



2018 North American VoIP Access and SIP Trunking Services
Growth Excellence Leadership Award



2018
BEST PRACTICES
AWARDS

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Background and Company Performance

Industry Challenges

The transition from legacy telecommunications services to Internet Protocol (IP)-based communications services has been a blessing for many service providers and a major hurdle for others. It has created a number of challenges for the voice over IP (VoIP) access and session initiation protocol (SIP) trunking services market in particular. VoIP access and SIP trunking services most closely resemble the legacy telecommunications services that preceded them. While this may have helped ease some customers into an end-to-end IP-based communications solution, the added value that VoIP access and SIP trunking services offer is often lost on customers, which slows broader adoption.

In addition, many customers, particularly in the small and mid-size market segments, are rethinking or refining their business communications strategies that could include hosted IP telephony, unified communications as a service (UCaaS) offerings, or VoIP access or SIP trunking services to the on-premises or private cloud-based communications solutions, or a mix of several of these services in a hybrid deployment approach. As more businesses acknowledge the flexibility and capabilities that come with IP-based services, service providers that designed their IP-based voice services to closely emulate legacy telecommunications services risk losing share to those with a diverse suite of communications services that can be tailored to a customer's exacting requirements.

Furthermore, much of the business communications market, including the providers of VoIP access and SIP trunking services and the global networks that support them, is experiencing sweeping consolidation. Tier 1 providers are grabbing up regional providers to extend their network footprint and services reach. During such periods of intense consolidation, an effective merger and acquisition strategy is vital to not only maintain market share and a strong competitive footing but also to find new sources of growth.

Leaders focused on continued growth in the VoIP access and SIP trunking services market achieve success by using different strategies. By offering a wide array of voice and communications services, growth leaders ensure that they are able to deliver exactly what their customers need and expect, generating organic growth as a result. In addition, growth leaders are consciously looking for merger and acquisition opportunities as the competitive landscape further consolidates.

Growth Performance and Customer Impact

Growth Factors

As separate entities, both CenturyLink and Level 3 Communications were strong competitors in different segments of the business communications marketplace. While Level 3 focused most of its efforts on providing data network access, security, and

communications services to mid-market and large enterprises, CenturyLink's reach as an incumbent carrier gave the provider access to an installed base of residential customers, small and mid-size businesses, as well as some marquee large customers. As such, each provider took a different approach in terms of market positioning and product lines. CenturyLink focused its product efforts on developing a wide range of unified communications solutions, including basic business VoIP services, hosted telephony and UCaaS services, SIP trunking services, and a full range of collaboration services. Level 3, on the other hand, focused on a narrow set of voice services that reflected the needs of its large target customers, notably Voice Complete, its SIP trunking service, audio conferencing services, UC&C and hosted contact center offerings. As a result, the two disparate providers rarely encountered each other in competitive situations.

The new CenturyLink is leveraging the prior entities' complementary capabilities, in terms of both customers and products, by offering the complete product portfolio of the two organizations and empowering its sales teams to pitch a mix of products and services to create best-fit solutions for their customers. As a result of the merger, CenturyLink today is able to deliver one of the most diverse product lines in the communications services marketplace.

Going forward, the two providers' combined network footprint, which includes both an impressive domestic data network and extensive global reach, enables CenturyLink to take this diverse portfolio to customers that could not be adequately addressed by either provider on its own. For example, while Level 3's multi-protocol label switching (MPLS) network may have physically reached smaller organizations that shared building space with a large enterprise, the mismatch between the provider's services and customer needs represented an obstacle. Under the new merged CenturyLink umbrella, the provider is now in a position to offer solutions to all tenants in these network-connected buildings, from basic VoIP access and UCaaS services, to large-scale SIP trunking deployments. Ultimately, CenturyLink will be able to find new organic growth from within its expanded network reach.

Brand Equity

CenturyLink has a long history and a strong track record in the telecommunications space and has carried that heritage branding throughout its transformation into a modern communications and IT services provider. The provider is well recognized among its core customers that range from consumers of its residential services to large distributed enterprises. On the other side of the merger, Level 3 Communications was a well-known and well-regarded network and communications provider, but its brand equity was strongest within the narrower confines of medium-to-large and multinational enterprises.

