The Business Value of Enhanced Enterprise Communication with Lumen Voice and UC&C
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Executive Summary

The way organizations do business has changed dramatically over the past year, leaving leadership intensely focused on implementing solutions that make employees more productive, businesses more cost effective, and customers more delighted. Nearly overnight, businesses have been left to grapple with remote workforce enablement while ensuring business continuity. Meanwhile, many customers have grown accustomed to digital interactions with their providers, and distribution of goods and services has been expected to continue nearly uninterrupted. Companies that prioritize digital transformation are in a better position to address the unpredictable communications and collaboration needs that employees need to support and grow business. IDC investigated the benefits realized from Lumen’s unified communications and collaboration (UC&C) services platform to identify and characterize their impact on organizations. This white paper details the results of that study. Lumen (formerly CenturyLink) is a communications technology service provider that delivers a broad range of connectivity services and digital solutions to businesses globally. IDC conducted research to explore the value and benefits for organizations of using Lumen’s voice and unified communications and collaboration (Lumen Voice and UC&C) offering. For the project, IDC interviewed eight organizations that had significant levels of experience with Lumen’s service offering. The survey data obtained and applied to IDC’s Business Value model showed that study participants realized significant value with Lumen Voice and UC&C.

**IDC calculates that these companies will achieve average annual benefits of $3.41 million per organization, which would result in a seven-month payback period and a five-year return on investment (ROI) of 497%, by:**

- Fostering more efficient IT and communications infrastructure staff productivity, including help desk and other core functions
- Shifting the focus of dedicated IT and communications staff away from routine tasks toward innovation and more direct business support
Improving business results in terms of both revenue enhancement and revenue protection

Minimizing the effects of unplanned downtime, serving to lower business risk and increase end-user productivity and customer satisfaction

**Situation Overview**

With the COVID-19 pandemic having changed the work environment drastically, UC&C buyers look to the next best alternatives to in-person meetings: video and voice. According to IDC, the worldwide unified communications and collaboration market is forecast to grow to almost $51.5 billion in 2024, representing a 5.9% compound annual growth rate (CAGR) in revenue for 2019–2024. Service provider revenue in the UC&C market for unified communications-as-a-service (UCaaS) solutions is forecast to grow at a CAGR of 7.0%, from $11.5 billion in 2019 to $16.1 billion in 2024.

The market continues to be shaped by the high value that organizations of all sizes place on quality and reliability of voice calling, increased security across UC as a service, reduction of internal IT staff workload, scalability and flexibility, improving business processes and applications, and lower total cost of ownership (TCO), according to IDC’s 2020 Enterprise Communications Survey. These needs are intensified versus needs in prior years as a result of the new workplace requirements and changed ways that businesses have to interact with their employees, business partners, and customers since the onset of the COVID-19 pandemic in 2020.

To drive usage of UC&C solutions, especially post-COVID-19 onset, voice and UC&C service providers must provide organizations with deployment and ongoing support in addition to support for employee end-user change management, or usage will suffer and benefits to the organization will not meet expectations.

**Lumen Voice and UC&C Overview**

Lumen delivers a comprehensive portfolio of adaptive networking, connected security, edge cloud and hybrid IT, and collaboration solutions on an enterprise-grade technology platform. For voice and collaboration needs, some of the options Lumen gives businesses are Cisco Hosted Collaboration Solution (HCS) delivered by Lumen, Cisco Webex Calling/Meetings, and the Lumen Hosted VoIP solution. Cisco HCS delivered by Lumen gives enterprises white-glove installation and ongoing technical support and customer service, as well as optional desktop phones and instant messaging and presence capabilities via Cisco Jabber. Alternatives to Cisco HCS include Cisco Webex Calling/Meetings delivered by Lumen giving businesses collaborative meeting and web conferencing capabilities and the Lumen Hosted VoIP solution, a full-featured UC&C solution that includes Lumen’s value-added provisioning of mobile and collaboration clients, rental devices, full-feature programming, and onsite technician installation wrapped into a monthly fee per seat. Lumen owns and operates the Hosted VoIP geographically
The Business Value of Enhanced Enterprise Communication with Lumen Voice and UC&C

At the forefront of Lumen's voice and UC&C solutions portfolio are flexibility, support, and implementation services, along with a focus on user experience, all of which contribute to positive outcomes for clients. For example, Lumen:

