR Dashboard: Service providers must enable their customer support teams to have full visibility into the CBRS device parameters to identify issues troubleshoot and automate tasks to improve first-time call resolution decrease call-handling time and reduce technical escalations.
* The solution must offer an automated built-in device discovery to learn about supported parameters resource issues and compliance.
* As many service providers start to consider CBRS a viable option they need to overcome five key challenges: Challenges Solution Deploy a multi-vendor device management solution.

**Frequency:** *26*

##### 202201240843-OpenVault Competitive Study-Incognito

* internal development teams.
* With self-service you can reduce operational costs Although it’s vital to remember that only one system decrease field technician truck rolls and improve customer can manage a TR-069 device at a single time.
* content filtering and other parental controls online Managed Wi-Fi – Commercial and standards-based Wi- backup and home surveillance; Fi optimization like wireless mesh improving the home Offer subscribers a degree of self-service through web and small business network experience portals and mobile apps; IoT device onboarding and lifecycle management – Expand service offerings and manage the connected Service provider control of IoT devices to offer services home and IoT offerings; such as smart home automation Improve your customer service with improved Mass telemetry – Deliver personalized services using diagnostics monitoring and firmware management; real-time deep edge intelligence and improving customer care applications Reduce the number of technical support calls from subscribers issue escalations to senior network Virtualized third-party applications – Evolve from operations personnel and field technician truck rolls; firmware-based third-party software on a gateway or CPE to containerized applications which can be rapidly Remove the burden of subscriber manual CPE deployed configuration; Roll-out services with an automated deployment process.
* For or TR-069 and the cable modem is managed by another this reason a unified device management solution that system using DOCSIS or SNMP.

**Frequency:** *26*

##### 202104161355-OpenVault Competitive Study-Incognito

* BENEFITS Reduce long and costly technical support calls Empower customer care team to remotely triage and diagnose issues helping reduce technical escalation and truck rolls.
* APAC Service Provider BENEFITS Reduce OPEX Reduce average call handling time (AHT) call escalations to technical personnel and truck rolls.
* What's more the solution delivers extensive 50% decrease in the number automation to reduce manual tasks and accelerate the of truck rolls resolution of technical issues.
* Costly escalations to technical teams INCOGNITO SOLUTION BenefitsDigital Experience solution proactively detects and addresses connectivity issues while also empowering 30% reduction in CSR call customer care teams with direct insights into subscriber home handling times networks.

**Frequency:** *26*

##### 202103021317-OpenVault Competitive Study-Incognito

* By viewing the home network as an area for differentiation service providers have been able to improve their Net Promotor Scores by 10-40 points reduce service calls by 30-60% reduce truck rolls by up to 30% and increase the number of customers subscribed to premium broadband tiers by 45%.
* 82% of CSPs said their top course of action to resolve Wi-Fi congestion or coverage issues is to provide Wi-Fi extenders Copyright © 2021 Software Systems Inc. All Rights Reserved.
* The Digital Experience Solution features support for the Broadband Forum’s User Services Platform (USP) standard.
* The DX solution offers unified support for residential and IoT device management with USP controller capability for next-generation TR-369 devices.

**Frequency:** *26*

##### 202106221211-OpenVault Competitive Study-Incognito

* These changes result in new pressures for service providers to resolve even more technical issues and maintain always-on connectivity for complex voice video and data services.
* brings the right solutions and expertise.
* USP Solution Overview Page 5
* Service provider rollout of managed Wi-Fi services requires always-on connectivity to device data to enable proactive service quality issues resolution.

**Frequency:** *26*

##### 202011081502-OpenVault Competitive Study-Incognito

* SOLUTION OVERVIEW Broadband Command Center DOCSIS Provisioning Solution Industry’s Leading Independent DOCSIS Provisioning Solution Broadband Command Center is the industry’s leading independent DOCSIS provisioning solution offering end-to-end device provisioning management and multi-standard support (DOCSIS PacketCable SIP IPv6) in a single software platform.
* Reduce risk of outages with reliable scalable solution Leverage value added modules like Central Lease and distributed architecture.
* DNS Proxy Service Configuration File Management Proxy Resolves dynamic DNS (DDNS) reliability Delivers scalable and secure transfer of issues by replacing the DNS server with device configuration files over TFTP HTTP a lightweight proxy server to send DNS HTTP(s) and FTP.
* tasks reduce errors and OPEX Reduce risk of misconfigurations by provisioning files to lowest common denominator Reduce risk of configuration errors when new DOCSIS devices register Configure remote PHY and remote MAC/PHY to CCAP core Track CMTS version DOCSIS TLV parameter version and DOCSIS CM version while building and validating service Automatically perform IP configuration of remote configuration files PHY devices directing them to the CCAP core using a Automatically detect version information sent through CableLabs DHCP option definition.

**Frequency:** *26*

##### 202102091229-OpenVault Competitive Study-Incognito

* Page 1 's Customer Success team offers dedicated support and access to unique expertise all day every day With Customer Success teams located worldwide (in North America CALA Europe and Asia) is well poised to provide service providers with the expertise and support they are looking for to ensure a successful cloud-based ACS deployment.
* transforms the data from your network into real-time insights leverages this intelligence to automate the resolution of technical issues and enables proactive broadband performance management to ensure customer experience and SLA adhereence.
* We are proud to offer our customers access to 24/7 available support resources our online knowledge center and an easy-to-use trouble ticketing system to help accelerate the resolution of technical issues and keep you operational.
* The DX SaaS solution is built to give operators regardless of size an opportunity to take advantage of a full-function carrier-grade ACS solution without the cost.

**Frequency:** *26*

##### 202201240809-OpenVault Competitive Study-Incognito

* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.
* Remote device management to reduce operational costs and improve customer experience Software partnered with Analysys Mason to research the challenges that emerging market operators face in supporting residential ﬁxed broadband subscribers.
* This infographic highlights key research and analysis ﬁndings where remote device management automates and augments operational processes and digital care channels to reduce costs and improve the customer experience.
* Up to 80% Up to 32% Up to 6% of calls are escalated of calls yield a truck roll of residential customers call to specialized where mean time customer care where average engineers to repair is days handle time is 8 minutes 70% of customer issues are Wi-Fi related Business impacts Lengthy customer service High operational costs; Increased customer representative calls with extended issue resolution frustration; poor experience; a lack of immediate resolution; times; home visit risk of churn which impacts impacts experience and inconvenience net promoter score operational costs Download the White Paper “Winning the battle for control and differentiation in the home broadband network with operations automation” Analysys Mason.

**Frequency:** *26*

##### 202202031526-OpenVault Competitive Study-Incognito

* Unfortunately the solution vendor may not yet have the expertise or experience needed to help resolve these or other issues and the company’s product roadmap may not be rich enough to meet your requirements long-term.
* You may miss opportunities to correlate issues in your LTE network with issues in your CBRS network leaving you unaware of the related CBRS network issues.
* They’re constantly switching platforms and they lack the unified view needed to quickly detect and resolve issues across all devices and technologies.
* For example if CBRS alerts and alarms are captured in an isolated platform and are not fed into your alarm system there may be delays in learning about CBRS network and device issues.

**Frequency:** *26*

### Detailed Theme Identifier: 9

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** A truck rolls down the road to resolve technical issues. [system generated]

**Tags:** *expertise | issues | reduce | resolve | solution | teams | technical | truck rolls*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* ...........................................................................................................................34.4% Historical Lease System..................................................................................................................................10.2% Other ...................................................................................................................................................................0.5% CABLE’S FIBER OUTLOOK SURVEY REPORT 7 Finally as cablecos make this historic shift to fiber-based service they could undoubtedly use some help from wholesale fiber providers.
* ow that cablecos are increasingly delivering their voice video data and other offerings over fiber lines while continuing to also deliver them over coax a new more complex level of service orchestration is required – especially as they move to a distributed access architecture (DAA) framework.
* Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience.
* Beyond digging up the streets and installing new fiber lines in the ground or stringing them from utility pole to pole cablecos must protect the new lines from harm add new devices to support them and thread them into their existing HFC plant.

**Frequency:** *23*

##### 202001010000-OpenVault Competitive Study-Incognito

* Capabilities to look for Look for a device management solution that offers: Multi-vendor device management that reduces deployment service provisioning and customer onboarding time Advanced Auto Configuration (ACS) with User Services Platform (USP) technology support that eliminates complex testing and future-proofs your investment Zero-touch onboarding and provisioning of all CPEs regardless of technology or vendor Monitoring and management of any device anywhere in the network over fixed 4G LTE 5G and CBRS (private LTE) broadband networks Extensible support for devices over a variety of access technologies through a single unified device management system including support for FTTx xPON cable xDSL and fixed- wireless via protocols such as TR-069 TR-369 SNMP and MQTT for IoT services Save Time and Money with Automated Device Discovery Avoid surprises during device onboarding and service provisioning by eliminating on-demand fetching which is hard to track down and affects performance.
* With a large number of devices deployed throughout the network often from multiple vendors with different protocols speeds technologies and firmware update requirements the device management process will be challenging.
* These devices will use a variety of technologies and applications such as Wi-Fi IoT mesh networking and emerging smart applications that create new challenges for service delivery.
* As your trials give way to commercial service you'll need to consider other devices that enable service delivery such as gateways that may be connected to both a modem and a set-top-box or home automation devices that communicate data and video to end-user handheld devices.

**Frequency:** *23*

##### 202202020000-OpenVault Competitive Study-Incognito

* But how can service providers develop a solid strategy to manage millions of devices from multiple manufacturers all with their own protocols and data collection mechanisms?
* For example in the health sector the predominant use of wearables allows for the possibility of remote-controlled robotic surgery standardized use of Registers Electronic Physicians (EMR) and thanks to the increasingly common use of 5G FWA DEVICE MANAGEMENT 06 augmented reality remote monitoring and telecare.
* While 4G infrastructure can be repurposed to deliver 5G FWA the focus must be on handling devices services and data collection across both technologies.
* 5G FWA DEVICE MANAGEMENT 10 3 UK Offers Residential 5G FWA to Revolutionize the Broadband Market Another interesting use case comes from the United Kingdom where operator Three is launching its FWA LTE service.

**Frequency:** *23*

##### 201806120842-OpenVault Competitive Study-Incognito

* Figure 5.2: Machine I learning and AI for operations automation Manual Guided Autonomous [Source: Analysys automation operations Mason 2018] Machine learning Analytics models Data storage/process/normalisation Data lakes Data streams It is in this context that the advanced analytics capabilities such as machine learning come into play.
* Enabled by the software-based disaggregation of vertically integrated proprietary devices these platforms: allow real time zero-touch provisioning of network and service capabilities into the home network environment support new revenue generating use cases such as cloud DVR and storage simplify and improve the management of customer devices and home networks (e.g.
* They are using a large variety of connected devices to access these services and to automate their homes using smart Internet of Things (IoT) devices such as smart speaker/AI assistants smart lighting and home security.
* Smart home and home automation use cases around IoT/connected devices in the home is expected to explode in the coming years and competition will emerge from a diverse ecosystem of players including operators digital companies and a new breed of home automation service providers.

**Frequency:** *23*

##### 202101111255-OpenVault Competitive Study-Incognito

* By "provision" I mean it creates the configuration files that those devices use to configure themselves.
* So our system needs to be able to live in that kind of an environment where there's a mixture of devices old devices new devices old infrastructure new infrastructure and be able to deliver accurate files every time we're configuring it.
* It impacts the access network devices—the cable modems and the CMTS—which is the infrastructure piece.
* And we'll automatically build a configuration file that's appropriate for the version of DOCSIS in use.

**Frequency:** *23*

##### 202202031523-OpenVault Competitive Study-Incognito

* Know what is happening – Operations Dashboard: Service providers must have holistic visibility of network operations with advanced data diagnostics from devices and networks.
* Besides providing a roadmap to 5G the use of the CBRS spectrum offers the ability to augment over-taxed cellular networks as well as deliver higher data speeds seamless coverage and higher capacity to subscribers.
* Enterprises: Enterprises could use the spectrum to connect their devices and enable critical communications in manufacturing logistics transportation healthcare etc.
* The right solution can enable service providers to easily scale horizontally to support massive device volumes innovate with IoT device integration and support upcoming modern architectures like User Services Platform (USP) leveraging TR-369.

**Frequency:** *23*

##### 202201240843-OpenVault Competitive Study-Incognito

* What devices use TR-369?
* mobile TR-181 data model so you can deploy the User Services apps web portals and chatbots) by exposing ACS TR-069 Platform to support TR-069 devices if you don’t have an and USP TR-369 device management data with simple Auto Configuration Server (ACS) today.
* In it offers over TR-069 which include: addition to using an industry standard approach for device Multiple management server support integration TR-369 TR-069 and their extensions allow Use case driven message transfer protocols you to: Efficient data encoding Enable remote provisioning of CPE; Always-on communication Better manage broadband networks with increased Application layer security visibility and control of CPE; Distributed data model processing which is crucial for big Collect data for analytics on network usage and activity data and IoT applications home or business network characteristics and service utilization; Deliver new managed data services such as Wi-Fi What are the use cases driving USP?
* Can I use USP instead?

**Frequency:** *23*

##### 202104161355-OpenVault Competitive Study-Incognito

* Holistic network visibility What's more the solution facilitates remote management of CPE devices and automates the configuration of devices.
* The solution's KPI Improved network analytics dashboard collects network and device performance intelligence data and provides technical and business insights to enable Cut down on time and costs proactive care remote diagnostics and service optimization.
* With increased visibility into KPI analytics the satisfaction operator is able to proactively monitor devices and network- Deliver high-quality service wide service quality.
* Multi-access technology device management Manage and monitor fixed line and mobile devices across any network technology including xDSL LTE HFC and FTTx.

**Frequency:** *23*

##### 202103021317-OpenVault Competitive Study-Incognito

* To achieve these results service providers are placing a greater emphasis on improving service diagnostics and performance measuring provisioning new services to existing devices and data security/privacy when it comes to CPE management.
* With personal devices such as smartphones and tablets already commonplace this growth will come from connected entertainment devices for example smart TVs and speakers and smart home devices including appliances security and lighting.
* Smart Wi-Fi a cloud-based technology that can significantly enhance the home broadband experience by leveraging AI and data analytics is on the rise.
* The DX solution offers unified support for residential and IoT device management with USP controller capability for next-generation TR-369 devices.

**Frequency:** *23*

##### 202106221211-OpenVault Competitive Study-Incognito

* Service providers will benefit from business process and investment re-use by leveraging the unified device management platform supporting ACS and USP.
* The proxied devices may be connected via technologies other than USP such as ZigBee or Zwave With USP multiple Controllers can manage the same device with strict access control rules to ensure security and data protection.
* Digital Experience Solution The Digital Experience (DX) Solution provides a unified platform to support both ACS (TR- 069 SNMP MQTT) and USP (TR-369) device management architectures powering new service provider use cases such as multi-AP mesh networking virtualized applications in the home or SMB gateways smart home IoT automation and managed Wi-Fi.
* USP Solution Overview Page 3 Figure 1 – Digital Experience Solution Architecture As shown in Figure 1 ACS and USP controllers will co-exist in a hybrid deployment model supporting current TR-069 devices and services while introducing new TR-369 services over time allowing service providers to continue to drive service innovation.

**Frequency:** *23*

##### 202011081502-OpenVault Competitive Study-Incognito

* Multimedia Provisioning Service DHCP Service Provisions accurate PacketCable and SIP Automatically manages dynamic IPv4 and multimedia configurations by managing IPv6 address allocation DNS records and subscribers devices and associated DOCSIS terminal configurations based configuration data.
* Leverage lease audit records in CLS to identify cloned configuring once per cluster devices and reduce risk of fraud Zero-touch BCC ecosystem configuration through Automatically detect and inspect suspected MAC spoofing automated discovery of BCC services - no need to when devices appear across multiple DHCP servers and configure specific interface information for BCC services CMTS gateways during an overlapping time period Improved security through a delegated administration Easily review gateway and lease histories to filter out model enabling only authorized personnel to implement legitimate cases (such as node splits) from cloned devices BCC configuration changes Improve quality of service for paying customers by blocking illegitimate devices from accessing your network BCC Central Management through configurable means (e.g.
* the provisioning platform to ensure cable modem configurations match activated subscriber services Extreme scalability to support network expansion and Automate validation of configuration files used by the efficient use of resources CMTS-CM system to reduce the risk of service interruption High-availability DHCP server supports millions of Java-based management interface accessible from any subscriber devices unlimited number of DHCP relays per operating system server in distributed deployments Wizards and templates for streamlined workflows with Weighted DHCP servers optimize use of available IP diagnostic and reporting tools address space Full-Featured DHCPv4 and DHCPv6 support Multi-level security Simultaneously report packet counters for DHCPv4 and Manage administrator and user rights with access DHCPv6 packets for network monitoring provisioning privileges access control lists and delegation limits system health checks troubleshooting Simplify DHCPv6 Prefix Delegation IPv6 and Flexible configuration and integration options reconfigurations with centralized control Simplified access to subscriber data with integration to Support CableLabs DHCP options registry including third-party OSS platforms including LDAP databases configuration and provisioning of DOCSIS and SOAP CLI CORBA APIs and XML APIs PacketCable devices over IPv6 Leverage Java interface automatic transfer from third- Expose address allocations over BCC API so that party OSS or direct retrieval from centralized back-end northbound IPAM systems can automatically track database utilization of IPv4 and IPv6 resources www.incognito.com 2 Broadband Command Center DNS SERVICE CONFIGURATION FILE MANAGEMENT Authoritative DNS supporting VoIP Dynamic file generation provisioning FQDN requirements Static file store Integrated clustering DNS PROXY SERVICE CONFIGURATION FILE Eliminate dynamic DNS updates in large domains MANAGEMENT PROXY Remove synchronization errors Network protocol support for dynamic Responds to DNS requests using the DHCP server and static provisioning information Integrated clustering DHCP SERVICE MULTIMEDIA PROVISIONING SERVICE High Performance DHCP Software High Performance VoIP Provisioning 1:1 Failover PacketCable and SIP Terminals DOCSIS Provisioning 1:1 Failover Independent and clustering based scalability Multiple API models supported Independent and clustering based scalability DNS Configuration File Management Service Supports high-security domain name Removes the need to track and store large resolution authoritative DNS zone transfers numbers of static files by dynamically and simplified DNS administration.
* Deploy DOCSIS 3.1 devices while you upgrade HFC Automated file configuration processes decrease manual plant even when supporting CMTS isn’t yet deployed.

**Frequency:** *23*

##### 202102091229-OpenVault Competitive Study-Incognito

* offers advanced data analytics for proactive care Leveraging network intelligence is critical to improving operations.solution offers holistic near real-time data collection and analytics from the access network connected devices and digital experience to equip operators with visibility into the status of the in-home network the health of devices network wide and application performance.
* 's solution provides out-of-the-box TR-069 ACS and TR-369 (USP) support for unified device management flexible yet robust northbound interfaces to ease integration to B/OSS systems and big data platforms and a comprehensive network operations dashboard allowing you to go to market effectively from the start!
* 's cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.
* We are proud to offer our customers access to 24/7 available support resources our online knowledge center and an easy-to-use trouble ticketing system to help accelerate the resolution of technical issues and keep you operational.