To address the post-merger transition to a unified brand, CenturyLink has managed an effective branding campaign at industry events, across social media and other outlets, driving the message that "Level 3 is now CenturyLink" to the core of its loyal customer

base. Branding for individual product lines, such as the popular Voice Complete SIP trunking service, has been retained, reflective of the strategic decision to support an inclusive set of communications solutions going forward. By maintaining existing product names, CenturyLink is reassuring customers that the solutions they have come to know and trust will be supported and maintained going forwards. Finally, CenturyLink has refined and rationalized branding for some of the integrated third-party solutions under a consistent “delivered by CenturyLink” or “managed by CenturyLink” branding, reflective of the role that the service provider plays. For example, prior to the merger, Level 3 partnered with Amazon for its Chime conferencing and collaboration service. Under CenturyLink, the joint service is now branded as “Amazon Chime delivered by CenturyLink”. Similarly, the provider’s Skype for Business offering is further refined as “Skype for Business managed by CenturyLink”.

Customer Ownership Experience

CenturyLink is fairly unique in the communications service provider market in that it operates more like an IT services partner than a traditional telecommunications provider. Many service providers in the communications market focus on selling a limited number of communications services or products to a broad range of customers. CenturyLink, on the other hand, caters to a very wide range of customers, industries and verticals, but aspires to deliver “best fit” solutions to address the varied needs of its diverse customer demographics. In the case of unified communications, CenturyLink supports IP telephony and UCaaS leveraging a number of hosted platforms, including BroadSoft BroadWorks, Cisco Hosted Communications Service (HCS) platforms, Microsoft Skype for Business and Cisco Webex. For SIP trunking services, CenturyLink continues to support its IQ SIP Trunk services for small and medium businesses alongside Voice Complete for large and multinational organizations.

With a complete umbrella of communications, networking, security, and IT managed services delivered by a single provider, CenturyLink customers gain the ease of a single point of contact for their IT and communications needs and the ability to bundle a range of technology services under a single invoice. Customers can also feel confident in knowing that CenturyLink will work with them to find the right set of solutions that matches their specific needs.

Share of Wallet

For 2017, the combined VoIP access and SIP trunking services revenue of CenturyLink and Level 3 Communications was an estimated \$535.05 million, netting the service provider an estimated 13.1 percent share in the North American market, and placing it among the top competitors in the market. Prior to the merger, both providers achieved more than three years of continuous growth, even while some competitors in the VoIP access and SIP trunking services faced flat revenues or even small declines in the number of users they supported.

CenturyLink's approach to the communications and IT services market is likely to enable the provider to translate the non-organic growth achieved through the merger into an increased customer spend and further organic growth across all of its business units. CenturyLink has the opportunity to address the installed base of Level 3 customers with additional, high-value products and services—such as big data analytics, IT services management, or collaboration solutions from Cisco, BroadSoft, Microsoft and Amazon—that customers previously had to purchase from others. Conversely, existing CenturyLink customers have similar opportunities to capitalize on the larger domestic footprint and an improved global reach, thanks to the greatly expanded fiber network. Distributed enterprises in particular will find that CenturyLink will be able to address a greater number of customers' remote locations.

Conclusion

CenturyLink achieved significant growth in the VoIP access and SIP trunking services market through a highly effective merger strategy and a carefully considered product integration approach. In addition, the two organizations maintained their own competitive edge through the extended approval process, providing a sizable installed base of customers to the combined company. CenturyLink remains well positioned for future growth with one of most diverse communications products and services portfolios in the industry.

With its strong overall performance, CenturyLink has earned Frost & Sullivan's 2018 Growth Excellence Leadership Award.

Significance of Growth Excellence Leadership

Growth Excellence Leadership is about inspiring customers to purchase from your company, and then to return time and again. In a sense, then, everything is truly about the customer, and making those customers happy is the cornerstone of any long-term successful growth strategy. Companies that excel in driving growth strive to be best-in-class in three key areas: meeting customer demand, fostering brand loyalty, and carving out a unique, sustainable market niche.



Understanding Growth Excellence Leadership

Companies that creatively and profitably deliver value to customers ultimately set up their businesses for long-term, rapid growth. This is what Growth Excellence Leadership is all about: growth through customer focus, fostering a virtuous cycle of improvement and success.

Key Benchmarking Criteria

For the Growth Excellence Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Growth Performance and Customer Impact—according to the criteria identified below.