- Works with customers on their journey to the cloud by supporting customers anywhere on the journey from a fully premise-based solution to a hosted solution to a multitenant cloud solution
- Can bundle several capabilities in its hosted UC solutions, making integration with additional features seamless for customers
- Emphasizes in the Lumen Hosted VoIP solution its enterprise-grade network quality, security, and management, as well as a variety of customer success services from implementation services to ongoing support options
- Offers hardware as a service as an option with the Lumen Hosted VoIP solution and gives companies the ability to treat hardware as an operating expense rather than a capital expense
- Provides a range of customer support and implementation options appropriate across the customer journey, including options for custom integration and tailored implementations

As a provider of voice and UC&C services, Lumen brings its portfolio as well as its ownership of the connectivity that carries and secures the traffic globally, along with its priority focus on customer support to bear when working with customers.

The Business Value of Lumen Voice and UC&C

Study Demographics

IDC conducted research that explored the value and benefits for organizations using Lumen Voice and UC&C. The project included interviews with eight organizations using the solution with in-depth knowledge about its benefits. During the interviews, companies were asked a variety of quantitative and qualitative questions about the impact of Lumen Voice and UC&C on their IT and communications operations, costs, and businesses results.

Table 1 (next page) presents study demographics and profiles. Interviewed organizations had an average of 19,884 employees, indicating the involvement of several large companies. This workforce was supported by an IT staff of 381 engaged in managing 289 business applications on behalf of 19,854 end users and a large number of external customers (~952,500). A good mix of vertical industries were represented, namely, the healthcare (2), manufacturing (2), financial services, energy, government, and transportation sectors. (Note: All numbers cited represent averages.)
TABLE 1
Firmographics of Interviewed Organizations

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>19,884</td>
<td>4,100</td>
<td>200 to 52,000</td>
</tr>
<tr>
<td>Number of IT staff</td>
<td>381</td>
<td>33</td>
<td>30 to 2,800</td>
</tr>
<tr>
<td>Number of IT users</td>
<td>19,854</td>
<td>4,055</td>
<td>200 to 52,000</td>
</tr>
<tr>
<td>Number external customers</td>
<td>~952,500</td>
<td>2,300</td>
<td>28 to 5.6M</td>
</tr>
<tr>
<td>Number of business applications</td>
<td>289</td>
<td>150</td>
<td>20 to 1,100</td>
</tr>
<tr>
<td>Revenue per year</td>
<td>$5.61B</td>
<td>$2.55B</td>
<td>$30.0M to $17.0B</td>
</tr>
<tr>
<td>Industries</td>
<td>Healthcare (2), manufacturing (2), financial services, energy, government, transportation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020

Choice and Use of Lumen Voice and UC&C

The companies that IDC surveyed described their usage of Lumen Voice and UC&C and provided a snapshot of their IT, communications, and business environments. In addition, they discussed the rationale behind their choice of the Lumen offering. Interviewed customers cited several key decision factors such as the benefit of having a single unified platform that served to diminish their reliance on multiple vendors. In some cases, companies chose Lumen to upgrade legacy systems that were at the end of their useful life or because of various functionality deficits with those solutions. Study participants also called out the benefits of improved scalability, risk mitigation, and security along with the platform’s contribution to ongoing efforts at digital transformation.

They elaborated on these and other reasons for switching to Lumen:

- **Hard to manage previous disparate communication solutions (transportation):**
  “We were managing multiple vendors with the three different technologies including analog POTS, T1 PRI voice circuits, and various SIP options. These technologies were spread out geographically and impacted cost. Another big factor was the inflexibility of disaster recovery, specifically forwarding capabilities. Finally, having to make additional equipment purchases to implement those types of solutions was becoming cost prohibitive.”

- **Help with digital transformation (healthcare):**
  “We have a number of initiatives including digital transformation. Our organization is very focused on digitizing as many processes as possible and using assisted intelligence to drive better outcomes and solutions for our products. We had limitations on scalability and reliability with our previous solution and were seeking a more global solution. CenturyLink (Lumen) fills that need.”
Increased functionality to support customers (retail):
“Our old platform was end of life and there was a need for a collaboration tool that does more than just basic audio calling. We wanted videoconference calling and other similar functionality to entice our users to do more with us.”