**Frequency:** *23*

##### 202201240809-OpenVault Competitive Study-Incognito

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* Learn more at www.incognito.com/solutions/digital-experience www.incognito.com Copyright © 2022 Software Systems Inc. All Rights Reserved.
* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.
* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.

**Frequency:** *23*

##### 202202031526-OpenVault Competitive Study-Incognito

* Forcing NOC staff to use a separate CBRS-only solution adds time and complexity to their jobs.
* For efficient device deployment and service provisioning CBRS platforms must be able to exchange customer information and other network data with these critical back-office systems.
* The only way to guarantee the CBRS solution will interoperate with your back-end systems is to choose a platform that’s already proven to smoothly interoperate with the systems you use.
* It automatically discovers new devices and can easily read and write device parameters so new devices can be quickly and easily added to the system and reconfigured when necessary.

**Frequency:** *23*

### Detailed Theme Identifier: 10

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Acs uses tr369 for transferring data between devices. [system generated]

**Tags:** *acs | data | devices | protocols | tr069 | use tr369 | usp*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience.
* bandwidth upgrade) moves and disconnects .................................................................33% Not applicable....................................................................................................................................................19.7% 8 CABLE’S FIBER OUTLOOK SURVEY REPORT Software Systems Inc. provides service orchestration software and services solutions that help fixed providers operate manage and scale next- generation in-home broadband services.
* ’s turn-key pre-integrated fiber solution not only provides multi-play bundled services such as hybrid video (IPTV OTT) Internet and VoIP but lays the foundation to fulfill new business models such as smart home IoT and mobile backhaul.
* New product introduction (e.g.

**Frequency:** *22*

##### 202001010000-OpenVault Competitive Study-Incognito

* With licenses in hand winning bidders across North America will shift their focus to leveraging the new spectrum to deliver everything from enhanced coverage and capacity in existing markets to extending their reach into new markets and introducing new 5G and IoT services.
* Our solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT and 5G FWA To find out more about how the Digital Experience Management Solution can help you get the most out of CBRS today and tomorrow visit www.incognito.com/solutions/fixed-wireless- internet-service-providers/ About Software Systems Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* Capabilities to look for Look for a device management solution that offers: Multi-vendor device management that reduces deployment service provisioning and customer onboarding time Advanced Auto Configuration (ACS) with User Services Platform (USP) technology support that eliminates complex testing and future-proofs your investment Zero-touch onboarding and provisioning of all CPEs regardless of technology or vendor Monitoring and management of any device anywhere in the network over fixed 4G LTE 5G and CBRS (private LTE) broadband networks Extensible support for devices over a variety of access technologies through a single unified device management system including support for FTTx xPON cable xDSL and fixed- wireless via protocols such as TR-069 TR-369 SNMP and MQTT for IoT services Save Time and Money with Automated Device Discovery Avoid surprises during device onboarding and service provisioning by eliminating on-demand fetching which is hard to track down and affects performance.

**Frequency:** *22*

##### 202202020000-OpenVault Competitive Study-Incognito

* The services that are being monetized today and promise tremendous growth include online gaming and OTT media.
* According to IDC video streaming home surveillance and security and smart speakers will be the main drivers of this growth.
* This technology could help drive the growth of fixed broadband by rapidly opening new monetization opportunities for operators.
* Software Systems provides service orchestration and device management solutions that help fixed broadband service providers manage the next-generation broadband experience.

**Frequency:** *22*

##### 201806120842-OpenVault Competitive Study-Incognito

* To compete with the video streaming companies fixed operators are also launching their own branded over- the-top (OTT) streaming service that could run on any broadband service even on top of a competitor’s broadband service.
* Consumers are rapidly adopting new cloud-based services enabled by high-speed broadband connectivity (video/music streaming storage and online gaming).
* Figure 2.1: Telecoms industry growth rates vs. 5% 9% global economy growth 0% 3.9% rates [Source: Analysys 7% Mason OECD 2018] 5% 0% Growth rate 5% 0% 5% 5% 0% 1.1% 0% 0.7% 6% 2% 0.5% 5% 5% 0.4% 0% Mobile Fixed Overall World economy 2017 2018 2019 Fixed service providers are pressing on with new growth strategies to accelerate revenue such as accelerating fiber-to-the-home (FTTH) roll-out and launching new digital services such as over the top video.
* Conclusions and recommendations The commoditization of broadband services and intense competition from alternative service providers present growth and profitability challenges for fixed service providers.

**Frequency:** *22*

##### 202101111255-OpenVault Competitive Study-Incognito

* So part of what DOCSIS 4.0 does is focus on new technology to increase upstream bandwidth to get to the true 10G type of service that a fiber connection could provide.
* 's solution: Broadband Command Center (BCC) Broadband Command Center (BCC) our DOCSIS device provisioning solution provisions the access devices—the cable modems.
* So our system needs to be able to live in that kind of an environment where there's a mixture of devices old devices new devices old infrastructure new infrastructure and be able to deliver accurate files every time we're configuring it.
* That's why DOCSIS 4.0 includes a low latency mechanism that will apply to other technologies similar to gaming—future technologies like AR and VR where latency might be very important to have a good service over DOCSIS.

**Frequency:** *22*

##### 202202031523-OpenVault Competitive Study-Incognito

* Fixed Wireless Access (FWA) providers: Service providers no longer must choose between fixed broadband and mobile capacity.
* The Future of Connectivity | CBRS – Citizens Broadband Radio Service Co-written by Dipalli Bhatt and Jeevithan Muttu The global pandemic has highlighted the vital importance of broadband networks and their role in accelerating digital transformation.
* The advent of transformational technologies such as 5G will unleash a vast array of groundbreaking digital services that will enable consumers and industries in new ways.
* Cable service providers: Cable service providers are continuously looking for ways to enter the wireless market and generate new revenue opportunities.

**Frequency:** *22*

##### 202201240843-OpenVault Competitive Study-Incognito

* About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* USP will be span 5G fixed wireless CPEs and STBs.
* User Services Platform (USP) is the revolutionary standard that builds on the Broadband Forum’s TR-069 specification.

**Frequency:** *22*

##### 202104161355-OpenVault Competitive Study-Incognito

* Expand broadband services Deliver competitive mass market broadband services over fixed LTE network.
* Solution Case Studies: Fixed Wireless Access Digital Experience Solution OVERVIEW Fixed wireless access (FWA) is a great way for service providers to extend their network and offer fixed broadband services to more residential customers.
* Over 200 customers worldwide leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* Technical issues often resulted in home visit to INCOGNITO SOLUTION perform signal test 's Digital Experience solution provides device Benefits configuration and network visibility to solve technical issues proactively and enable the efficient roll out of new LTE Improved customer services.

**Frequency:** *22*

##### 202103021317-OpenVault Competitive Study-Incognito

* To achieve these results service providers are placing a greater emphasis on improving service diagnostics and performance measuring provisioning new services to existing devices and data security/privacy when it comes to CPE management.
* The report highlighted that for service providers to overcome these challenges and take advantage of new revenue- generating opportunities new open standards are a must to eradicate fragmentation and facilitate the development of open platforms to drive partnerships and/or enable other smart home solutions from third-party suppliers.
* A new report commissioned by the Broadband Forum and sponsored by Software Systems provides a comprehensive view of the latest trends and developments surrounding the connected home.
* When it comes to offering new value-added services to customers the top priorities for service providers are applications that deliver online protection and parental controls while remote technical support and application prioritization controls follow closely behind.

**Frequency:** *22*

##### 202106221211-OpenVault Competitive Study-Incognito

* Not all users are the same: many are working from home while others are gaming or streaming.
* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast- track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* Traditional firmware upgrades require a device reboot A standardized approach to lifecycle management without any firmware upgrades Launch market pilots and evaluate services and measure service uptake very quickly Launch new virtualized services on customer premise equipment Take advantage of a complete USP ecosystem and build a better connected home experience Vendors Gives partners a tested and proven way to work with operators Provides a new service delivery channel Access to wider service provider market Vendor- and technology-agnostic platform Secure services – vendors are tested and securely deployed throughplatform Strengthen market position against competitors About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next-generation broadband experience.
* Over the next five years the compound annual growth rate (CAGR) of revenue from broadband access will be down to low single digits.

**Frequency:** *22*

##### 202011081502-OpenVault Competitive Study-Incognito

* Over 200 customers worldwide including Claro Cox Digicel Globe and Orange leverage solutions to fast-track the introduction of innovative broadband services over fiber cable fixed wireless technologies while delivering a great customer experience.
* Broadband Command Center Network Deployment Broadband Command Center Modem CMTS OSS/BSS www.incognito.com 3 Value-Added Capabilities Central Management Service Central Lease Service (CLS) New software tool and lightweight user interface to Accelerate and simplify Lawful Intercept look-up processes manage and configure multiple BCC clusters with CLS Alleviates the need for lengthy and error-prone manual Compiles historical and active lease data from Broadband configuration Command Center Replaces CLI-based scripting to configure BCC clusters Simplifies LI without overloading DHCP that typically required significant scripting expertise.
* Accelerate service rollout of triple-play services spanning Protect services with built-in security features to multi-vendor and multi-standard technologies including prevent denial of service (DoS) CPE cloning and other IPv6 IPTV DOCSIS 3.1 SIP and PacketCable 2.0. hacking attacks.
* walled garden or blocked access) Service Fit Export reports on potential rogue devices for simplified reporting and documentation Firmware Management Service Reduce OPEX and improve QoE with automated DOCSIS firmware management Easily see when firmware packages are available and which devices require these updates Orchestrate bulk firmware updates with automated operations Avoid service interruption with flexible scheduling options Simplify the update process and enhance visibility with an intuitive user interface www.incognito.com 4 About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.

**Frequency:** *22*

##### 202102091229-OpenVault Competitive Study-Incognito

* 's cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.
* WhyDX SaaS Solution is the Next Big Thing in Cloud-based ACS CHECKLIST In the wake of escalating financial pressures and customers demanding more from their broadband services a greater number of operators are choosing to deploy cloud-based Auto Configuration Server (ACS) solutions.
* transforms the data from your network into real-time insights leverages this intelligence to automate the resolution of technical issues and enables proactive broadband performance management to ensure customer experience and SLA adhereence.

**Frequency:** *22*

##### 202201240809-OpenVault Competitive Study-Incognito

* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.
* Example: cost efﬁciencies in an emerging market For a service provider in an emerging market consider the example highlighted by Analysys Mason in their paper “Winning the battle for control and differentiation in the home broadband network with operations automation”.
* Remote device management to reduce operational costs and improve customer experience Software partnered with Analysys Mason to research the challenges that emerging market operators face in supporting residential ﬁxed broadband subscribers.
* Up to 80% Up to 32% Up to 6% of calls are escalated of calls yield a truck roll of residential customers call to specialized where mean time customer care where average engineers to repair is days handle time is 8 minutes 70% of customer issues are Wi-Fi related Business impacts Lengthy customer service High operational costs; Increased customer representative calls with extended issue resolution frustration; poor experience; a lack of immediate resolution; times; home visit risk of churn which impacts impacts experience and inconvenience net promoter score operational costs Download the White Paper “Winning the battle for control and differentiation in the home broadband network with operations automation” Analysys Mason.

**Frequency:** *22*

##### 202202031526-OpenVault Competitive Study-Incognito

* With access to 3.5 GHz spectrum you have new opportunities to enhance wireless coverage and capacity in existing markets and to tap into new markets by offering in- demand 5G and IoT services.
* Why You Can’t Take a Siloed Approach with CBRS Device Management Winning your bid for a Citizens Broadband Radio Service (CBRS) Priority Access License (PAL) is great news for your business whether you’re an MNO cable company telco operator or enterprise.
* It automatically discovers new devices and can easily read and write device parameters so new devices can be quickly and easily added to the system and reconfigured when necessary.
* Naturally you’ll want to get a proof of concept (PoC) for CBRS device deployment and service provisioning going so you can get to field trials and commercial service as quickly as possible.

**Frequency:** *22*

### Detailed Theme Identifier: 11

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Ottawa has launched a new service for fixed broadband gaming. [system generated]

**Tags:** *broadband | fixed | gaming | growth | new | ott | services | streaming service*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* CABLE’S FIBER OUTLOOK SURVEY REPORT 9 – PAGE INTENTIONALLY LEFT BLANK –
* When rolling out DAA (Remote PHY Remote MAC/PHY) what is your company seeking to address with its provisioning approach?
* the U.S. and Canada.
* In fact those two countries generated 125 fully Not too surprisingly most of the complete responses or more than responses came from providers 65% of the 191 complete replies that have been offering fiber-based received.

**Frequency:** *19*

##### 202001010000-OpenVault Competitive Study-Incognito

* CBRS Opportunity Guide 07
* Untested devices may get you up and running faster but will probably end up requiring more management and support throughout a trial and costing you more in the long run.
* The devices in the access portion of your network that provide that coverage and availability are key to ensuring service quality is high at all times.
* Chances are that to get up and running you'll need to deploy and provision a variety of access points and gateways from different vendors to support CBRS in the access network.

**Frequency:** *19*

##### 202202020000-OpenVault Competitive Study-Incognito

* For mobile network operators in Latin America 5G FWA represents a significant business opportunity to offer faster connectivity and IP services to households with limited/no broadband access and companies across different verticals that need more reliable connectivity or simply a backup connection.
* 5G FWA DEVICE MANAGEMENT 10 3 UK Offers Residential 5G FWA to Revolutionize the Broadband Market Another interesting use case comes from the United Kingdom where operator Three is launching its FWA LTE service.
* Why 5G FWA Devices Critical to Service Monetization The 5G FWA CPE market will grow at an annual rate of 48 percent over the next five years to reach 11.7 million units by 2025 according to the latest ABI Research study on 5G FWA devices.
* Three's business decision may be related to the findings of Ovum's recent study which found that FWA services could replace traditional connections for 85 percent of the UK's 26 million fixed-line customers with equal or better speeds.

**Frequency:** *19*

##### 201806120842-OpenVault Competitive Study-Incognito

* © Analysys Mason Limited 2018 Consulting from Analysys Mason
* He holds a BEng in Computer Science from the University of Mysore and an MBA from Lancaster University Management School UK.
* For more information about our consulting services please visit www.analysysmason.com/consulting.
* © Analysys Mason Limited 2018 Research from Analysys Mason Winning the battle for control and differentiation in the home broadband network with operations automation | 22 Consulting from Analysys Mason For 30 years our consultants have been bringing the benefits of applied intelligence to enable clients around the world to make the most of their opportunities Our clients in the telecoms media and technology (TMT) sectors operate in dynamic markets where change is constant.

**Frequency:** *19*

##### 202101111255-OpenVault Competitive Study-Incognito

* Check out our solution page to learn more aboutBroadband Command Center.
* That's why DOCSIS 4.0 includes a low latency mechanism that will apply to other technologies similar to gaming—future technologies like AR and VR where latency might be very important to have a good service over DOCSIS.
* Implementing it is a lot of effort though.
* Full Duplex DOCSIS moves to a flexible type of system where you can have certain parts of the frequency spectrum shared between upstream and downstream and have this kind of dynamic—to assign frequencies to be either or upstream or downstream depending on upon need—so it greatly increases the amount of bandwidth that could be available for upstream.

**Frequency:** *19*

##### 202202031523-OpenVault Competitive Study-Incognito

* DownloadCBRS Technology Guide to learn what you need to consider for your CBRS project
* It is also complementary to Wi-Fi.
* CBRS has the option to offer service effectively to rural and suburban markets without reusing mobile capacity.
* FWA will prove to be an essential use case for 5G and CBRS.

**Frequency:** *19*

##### 202201240843-OpenVault Competitive Study-Incognito

* www.incognito.com Copyright © 2022 Software Systems Inc.. All Rights Reserved.
* DOCSIS less ‘noisy’ than TR-069 in terms of message exchange enabled gateways and PON network equipment are in and more efficient in establishing a session between a development and assume future DSL modem IP phone device and a controller.
* However service providers are looking to stay ahead of the curve so there is active interest in TR-369 Can I use TR-369 with DOCSIS or other protocols?
* 369 capable devices from hardware vendors is still in its early stages.

**Frequency:** *19*

##### 202104161355-OpenVault Competitive Study-Incognito

* To Low-touch training for CSRs reduce the average handle time for customer support calls with limited technical the operator wanted to automate and digitize the interactions knowledge between call center agents and home broadband users.
* PAGE 6 Copyright © 2021 Software Systems Inc. All Rights Reserved.
* Improve QoE The operator is now able to avoid long and costly technical support calls and improve subscriber QoE.
* Expand broadband services Deliver competitive mass market broadband services over fixed LTE network.

**Frequency:** *19*

##### 202103021317-OpenVault Competitive Study-Incognito

* Request a session today: www.incognito.com/usp-consultation Copyright © 2021 Software Systems Inc. All Rights Reserved.
* With the home network now so vital to supporting the high-quality broadband services and applications we use every day the report seeks to shed light on how operators are managing complexity within the connected home the enablement of value-added services the need for open standards to enable a better-connected world.
* When it comes to leading Wi-Fi issues subscribers encounter within their home network the report highlighted that low coverage/range latency/jitter and slow speed were at the top of the list.
* Delivering quality Wi-Fi services in the home.

**Frequency:** *19*

##### 202106221211-OpenVault Competitive Study-Incognito

* USP Solution Overview Page 5
* Wi-Fi networking lights IoT Service Elements via an IoT proxy to Controllers - what needs to be managed is not necessarily on the agent.
* A recent industry survey found that 75% of service providers plan to deploy USP into their networks within the next 12 months USP Technical Description Controllers and Agents The User Services Platform is a system of Controllers and Agents enabling remote manipulation of software and hardware capabilities.
* Did you know?

**Frequency:** *19*

##### 202011081502-OpenVault Competitive Study-Incognito

* www.incognito.com
* Visit https://www.incognito.com or follow us on LinkedIn and Twitter.
* Deployed in more than150 cable networks globally Broadband Command Center is renowned for its flexibility reliability and extensive feature set.
* Accelerate service rollout of triple-play services spanning Protect services with built-in security features to multi-vendor and multi-standard technologies including prevent denial of service (DoS) CPE cloning and other IPv6 IPTV DOCSIS 3.1 SIP and PacketCable 2.0. hacking attacks.

**Frequency:** *19*

##### 202102091229-OpenVault Competitive Study-Incognito

* www.incognito.com Page 2 Copyright © 2021 Software Systems Inc. All Rights Reserved
* Visit our DX SaaS solution page (www.incognito.com/solutions/digital-experience-saas/) or write to us at info@incognito.com to schedule your demo of DX SaaS today.
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.
* The Digital Experience SaaS (DX SaaS) solution delivers robust analytics automated lifecycle management and proactive digital care functions to help you improve the digital experience – at a fraction of the cost.