Growth Performance

- Criterion 1: Growth Strategy
- Criterion 2: Above-market Growth
- Criterion 3: Share of Wallet
- Criterion 4: Growth Diversification
- Criterion 5: Growth Sustainability

Customer Impact

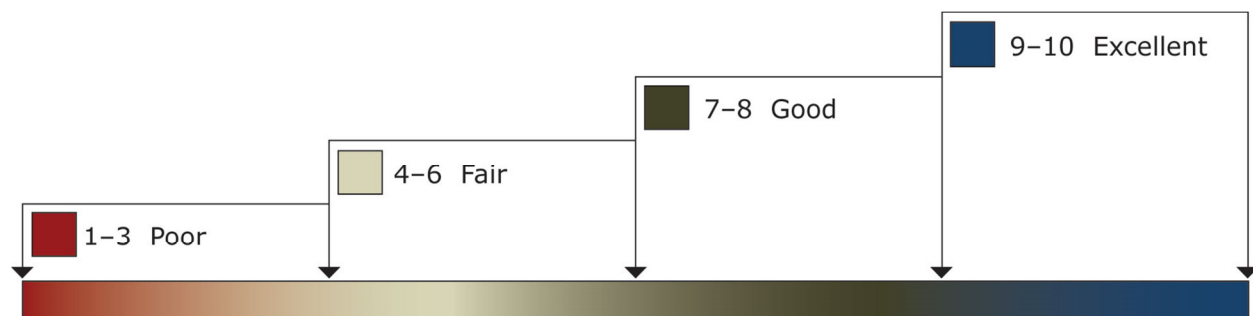
- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

Best Practices Award Analysis for CenturyLink

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows our research and consulting teams to objectively analyze performance, according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

RATINGS GUIDELINES



The Decision Support Scorecard is organized by Growth Performance and Customer Impact (i.e., These are the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, we have chosen to refer to the other key participants as Competitor 2 and Competitor 3.

<i>Measurement of 1-10 (1 = poor; 10 = excellent)</i>			
Growth Excellence Leadership	Growth Performance	Customer Impact	Average Rating
CenturyLink	9	9	9
Competitor 2	8	9	8.5
Competitor 3	9	8	9.5

Growth Performance

Criterion 1: Growth Strategy

Requirement: Executive team has a shared vision for the organization’s future growth and has created and implemented a strategy that is consistent with that vision.

Criterion 2: Above-market Growth

Requirement: Company’s growth rate exceeds the industry’s year-over-year growth rate.

Criterion 3: Share of Wallet

Requirement: Customers allocate a greater percentage of their total spend to purchasing products or services produced by the company.

Criterion 4: Growth Diversification

Requirements: Company is equally able to pursue organic (e.g., distribution channel optimization, new product innovation) or inorganic (e.g., acquisitions, partnerships) growth opportunities consistent with the long-term objectives of the organization.

Criterion 5: Growth Sustainability

Requirement: Company has consistently sought out opportunities for new growth, enabling the organization to build on its base and sustain growth over the long-term.

Customer Impact

Criterion 1: Price/Performance Value

Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience

Requirement: Customers feel they are buying the most optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience

Requirement: Customers are proud to own the company’s product or service and have a positive experience throughout the life of the product or service.