Improved scalability, risk mitigation, and security (healthcare):
“We saw that the platform was pretty exciting in that it had high bandwidth, scalability, and we had options abound for self-hosting using some kind of a hybrid solution. We initially went with the hybrid IT and cloud solution. This allowed us to migrate without the risk of turning one system off and the other on; so it reduced risk. We liked some of the security walls and firewall options; so Lumen seemed like a really good fit.”

Improved performance (healthcare):
“We switched to Lumen based on absolutely nothing but performance, based on our tests. It was mostly speed of starting it up, (communication applications) boot-up speed, and the speed of our agents being able to swap between calls. By testing Lumen, they preferred that solution because there was a 50% increase in performance.”

Table 2 describes organizational usage associated with the Lumen Voice and UC&C platform. There was a substantial level of communications activity across all interviewed companies, with contact centers representing the predominant application. On average, there were nine contact centers handling 72,100 inbound and 56,900 outbound calls on a monthly basis. An average of 31 business applications were in play serving 1,851 end users. Additional metrics are presented.

### TABLE 2
Lumen Voice and UC&C Use

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of physical sites</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Number of countries</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Number of contact centers</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Number of business applications</td>
<td>39</td>
<td>34</td>
</tr>
<tr>
<td>Number of internal users</td>
<td>1,851</td>
<td>904</td>
</tr>
<tr>
<td>Number of inbound calls per month</td>
<td>72,100</td>
<td>52,500</td>
</tr>
<tr>
<td>Number of outbound calls per month</td>
<td>56,900</td>
<td>4,000</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020
Quantifying the Business Value of Lumen Voice and UC&C

IDC’s Business Value model explores the benefits for organizations that have chosen Lumen Voice and UC&C to support their ongoing IT and communications operations. Considering the use of alternative or previous solutions, the study data obtained from Lumen customers was applied to this model to arrive at an array of quantified post-deployment benefits. Using this methodology, IDC found that Lumen customers realized significant value for their businesses.

The use of the Lumen Voice and UC&C platform significantly improved IT and communications-related staff productivity while shifting the focus away from routine tasks and toward innovation and direct support of business projects and goals. These benefits enabled a value chain that promoted better business productivity along with improvements in revenue enhancement and protection. The use of the platform also helped these companies minimize unplanned downtime, thereby contributing to greater end-user productivity and lowering business risk.

Study participants described these benefits:

- **Better scalability and flexibility (healthcare):**
  “The scalability, high bandwidth, and the fact that we’re no longer on-premises are all benefits. We have greater flexibility to ramp up and down depending on volume. For example, when COVID-19 kicked in, our volume increased significantly, and we were able to ramp up quickly. We had switched from our previous vendor to a Lumen solution when COVID-19 started, and that’s been very reliable.”

- **Improved functionality, performance, and cost savings (manufacturing):**
  “The biggest benefits we’re seeing are better functionality and reliability, as well as cost savings. We’re paying less than we were with our previous vendor by about $500 per month and have a bigger pipe.”

- **Fewer tools that require management (financial services):**
  “The biggest benefit is to have one crew that does a lot of different things. The support then comes down to just managing and supporting one tool.”

- **Flexibility for users (retail):**
  “The solution gives users flexibility with more options to be productive because they can use the tools away from the office. It’s a lot more enticing for them to leverage and get things done that were required in the office …. And when they go home, they have the same functions with them as well. It’s very functional.”

IDC calculated that the total value that Lumen Voice and UC&C customers are realizing will be worth an annual average of $3.41 million per organization over five years, consisting of the following areas of improvement (see Figure 1, next page):

- **Business productivity benefits:**
  Better use of communication and collaboration tools with an improved unified communications platform leads to higher business productivity and additional revenue gained and protected. IDC calculates the value of these business productivity benefits at an annual average of $1.8 million per organization ($1.01 million per 1,000 users).
**Risk mitigation – user productivity benefits:**
Use of the Lumen platform translates to fewer unplanned outages with the potential to negatively affect the performance impacting internal end users, partners, and customers. IDC calculates the value of higher user productivity at an annual average of $828,000 per organization ($447,000 per 1,000 users).

**IT staff productivity benefits:**
Better communications service performance requires less IT infrastructure staff time to manage resources compared with previous or alternative approaches. IDC projects that interviewed organizations will realize value through staff time savings and higher productivity worth an annual average of $640,000 per organization ($346,000 per 1,000 users).