**Frequency:** *19*

##### 202201240809-OpenVault Competitive Study-Incognito

* Remote device management to reduce operational costs and improve customer experience Software partnered with Analysys Mason to research the challenges that emerging market operators face in supporting residential ﬁxed broadband subscribers.
* Example: cost efﬁciencies in an emerging market For a service provider in an emerging market consider the example highlighted by Analysys Mason in their paper “Winning the battle for control and differentiation in the home broadband network with operations automation”.
* This infographic highlights key research and analysis ﬁndings where remote device management automates and augments operational processes and digital care channels to reduce costs and improve the customer experience.
* Up to 80% Up to 32% Up to 6% of calls are escalated of calls yield a truck roll of residential customers call to specialized where mean time customer care where average engineers to repair is days handle time is 8 minutes 70% of customer issues are Wi-Fi related Business impacts Lengthy customer service High operational costs; Increased customer representative calls with extended issue resolution frustration; poor experience; a lack of immediate resolution; times; home visit risk of churn which impacts impacts experience and inconvenience net promoter score operational costs Download the White Paper “Winning the battle for control and differentiation in the home broadband network with operations automation” Analysys Mason.

**Frequency:** *19*

##### 202202031526-OpenVault Competitive Study-Incognito

* What’s more it may have only been used in a limited number of markets around the world.
* Learn More For additional insight into how to get the most out of CBRS today and tomorrow read our technology guide and explore the many benefits of the Digital Experience Solution.
* In contrast a field-hardened multi-vendor solution already supports a wide variety of access points and gateways from different vendors.
* A CBRS device management solution that’s not field-hardened can also make it more time-consuming and difficult to add new devices and to change provisioning parameters.

**Frequency:** *19*

### Detailed Theme Identifier: 12

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Research carried out by mason limited in the uk [system generated]

**Tags:** *analysys mason limited | consulting | research | uk | university*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* Also scoring relatively highly were device discovery and diagnostics (45%) and improving service quality and churn management (44%).
* If you are a retail ISP what would you like to see from your wholesale fiber provider?
* So we asked operators exactly what they need.
* Where is your company focusing for greater operational efficiency over the next 12-18 months?

**Frequency:** *18*

##### 202001010000-OpenVault Competitive Study-Incognito

* Post- auction reports pointed out that 271 bidders took part in 76 rounds of bidding spending $4.5 billion on licenses and of those 23000 were new licenses.
* With the right solution you won't waste valuable time budget and resources on products that can't offer the next-generation device management you need to deploy and provision devices efficiently optimize service delivery while maintaining QoS and QoE and streamline operations.
* As you plan your next steps with CBRS consultations with the right device management software provider can make a world of difference.
* Next-generation device management solutions that are engineered to support the deployment onboarding and provisioning of multiple devices will reduce time-to-trial and make it easier to go beyond trials by enabling you to get to market faster with revenue-generating services.

**Frequency:** *18*

##### 202202020000-OpenVault Competitive Study-Incognito

* What's Next?
* Software Systems provides service orchestration and device management solutions that help fixed broadband service providers manage the next-generation broadband experience.
* 's Digital Experience Solution is a next-generation remote device management platform that supports zero-touch provisioning and remote management of any device regardless of network technology.
* If you would like to learn more aboutFWA solution or discuss the findings of this report in more detail please contact the team at info@incognito.com or visit 's 5G FWA solution page at www.incognito.com/solutions/fixed-wireless-internet- service-providers/ About Software Systems Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.

**Frequency:** *18*

##### 201806120842-OpenVault Competitive Study-Incognito

* These benefits were calculated as a range which should be interpreted as low/conservative and high/optimistic scenarios depending on an operator’s unique operational environment and its ability to adopt automation and put it into practice.
* This is partly because the emerging market operator has greenfield newly built next-generation access (NGA) networks whereas the developed market operator has an older highly complex network with multiple generations of legacy and next-generation technologies which is more likely to generate a higher volume of support calls.
* Increasing technology maturity and improving confidence in automations will accelerate adoption of machine learning and AI but this is likely to be gradual and will occur over the next two to three years.
* 4 In contrast overall telecoms retail revenue is expected to grow by 1.1% and 0.6% over the next two years while the fixed telecoms services market will see only a marginal growth of 1% and 0.5% in 2018 and 2019 respectively.

**Frequency:** *18*

##### 202101111255-OpenVault Competitive Study-Incognito

* They can trust that we're staying on top of it for them.
* They don't need to come to us and ask "Can you support DOCSIS 4.0?"
* We know which CMTS it's on.
* DOCSIS 4.0: What It Means for Your Business and How Can Help DOCSIS 4.0—touted as the foundation to 10G and next-generation cable services—is real it's coming and like all innovations it brings opportunities and challenges.

**Frequency:** *18*

##### 202202031523-OpenVault Competitive Study-Incognito

* there.
* What do you need?
* The proven carrier-grade solution will equip you with the robustness flexibility to respond and predictable performance required to take the next step with a CBRS deployment.
* DownloadCBRS Technology Guide to learn what you need to consider for your CBRS project

**Frequency:** *18*

##### 202201240843-OpenVault Competitive Study-Incognito

* To learn more about the next-generation device Yes.
* Yes.
* Commercial availability of next-generation TR- FAQ page.
* eases the operator transition over the next few years.

**Frequency:** *18*

##### 202104161355-OpenVault Competitive Study-Incognito

* They were also dealing with the challenge of having reason for service no visibility of CPE devices and relied heavily on field cancellation technicians and truck rolls to resolve issues.
* When issues arise customer care regardless of the access personnel are equipped with the tools to quickly identify and network troubleshoot them without the need for truck rolls.
* www.incognito.com INCOGNITO CASE STUDY Tier 1 Galaxy Operator in Europe BUSINESS CHALLENGES A Tier 1 European galaxy operator was facing the challenge of remotely troubleshooting common technical issues that AT A GLANCE were impacting quality of experience for their LTE fixed wireless residential customers.
* www.incognito.com To learn more aboutDigital Experience (DX) solution and how we can help you deliver a great digital experience over fixed wireless technology visit www.incognito.com/solutions/digital-experience/ ABOUT INCOGNITO Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.

**Frequency:** *18*

##### 202103021317-OpenVault Competitive Study-Incognito

* When it comes to leading Wi-Fi issues subscribers encounter within their home network the report highlighted that low coverage/range latency/jitter and slow speed were at the top of the list.
* Without greater standardization across the industry service providers will be restricted by fragmentation that will impact their ability to scale and compete with global tech and consumer electronic companies who are dominating the smart home market thanks to their consumer trust and dynamic business models.
* This is a clear indication that the industry is ready for USP.
* The report found that 63% of service providers expect to have Smart Wi-Fi available in 25% of their networks within the next three years.

**Frequency:** *18*

##### 202106221211-OpenVault Competitive Study-Incognito

* Did you know?
* Did you know?
* Service Providers Need to prioritize adaptive self-optimizing connectivity throughout the home Need to support service diagnostics and performance measuring as well as the provisioning of new service and applications to CPEs all while managing customer privacy and data security Vendors Need to develop market-ready applications to generate new opportunities Greater focus on developing partnerships Enabling smart home solutions from third-party suppliers USP Solution Overview Page 2 User Services Platform (USP) The User Services Platform (USP) is a new device management standard that enables a faster scalable and more secure way of managing the full lifecycle of connected devices and provides the platform to support the delivery of next-generation virtualized services.
* provides service orchestration software solutions to help service providers manage the next-generation broadband experience.

**Frequency:** *18*

##### 202011081502-OpenVault Competitive Study-Incognito

* Deploy DOCSIS 3.1 devices while you upgrade HFC Automated file configuration processes decrease manual plant even when supporting CMTS isn’t yet deployed.
* walled garden or blocked access) Service Fit Export reports on potential rogue devices for simplified reporting and documentation Firmware Management Service Reduce OPEX and improve QoE with automated DOCSIS firmware management Easily see when firmware packages are available and which devices require these updates Orchestrate bulk firmware updates with automated operations Avoid service interruption with flexible scheduling options Simplify the update process and enhance visibility with an intuitive user interface www.incognito.com 4 About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* clusters featuring a new lightweight user interface that alleviates the need for CLI-based scripting and manual error-prone manual configuration.
* tasks reduce errors and OPEX Reduce risk of misconfigurations by provisioning files to lowest common denominator Reduce risk of configuration errors when new DOCSIS devices register Configure remote PHY and remote MAC/PHY to CCAP core Track CMTS version DOCSIS TLV parameter version and DOCSIS CM version while building and validating service Automatically perform IP configuration of remote configuration files PHY devices directing them to the CCAP core using a Automatically detect version information sent through CableLabs DHCP option definition.

**Frequency:** *18*

##### 202102091229-OpenVault Competitive Study-Incognito

* Are you ready to get started?
* Customer success is central to our business that's why were are focused on delivering prompt and complete responses to ensure everything keeps running smoothly.
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.
* Unlike most solutions currently available in the market our customers don’t just get the bare bones but instead have access to the additional modules they need as they grow.

**Frequency:** *18*

##### 202201240809-OpenVault Competitive Study-Incognito

* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.
* | Privacy Policy
* Learn more at www.incognito.com/solutions/digital-experience www.incognito.com Copyright © 2022 Software Systems Inc. All Rights Reserved.
* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.

**Frequency:** *18*

##### 202202031526-OpenVault Competitive Study-Incognito

* In our next blog we explore some of the additional steps you can take to help keep your CBRS operations profitable.
* Also at some point your network operations center (NOC) will need to get involved in managing CBRS deployments.
* The device vendor may need to make firmware changes that require extensive testing and making those changes may not be the vendor’s top priority.
* To avoid these types of uncontrollable costs start thinking about the bigger picture the moment you know you’ll be working with CBRS.

**Frequency:** *18*

### Detailed Theme Identifier: 13

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** I need to know if i am the person next to me who needs to trust me. [system generated]

**Tags:** *next trust were | them there need | trust were staying | were staying top | whats next trust | yes know | you ready get*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* They also must activate the new fiber-based services integrate them with their existing services over HFC and manage both sets of services on both the front and back ends.
* technologies like Full Duplex DOCSIS They aim to offer faster broadband Extended Spectrum DOCSIS and speeds slash operational costs deliver next-gen passive optical network advanced video services like UHD/4K (PON); the shift to distributed access TV boost bandwidth capacity support architecture (DAA); the virtualization new wireless offerings such as 5G of network functions; and the roll-out improve service reliability and perhaps of 5G wireless and small cells.
* Beyond digging up the streets and installing new fiber lines in the ground or stringing them from utility pole to pole cablecos must protect the new lines from harm add new devices to support them and thread them into their existing HFC plant.
* Ensuring rapid turn-up to maintain service continuity and availability e. for emergency services ............................................................................................................................53.2% Maintaining service parity when orchestrating from 1 fiber OSS to a mobile OSS ............................48.4% Managing backhaul services across Fiber and RAN EMS ......................................................................44.7% Changing 5G provisioning business process flow sequence for example adding an additional slice between ‘mission critical’ and ‘mission-critical IoT’ .

**Frequency:** *18*

##### 202001010000-OpenVault Competitive Study-Incognito

* With licenses in hand winning bidders across North America will shift their focus to leveraging the new spectrum to deliver everything from enhanced coverage and capacity in existing markets to extending their reach into new markets and introducing new 5G and IoT services.
* The additional coverage and capacity combined with the flexibility to create customized services for specific market segments and use cases offer the potential to increase existing revenue and introduce additional revenue streams with LTE 5G and IoT services.
* You're also better equipped to deliver on the promise of 5G and IoT services almost anywhere.
* Network trials will lead to the eventual rollout of new services so getting it right the first time is important.

**Frequency:** *18*

##### 202202020000-OpenVault Competitive Study-Incognito

* With its 5G network the operator can expand coverage innovate services and be competitive against existing alternatives.
* At this point not only is 5G network technology available but most importantly the ecosystem of devices critical to activating new services is already available and proliferating creating a complete ecosystem to enable different applications and scenarios.
* How many more of these unique services will soon emerge through existing or new devices?
* By having the service available in 4G and 5G the operator has a robust offer and a way to reach more homes thanks to its footprint with both technologies.

**Frequency:** *18*

##### 201806120842-OpenVault Competitive Study-Incognito

* Operators should start today forming the foundation of the highly automated software-based network operations which is essential to seize new 5G and digital service opportunities building on the readily available operations automation capabilities.
* © Analysys Mason Limited 2018 About the authors Winning the battle for control and differentiation in the home broadband network with operations automation | 21 Research from Analysys Mason We provide dedicated coverage of developments in the telecoms media and technology (TMT) sectors through a range of research programs that focus on different services and regions of the world The division consists of a specialized team of analysts who provide dedicated coverage of TMT issues and trends.
* A new but fast evolving area is 5G which brings a whole set of new use cases including a fixed–wireless option to deliver ultra-broadband to homes.
* A plethora of access network technologies (fiber copper Wi-Fi fixed-wireless with LTE/5G) managed (router set-top box) and unmanaged devices (Apple TV Wi-Fi extenders IoT management) need to be supported.

**Frequency:** *18*

##### 202101111255-OpenVault Competitive Study-Incognito

* With DOCSIS 4.0 mainly focused on ensuring low latency and improving bandwidth both upstream and downstream this is future-proofing the DOCSIS technology so operators can remain competitive on their existing access network which is a combination of fiber and coax.
* It's part of the change that allows for an increased amount of available upstream bandwidth.
* So our system needs to be able to live in that kind of an environment where there's a mixture of devices old devices new devices old infrastructure new infrastructure and be able to deliver accurate files every time we're configuring it.
* DOCSIS 4.0: What It Means for Your Business and How Can Help DOCSIS 4.0—touted as the foundation to 10G and next-generation cable services—is real it's coming and like all innovations it brings opportunities and challenges.

**Frequency:** *18*

##### 202202031523-OpenVault Competitive Study-Incognito

* A solution that can roll out IoT services with CBRS: A report by SNS Telecom and IT anticipates that initial rollouts of 5G NR (new radio) network equipment in the CBRS band will start to take shape in 2021.
* As service providers build out their 5G networks and 5G-enabled devices become available connectivity with higher speeds superior reliability and extended capacity becomes possible.
* in the network.
* The advent of transformational technologies such as 5G will unleash a vast array of groundbreaking digital services that will enable consumers and industries in new ways.

**Frequency:** *18*

##### 202201240843-OpenVault Competitive Study-Incognito

* USP will be span 5G fixed wireless CPEs and STBs.
* Now you can rapidly deliver subscriber self-service functions and equip field technicians Visit ’s Digital Experience Solution page to learn with operational tools all while using your existing BSS more about our unified device management approach assets such as existing self-care portals and mobile apps.
* content filtering and other parental controls online Managed Wi-Fi – Commercial and standards-based Wi- backup and home surveillance; Fi optimization like wireless mesh improving the home Offer subscribers a degree of self-service through web and small business network experience portals and mobile apps; IoT device onboarding and lifecycle management – Expand service offerings and manage the connected Service provider control of IoT devices to offer services home and IoT offerings; such as smart home automation Improve your customer service with improved Mass telemetry – Deliver personalized services using diagnostics monitoring and firmware management; real-time deep edge intelligence and improving customer care applications Reduce the number of technical support calls from subscribers issue escalations to senior network Virtualized third-party applications – Evolve from operations personnel and field technician truck rolls; firmware-based third-party software on a gateway or CPE to containerized applications which can be rapidly Remove the burden of subscriber manual CPE deployed configuration; Roll-out services with an automated deployment process.
* This requires a new management platform which offers remote visibility and management of gateways CPEs and connected devices regardless of device type or network access technology.

**Frequency:** *18*

##### 202104161355-OpenVault Competitive Study-Incognito

* Expand broadband services Deliver competitive mass market broadband services over fixed LTE network.
* Technical issues often resulted in home visit to INCOGNITO SOLUTION perform signal test 's Digital Experience solution provides device Benefits configuration and network visibility to solve technical issues proactively and enable the efficient roll out of new LTE Improved customer services.
* 5G FWA Readiness 's solution provides a centralized approach to manage different FWA technologies including 5G PAGE 2 Copyright © 2021 Software Systems Inc. All Rights Reserved.
* The solution seamlessly integrates with existing back office systems and databases for efficient device management.

**Frequency:** *18*

##### 202103021317-OpenVault Competitive Study-Incognito

* To achieve these results service providers are placing a greater emphasis on improving service diagnostics and performance measuring provisioning new services to existing devices and data security/privacy when it comes to CPE management.
* The report highlighted that 36% of operators are focusing on reducing overall OPEX and CAPEX as part of their strategy to increase return on investment while 26% said they are looking to develop new value-added services or improve the customer scale for existing ones.
* The report found that 63% of service providers expect to have Smart Wi-Fi available in 25% of their networks within the next three years.
* The Broadband Forum’s User Services Platform (USP) is one such standard that is paving the way to better managing the connected home as it was designed to help deploy implement and manage all aspects of the in-home Wi-Fi network including IoT.

**Frequency:** *18*

##### 202106221211-OpenVault Competitive Study-Incognito

* Wi-Fi networking lights IoT Service Elements via an IoT proxy to Controllers - what needs to be managed is not necessarily on the agent.
* USP also enables always-on connectivity and real-time network telemetry.
* SOLUTION OVERVIEW Digital Experience Solution Building better-connected smart home services through strategic partnerships and USP innovation The explosion of connected devices in the home The Broadband Forum User Services Platform today which use various technologies such as (USP) specification sets out capabilities to Wi-Fi IoT mesh and anything 'smart' presents enable Wi-Fi optimization virtualized services new challenges to operators — how to maintain on the gateway and automation and provides seamless always-on connectivity.
* Service Providers Need to prioritize adaptive self-optimizing connectivity throughout the home Need to support service diagnostics and performance measuring as well as the provisioning of new service and applications to CPEs all while managing customer privacy and data security Vendors Need to develop market-ready applications to generate new opportunities Greater focus on developing partnerships Enabling smart home solutions from third-party suppliers USP Solution Overview Page 2 User Services Platform (USP) The User Services Platform (USP) is a new device management standard that enables a faster scalable and more secure way of managing the full lifecycle of connected devices and provides the platform to support the delivery of next-generation virtualized services.

**Frequency:** *18*

##### 202011081502-OpenVault Competitive Study-Incognito

* Accelerate service rollout of triple-play services spanning Protect services with built-in security features to multi-vendor and multi-standard technologies including prevent denial of service (DoS) CPE cloning and other IPv6 IPTV DOCSIS 3.1 SIP and PacketCable 2.0. hacking attacks.
* Leverage lease audit records in CLS to identify cloned configuring once per cluster devices and reduce risk of fraud Zero-touch BCC ecosystem configuration through Automatically detect and inspect suspected MAC spoofing automated discovery of BCC services - no need to when devices appear across multiple DHCP servers and configure specific interface information for BCC services CMTS gateways during an overlapping time period Improved security through a delegated administration Easily review gateway and lease histories to filter out model enabling only authorized personnel to implement legitimate cases (such as node splits) from cloned devices BCC configuration changes Improve quality of service for paying customers by blocking illegitimate devices from accessing your network BCC Central Management through configurable means (e.g.
* walled garden or blocked access) Service Fit Export reports on potential rogue devices for simplified reporting and documentation Firmware Management Service Reduce OPEX and improve QoE with automated DOCSIS firmware management Easily see when firmware packages are available and which devices require these updates Orchestrate bulk firmware updates with automated operations Avoid service interruption with flexible scheduling options Simplify the update process and enhance visibility with an intuitive user interface www.incognito.com 4 About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* clusters featuring a new lightweight user interface that alleviates the need for CLI-based scripting and manual error-prone manual configuration.