Criterion 4: Customer Service Experience

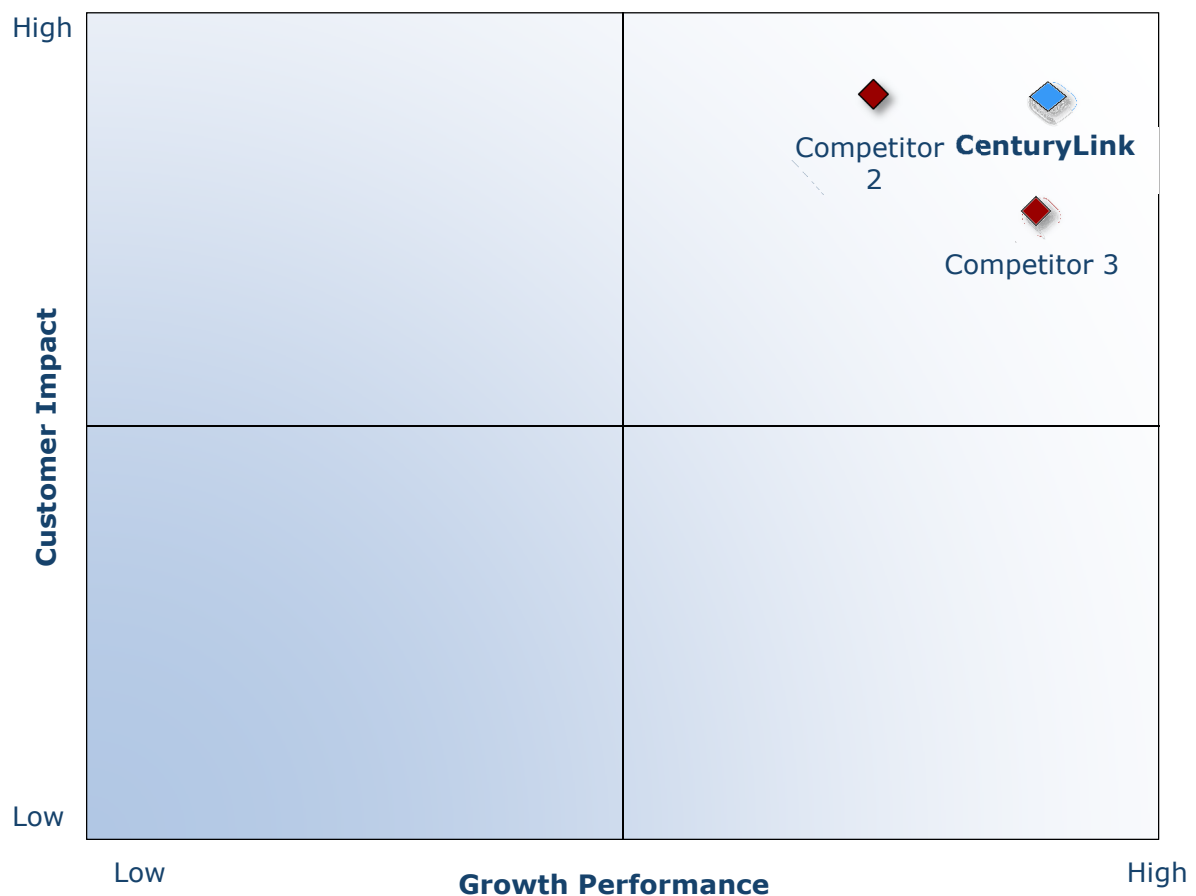
Requirement: Customer service is accessible, fast, stress-free, and of high quality.

Criterion 5: Brand Equity

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

Decision Support Matrix

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.



Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate Award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1 Monitor, target, and screen	Identify Award recipient candidates from around the globe	<ul style="list-style-type: none"> • Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice criteria
2 Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> • Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates 	Matrix positioning of all candidates' performance relative to one another
3 Invite thought leadership in best practices	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> • Confirm best-practice criteria • Examine eligibility of all candidates • Identify any information gaps 	Detailed profiles of all ranked candidates
4 Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	<ul style="list-style-type: none"> • Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles 	Final prioritization of all eligible candidates and companion best-practice positioning paper
5 Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> • Share findings • Strengthen cases for candidate eligibility • Prioritize candidates 	Refined list of prioritized Award candidates
6 Conduct global industry review	Build consensus on Award candidates' eligibility	<ul style="list-style-type: none"> • Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates 	Final list of eligible Award candidates, representing success stories worldwide
7 Perform quality check	Develop official Award consideration materials	<ul style="list-style-type: none"> • Perform final performance benchmarking activities • Write nominations • Perform quality review 	High-quality, accurate, and creative presentation of nominees' successes
8 Reconnect with panel of industry experts	Finalize the selection of the best-practice Award recipient	<ul style="list-style-type: none"> • Review analysis with panel • Build consensus • Select recipient 	Decision on which company performs best against all best-practice criteria
9 Communicate recognition	Inform Award recipient of Award recognition	<ul style="list-style-type: none"> • Present Award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance 	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10 Take strategic action	Upon licensing, company is able to share Award news with stakeholders and customers	<ul style="list-style-type: none"> • Coordinate media outreach • Design a marketing plan • Assess Award's role in future strategic planning 	Widespread awareness of recipient's Award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry participants and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages more than 50 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.