**IT infrastructure cost reductions:**
Interviewed companies lower the cost of operations because their organizations need to purchase fewer tools, hardware, and licenses. IDC calculates that the solution reduces these costs by an annual average of $63,000 per organization ($34,000 per 1,000 users).

**FIGURE 1**
Annual Average Benefits per Organization
(cost by an annual average, $)

Total: $3.41 million

- Business productivity benefits: $1,877,000
- Risk mitigation benefits: $828,000
- IT staff productivity gains: $640,000
- IT infrastructure cost reductions: $63,000

n = 8, Source: IDC In-depth Interviews, December 2020
Improvements in Enterprise Communications and Collaboration

Streamlined communications and collaborative tools are an essential success factor for businesses today. Unified communications as a service makes an important contribution to fostering better collaboration by delivering voice, messaging, video, web conferencing, and chat communications over IP-based systems. Lumen's UCaaS portfolio includes a variety of hosted and on-premises solutions including desktop phones, instant messaging, and TelePresence as well as voice/data network connectivity and web conferencing delivered via a unified user interface.

Communications and collaboration needs have intensified with the advent of COVID-19 and have had significant impacts on the way organizations conduct their business with customers as well as how employees work and interact with those customers and each other. Businesses across a wide variety of vertical markets now need to grapple with critical and rapidly changing state changes related to remote workforce enablement while guaranteeing high levels of business continuity. Combined, these trends place new emphasis on having strong and robust UCaaS solutions.

Lumen's offering is designed to address these challenges and to provide easy migration of collaborative capabilities. Overall, interviewed companies reported that the Lumen Voice and UC&C platform provided improved ability to carry out troubleshooting tasks along with making the process of call center migration smoother. They cited other benefits such as how the platform improved the process of deploying IT resources and enhanced business intelligence efforts (a consistent theme throughout customer comments).

Study participants elaborated on the other benefits:

- More efficient IT troubleshooting (retail):
  “Previously, we spent a lot of time looking through different reports from different tools to understand the problem or even where you have to go to troubleshoot an issue. With this tool, it streamlines by asking ‘Where is the issue? Or Who are the users?’ It also gives a full overview from start to finish. Previously, we would not be 100% sure of the cause of an issue. Now we can review the technology we haven’t replaced and look into implementing capabilities with unified communications platform that give us more benefits for users, such as tools to leverage on phones or more flexibility in reporting.”

- Can manage remote work and reduce footprints (healthcare):
  “With COVID-19, we had to have support staff work remotely … People are all working from home and now have access to SAP. Our developers and our operation folks are also able to work remotely. What it’s done basically is identify that we have real estate we don’t need and is probably going to go away.”

- IT can better support business needs (healthcare):
  “Because of the time freed up, we are now much more active in data analytics, machine learning, and AI initiatives. It’s amazing how data analytics and business intelligence has expanded … the data helps us make better decisions. We’ve deployed a lot of our resources for data collection, analysis, and consumption that provide insight for the operations teams. We have a plethora of intelligence tools that we use.”
IDC evaluated the ways that Lumen Voice and UC&C made it easier for communications-related IT infrastructure management teams to carry out their day-to-day tasks and responsibilities. Interviewees told IDC that Lumen’s ability to combine multiple tools into a single unified view made these processes much easier to manage. Table 3 quantifies these improvements, showing a substantial productivity improvement of 56%. This translated into an annual salary savings of $370,800 as the IT staff can now spend less time on “keeping the lights on” and spend more time on strategic and other projects.

**TABLE 3**

**Communication-Related IT Infrastructure Management Impact**

<table>
<thead>
<tr>
<th>Management of IT infrastructure productivity impact (equivalent FTEs)</th>
<th>Before Lumen Voice and UC&amp;C</th>
<th>With Lumen Voice and UC&amp;C</th>
<th>Difference</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.6</td>
<td>2.9</td>
<td>3.7</td>
<td>56%</td>
</tr>
</tbody>
</table>

| Salary cost per year per organization | $658,100 | $287,200 | $370,800 | 56% |

n = 8, Source: IDC In-depth Interviews, December 2020

Study participants data also confirmed that Lumen Voice and UC&C helped their IT infrastructure teams shift the focus from routine tasks associated with “keeping the lights on” to spending greater amounts of time on innovation and direct support for the business. Figure 2 quantifies the impacts, showing that IT organizations were able to spend 50% less time on these routine tasks.