**Frequency:** *18*

##### 202102091229-OpenVault Competitive Study-Incognito

* 's cloud-based ACS solution is at the forefront of the industry by allowing service providers to continue to manage and innovate services based on the TR-069 standard while preparing for next- generation TR-369 IoT and 5G fixed wireless access devices and services.
* offers advanced data analytics for proactive care Leveraging network intelligence is critical to improving operations.solution offers holistic near real-time data collection and analytics from the access network connected devices and digital experience to equip operators with visibility into the status of the in-home network the health of devices network wide and application performance.
* However when modernizing your business with a cloud-based platform you need the functionality and performance to support the unified management of next-generation broadband devices and services.
* Unlike most solutions currently available in the market our customers don’t just get the bare bones but instead have access to the additional modules they need as they grow.

**Frequency:** *18*

##### 202201240809-OpenVault Competitive Study-Incognito

* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.
* Example: cost efﬁciencies in an emerging market For a service provider in an emerging market consider the example highlighted by Analysys Mason in their paper “Winning the battle for control and differentiation in the home broadband network with operations automation”.
* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.
* Up to 80% Up to 32% Up to 6% of calls are escalated of calls yield a truck roll of residential customers call to specialized where mean time customer care where average engineers to repair is days handle time is 8 minutes 70% of customer issues are Wi-Fi related Business impacts Lengthy customer service High operational costs; Increased customer representative calls with extended issue resolution frustration; poor experience; a lack of immediate resolution; times; home visit risk of churn which impacts impacts experience and inconvenience net promoter score operational costs Download the White Paper “Winning the battle for control and differentiation in the home broadband network with operations automation” Analysys Mason.

**Frequency:** *18*

##### 202202031526-OpenVault Competitive Study-Incognito

* With access to 3.5 GHz spectrum you have new opportunities to enhance wireless coverage and capacity in existing markets and to tap into new markets by offering in- demand 5G and IoT services.
* CBRS spectrum has only recently become available.
* You may miss opportunities to correlate issues in your LTE network with issues in your CBRS network leaving you unaware of the related CBRS network issues.
* It automatically discovers new devices and can easily read and write device parameters so new devices can be quickly and easily added to the system and reconfigured when necessary.

**Frequency:** *18*

### Detailed Theme Identifier: 14

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Iot is a network of mobile devices that are connected to each other and have the same coverage. [system generated]

**Tags:** *5g iot services | available | coverage | existing | network | new*

#### Theme Quotes by Interaction

##### 201910151126-OpenVault Competitive Study-Incognito

* Also scoring relatively highly were device discovery and diagnostics (45%) and improving service quality and churn management (44%).
* Our productized service orchestration platforms allow cable fiber and fixed wireless broadband service providers to manage devices and services and bring extensive automation and analytics to reduce operational costs and improve the home-user experience.
* .............................................................................................23.6% Network virtualization (e.g.
* Cable executives view network virtualization (e.g.

**Frequency:** *13*

##### 202001010000-OpenVault Competitive Study-Incognito

* Choose a device management solution that provides a holistic view of the network delivers advanced data diagnostics and provides deeper network insights about traffic events and resource utilization in near real time.
* A single device management dashboard that provides a holistic view of all network operations and advanced device data metrics and enables automated troubleshooting of service issues will streamline device management processes.
* Our solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT and 5G FWA To find out more about how the Digital Experience Management Solution can help you get the most out of CBRS today and tomorrow visit www.incognito.com/solutions/fixed-wireless- internet-service-providers/ About Software Systems Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.
* Choose a device management solution that provides advanced monitoring filtering and visualization of massive device and network data sets that can be used to identify issues troubleshoot and automate tasks to improve first-time call resolution decrease call-handling time and reduce technical escalations.

**Frequency:** *13*

##### 202202020000-OpenVault Competitive Study-Incognito

* Remote device management is crucial for the performance of 5G FWA services.
* The solution: Expedites time to market with automated device discovery rapid device integration and a technology- and vendor-agnostic approach to managing any device on the network Enables faster service fulfillment issue resolution and service delivery with a comprehensive view of all devices in the network Increases efficiency and reduces operations costs with a near real-time view of all network devices through a single dashboard that provides critical insights needed to improve proactive care remote diagnostics and service optimization Delivers the optimal QoE based on more informed decision-making by collecting centralizing and normalizing all device and network data 5G FWA DEVICE MANAGEMENT 12 Enables customer support teams with the tools to automate the identification and troubleshooting of services issues to improve first-call resolution rates and decrease technical escalations Provides a unified approach to device management by supporting the TR-069 standard while preparing for next-gen broadband services and devices using User Services Platform TR-369 IoT 4G LTE and 5G FWA With proven FWA remote device management deployments at leading global operators such as Globe in the Philippines a Nordic multi-country mobile operator a South African mobile operator and Claro Brazil is the trusted technology partner for your 5G FWA implementation.
* As a result more devices are going to be added to the network magnifying all the typical management scenarios faced by fixed broadband service providers including the delivery of devices their activation monitoring and management as well as all the unforeseen technical issues needed to be resolved by customer care network operations and field engineering.
* Simply by examining the case of health care it is not difficult to understand how vital connectivity and device and service management are for these organizations and as such how much these types of verticals would be willing to pay for guaranteed service quality.

**Frequency:** *13*

##### 201806120842-OpenVault Competitive Study-Incognito

* Figure 5.2: Machine I learning and AI for operations automation Manual Guided Autonomous [Source: Analysys automation operations Mason 2018] Machine learning Analytics models Data storage/process/normalisation Data lakes Data streams It is in this context that the advanced analytics capabilities such as machine learning come into play.
* Analytics and machine learning will play a pivotal role in enabling operators to make the leap in delivering proactive care and automated operations.
* New digital care and operations automation solutions are now emerging and with the right set of holistic tools addressing customer care network operations and the home user these solutions will serve to deliver tangible benefits as demonstrated in this research.
* © Analysys Mason Limited 2018 6: Conclusions and recommendations Winning the battle for control and differentiation in the home broadband network with operations automation | 19 Based on research conducted by Analysys Mason digital care and operations use cases such as troubleshooting automation for the home network and service issues proactive customer care customer self-care and zero touch install initiatives can deliver tangible operational efficiencies in both the customer care and operations departments.

**Frequency:** *13*

##### 202101111255-OpenVault Competitive Study-Incognito

* They've got a combination of fiber and coaxial cable outside the plant to take care of.
* It impacts the access network devices—the cable modems and the CMTS—which is the infrastructure piece.
* So part of what DOCSIS 4.0 does is focus on new technology to increase upstream bandwidth to get to the true 10G type of service that a fiber connection could provide.
* It includes quality of service and a whole bunch of things; a typical DOCSIS configuration for a cable modem might have many dozens— maybe upwards of 100 different—parameters included in the file.

**Frequency:** *13*

##### 202202031523-OpenVault Competitive Study-Incognito

* Provide proactive care – KPI Analytics: Service providers need a current view of critical insights to improve proactive care remote diagnostics and service optimization.
* Know what is happening – Operations Dashboard: Service providers must have holistic visibility of network operations with advanced data diagnostics from devices and networks.
* to reveal network and connection performance.
* in the network.

**Frequency:** *13*

##### 202201240843-OpenVault Competitive Study-Incognito

* In it offers over TR-069 which include: addition to using an industry standard approach for device Multiple management server support integration TR-369 TR-069 and their extensions allow Use case driven message transfer protocols you to: Efficient data encoding Enable remote provisioning of CPE; Always-on communication Better manage broadband networks with increased Application layer security visibility and control of CPE; Distributed data model processing which is crucial for big Collect data for analytics on network usage and activity data and IoT applications home or business network characteristics and service utilization; Deliver new managed data services such as Wi-Fi What are the use cases driving USP?
* You can further extend digital channels by management and data collection standard and get supplementing your customer care solutions with TR- perspectives from global service providers on the business 369 USP and/or TR-069 ACS retrieved device data value that User Services Platform could deliver visit which previously was a key integration challenge for ’s USP Insights page.
* content filtering and other parental controls online Managed Wi-Fi – Commercial and standards-based Wi- backup and home surveillance; Fi optimization like wireless mesh improving the home Offer subscribers a degree of self-service through web and small business network experience portals and mobile apps; IoT device onboarding and lifecycle management – Expand service offerings and manage the connected Service provider control of IoT devices to offer services home and IoT offerings; such as smart home automation Improve your customer service with improved Mass telemetry – Deliver personalized services using diagnostics monitoring and firmware management; real-time deep edge intelligence and improving customer care applications Reduce the number of technical support calls from subscribers issue escalations to senior network Virtualized third-party applications – Evolve from operations personnel and field technician truck rolls; firmware-based third-party software on a gateway or CPE to containerized applications which can be rapidly Remove the burden of subscriber manual CPE deployed configuration; Roll-out services with an automated deployment process.
* and controllers results in a simpler lighter message set reducing complexity and increasing performance all while maintaining backwards compatibility with TR-069.

**Frequency:** *13*

##### 202104161355-OpenVault Competitive Study-Incognito

* The solution's KPI Improved network analytics dashboard collects network and device performance intelligence data and provides technical and business insights to enable Cut down on time and costs proactive care remote diagnostics and service optimization.
* Optimize service quality Minimize swivel chair The solution also provides advanced remote device Prepare for 5G monitoring and management capabilities to proactively resolve service quality issues automate bulk operation tasks and deliver insights on CPE operations and application performance.
* With increased visibility into KPI analytics the satisfaction operator is able to proactively monitor devices and network- Deliver high-quality service wide service quality.
* Holistic network visibility What's more the solution facilitates remote management of CPE devices and automates the configuration of devices.

**Frequency:** *13*

##### 202103021317-OpenVault Competitive Study-Incognito

* To achieve these results service providers are placing a greater emphasis on improving service diagnostics and performance measuring provisioning new services to existing devices and data security/privacy when it comes to CPE management.
* Smart Wi-Fi a cloud-based technology that can significantly enhance the home broadband experience by leveraging AI and data analytics is on the rise.
* Establishing reliable broadband performance and innovating service offerings around the connected home ecosystem will be key factors in operators' differentiation and revenue generation strategies.
* Traditionally service providers have primarily focused on their access network and left the responsibility of maintaining the home network to that of the consumer.

**Frequency:** *13*

##### 202106221211-OpenVault Competitive Study-Incognito

* Service provider rollout of managed Wi-Fi services requires always-on connectivity to device data to enable proactive service quality issues resolution.
* By offering a unified approach to device management using TR-069 and TR-369 and offering the ability to deploy third-party virtualized applications on home and SME CPEs and gateways.solution allows service providers to leverage investments in common tools across ACS and USP – self-care tools service quality management and KPI analytics – and deliver managed services such as network security smart home automation traffic prioritization and parental controls using virtualized containers.
* Service Providers Need to prioritize adaptive self-optimizing connectivity throughout the home Need to support service diagnostics and performance measuring as well as the provisioning of new service and applications to CPEs all while managing customer privacy and data security Vendors Need to develop market-ready applications to generate new opportunities Greater focus on developing partnerships Enabling smart home solutions from third-party suppliers USP Solution Overview Page 2 User Services Platform (USP) The User Services Platform (USP) is a new device management standard that enables a faster scalable and more secure way of managing the full lifecycle of connected devices and provides the platform to support the delivery of next-generation virtualized services.
* USP also enables always-on connectivity and real-time network telemetry.

**Frequency:** *13*

##### 202011081502-OpenVault Competitive Study-Incognito

* the provisioning platform to ensure cable modem configurations match activated subscriber services Extreme scalability to support network expansion and Automate validation of configuration files used by the efficient use of resources CMTS-CM system to reduce the risk of service interruption High-availability DHCP server supports millions of Java-based management interface accessible from any subscriber devices unlimited number of DHCP relays per operating system server in distributed deployments Wizards and templates for streamlined workflows with Weighted DHCP servers optimize use of available IP diagnostic and reporting tools address space Full-Featured DHCPv4 and DHCPv6 support Multi-level security Simultaneously report packet counters for DHCPv4 and Manage administrator and user rights with access DHCPv6 packets for network monitoring provisioning privileges access control lists and delegation limits system health checks troubleshooting Simplify DHCPv6 Prefix Delegation IPv6 and Flexible configuration and integration options reconfigurations with centralized control Simplified access to subscriber data with integration to Support CableLabs DHCP options registry including third-party OSS platforms including LDAP databases configuration and provisioning of DOCSIS and SOAP CLI CORBA APIs and XML APIs PacketCable devices over IPv6 Leverage Java interface automatic transfer from third- Expose address allocations over BCC API so that party OSS or direct retrieval from centralized back-end northbound IPAM systems can automatically track database utilization of IPv4 and IPv6 resources www.incognito.com 2 Broadband Command Center DNS SERVICE CONFIGURATION FILE MANAGEMENT Authoritative DNS supporting VoIP Dynamic file generation provisioning FQDN requirements Static file store Integrated clustering DNS PROXY SERVICE CONFIGURATION FILE Eliminate dynamic DNS updates in large domains MANAGEMENT PROXY Remove synchronization errors Network protocol support for dynamic Responds to DNS requests using the DHCP server and static provisioning information Integrated clustering DHCP SERVICE MULTIMEDIA PROVISIONING SERVICE High Performance DHCP Software High Performance VoIP Provisioning 1:1 Failover PacketCable and SIP Terminals DOCSIS Provisioning 1:1 Failover Independent and clustering based scalability Multiple API models supported Independent and clustering based scalability DNS Configuration File Management Service Supports high-security domain name Removes the need to track and store large resolution authoritative DNS zone transfers numbers of static files by dynamically and simplified DNS administration.
* Multimedia Provisioning Service DHCP Service Provisions accurate PacketCable and SIP Automatically manages dynamic IPv4 and multimedia configurations by managing IPv6 address allocation DNS records and subscribers devices and associated DOCSIS terminal configurations based configuration data.
* Broadband Command Center Network Deployment Broadband Command Center Modem CMTS OSS/BSS www.incognito.com 3 Value-Added Capabilities Central Management Service Central Lease Service (CLS) New software tool and lightweight user interface to Accelerate and simplify Lawful Intercept look-up processes manage and configure multiple BCC clusters with CLS Alleviates the need for lengthy and error-prone manual Compiles historical and active lease data from Broadband configuration Command Center Replaces CLI-based scripting to configure BCC clusters Simplifies LI without overloading DHCP that typically required significant scripting expertise.
* walled garden or blocked access) Service Fit Export reports on potential rogue devices for simplified reporting and documentation Firmware Management Service Reduce OPEX and improve QoE with automated DOCSIS firmware management Easily see when firmware packages are available and which devices require these updates Orchestrate bulk firmware updates with automated operations Avoid service interruption with flexible scheduling options Simplify the update process and enhance visibility with an intuitive user interface www.incognito.com 4 About Software Systems Inc. Software Systems Inc. provides service orchestration software and services that help digital service providers manage the next generation broadband experience.

**Frequency:** *13*

##### 202102091229-OpenVault Competitive Study-Incognito

* offers advanced data analytics for proactive care Leveraging network intelligence is critical to improving operations.solution offers holistic near real-time data collection and analytics from the access network connected devices and digital experience to equip operators with visibility into the status of the in-home network the health of devices network wide and application performance.
* transforms the data from your network into real-time insights leverages this intelligence to automate the resolution of technical issues and enables proactive broadband performance management to ensure customer experience and SLA adhereence.
* The Digital Experience SaaS (DX SaaS) solution delivers robust analytics automated lifecycle management and proactive digital care functions to help you improve the digital experience – at a fraction of the cost.
* Even as the digital home evolves 's DX solution will continue to be the single source for your unified device management needs with a platform that boasts a future-proofed architecture.solution takes care of your network requirements today while providing you with a window to the future.

**Frequency:** *13*

##### 202201240809-OpenVault Competitive Study-Incognito

* Example: cost efﬁciencies in an emerging market For a service provider in an emerging market consider the example highlighted by Analysys Mason in their paper “Winning the battle for control and differentiation in the home broadband network with operations automation”.
* ASSUMPTIONS 3 million 4.6% 2.3% Initial subscriber base Subscriber growth Monthly over 3 years churn rate Tier 1 full-time employees – 2% BY INTRODUCING ESTIMATED customer care CSR OPEX SAVINGS OF 18% Tier 2 full-time employees – Remote device management 10% technical specialized network operations Digital care channels Truck rolls with Operational automation OVER 3 YEARS 6% ﬁeld technicians DIGITAL CHANNELS REMOTE ZERO-TOUCH 18% + 20% MANAGEMENT PROCESS AUTOMATION PROVISIONING OPEX SAVINGS SAVINGS SAVINGS offers a proven remote device management platform that reduces subscriber in-bound calls to customer care technical escalations and truck rolls yielding both operational savings and a seamless digital experience.
* Up to 80% Up to 32% Up to 6% of calls are escalated of calls yield a truck roll of residential customers call to specialized where mean time customer care where average engineers to repair is days handle time is 8 minutes 70% of customer issues are Wi-Fi related Business impacts Lengthy customer service High operational costs; Increased customer representative calls with extended issue resolution frustration; poor experience; a lack of immediate resolution; times; home visit risk of churn which impacts impacts experience and inconvenience net promoter score operational costs Download the White Paper “Winning the battle for control and differentiation in the home broadband network with operations automation” Analysys Mason.
* When an operator with 3 million subscribers introduces remote device management digital care channels and operational process automation there are substantial cost efﬁciencies in supporting residential consumers’ ﬁxed broadband services.

**Frequency:** *13*

##### 202202031526-OpenVault Competitive Study-Incognito

* For efficient device deployment and service provisioning CBRS platforms must be able to exchange customer information and other network data with these critical back-office systems.
* You may miss opportunities to correlate issues in your LTE network with issues in your CBRS network leaving you unaware of the related CBRS network issues.
* Naturally you’ll want to get a proof of concept (PoC) for CBRS device deployment and service provisioning going so you can get to field trials and commercial service as quickly as possible.
* Device Management Gets Messy Almost every service provider in the world operates in a multi-vendor multi- technology and multi-system environment.

**Frequency:** *13*

### Detailed Theme Identifier: 15

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Advanced analytics and proactive care to improve the performance of your network. [system generated]

**Tags:** *advanced | analytics | data | diagnostics | holistic | network | performance | proactive care | service*

#### Theme Quotes by Interaction

# Sub-Study Identifier: default — Every study has the default substudy, and this is the description. We encourage you to make this substudy unique to your work.