**FIGURE 2**

**Impact on IT Infrastructure Team Activities**

(\% of time)

50% less time spent keeping the lights on

n = 8, Source: IDC In-depth Interviews, December 2020
Lumen Voice and UC&C has improved the agility that IT organizations require in deploying new communication resources. As one study participant working in the transportation sector noted, “It’s easier to deploy IT resources. We like their IT support and maintenance, and it lowers our IT administrator burden.” Figure 3 quantifies these benefits. After adopting Lumen, the staff time needed to deploy new communications resources was reduced by 41% while time required for the overall process of deploying them for the organization was 40% less.

**FIGURE 3**  
Impact on IT Agility  
(\% improvement)

<table>
<thead>
<tr>
<th>Staff time needed to deploy new communication resources</th>
<th>41%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time needed to deploy new communication resources</td>
<td>40%</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020

IDC then evaluated the benefits that Lumen Voice and UC&C provided for the help desk operations of interviewed companies. Study participants reported that with improved performance, their IT help desk teams had fewer issues that needed to be addressed. In addition, when end-user problems did arise, they were easier to address. As shown in Figure 4, the time savings for help desk staff was significant (81\%). In addition, the time required to address calls was reduced by 69\%.

**FIGURE 4**  
Help Desk Impact  
(\% improvement)

<table>
<thead>
<tr>
<th>Time savings for help desk staff</th>
<th>81%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced time to address tickets/calls</td>
<td>69%</td>
</tr>
<tr>
<td>Reduced number of tickets/calls</td>
<td>39%</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020
IDC also assessed cumulative staff time impacts in three functional areas: help desk, resource deployment, and IT infrastructure. As shown in Figure 5, IDC projects that over a five-year period IT will require 44% less time to run and manage its communication-related infrastructure compared against the use of alternative or legacy solutions.

Security considerations are critical in today’s business environments. Study participants reported that security teams in their organizations appreciated the additional security features that Lumen Voice and UC&C provided to their customers. As shown in Table 4, IDC calculated a 9% improvement in security postures after adoption, resulting in an annual salary-based business value of $208,000.

TABLE 4
IT Security Impact

<table>
<thead>
<tr>
<th>IT security impact (equivalent FTEs)</th>
<th>Before Lumen Voice and UC&amp;C</th>
<th>With Lumen Voice and UC&amp;C</th>
<th>Difference</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary cost per year per organization</td>
<td>$2.42M</td>
<td>$2.21M</td>
<td>$208,000</td>
<td>9%</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020
Interviewed companies were able to substantially lower the cost of operations because their organizations needed to purchase fewer tools, hardware, and licenses, as Lumen is able to consolidate what they need on a cloud-based platform. IDC calculated the infrastructure savings that these companies can expect over a five-year period. As shown in Figure 6, a comparable environment would cost almost 30% more over that same period.

**FIGURE 6**
Infrastructure Savings Five Years
(Cost of Lumen UC&C/alternative environment)

![Image of bar chart showing cost savings](chart)

*Comparative infrastructure savings from Lumen UC&C versus alternative environment over a five-year period.*

Improvements in Business Operations and Results

The use and deployment of Lumen Voice and UC&C fostered better business results while providing additional revenue and improved revenue protection for interviewed companies. Overall, these organizations were able to boost typical key performance indicators (KPIs) associated with their business operations. Study participants cited benefits such as being able to increase analytical capabilities and spending less time on interactive voice response (IVR) calls. They also noted improved employee communications and reduced downtime related to bandwidth performance issues. They commented on these and related benefits:

- **Freeing up more time for users (retail):**
  “The IVR was definitely a game changer. It’s increased our revenue by at least $250,000 a year. Four of my employees used to take phone calls, and we calculated they spent 2 minutes for each call. Now we’re not spending those minutes on the phone. We are more productive overall doing something else. Besides my team, we get 5-minute calls in our stores as well. If we consider that, it easily amounts to up to $300,000 a year in savings.”

- **Can communicate with users more effectively (retail):**
  “We’re seeing an increase in services ... because of the things we can do. An example is notifying our assistants that a store is closed because of weather or power outage. The notification used to go through this whole group of employees that would take at least a full day, maybe more. This is down to less than 2 hours now. That’s a big savings that comes by turning over information more quickly. So, from that aspect, it’s a lot more resourceful.”
IDC evaluated these business benefits in terms of typical KPIs. As shown in Figure 7, improvements were seen in market delivery speed (44%), application performance (35%), and business process performance (25%).