## Summary Theme

This is the summary theme for the entire sub-study. Using natural language processing mediumroast.io has detected the associated tags and quotes matched to the tags. It is a generalization of the sub-study and accompanies the discrete detailed themes.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** A model of interoperability between service providers and their networks of resources for service delivery in real time [system generated]

**Tags:** *daa deployment automation | interoperability gpon | network orchestration | network resources | new services | operative model | orchestration service | service delivery | service orchestration | service providers | time market | use cases | virtual network*

### Theme Quotes

* Symphonica accelerates deployment for GPON 5G small cells and Remote Phy with multiple ready use cases and deployment scenarios.The voice and high- FTTH assets forward it seeks vendor-agnostic speed data provider engaged n 1 week to solve OLT multi-session cloud-native solutions like ’s for its Symphonica codeless cloud service orchestration solution a cloud- challenge Symphonica codeless automation orchestration and service activation native platform that runs out of Amazon n Reduced NMS/EMS footprint engine to gain efﬁciencies and Web Services (AWS).Voice over GPON opportunities to reduce costs by simplifying its multi-vendor izzi sought to accelerate its time to n 1 day to deliver initial solution environment and reducing its need to market for new services with a solution components engage legacy suppliers to modify BSS that would enable any roll out in any city to be done remotely and in a highly n 1 month to add newly acquired systems and process ﬂows when launching new services.By providing an independent means of modifying process ﬂows with API- based abstraction and its codeless approach was further able to reduce cost and accelerate time to market for new services for izzi.
* Improved time-to-market Multi-vendor interoperability means that service providers can choose the best equipment for their network regardless of the manufacturer reducing the amount of time it takes to make FTTH services available for use by the end-users.By giving service providers flexibility beyond single-vendor products the companies can adopt new solutions as they become available presenting new business opportunities and allowing service providers to offer customized services to end-users.You may also like Moving the OSS Infrastructure Active Ethernet Vs. GPON | A DAA Deployment Automation: Stack to the Cloud – Challenges Comparison Everything You Should Know and Myths " # $ % © | thinkincredible@intraway.comAbility to customize services Multi-vendor interoperability in GPON provisioning enables service providers to leverage the best available solutions.
* The implementation of Symphonica as a service orchestrator and service activation has a transforming impact on the overall operation of telecommunication service providers: At Design Time: Increases the agility in new product introduction: The low-code/no-code technology applied to implement provisioning of new services or new network elements reduces from months to weeks or even days integration times and therefore time-to-market for new products.Improve Operational Effectiveness Our cloud-native operative model and applications provide a reliable and secure platform and a modern and agile operative model.At Run Time: Enables full or partial Automation of delivery processes (i.e.Look for Interoperability As a Service Orchestrator Symphonica promotes interoperability in different ways: Integrating various technologies: Symphonica capabilities allow us to handle Lifecycle Service Orchestration for Services whose support comes from different technologies like xDSL xPON GSM DTH SD-WAN etc.
* Best Use Cases for GPON GPON technology can be very cost-effective provided it meets certain conditions.◎ Quality of service: GPON guarantees the necessary bandwidth for each service and user.◎ Operation: GPON has an integrated management model that simplifies the administration of the equipment.In addition this technology allows all IP services to be integrated through a single cable: VoIP IPTV Data / Internet WIFI video conferencing video surveillance access control home automation … etc.
* Communications providers are finding the carrier Ethernet market an increasingly important part of their business model.Connecting up a new facility can be costly and time-consuming.What lets Ethernet work in a WAN is the VPLS (virtual private LAN service) technology.It’s generally considered a Layer 2 technology on the OSI network model.
* At such a point network orchestration will be a crucial tool to optimize the service delivery capabilities for any telecommunications organization.Reduced Service Control Complexity- Reduced Time to Market The real-time inventory data along with the appropriate resource allocations allows for robust infrastructure provisioning capabilities.Intuitive Self-Service- Great Customer Experience Network orchestration and automation enable intuitive self-service capabilities for the customers.Lower time to market in this case allows organizations to add value for their customers- both businesses and individual subscribers.
* They demonstrate that aligning a DAA operational model with market drivers and using proven orchestration and automation tools helps navigate challenges and enhance efficiency.Multi-vendor end-to-end codeless orchestration in one place will help with Quality of Service (QoS) issues reduce any element of a single point of failure maximize the use of existing infrastructure resources and deliver a better customer service experience.Overall improved efficiency: Operations teams will be able to reduce deployment time for new network resources from weeks to minutes freeing up personnel resources for other projects that will help improve the service quality customer satisfaction levels and financial returns of their business.CIN Digitized access network CIN technology streamlines the delivery of services.
* deployment.’s Symphonica The Key Features and For the GPON Virtual Network Operator Service management automation solution UFINET used Benefits of Symphonica ’s Symphonica a multi-tenant cloud- native no-code solution.As part of active FTTH service providers.State-of-the-art notification service This helped accomplish UFINET expectations regarding time-to-market and adding new vendors in days.
* They’re not just developing new unique approaches to existing services– in many cases they’re creating new services entirely.In order for a virtual CMTS system to be deployed in a production network and orchestration layer must be present to automate deployment.The Symphonica orchestration engine can be utilized by service providers looking to make the transition from the physical fixed network to their virtualized dynamic counterparts.CVIM leverages Instrway’s real-time service design technology in order to create services.

## Detailed Themes

Here are the discrete themes for the sub-study. Since we need enough unique tags to check the individual interactions in the sub-study for relevant text snippets and quotes you may find discrete themes without quotes. We do not strike them from the report because we believe it is important to see what the mediumroast.io detected for transparency purposes.

### Detailed Theme Identifier: 1

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Symphonica is a new service from saas that offers orchestration and provisioning. [system generated]

**Tags:** *apis | network | new | nocode | orchestration | provisioning | saas | service | solution | symphonica*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* Integration of its assets required only a High speed data were launched in the silos and heterogeneous environments month by reusing the integration and they are transforming to eliminate third month.
* It supports izzi aimed to offer new premium technology stack running out of AWS in geographical distribution among its GPON-based voice and high-speed data a Kubernetes-based environment that device connectors greatly reducing services in Monterrey.
* The voice and high- FTTH assets forward it seeks vendor-agnostic speed data provider engaged n 1 week to solve OLT multi-session cloud-native solutions like ’s for its Symphonica codeless cloud service orchestration solution a cloud- challenge Symphonica codeless automation orchestration and service activation native platform that runs out of Amazon n Reduced NMS/EMS footprint engine to gain efﬁciencies and Web Services (AWS).
* The Communications Service Provider (CSP) delivers high speed Internet digital television and voice services to consumers and businesses in Mexico.

**Frequency:** *60*

##### 202104190000-OpenVault Competitive Study-Intraway

* GPON Multi-vendor Interoperability April 19 2021 " Eduardo Baroncini GPON Multi-Vendor Interoperability Gigabit-Capable Passive Optical Network (GPON) is a point-to-multipoint infrastructure considered the best fiber optic technology.
* Multi-vendor interoperability ensures consistency which further leads to speed improvements.
* As such multi-vendor interoperability allows different vendors’ systems to communicate and share data.
* Simplified deployment of fiber networks Interoperability of GPON equipment simplifies fiber networks’ deployment which aids in streamlining infrastructure and ensuring installation quality.

**Frequency:** *60*

##### 202006300000-OpenVault Competitive Study-Intraway

* Unprecedented high-speed Internet access virtualization and service personalization are driving automated dynamic resources and service orchestration.
* Performance rate-limiting prioritized queuing connection management; the SLA enforcement and overall transaction management are handled by the platform.
* Cloud Way to Service Innovation OSS/BSS solutions Infrastructure " # $ % © | thinkincredible@intraway.com
* The northbound integration provided to interact with the Symphonica platform is based on the latest APIs specification from the forum design to be network “agnostic.” This means the same integration will be leveraged to activate service offerings on legacy platforms and new offerings over cutting-edge platforms.

**Frequency:** *60*

##### 202004040000-OpenVault Competitive Study-Intraway

* FTTH Fiber-to-the-Home connections is a direct connection between the plant and our home using a fiber optic cable.
* ◎ Longer distance: The optical fiber allows cable distances of up to 20Km.
* This fiber optic technology provides faster data transmission and reception through a single fiber with a point-to-multipoint architecture which allows home optical fiber (FTTH) or a building (FTTB).
* Downstream data goes over a 1490 nm signal with a maximum speed of 2.488 gigabits per second.

**Frequency:** *60*

##### 201706260000-OpenVault Competitive Study-Intraway

* Ethernet speed and simplicity make this a practical choice.
* A T1 connection is finicky and upgrading its bandwidth requires adding more lines.
* With the widespread availability of Ethernet connections to the Internet businesses have ready access to the speed they require.
* An Ethernet-based SD-WAN takes advantage of the economy of the Internet yet delivers high speed and good turnaround.

**Frequency:** *60*

##### 202007190000-OpenVault Competitive Study-Intraway

* Reduced Service Control Complexity- Reduced Time to Market The real-time inventory data along with the appropriate resource allocations allows for robust infrastructure provisioning capabilities.
* This allows operators to optimize resource utilization by removing manual interventions.
* With more and more people opting for the 5G network this is a crucial necessity for maintaining the service quality by telecom companies.
* It also allows the scalability of the bandwidth as per the requirements of the network users.

**Frequency:** *60*

##### 202109200000-OpenVault Competitive Study-Intraway

* It allows cable and fiber network operators to reconfigure their existing HFC infrastructure into an elastic access layer that provides real-time programmability visibility flexibility and virtualization capabilities.
* For example cable operators will achieve this by leveraging a framework on an RPD’s data plane to configure and manage itself.
* For instance 60-70% more fiber is necessary to deploy N+0 Nodes.
* In addition the access and edge devices should be able to access the operator’s secure Internet connection to download updates.

**Frequency:** *60*

##### 202104140643-OpenVault Competitive Study-Intraway

* Argentina was the has laid over 75000 kilometers of optical fiber.
* Their optical fiber network grows by the Architected Framework of AWS day to cater to the rising demand demonstrating Deployment of the cloud-native solution on their success and growth.
* Along with solution in all the countries where the model was 2000+ towns and cities with optical fiber they being rolled out and for it to support multiple also have 45000+ on-net buildings 95000+ near- CSPs.
* UFINET to provide data connectivity to their To gain the ability to orchestrate triple-play clients spread across 17 countries.

**Frequency:** *60*

##### 201905290000-OpenVault Competitive Study-Intraway

* They are combined in centralized data centers.
* These may include customer orders data center status and other factors.
* RPds serve low-latency high-speed connections and simultaneously offer savings on cooling space and power costs for the headend.
* Deploying innovative applications that capitalize on machine learning and AI distributed data processing and ultra-low latency becomes a breeze.

**Frequency:** *60*

### Detailed Theme Identifier: 2

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Sdwan ethernet cable with high speed of transmission of data. [system generated]

**Tags:** *cable | connection | data | ethernet | optical fiber | sdwan | speed*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* Symphonica accelerates deployment for GPON 5G small cells and Remote Phy with multiple ready use cases and deployment scenarios.
* It supports izzi aimed to offer new premium technology stack running out of AWS in geographical distribution among its GPON-based voice and high-speed data a Kubernetes-based environment that device connectors greatly reducing services in Monterrey.
* But the GPON (TAM) to facilitate discussions that change; to meet aggressive time to engineering team was focused on helped to adapt legacy functionality to market demands; and to provide integrating resource-facing services.
* Voice over GPON opportunities to reduce costs by simplifying its multi-vendor izzi sought to accelerate its time to n 1 day to deliver initial solution environment and reducing its need to market for new services with a solution components engage legacy suppliers to modify BSS that would enable any roll out in any city to be done remotely and in a highly n 1 month to add newly acquired systems and process ﬂows when launching new services.

**Frequency:** *52*

##### 202104190000-OpenVault Competitive Study-Intraway

* GPON Multi-vendor Interoperability April 19 2021 " Eduardo Baroncini GPON Multi-Vendor Interoperability Gigabit-Capable Passive Optical Network (GPON) is a point-to-multipoint infrastructure considered the best fiber optic technology.
* GPON has a greater range faster speeds flexible infrastructure capacity lower cost and space-saving benefits.
* The importance of multi-vendor interoperability in GPON provisioning Interoperability and certification will have a significant impact on the future prospects of GPON.
* Here is what to know about GPON multi-vendor interoperability.

**Frequency:** *52*

##### 202006300000-OpenVault Competitive Study-Intraway

* Look for Interoperability As a Service Orchestrator Symphonica promotes interoperability in different ways: Integrating various technologies: Symphonica capabilities allow us to handle Lifecycle Service Orchestration for Services whose support comes from different technologies like xDSL xPON GSM DTH SD-WAN etc.
* Manage Traditional Network Functions As a service orchestrator Symphonica is in charge of connecting all the CSP underlying technology whether it is legacy voice platform physical GPON infrastructure or a Software Define Controller the idea of our solution is the product offering can concentrate on putting together new offers without being worried what is “underneath the hood.” Our solution is really on target when it comes to activating services in traditional networks or Software Defined Networks we support legacy protocols like CLI TL1 and Telnet and at the same time we offer REST LDAP or Netconf support.
* Cloud Way to Service Innovation OSS/BSS solutions Infrastructure " # $ % © | thinkincredible@intraway.com
* Accurate fulfillment process reduces post-support calls to the call center and improves overall customer satisfaction by minimizing errors.

**Frequency:** *52*

##### 202004040000-OpenVault Competitive Study-Intraway

* Within PON the main options are BPON (broadband passive optical network) GPON (gigabit passive optical network) and EPON (Ethernet passive optical network).
* GPON will continue to be the standard for present and future short-term fiber connections a standard that will continue to behave smoothly when 1 Gbps connections become the standard connections of all households connections that some companies already offer and that they are not so far from becoming the standard if we take into account that connections between 300 Mbps and 600 Mbps are today the standard speeds.
* Within passive optical networking GPON and EPON are the leading choices.
* The Future of FTTH Connections and the GPON Standard The GPON standard today is perfect for ensuring the proper functioning of new FTTH connections and can still give much more of itself; it is far from saturated.

**Frequency:** *52*

##### 201706260000-OpenVault Competitive Study-Intraway

* Ethernet is a widely supported standard and connectivity is just a matter of plugging it.
* Ethernet connections aren’t mutually exclusive with higher-level network features.
* You may also like Moving the OSS Infrastructure Active Ethernet Vs. GPON | A Stack to the Cloud – Challenges Going No-Code to Launch Services Comparison and Myths Fast " # $ % © | thinkincredible@intraway.com
* This will allow good-quality voice and streaming connections with a minimum of delay and jitter.

**Frequency:** *52*

##### 202007190000-OpenVault Competitive Study-Intraway

* You may also like Telecom Industry: How to get ROI Scaling from Manual Provisioning Automation in the Telecom out of Intelligent Automation to fully Automate FTTH Activation Industry " # $ % © | thinkincredible@intraway.com
* This allows operators to optimize resource utilization by removing manual interventions.
* With more and more people opting for the 5G network this is a crucial necessity for maintaining the service quality by telecom companies.
* It also allows the scalability of the bandwidth as per the requirements of the network users.

**Frequency:** *52*

##### 202109200000-OpenVault Competitive Study-Intraway

* This will help deliver multi-Gigabit speeds without investing in additional bandwidth infrastructure thus saving on costs and improving business efficiency with faster data transmission rates and reduced delays between data transfer events.
* It will offer benefits in the following areas: Business Businesses will enjoy the following business-related benefits when it comes to DAA deployment automation: Cost-effective delivery of multi-Gigabit speeds: DAA deployment automation will help companies address network scalability issues by deploying DAA resources as per the changing demands.
* To learn more about Symphonica please visit www.symphonica.com You may also like Leveraging Best Customers Moving the OSS Infrastructure Experiences Options: FTTH vs. Stack to the Cloud – Challenges Going No-Code to Launch Services Cable (DOCSIS) and Myths Fast " # $ % © | thinkincredible@intraway.com
* This will improve customer satisfaction as people get quicker access to bandwidth-hungry applications such as video streaming live meetings and social media.

**Frequency:** *52*

##### 202104140643-OpenVault Competitive Study-Intraway

* passive and active network management is now To achieve this there is a need for the automation easier with a standard set of APIs workflows and of activation flows and end-to-end orchestration.
* Argentina was the has laid over 75000 kilometers of optical fiber.
* Facilitating GPON Management Automation with Symphonica SaaS a No-code Provisioning Platform FACILITATING GPON MANAGEMENT AUTOMATION WITH SYMPHONICA SAAS A NO-CODE PROVISIONING PLATFORM Now more than ever the telecommunications challenges businesses have.
* when moving from passive to active network Implementing new features and functionalities activation.

**Frequency:** *52*

##### 201905290000-OpenVault Competitive Study-Intraway

* RPds serve low-latency high-speed connections and simultaneously offer savings on cooling space and power costs for the headend.
* Our combined vCCAP solution is based on open APIs and standard interfaces at every level.
* vCCAPs are deployed on industry-standard x86 hardware onto one or multiple NFV platforms.
* Managing High-Bandwidth Demand Through the Enablement of DOCSIS 3.1 Through experimentation many operators have discovered that DOCSIS distributed access architecture (DAA) plays a key role in enabling gigabit speeds over the HFC network.

**Frequency:** *52*

### Detailed Theme Identifier: 3

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Epon gpon is a multivendor system that allows for fast and easy interoperability with other systems. [system generated]

**Tags:** *connections | epon | gpon | interoperability | multivendor | passive optical | speeds | standard*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* izzi’s OLT Network massive efﬁciencies.
* It was also deployed and conﬁgured in the cloud today.
* The voice and high- FTTH assets forward it seeks vendor-agnostic speed data provider engaged n 1 week to solve OLT multi-session cloud-native solutions like ’s for its Symphonica codeless cloud service orchestration solution a cloud- challenge Symphonica codeless automation orchestration and service activation native platform that runs out of Amazon n Reduced NMS/EMS footprint engine to gain efﬁciencies and Web Services (AWS).
* is a Select Technology Partner in the Amazon Web Services (AWS) Partner Network.

**Frequency:** *38*

##### 202104190000-OpenVault Competitive Study-Intraway

* Enhanced network performance In a world where there is increased competition among service providers and the consumer is more discerning than ever there is a need to improve network performance.
* During this 40-minute webinar we discuss the challenges that GPON activation presents and how to solve them quickly and efficiently with a Cloud-Native SaaS solution.
* During this 40-minute webinar we discuss the challenges that GPON activation presents and how to solve them quickly and efficiently with a Cloud-Native SaaS solution.
* Generally service providers will deploy equipment from multiple vendors in a single network.

**Frequency:** *38*

##### 202006300000-OpenVault Competitive Study-Intraway

* Unprecedented high-speed Internet access virtualization and service personalization are driving automated dynamic resources and service orchestration.
* The northbound integration provided to interact with the Symphonica platform is based on the latest APIs specification from the forum design to be network “agnostic.” This means the same integration will be leveraged to activate service offerings on legacy platforms and new offerings over cutting-edge platforms.
* This hardware guarantees availability to the customers within certain levels but it is: Expensive Heavily vendor locked in Often very expensive Complex updates are required to maintain hardware and software with service windows and complex operation with big teams.
* Symphonica will reduce implementation time to hours with no installation operation or hardware costs.

**Frequency:** *38*

##### 202004040000-OpenVault Competitive Study-Intraway

* Within PON the main options are BPON (broadband passive optical network) GPON (gigabit passive optical network) and EPON (Ethernet passive optical network).
* A single network consists of an optical line terminal (OLT) belonging to the service provider a splitter and up to 64 optical network units (ONU).
* An ONU is sometimes called an ONT (optical network terminal).
* Also it uses ATM encapsulation for when working in an ATM network rather than Ethernet.

**Frequency:** *38*

##### 201706260000-OpenVault Competitive Study-Intraway

* What lets Ethernet work in a WAN is the VPLS (virtual private LAN service) technology.
* Cloud services have many uses but sometimes it’s necessary to keep data on the premises.
* You may also like Moving the OSS Infrastructure Active Ethernet Vs. GPON | A Stack to the Cloud – Challenges Going No-Code to Launch Services Comparison and Myths Fast " # $ % © | thinkincredible@intraway.com
* It’s generally considered a Layer 2 technology on the OSI network model.

**Frequency:** *38*

##### 202007190000-OpenVault Competitive Study-Intraway

* Network Infrastructure Adaptability- Improved Resource Utilization Network orchestration programs can help organizations discover the state of resource allocation within the network dynamically.
* One of the effective ways in which businesses can handle various network management issues is by implementing network orchestration and automation processes.
* Automated Service Order Fulfillment- Adaptive and Effective Network Network orchestration processes have in-built mechanisms for automated service order fulfillment.
* In the world of telecommunication having an effectively adaptive network is the cornerstone business value proposition.

**Frequency:** *38*

##### 202109200000-OpenVault Competitive Study-Intraway

* Opens the way for virtualization of the network: DAA deployment automation will eliminate the need for physical networking resources.
* It allows for virtualization automated provisioning and IT integration through closed- loop network operations.
* They can also simplify IT and network operations by moving to a managed no-code cloud-native solution.
* Symphonica’s flexible cloud-based implementation infrastructure can be deployed in minutes.

**Frequency:** *38*

##### 202104140643-OpenVault Competitive Study-Intraway

* platforms in various countries.
* ’s Symphonica The Key Features and For the GPON Virtual Network Operator Service management automation solution UFINET used Benefits of Symphonica ’s Symphonica a multi-tenant cloud- native no-code solution.
* Implementation of solutions is vital for the success of any virtual network operator service.
* They include: At first the solution used a centralized TMF Makes it Easy for CSPs to Innovate open API to handle passive network resources management.

**Frequency:** *38*

##### 201905290000-OpenVault Competitive Study-Intraway

* Virtual CCAP (vCCAP) In order to implement a virtual CCAP three elements must be present: a virtual CTMS system orchestration and cloud infrastructure.
* The virtual CMTS system operates on two cloud environments located on two separate hardware platforms.
* Virtual CCAP takes advantage of and utilizes standard server hardware that affords the option to cost-effectively scale processing memory and I/O resources up or down.
* NFVi The final element of a vCCAP is the cloud infrastructure.

**Frequency:** *38*

### Detailed Theme Identifier: 4

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Vccap is a virtualization of hardware and software on a variety of platforms. [system generated]

**Tags:** *cloud | hardware | network | platforms | resources | vccap | virtual ccap | virtualization*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* Symphonica accelerates deployment for GPON 5G small cells and Remote Phy with multiple ready use cases and deployment scenarios.
* izzi’s acquisition strategy entails the company wanted to expand its new Delivers Stunning Results: overcoming challenges with services nationwide which meant heterogeneous networks and ﬁnding a cloud-native solution that n Just 3 months to launch HSD and operations environments.
* Symphonica cloud is the closest CSPs will get to plug and play automation.
* The design studio simpliﬁes the deployed in Kubernetes that enable a with its customers to overcome the conﬁguration of the southbound continuous deployment approach.

**Frequency:** *36*

##### 202104190000-OpenVault Competitive Study-Intraway

* You may also like Moving the OSS Infrastructure Active Ethernet Vs. GPON | A DAA Deployment Automation: Stack to the Cloud – Challenges Comparison Everything You Should Know and Myths " # $ % © | thinkincredible@intraway.com
* The mass deployment of the technology has not only resulted in opportunities but also challenges for service providers.
* Simplified deployment of fiber networks Interoperability of GPON equipment simplifies fiber networks’ deployment which aids in streamlining infrastructure and ensuring installation quality.
* Interoperability and certification of various elements of the network will help address some of the challenges and promote the growth of GPON.

**Frequency:** *36*

##### 202006300000-OpenVault Competitive Study-Intraway

* This is a change to usual business deployment because it enables our customers to migrate their current deployment to the cloud.
* Application deployment is modular automatically tested and heavily automated.
* zero-touch or self-serve): Automation of the end to end service lifecycle deeply transforms the business and the operations of a Telecom Provider: Symphonica robust and highly available software has been verified by AWS as a Well-Architected Platform.
* For infrastructure deployment we are using Terraform for infrastructure description and git ops to store all our information including Terraform scripts and Jenkins for infrastructure deployments automation.

**Frequency:** *36*

##### 202004040000-OpenVault Competitive Study-Intraway

* Optical cables have very high bandwidth.
* Among its main advantages are: ◎ Higher bandwidth.
* ◎ Quality of service: GPON guarantees the necessary bandwidth for each service and user.
* While a few years ago it was a success to have 10 Mbps of an ADSL/DOCSIS connection these speeds have been left far behind today.

**Frequency:** *36*

##### 201706260000-OpenVault Competitive Study-Intraway

* A T1 connection is finicky and upgrading its bandwidth requires adding more lines.
* You may also like Moving the OSS Infrastructure Active Ethernet Vs. GPON | A Stack to the Cloud – Challenges Going No-Code to Launch Services Comparison and Myths Fast " # $ % © | thinkincredible@intraway.com
* Where does Ethernet fit in?
* If you can do something on a local network generally you can do it on an Ethernet-based SD-WAN.

**Frequency:** *36*

##### 202007190000-OpenVault Competitive Study-Intraway

* It also allows the scalability of the bandwidth as per the requirements of the network users.
* You may also like Telecom Industry: How to get ROI Scaling from Manual Provisioning Automation in the Telecom out of Intelligent Automation to fully Automate FTTH Activation Industry " # $ % © | thinkincredible@intraway.com
* Intuitive Self-Service- Great Customer Experience Network orchestration and automation enable intuitive self-service capabilities for the customers.
* One of the effective ways in which businesses can handle various network management issues is by implementing network orchestration and automation processes.

**Frequency:** *36*

##### 202109200000-OpenVault Competitive Study-Intraway

* The latest version of DOCSIS specifications – DOCSIS 3.1 – provides the tools needed to enable DAA deployment automation.
* DOCSIS 4.0 & Full Duplex DOCSIS DOCSIS 4.0 is a crucial enabler for DAA deployment automation – it will offer an improved user experience efficiency and flexibility on HFC networks.
* Technology Enablers of DAA The success of DAA deployment is reliant on technology enablers such as: DAA DOCSIS specifications and technologies DOCSIS is a key enabler for DAA deployment.
* Operations Determining the bandwidth resources and interconnections necessary are just some of the challenges that IT professionals face when it comes to DAA deployment.

**Frequency:** *36*

##### 202104140643-OpenVault Competitive Study-Intraway

* deployment.
* Facilitating GPON Management Automation with Symphonica SaaS a No-code Provisioning Platform FACILITATING GPON MANAGEMENT AUTOMATION WITH SYMPHONICA SAAS A NO-CODE PROVISIONING PLATFORM Now more than ever the telecommunications challenges businesses have.
* For this reason the (CSPs) have to overcome many challenges.
* deployment on Amazon Web Services (AWS).

**Frequency:** *36*

##### 201905290000-OpenVault Competitive Study-Intraway

* Managing High-Bandwidth Demand Through the Enablement of DOCSIS 3.1 Through experimentation many operators have discovered that DOCSIS distributed access architecture (DAA) plays a key role in enabling gigabit speeds over the HFC network.
* The advent of bandwidth-intensive applications like 3D and 4k video virtual reality (VR) and augmented reality (AR) has presented a web of challenges to cable network providers.
* The orchestrator is responsible for the automation of design fulfillment and assurance processes.
* DOCSIS WiFi HFC LTE/5G etc.).

**Frequency:** *36*

### Detailed Theme Identifier: 5

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Docs on the challenges of deploying a daa in the cloud. [system generated]

**Tags:** *bandwidth | challenges | daa deployment automation | docsis | operations*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* By providing an independent means of modifying process ﬂows with API- based abstraction and its codeless approach was further able to reduce cost and accelerate time to market for new services for izzi.
* trusted advisor approach to every Symphonica’s microservices are also customer engagement.
* the new solution approach and to deﬁne massive cost advantages over was able to address both components and entities.
* northbound integration with izzi TM challenges inherent to every Symphonica’s codeless approach Forum Open APIs were used for service operator’s IT and network enables its users to create their own ordering service inventory and service environment.

**Frequency:** *30*

##### 202104190000-OpenVault Competitive Study-Intraway

* All these factors help to reduce costs for both service providers and the end-user.
* Reduced costs Every service provider will want to find cost-effective ways of catering to the needs of their customers.
* This approach offers service providers several options to get fiber optics closer to the end-user.
* As such multi-vendor interoperability allows different vendors’ systems to communicate and share data.

**Frequency:** *30*

##### 202006300000-OpenVault Competitive Study-Intraway

* Retire expensive legacy solutions reduce TCO improve cost optimization and free up resources to drive innovation Improve efficiency per transaction in the fulfillment process – Cost per transaction and/or FTE cost reduction Increase effectiveness in the fulfillment process: Attain higher throughput & quality at the service delivery team Reduce YoY operation cost growth – Cap and reduce operation costs Implement a framework that allows increased agility in deploying new services and making changes to existing ones Improve customer experience during the service life cycle setting the framework to support future operation models such as self- care self-provisioning APIs for easier integration into analytics and advanced diagnosis tools Minimize Investments and Complexity Without technology partners that understand the benefits to their own businesses of adopting cloud-native approaches migration will be difficult.
* (operational efficiency).
* It generates immediate cost savings by reducing personnel doing repetitive tasks.
* Symphonica will reduce implementation time to hours with no installation operation or hardware costs.

**Frequency:** *30*

##### 202004040000-OpenVault Competitive Study-Intraway

* which means not only significant cost savings but also a simplification in the management of all the elements that are part of the network.
* Each approach has its advantages.
* ◎ Quality of service: GPON guarantees the necessary bandwidth for each service and user.
* Costs and maintenance requirements will be higher.

**Frequency:** *30*

##### 201706260000-OpenVault Competitive Study-Intraway

* It allows service providers link local sites as if there was a bridge or “pseudowire” between them.
* Fulfillment Service & Revenue Assurance About Blog !
* Whatever approach a business takes to its network it can’t afford to let the last-mile connection be a bottleneck.
* It even lets companies without a technical staff set up intra-business services at a low cost and update the network configuration whenever they need to.

**Frequency:** *30*

##### 202007190000-OpenVault Competitive Study-Intraway

* Ultimately the ability of the infrastructure to adapt as per the requirements of the network allows businesses to improve their OPEX and lower service costs.
* It also allows the scalability of the bandwidth as per the requirements of the network users.
* As a result telecom companies can greatly reduce latency and offer high-quality products with lesser turnaround time.
* It also allows the identification of potential threats to the system and take the necessary actions at the appropriate time.

**Frequency:** *30*

##### 202109200000-OpenVault Competitive Study-Intraway

* They also enable significant cost savings over proprietary equipment due to more efficient manufacturing processes that reduce hardware costs and operational expenses.
* Overall improved efficiency: Operations teams will be able to reduce deployment time for new network resources from weeks to minutes freeing up personnel resources for other projects that will help improve the service quality customer satisfaction levels and financial returns of their business.
* Multi-vendor end-to-end codeless orchestration in one place will help with Quality of Service (QoS) issues reduce any element of a single point of failure maximize the use of existing infrastructure resources and deliver a better customer service experience.
* Challenges of DAA Deployment Innovations and new technologies can offer significant benefits in the telecommunications sector.

**Frequency:** *30*

##### 202104140643-OpenVault Competitive Study-Intraway

* There is a great need for solutions that can help reduce costs and facilitate faster and easier deployment of services.
* Efficiency is one of the critical factors that play a part in the growth of a company.
* The Journey UFINET is one such company that is successfully enabling CSPs to reduce costs and become more Initially their journey began as a challenge to efficient.
* The state-of-the-art with varying service adoption rates the model notification service also has simplified integration should be flexible enough on a commercial level.

**Frequency:** *30*

##### 201905290000-OpenVault Competitive Study-Intraway

* The architecture struggles to deliver the additional scalability cost savings service agility and capacity that CSPs require if they want to meet growing demand.
* We seek to unleash the full potential of networks; and in doing so we advance customer-centricity reduce operational costs and speed up time-to- market.
* RPds serve low-latency high-speed connections and simultaneously offer savings on cooling space and power costs for the headend.
* It also improves service quality and reliability.

**Frequency:** *30*

### Detailed Theme Identifier: 6

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** This approach allows you to reduce your operating costs by a significant amount. [system generated]

**Tags:** *allows | also | approach | cost savings | costs | efficiency | reduce | service | significant*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* The growing CSP Kafka Symphonica is highly available Java with a Spring Boot stack and didn’t intend to limit itself to Monterrey and scalable with all components reuses open components from Netﬂix either; after a successful launch there running in active/active mode.
* izzi’s OLT Network massive efﬁciencies.
* The voice and high- FTTH assets forward it seeks vendor-agnostic speed data provider engaged n 1 week to solve OLT multi-session cloud-native solutions like ’s for its Symphonica codeless cloud service orchestration solution a cloud- challenge Symphonica codeless automation orchestration and service activation native platform that runs out of Amazon n Reduced NMS/EMS footprint engine to gain efﬁciencies and Web Services (AWS).
* Its Symphonica platform is a cloud-native codeless automation orchestration and service activation engine designed following the ﬁve pillars of the AWS Well-Architected Framework — operational excellence security reliability performance efﬁciency and cost optimization.

**Frequency:** *23*

##### 202104190000-OpenVault Competitive Study-Intraway

* GPON Multi-vendor Interoperability April 19 2021 " Eduardo Baroncini GPON Multi-Vendor Interoperability Gigabit-Capable Passive Optical Network (GPON) is a point-to-multipoint infrastructure considered the best fiber optic technology.
* You may also like Moving the OSS Infrastructure Active Ethernet Vs. GPON | A DAA Deployment Automation: Stack to the Cloud – Challenges Comparison Everything You Should Know and Myths " # $ % © | thinkincredible@intraway.com
* Enhanced network performance In a world where there is increased competition among service providers and the consumer is more discerning than ever there is a need to improve network performance.
* Generally service providers will deploy equipment from multiple vendors in a single network.

**Frequency:** *23*

##### 202006300000-OpenVault Competitive Study-Intraway

* At Run Time: Enables full or partial Automation of delivery processes (i.e.
* By moving this complex and critical application for service orchestration and activation to the Cloud our solution encapsulates all communication complexity to the network inside Symphonica.
* It helps the operator to provide a superior customer experience with intuitive self-service capabilities that empower customers to self- manage their services.
* Not depending on complex coding operators can launch and adjust processes or services as per the market response.

**Frequency:** *23*

##### 202004040000-OpenVault Competitive Study-Intraway

* Within PON the main options are BPON (broadband passive optical network) GPON (gigabit passive optical network) and EPON (Ethernet passive optical network).
* The first choice is between active and passive networking.
* An AON has higher power consumption and active components are more prone to failure than passive ones.
* They include active optical networks (AON) as well as passive optical networks (PON).

**Frequency:** *23*

##### 201706260000-OpenVault Competitive Study-Intraway

* You may also like Moving the OSS Infrastructure Active Ethernet Vs. GPON | A Stack to the Cloud – Challenges Going No-Code to Launch Services Comparison and Myths Fast " # $ % © | thinkincredible@intraway.com
* It’s generally considered a Layer 2 technology on the OSI network model.
* An SD-WAN is easy to manage compared to an MPLS network.
* Ethernet connections aren’t mutually exclusive with higher-level network features.

**Frequency:** *23*

##### 202007190000-OpenVault Competitive Study-Intraway

* Intuitive Self-Service- Great Customer Experience Network orchestration and automation enable intuitive self-service capabilities for the customers.
* One of the effective ways in which businesses can handle various network management issues is by implementing network orchestration and automation processes.
* Thus having an automated and intuitive self-service mechanism through network orchestration is an excellent way to guarantee superior-quality user experience to the customers.
* Automated Service Order Fulfillment- Adaptive and Effective Network Network orchestration processes have in-built mechanisms for automated service order fulfillment.

**Frequency:** *23*

##### 202109200000-OpenVault Competitive Study-Intraway

* Leveraging event-oriented architecture built on Apache Kafka Symphonica is highly available and scalable with all components running in active/active mode.
* Multi-vendor end-to-end codeless Orchestration: DAA deployment automation will be the heart of the next-generation data center and network.
* They may also leverage the RPD stack to support real-time processes.
* But what can it offer in terms of zero-touch self-service system reliance and real-time processes?

**Frequency:** *23*

##### 202104140643-OpenVault Competitive Study-Intraway

* when moving from passive to active network Implementing new features and functionalities activation.
* passive and active network management is now To achieve this there is a need for the automation easier with a standard set of APIs workflows and of activation flows and end-to-end orchestration.
* One of orchestration of use cases over wholesale FTTH the primary challenges is the high capital needed services in both passive and active modes was for developing and maintaining infrastructure.
* As part of active FTTH service providers.

**Frequency:** *23*

##### 201905290000-OpenVault Competitive Study-Intraway

* vCCAP & Remote PHY Device (RPD) Provisioning and Orchestration The second element of virtual CCAP implementation is management orchestration and control.
* The orchestrator is responsible for the automation of design fulfillment and assurance processes.
* Error- prone manual processes are all but eradicated.
* In order for a virtual CMTS system to be deployed in a production network and orchestration layer must be present to automate deployment.

**Frequency:** *23*

### Detailed Theme Identifier: 7

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** A network of passive and active selfservice processes. [system generated]

**Tags:** *intuitive selfservice | network orchestration | passive active | processes*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* It is designed to allow CSPs to automate service lifecycle management without investing in time-consuming and budget-heavy projects.
* Symphonica cloud is the closest CSPs will get to plug and play automation.
* During legacy systems was another important inform.tmforum.org 27 with every product launch.
* The danger CSPs face is recreating the The program’s results were stunning.

**Frequency:** *19*

##### 202104190000-OpenVault Competitive Study-Intraway

* As such multi-vendor interoperability allows different vendors’ systems to communicate and share data.
* Simply put interoperability refers to a network’s ability to perform its tasks successfully and without problems even when different manufacturers manufacture the equipment.
* Fulfillment Service & Revenue Assurance About Blog !
* Service providers can take advantage of interoperability to grow their revenues.

**Frequency:** *19*

##### 202006300000-OpenVault Competitive Study-Intraway

* This allows the customer to have their own workspace in minutes without investing in hardware.
* Large incumbent vendors may not see a clear business case for building cloud-native systems because they necessarily disrupt traditional systems and approaches.
* OSS software is considered to be a highly critical software in all CSPs.
* It also exports metrics to BI systems for Product Management or Executive Analysis.

**Frequency:** *19*

##### 202004040000-OpenVault Competitive Study-Intraway

* ◎ Quality of service: GPON guarantees the necessary bandwidth for each service and user.
* GPON Advantages Fulfillment Service & Revenue Assurance About Blog !
* It uses GPON Encapsulation Mode or GEM to provide a frame-oriented service.
* When upgrading your service network you need the highest level of expertise on your side.

**Frequency:** *19*

##### 201706260000-OpenVault Competitive Study-Intraway

* Fulfillment Service & Revenue Assurance About Blog !
* It even lets companies without a technical staff set up intra-business services at a low cost and update the network configuration whenever they need to.
* What lets Ethernet work in a WAN is the VPLS (virtual private LAN service) technology.
* It allows service providers link local sites as if there was a bridge or “pseudowire” between them.

**Frequency:** *19*

##### 202007190000-OpenVault Competitive Study-Intraway

* Services can now be provided quickly even in multi-layer multi-vendor systems with network orchestration.
* Intuitive Self-Service- Great Customer Experience Network orchestration and automation enable intuitive self-service capabilities for the customers.
* Automated Service Order Fulfillment- Adaptive and Effective Network Network orchestration processes have in-built mechanisms for automated service order fulfillment.
* Fulfillment Service & Revenue Assurance About Blog !

**Frequency:** *19*

##### 202109200000-OpenVault Competitive Study-Intraway

* CSPs can leave behind their silo-structured B/OSS approach and implement a centralized solution to automate the entire life cycle of services orchestrated across multiple networks and technology domains without investing in time-consuming and budget-heavy projects reducing operational costs and speeding up time-to-market.
* This will help deliver multi-Gigabit speeds without investing in additional bandwidth infrastructure thus saving on costs and improving business efficiency with faster data transmission rates and reduced delays between data transfer events.
* Overall improved efficiency: Operations teams will be able to reduce deployment time for new network resources from weeks to minutes freeing up personnel resources for other projects that will help improve the service quality customer satisfaction levels and financial returns of their business.
* Fulfillment Service & Revenue Assurance About Blog !

**Frequency:** *19*

##### 202104140643-OpenVault Competitive Study-Intraway

* include native functionalities such as redundancy The ability to quickly adapt to new processes and high availability facilitating the commercial or modify existing ones is a critical feature that model’s quick implementation via a multi-tenant helps UFINET keep the service up-to-day without platform.
* More importantly for the solution to integrate with varying Business Support Systems (BSS) used by CSPs it had to be versatile and straightforward.
* Other key features of implementation include: Leverage Current and Legacy Systems The solution implemented at UFINET One of the main challenges CSPs often have offers dynamic scaling as it is based on with adopting new solutions is the need to do microservices and supports deployment in a complete overhaul of their existing systems.
* This With the no-code platform CSPs benefit from the allowed UFINET to speed the implementation automation of operational processes and service process reducing it to days.

**Frequency:** *19*

##### 201905290000-OpenVault Competitive Study-Intraway

* Cable Virtual Infrastructure Management ’s Symphonica orchestration engine offers the multi-level organization that projects of this magnitude require.
* Business and operational processes are also simplified due to CVIM’s ability to integrate with operational support systems (OSS) and business support systems (BSS).
* These capabilities open up countless possibilities for service differentiation and network optimization for CSPs.
* Dynamic services can also be utilized in instances where RPDs go without use for several hours during the night.

**Frequency:** *19*

### Detailed Theme Identifier: 8

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Csps is a timeconsuming and expensive service without investing in the right systems. [system generated]

**Tags:** *csps | investing timeconsuming budgetheavy | service | systems | timeconsuming budgetheavy projects | without investing timeconsuming*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* izzi’s OLT Network massive efﬁciencies.
* is a Select Technology Partner in the Amazon Web Services (AWS) Partner Network.
* Not only is This approach was possible with based on functions aligned with TM Symphonica a cutting-edge solution Symphonica because it enables new Forum Open API TMF641 for Service but takes responsibility for its NMS and Network Elements to be Ordering.
* But the GPON (TAM) to facilitate discussions that change; to meet aggressive time to engineering team was focused on helped to adapt legacy functionality to market demands; and to provide integrating resource-facing services.

**Frequency:** *14*

##### 202104190000-OpenVault Competitive Study-Intraway

* Enhanced network performance In a world where there is increased competition among service providers and the consumer is more discerning than ever there is a need to improve network performance.
* Generally service providers will deploy equipment from multiple vendors in a single network.
* Improved time-to-market Multi-vendor interoperability means that service providers can choose the best equipment for their network regardless of the manufacturer reducing the amount of time it takes to make FTTH services available for use by the end-users.
* At we provide you with the best solutions so you can focus on growing your business.

**Frequency:** *14*

##### 202006300000-OpenVault Competitive Study-Intraway

* It helps the operator to provide a superior customer experience with intuitive self-service capabilities that empower customers to self- manage their services.
* By moving this complex and critical application for service orchestration and activation to the Cloud our solution encapsulates all communication complexity to the network inside Symphonica.
* It also gives the operator the agility to quickly deploy new services in branch offices in the network with the appropriate performance guarantees.
* OSS software is considered to be a highly critical software in all CSPs.

**Frequency:** *14*

##### 202004040000-OpenVault Competitive Study-Intraway

* Within PON the main options are BPON (broadband passive optical network) GPON (gigabit passive optical network) and EPON (Ethernet passive optical network).
* A single network consists of an optical line terminal (OLT) belonging to the service provider a splitter and up to 64 optical network units (ONU).
* GPON customers are typically homes or small businesses.
* An ONU is sometimes called an ONT (optical network terminal).

**Frequency:** *14*

##### 201706260000-OpenVault Competitive Study-Intraway

* Other next-gen business services “Unified communication” is a favorite buzzword in today’s business services.
* It even lets companies without a technical staff set up intra-business services at a low cost and update the network configuration whenever they need to.
* It’s generally considered a Layer 2 technology on the OSI network model.
* An SD-WAN is easy to manage compared to an MPLS network.

**Frequency:** *14*

##### 202007190000-OpenVault Competitive Study-Intraway

* Symphonica is our lifecycle service network orchestration solution that is aimed at adding flexibility and agility to your telecommunications business.
* As a result software capabilities will play an important role in stepping up the game and delivering the expected services to the customers.
* Our Solutions At we constantly strive to provide our valued customers with viable solutions that help them to scale up their business and address their business requirements.
* Services can now be provided quickly even in multi-layer multi-vendor systems with network orchestration.

**Frequency:** *14*

##### 202109200000-OpenVault Competitive Study-Intraway

* A single solution for network application and business needs.
* This will allow them to easily meet their customers’ demands for higher-quality and bandwidth-intensive services.
* CSPs can leave behind their silo-structured B/OSS approach and implement a centralized solution to automate the entire life cycle of services orchestrated across multiple networks and technology domains without investing in time-consuming and budget-heavy projects reducing operational costs and speeding up time-to-market.
* They can also simplify IT and network operations by moving to a managed no-code cloud-native solution.

**Frequency:** *14*

##### 202104140643-OpenVault Competitive Study-Intraway

* To integration of different CSPs offering their services ensure the solution can be deployed in countries via UFINET’s network.
* services activation by CSPs using their FTTH network UFINET expanded its services to Brazil.
* Through this platform the CSPs operators for telecommunications companies in could leverage UFINET’s network to provide its Latin America.
* For UFINET this is important because they can naturally offer new functionalities to their To provide serviceability capabilities the customers and continuously add value to their solution was integrated with a network logical commercial offerings.

**Frequency:** *14*

##### 201905290000-OpenVault Competitive Study-Intraway

* It’s an open catalog-driven solution that automates a variety of key factors like fulfillment design and the assurance of network services.
* This relieves pressure on the network and leads to improved serviceability for customers.
* Open Standards CSPs seeking to transition away from deploying physical network appliances and make the shift towards implementing virtual network functions have to adopt standardized solutions network-wide and avoid vendor lock-in.
* Network Slicing and Optimization CVIM can perform network slicing and service chaining.

**Frequency:** *14*

### Detailed Theme Identifier: 9

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Ufinet provides csps services to customers in countries. [system generated]

**Tags:** *countries | csps | network ufinet | provide | services | solution | ufinet customers | ufinets network*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* Looking Ahead As more operators pursue 5G IoT and other next-generation service strategies their major growth opportunities will arise from the solutions they can provide over new high performance networks.
* izzi’s OLT Network massive efﬁciencies.
* The design studio simpliﬁes the deployed in Kubernetes that enable a with its customers to overcome the conﬁguration of the southbound continuous deployment approach.
* The separation of functions delivery; for educating customers on added in minutes through its design allows to create containers how to maximize its use; and partners studio.

**Frequency:** *14*

##### 202104190000-OpenVault Competitive Study-Intraway

* Enhanced network performance In a world where there is increased competition among service providers and the consumer is more discerning than ever there is a need to improve network performance.
* Improved time-to-market Multi-vendor interoperability means that service providers can choose the best equipment for their network regardless of the manufacturer reducing the amount of time it takes to make FTTH services available for use by the end-users.
* Simplified deployment of fiber networks Interoperability of GPON equipment simplifies fiber networks’ deployment which aids in streamlining infrastructure and ensuring installation quality.
* Reduced costs Every service provider will want to find cost-effective ways of catering to the needs of their customers.

**Frequency:** *14*

##### 202006300000-OpenVault Competitive Study-Intraway

* At Run Time: Enables full or partial Automation of delivery processes (i.e.
* It also gives the operator the agility to quickly deploy new services in branch offices in the network with the appropriate performance guarantees.
* Not depending on complex coding operators can launch and adjust processes or services as per the market response.
* It provides on-demand mix and match of the optimal types of transport for different sites with assured performance attributes: High bandwidth for cloud interconnect and SAN Low latency for VoIP UC and Videoconferencing High availability for mission-critical sites Network Security The Symphonica SaaS solution will enable our customers to consider a complete application landscape migration to cloud or SaaS from a set of vendors.

**Frequency:** *14*

##### 202004040000-OpenVault Competitive Study-Intraway

* GPON customers are typically homes or small businesses.
* ◎ Quality of service: GPON guarantees the necessary bandwidth for each service and user.
* Within PON the main options are BPON (broadband passive optical network) GPON (gigabit passive optical network) and EPON (Ethernet passive optical network).
* A single network consists of an optical line terminal (OLT) belonging to the service provider a splitter and up to 64 optical network units (ONU).

**Frequency:** *14*

##### 201706260000-OpenVault Competitive Study-Intraway

* This will allow good-quality voice and streaming connections with a minimum of delay and jitter.
* Communications providers are finding the carrier Ethernet market an increasingly important part of their business model.
* It’s generally considered a Layer 2 technology on the OSI network model.
* An SD-WAN is easy to manage compared to an MPLS network.

**Frequency:** *14*

##### 202007190000-OpenVault Competitive Study-Intraway

* Our telecommunications solutions help our clients to achieve their full potential and increase profitability while delivering quality customer experiences to millions.
* Lower time to market in this case allows organizations to add value for their customers- both businesses and individual subscribers.
* Thus having an automated and intuitive self-service mechanism through network orchestration is an excellent way to guarantee superior-quality user experience to the customers.
* It also allows the identification of potential threats to the system and take the necessary actions at the appropriate time.

**Frequency:** *14*

##### 202109200000-OpenVault Competitive Study-Intraway

* This helps them remain competitive in today’s highly competitive telecommunications industry by putting them ahead of their competitors and delivering the services that their customers want.
* This will allow them to easily meet their customers’ demands for higher-quality and bandwidth-intensive services.
* Next Steps in DAA Deployment Evolution Undoubtedly DAA has transformative potential.
* The primary catalysts for this growth are the increased accessibility of smartphones and other digital devices along with a sharp rise in video consumption.

**Frequency:** *14*

##### 202104140643-OpenVault Competitive Study-Intraway

* By unleashing the full potential of networks ’s no-code provisioning automation solutions add the latest cutting-edge functionalities to speed up time-to-market reduce operational costs and advance customer-centricity.
* Thanks to the native telemetry to implement new services products and for technical and business Key Performance technologies accelerating the time-to-market Indicators (KPIs) it is now easier for CSPs to and new product launch in a matter of days.
* State-of-the-art notification service This helped accomplish UFINET expectations regarding time-to-market and adding new vendors in days.
* of the BSSs used by various customers.

**Frequency:** *14*

##### 201905290000-OpenVault Competitive Study-Intraway

* Maintaining a superior quality of experience (QoE) in today’s aggressive and competitive broadband services market is critical.
* We seek to unleash the full potential of networks; and in doing so we advance customer-centricity reduce operational costs and speed up time-to- market.
* It also improves service quality and reliability.
* This relieves pressure on the network and leads to improved serviceability for customers.

**Frequency:** *14*

### Detailed Theme Identifier: 10

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** The network has increased its capacity to serve its customers to the fullest extent possible. [system generated]

**Tags:** *ahead | competitive | customers | full potential | increased | market | network performance | quality*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* that provides loops conditionals and the TM Forum Information Framework Integration with two existing systems protocol libraries like HTTP SSH which provided business entity from different vendors resulting from Netconf and more.
* Its ﬂexible cloud- Expanding in New Symphonica based implementation infrastructure Markets Symphonica delivers a state-of-the-art can be deployed in minutes.
* also For more information you can visit actions were executed in one day eliminated izzi’s dependence on third ’s website at using lab equipment.
* In a multi- vendor multi-network ecosystem- driven service environment many disparate vendors will bring their own Results While this program was underway izzi tools for activation and provisioning.

**Frequency:** *12*

##### 202104190000-OpenVault Competitive Study-Intraway

* However because different vendors use different standards and parameters such situations mostly result in faults in these environments.
* As such multi-vendor interoperability allows different vendors’ systems to communicate and share data.
* Multi-vendor interoperability ensures consistency which further leads to speed improvements.
* Below are some of the reasons why it is crucial to address interoperability issues between vendors’ equipment.

**Frequency:** *12*

##### 202006300000-OpenVault Competitive Study-Intraway

* Look for Interoperability As a Service Orchestrator Symphonica promotes interoperability in different ways: Integrating various technologies: Symphonica capabilities allow us to handle Lifecycle Service Orchestration for Services whose support comes from different technologies like xDSL xPON GSM DTH SD-WAN etc.
* It brings consistency and predictability into the operation flows (i.e.
* For infrastructure deployment we are using Terraform for infrastructure description and git ops to store all our information including Terraform scripts and Jenkins for infrastructure deployments automation.
* Symphonica will be ready to use in minutes and available as you go in a true SaaS way.

**Frequency:** *12*

##### 202004040000-OpenVault Competitive Study-Intraway

* GPON uses two different types of encapsulation.
* ◎ Scalability: Companies can evolve to XG-PON and continue using the same fiber infrastructure.
* ◎ Operation: GPON has an integrated management model that simplifies the administration of the equipment.
* It converts the optical signal to electrical or RF signals which the end user’s equipment can connect to.

**Frequency:** *12*

##### 201706260000-OpenVault Competitive Study-Intraway

* You may also like Moving the OSS Infrastructure Active Ethernet Vs. GPON | A Stack to the Cloud – Challenges Going No-Code to Launch Services Comparison and Myths Fast " # $ % © | thinkincredible@intraway.com
* Where does Ethernet fit in?
* If you can do something on a local network generally you can do it on an Ethernet-based SD-WAN.
* Ethernet connections aren’t mutually exclusive with higher-level network features.

**Frequency:** *12*

##### 202007190000-OpenVault Competitive Study-Intraway

* Such a network can effectively use analytics and become self-healing and adapt according to the needs of its customers.
* Ultimately the ability of the infrastructure to adapt as per the requirements of the network allows businesses to improve their OPEX and lower service costs.
* Network Infrastructure Adaptability- Improved Resource Utilization Network orchestration programs can help organizations discover the state of resource allocation within the network dynamically.
* Reduced Service Control Complexity- Reduced Time to Market The real-time inventory data along with the appropriate resource allocations allows for robust infrastructure provisioning capabilities.

**Frequency:** *12*

##### 202109200000-OpenVault Competitive Study-Intraway

* Multi-vendor end-to-end codeless orchestration in one place will help with Quality of Service (QoS) issues reduce any element of a single point of failure maximize the use of existing infrastructure resources and deliver a better customer service experience.
* Whereas there has been a 15% increase in the revenues of Cable access vendors during the first quarter of 2021 there’s more potential to unlock.
* They also enable significant cost savings over proprietary equipment due to more efficient manufacturing processes that reduce hardware costs and operational expenses.
* Engineering From an engineering point of view different factors need to be considered for a successful DAA deployment.

**Frequency:** *12*

##### 202104140643-OpenVault Competitive Study-Intraway

* The solution was similar in different For convenience purposes it should also facilitate countries with only the tenants varying depending integration with new vendors offering FTTH on the country and business model in use.
* Integrating physical network inventory with the logical port assignment is one of the primary A vital feature of the solution is the ability to use 2 Success Story UFINET zero-touch processes to solve different use cases.
* One of orchestration of use cases over wholesale FTTH the primary challenges is the high capital needed services in both passive and active modes was for developing and maintaining infrastructure.
* State-of-the-art notification service This helped accomplish UFINET expectations regarding time-to-market and adding new vendors in days.

**Frequency:** *12*

##### 201905290000-OpenVault Competitive Study-Intraway

* Now in partnership with CableLabs Kyrio Lab and multiple industry vendors is proud to present a system designed to offer solutions to one primary use case for cable operators: the economical and efficient deployment of gigabit broadband.
* This is the NEtwork Function Virtualization Infrastructure (NFVi).
* NFVi The final element of a vCCAP is the cloud infrastructure.
* There are as many options in place for solving these issues as there are vendors.

**Frequency:** *12*

### Detailed Theme Identifier: 11

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** Different vendors use different types of equipment for interoperability. [system generated]

**Tags:** *consistency | different vendors | equipment | multivendor infrastructure | multivendor interoperability | use*

#### Theme Quotes by Interaction

##### 202005191333-OpenVault Competitive Study-Intraway

* The design studio simpliﬁes the deployed in Kubernetes that enable a with its customers to overcome the conﬁguration of the southbound continuous deployment approach.
* Voice over GPON opportunities to reduce costs by simplifying its multi-vendor izzi sought to accelerate its time to n 1 day to deliver initial solution environment and reducing its need to market for new services with a solution components engage legacy suppliers to modify BSS that would enable any roll out in any city to be done remotely and in a highly n 1 month to add newly acquired systems and process ﬂows when launching new services.
* The separation of functions delivery; for educating customers on added in minutes through its design allows to create containers how to maximize its use; and partners studio.
* By providing an independent means of modifying process ﬂows with API- based abstraction and its codeless approach was further able to reduce cost and accelerate time to market for new services for izzi.

**Frequency:** *12*

##### 202104190000-OpenVault Competitive Study-Intraway

* Fulfillment Service & Revenue Assurance About Blog !
* By giving service providers flexibility beyond single-vendor products the companies can adopt new solutions as they become available presenting new business opportunities and allowing service providers to offer customized services to end-users.
* Besides the end-to-end GPON management helps to address multi-vendor provisioning challenges deal with installation errors and ensure you serve new customers swiftly.
* Ability to customize services Multi-vendor interoperability in GPON provisioning enables service providers to leverage the best available solutions.

**Frequency:** *12*

##### 202006300000-OpenVault Competitive Study-Intraway

* Fulfillment Service & Revenue Assurance About Blog !
* The implementation of Symphonica as a service orchestrator and service activation has a transforming impact on the overall operation of telecommunication service providers: At Design Time: Increases the agility in new product introduction: The low-code/no-code technology applied to implement provisioning of new services or new network elements reduces from months to weeks or even days integration times and therefore time-to-market for new products.
* To help our customers we created a new operative model for Symphonica with a customer-centric approach that is heavily automated.
* It also gives the operator the agility to quickly deploy new services in branch offices in the network with the appropriate performance guarantees.

**Frequency:** *12*

##### 202004040000-OpenVault Competitive Study-Intraway

* GPON Advantages Fulfillment Service & Revenue Assurance About Blog !
* GPON customers are typically homes or small businesses.
* Getting fiber to the customer allows higher data speeds and opens new business opportunities.
* GPON emerged to end the problems of the PON standard seeking to support all types of services (voice Internet TV etc.)

**Frequency:** *12*

##### 201706260000-OpenVault Competitive Study-Intraway

* Fulfillment Service & Revenue Assurance About Blog !
* Adding a new site to the WAN is straightforward.
* Other next-gen business services “Unified communication” is a favorite buzzword in today’s business services.
* Connecting up a new facility can be costly and time-consuming.

**Frequency:** *12*

##### 202007190000-OpenVault Competitive Study-Intraway

* Fulfillment Service & Revenue Assurance About Blog !
* As a result software capabilities will play an important role in stepping up the game and delivering the expected services to the customers.
* Services can now be provided quickly even in multi-layer multi-vendor systems with network orchestration.
* Such a network can effectively use analytics and become self-healing and adapt according to the needs of its customers.

**Frequency:** *12*

##### 202109200000-OpenVault Competitive Study-Intraway

* Fulfillment Service & Revenue Assurance About Blog !
* Increased revenue opportunities: The growing need for bandwidth coupled with the limited bandwidth available has forced companies to explore new avenues for revenue generation.
* This will allow them to easily meet their customers’ demands for higher-quality and bandwidth-intensive services.
* To help handle such bandwidth demands DAA comes with multi-Gigabit and symmetric services which will also boost the Average Revenue Per User (ARPU).

**Frequency:** *12*

##### 202104140643-OpenVault Competitive Study-Intraway

* by helping their customers with the quick introduction of new services.
* They include: and accelerate time-to-revenue.
* During this period the company customers with FTTH services.
* This was essential to ensure that the solution was Solutions for Businesses adaptable to varying operational processes used by different customers.

**Frequency:** *12*

##### 201905290000-OpenVault Competitive Study-Intraway

* Fulfillment Service & Revenue Assurance About Blog !
* They’re not just developing new unique approaches to existing services– in many cases they’re creating new services entirely.
* The lab showcases innovative ways in which new technologies can be applied to problems new and old; there’s also a push to create new service opportunities.
* New sources of revenue must be sought out aggressively in order to preserve already-shrinking profit margins.

**Frequency:** *12*

### Detailed Theme Identifier: 12

Each theme, if quotes/snippets are detected, has appropriate data pulled from interactions listed below. Additionally, the frequency of each theme is reported to provide the user with a sense of how strong the theme is relative to the other themes in the sub-study.

**Definition:** Description generated by the Mediumroast Caffeine machine intelligence service, please replace the definition with your own.

**Fortune:** New services and products for customers at the blog. [system generated]

**Tags:** *new | revenue assurance blog | services customers | theyre | varying*

#### Theme Quotes by Interaction

References

## 201806120842-OpenVault Competitive Study-Incognito

Date: 2018-06-12 08:42 | Sub-Study Identifier: 1

White paper Winning the battle for control and differentiation in the home broadband network with operations automation May 2018 Anil Rao and Gorkem Yigit . Consumers are rapidly adopting new cloud-based services enabled by high-speed broadband connectivity (video/music streaming storage and online gaming). Analysys Mason research shows that the customer’s experience of customer support is one of the prime determinants of overall customer experience with a potential CEI weightage of between 20–3...

Interaction Resource: [201806120842-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/201806120842-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Solution Guide.pdf)

## 201910151126-OpenVault Competitive Study-Incognito

Date: 2019-10-15 11:26 | Sub-Study Identifier: 1

Produced by: In Partnership with: CABLE’S FIBER OUTLOOK SURVEY REPORT Sponsored by: – PAGE INTENTIONALLY LEFT BLANK – Introduction Even more than ven with some significant As operators gear up for a new decade they have before technical advances in other parts of jousting with telcos and other rivals of the industry’s hybrid fiber-coax by investing heavily in fiber there cable operators (HFC) architecture cablecos are moving remain many questions about how are looking to load to put more fiber l...

Interaction Resource: [201910151126-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/201910151126-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Whitepaper.pdf)

## 202001010000-OpenVault Competitive Study-Incognito

Date: 2020-01-01 00:00 | Sub-Study Identifier: 1

HOW TO GET THE MOST OUT OF CBRS TODAY AND TOMORROW An Incognito Software Systems Guide INFO@INCOGNITO.COM Thinking Beyond Spectrum Based on initial activity it's safe to say that the use of unlicensed 3.5 GHz spectrum across North America will exceed expectations. Addressing the Device Management Challenge With a large number of devices from multiple vendors in your CBRS network deployment provisioning and onboarding can be complicated time-consuming and costly. This guide outlines three aspects...

Interaction Resource: [202001010000-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202001010000-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Whitepaper.pdf)

## 202011081502-OpenVault Competitive Study-Incognito

Date: 2020-11-08 15:02 | Sub-Study Identifier: 1

SOLUTION OVERVIEW Broadband Command Center DOCSIS Provisioning Solution Industry’s Leading Independent DOCSIS Provisioning Solution Broadband Command Center is the industry’s leading independent DOCSIS provisioning solution offering end-to-end device provisioning management and multi-standard support (DOCSIS PacketCable SIP IPv6) in a single software platform. tasks reduce errors and OPEX Reduce risk of misconfigurations by provisioning files to lowest common denominator Reduce risk of configura...

Interaction Resource: [202011081502-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202011081502-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Solution Brief.pdf)

## 202101111255-OpenVault Competitive Study-Incognito

Date: 2021-01-11 12:55 | Sub-Study Identifier: 1

DOCSIS 4.0: What It Means for Your Business and How Incognito Can Help DOCSIS 4.0—touted as the foundation to 10G and next-generation cable services—is real it's coming and like all innovations it brings opportunities and challenges. Cable companies need to remain competitive and their competitors often are telco companies running either fiber or fixed wireless solutions. So to stay competitive CableLabs came up with their 10G campaign meaning 10-Gigabit bandwidth. That's why DOCSIS 4.0 includes...

Interaction Resource: [202101111255-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202101111255-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Blog.pdf)

## 202102091229-OpenVault Competitive Study-Incognito

Date: 2021-02-09 12:29 | Sub-Study Identifier: 1

Why Incognito's DX SaaS Solution is the Next Big Thing in Cloud-based ACS CHECKLIST In the wake of escalating financial pressures and customers demanding more from their broadband services a greater number of operators are choosing to deploy cloud-based Auto Configuration Server (ACS) solutions. Incognito transforms the data from your network into real-time insights leverages this intelligence to automate the resolution of technical issues and enables proactive broadband performance management t...

Interaction Resource: [202102091229-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202102091229-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Whitepaper.pdf)

## 202103021317-OpenVault Competitive Study-Incognito

Date: 2021-03-02 13:17 | Sub-Study Identifier: 1

The Future of the Connected Home Summary of the future telco-connected home 2021 survey report In partnership with 02 | The Future of the Connected Home Survey Overview As more people bring their work education and entertainment activities into their homes it’s clear that broadband connectivity has very much become essential to everyday life. The Broadband Forum’s User Services Platform (USP) is one such standard that is paving the way to better managing the connected home as it was designed to ...

Interaction Resource: [202103021317-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202103021317-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Survey Summary.pdf)

## 202104161355-OpenVault Competitive Study-Incognito

Date: 2021-04-16 13:55 | Sub-Study Identifier: 1

Solution Case Studies: Fixed Wireless Access Incognito Digital Experience Solution OVERVIEW Fixed wireless access (FWA) is a great way for service providers to extend their network and offer fixed broadband services to more residential customers. No insights into CPE device To improve customer quality of experience the operator status required a carrier-grade remote device management solution Negatively impacted that offers extensive analytic and diagnostic capabilities and customer experience s...

Interaction Resource: [202104161355-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202104161355-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Case Study.pdf)

## 202106221211-OpenVault Competitive Study-Incognito

Date: 2021-06-22 12:11 | Sub-Study Identifier: 1

SOLUTION OVERVIEW Digital Experience Solution Building better-connected smart home services through strategic partnerships and USP innovation The explosion of connected devices in the home The Broadband Forum User Services Platform today which use various technologies such as (USP) specification sets out capabilities to Wi-Fi IoT mesh and anything 'smart' presents enable Wi-Fi optimization virtualized services new challenges to operators — how to maintain on the gateway and automation and provid...

Interaction Resource: [202106221211-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202106221211-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Solution Overview.pdf)

## 202201240809-OpenVault Competitive Study-Incognito

Date: 2022-01-24 08:09 | Sub-Study Identifier: 1

Remote device management to reduce operational costs and improve customer experience Incognito Software partnered with Analysys Mason to research the challenges that emerging market operators face in supporting residential ﬁxed broadband subscribers. Learn more at www.incognito.com/solutions/digital-experience www.incognito.com Copyright © 2022 Incognito Software Systems Inc. All Rights Reserved....

Interaction Resource: [202201240809-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202201240809-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Infographic.pdf)

## 202201240843-OpenVault Competitive Study-Incognito

Date: 2022-01-24 08:43 | Sub-Study Identifier: 1

User Services Platform (USP) and TR-369 What’s driving industry interest in USP? This requires a new management platform which offers remote visibility and management of gateways CPEs and connected devices regardless of device type or network access technology. USP will be span 5G fixed wireless CPEs and STBs. USP supports backwards compatibility with the approach to unify your digital care channels (i.e. mobile TR-181 data model so you can deploy the User Services apps web portals and chatbots)...

Interaction Resource: [202201240843-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202201240843-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Blog.pdf)

## 202202020000-OpenVault Competitive Study-Incognito

Date: 2022-02-02 00:00 | Sub-Study Identifier: 1

INDUSTRY REPORT IN PARTNERSHIP WITH www.incognito.com info@incognito.com EXECUTIVE SUMMARY The global pandemic in 2020 has magnified the importance of connectivity and digital services in entertainment products and productivity. Even in mature markets much effort is going towards deploying new fiber- based networks to deliver access to better broadband allowing more people to enjoy entertainment services and remain productive. According to a 2018 Ovum report FWA was almost 50 percent cheaper and...

Interaction Resource: [202202020000-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202202020000-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Case Study.pdf)

## 202202031523-OpenVault Competitive Study-Incognito

Date: 2022-02-03 15:23 | Sub-Study Identifier: 1

The Future of Connectivity | CBRS – Citizens Broadband Radio Service Co-written by Dipalli Bhatt and Jeevithan Muttu The global pandemic has highlighted the vital importance of broadband networks and their role in accelerating digital transformation. In the United States the 3.5 GHz band commonly known as Citizens Broadband Radio Service (CBRS) has a special role to play in the world of 5G innovation. Besides providing a roadmap to 5G the use of the CBRS spectrum offers the ability to augment ov...

Interaction Resource: [202202031523-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202202031523-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Blog.pdf)

## 202202031526-OpenVault Competitive Study-Incognito

Date: 2022-02-03 15:26 | Sub-Study Identifier: 1

Why You Can’t Take a Siloed Approach with CBRS Device Management Winning your bid for a Citizens Broadband Radio Service (CBRS) Priority Access License (PAL) is great news for your business whether you’re an MNO cable company telco operator or enterprise. Single-Vendor Device Management Solutions Are Not Field-Hardened While a single-vendor CBRS-only solution can help to accelerate the PoC phase there are no guarantees the solution will function the same way in your production environment as it ...

Interaction Resource: [202202031526-OpenVault Competitive Study-Incognito](http://mr-02:9000/openvault/202202031526-AMER-CANADA-British Colombia-Vancouver-Computer Programming-OpenVault Competitive Study-Incognito-Blog.pdf)

## 201706260000-OpenVault Competitive Study-Intraway

Date: 2017-06-26 00:00 | Sub-Study Identifier: default

Fulfillment Service & Revenue Assurance About Blog ! A big factor in the growth of SD-WANs is the convenience of Ethernet. It isn’t limited to connecting servers to other servers. MPLS is regarded as one of the best ways to do this. It avoids the uncertainties of the public Internet providing very high uptime and consistent speed. A VPLS network can include QoS support though it is subject to the Internet’s vagaries....

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## 201905290000-OpenVault Competitive Study-Intraway

Date: 2019-05-29 00:00 | Sub-Study Identifier: default

Fulfillment Service & Revenue Assurance About Blog ! The advent of bandwidth-intensive applications like 3D and 4k video virtual reality (VR) and augmented reality (AR) has presented a web of challenges to cable network providers. With average revenue per user (ARPU) on a steady decline it’s essential for CSPs to invest time effort and manpower in the surge to meet capacity demands and locate opportunities for savings. There are as many options in place for solving these issues as there are vend...

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## 202004040000-OpenVault Competitive Study-Intraway

Date: 2020-04-04 00:00 | Sub-Study Identifier: default

GPON The Standard For Fiber Connections March 4 2020 " Fernando Di Chiara GPON is a telecommunications access technology that uses fiber-optic cabling to reach the user. Now copper and fiber optic provide adequate solutions to each need. This connection is made from the OLT that is located in the central of the company to the ONT which is the device that we place in our house. Several options are available for getting fiber optics close to the end-user. An ONU is sometimes called an ONT (optical...

Interaction Resource: [202004040000-OpenVault Competitive Study-Intraway](http://mr-02:9000/openvault/202004040000-AMER-ARGENTINA-Buenos Aires-Buenos Aires-Computer Programming-OpenVault Competitive Study-Intraway-Blog.pdf)

## 202005191333-OpenVault Competitive Study-Intraway

Date: 2020-05-19 13:33 | Sub-Study Identifier: default

Intraway Symphonica: Accelerating new service launches with cloud- native automation Mexico’s izzi Telecom is pursuing an aggressive growth and expansion strategy. izzi’s acquisition strategy entails the company wanted to expand its new Intraway Delivers Stunning Results: overcoming challenges with services nationwide which meant heterogeneous networks and ﬁnding a cloud-native solution that n Just 3 months to launch HSD and operations environments. It supports izzi aimed to offer new premium te...

Interaction Resource: [202005191333-OpenVault Competitive Study-Intraway](http://mr-02:9000/openvault/202005191333-AMER-ARGENTINA-Buenos Aires-Buenos Aires-Computer Programming-OpenVault Competitive Study-Intraway-Case Study.pdf)

## 202006300000-OpenVault Competitive Study-Intraway

Date: 2020-06-30 00:00 | Sub-Study Identifier: default

Fulfillment Service & Revenue Assurance About Blog ! Learn more about Intraway’s Symphonica a no-code provisioning platform that supports complex telecommunications network automation and adds flexibility and agility. However if they can be persuaded that the investment required to satisfy one operator can be recouped as they roll the same approach out to others a clear business rationale can emerge. OSS software is considered to be a highly critical software in all CSPs. For infrastructure depl...

Interaction Resource: [202006300000-OpenVault Competitive Study-Intraway](http://mr-02:9000/openvault/202006300000-AMER-ARGENTINA-Buenos Aires-Buenos Aires-Computer Programming-OpenVault Competitive Study-Intraway-Whitepaper.pdf)

## 202007190000-OpenVault Competitive Study-Intraway

Date: 2020-07-19 00:00 | Sub-Study Identifier: default

Fulfillment Service & Revenue Assurance About Blog ! At such a point network orchestration will be a crucial tool to optimize the service delivery capabilities for any telecommunications organization. Ultimately the ability of the infrastructure to adapt as per the requirements of the network allows businesses to improve their OPEX and lower service costs. With more and more people opting for the 5G network this is a crucial necessity for maintaining the service quality by telecom companies. Sym...

Interaction Resource: [202007190000-OpenVault Competitive Study-Intraway](http://mr-02:9000/openvault/202007190000-AMER-ARGENTINA-Buenos Aires-Buenos Aires-Computer Programming-OpenVault Competitive Study-Intraway-Blog.pdf)

## 202104140643-OpenVault Competitive Study-Intraway

Date: 2021-04-14 06:43 | Sub-Study Identifier: default

Facilitating GPON Management Automation with Symphonica SaaS a No-code Provisioning Platform FACILITATING GPON MANAGEMENT AUTOMATION WITH SYMPHONICA SAAS A NO-CODE PROVISIONING PLATFORM Now more than ever the telecommunications challenges businesses have. There is a great need for solutions that can help reduce costs and facilitate faster and easier deployment of services. For the latter to be achieved the solution net buildings 5000+ towers on-net and 1000+ had to adopt a multi-tenant model. In...

Interaction Resource: [202104140643-OpenVault Competitive Study-Intraway](http://mr-02:9000/openvault/202104140643-AMER-ARGENTINA-Buenos Aires-Buenos Aires-Computer Programming-OpenVault Competitive Study-Intraway-Whitepaper.pdf)

## 202104190000-OpenVault Competitive Study-Intraway

Date: 2021-04-19 00:00 | Sub-Study Identifier: default

Fulfillment Service & Revenue Assurance About Blog ! During this 40-minute webinar we discuss the challenges that GPON activation presents and how to solve them quickly and efficiently with a Cloud-Native SaaS solution. Service providers can take advantage of interoperability to grow their revenues. This approach offers service providers several options to get fiber optics closer to the end-user. GPON | A DAA Deployment Automation: Stack to the Cloud – Challenges Comparison Everything You Should...

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## 202109200000-OpenVault Competitive Study-Intraway

Date: 2021-09-20 00:00 | Sub-Study Identifier: default

Fulfillment Service & Revenue Assurance About Blog ! Although they span all user bases the growing demand in the B2B services space contributes the most. Engineering From an engineering point of view different factors need to be considered for a successful DAA deployment. Even as bandwidth is a limited resource and can be very costly in certain areas DAA deployment automation will help companies build new revenue models around it by providing them with more bandwidth than ever before. Engineerin...

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