**Figure 7**

**Key Business KPIs**

<table>
<thead>
<tr>
<th>KPI</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster time to market</td>
<td>44%</td>
</tr>
<tr>
<td>Higher application performance</td>
<td>35%</td>
</tr>
<tr>
<td>Improved business processes</td>
<td>25%</td>
</tr>
</tbody>
</table>

IDC drilled down on the benefits of unplanned downtime by looking at how Lumen affected lost end-user productivity in relation to better performance (see Table 5). After adoption of the Lumen solution, interviewed companies experienced 75% fewer outages. One study participant in the healthcare vertical noted, “With the older system, we had more downtime. We had bottlenecks and calls that were dropped in certain countries. For example, with Asia, we had latency in communications, which we thought was an application problem when, in fact, it was the network. We’ve definitely seen an improvement with greater bandwidth.” When disruptions did occur, companies were able to ameliorate them 69% faster. This improvement translated into a very substantial increase in end-user productivity (92%).
### TABLE 5
Unplanned Downtime — User Productivity Impact

<table>
<thead>
<tr>
<th></th>
<th>Before Lumen Voice and UC&amp;C</th>
<th>With Lumen Voice and UC&amp;C</th>
<th>Difference</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of outages per year</td>
<td>27.3</td>
<td>6.7</td>
<td>20.5</td>
<td>75%</td>
</tr>
<tr>
<td>MTTR (hours)</td>
<td>1.7</td>
<td>0.5</td>
<td>1.2</td>
<td>69%</td>
</tr>
<tr>
<td>Lost productive time per organization per year (FTEs)</td>
<td>12.9</td>
<td>1.0</td>
<td>11.9</td>
<td>92%</td>
</tr>
<tr>
<td>Hours per user of lost productive time per year</td>
<td>1.2</td>
<td>0.1</td>
<td>1.1</td>
<td>92%</td>
</tr>
<tr>
<td>Value of lost productive time per organization per year (based on FTEs)</td>
<td>$903,000</td>
<td>$68,300</td>
<td>$834,700</td>
<td>92%</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020

An improved communications experience for end users and customers with less business and operational risk stemming from potential outages had identifiable impacts on business operations and revenues. As shown in Table 6, on average, Lumen customers benefitted from receiving additional annual revenues of $276,000.

### TABLE 6
Unplanned Downtime – Revenue Impact

<table>
<thead>
<tr>
<th></th>
<th>Per Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total additional revenue per year</td>
<td>$276,000</td>
</tr>
<tr>
<td>Assumed operating margin</td>
<td>15%</td>
</tr>
<tr>
<td>Total recognized revenue per year – IDC Business Value model</td>
<td>$41,000</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020
Another business benefit evaluated by IDC was the overall cost of operations. IDC analysis shows that deploying the Lumen platform helped interviewed companies cut their costs significantly.

**This analysis looked at three factors:**

- The cost of lost productivity and unplanned downtime
- IT staff management costs
- The cost of Lumen compared against alternatives

Based on the data garnered from Lumen customers, IDC projects that the overall cost of operations over a period of five years will be 62% lower (see **Figure 8**).

**FIGURE 8**

**Cost of Operations Over Five Years**

(Cost of Lumen UC&C/alternative environment)

- Cost of lost productivity (unplanned downtime)
- IT staff management costs
- Costs of Lumen UC&C/alternative approach

$n = 8$, Source: IDC In-depth Interviews, December 2020
Table 7 quantifies revenue impacts from better addressing business opportunities based on the Lumen capabilities and features previously described. The total average annual revenue expected after service platform deployment is $992,000.

### TABLE 7
**Business Operations and User Impact**

<table>
<thead>
<tr>
<th>Per Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total additional revenue per year</strong></td>
</tr>
<tr>
<td>$992,000</td>
</tr>
<tr>
<td><strong>Assumed operating margin</strong></td>
</tr>
<tr>
<td>15%</td>
</tr>
<tr>
<td><strong>Total recognized revenue per year – IDC Business Value model</strong></td>
</tr>
<tr>
<td>$149,000</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020

Table 8 quantifies end-user productivity and revenue impacts, showing an annual net productivity gain of 2% for Lumen customers’ employees. This translates into an annual business value of $1.84 million.

### TABLE 8
**End-User Productivity Impact**

<table>
<thead>
<tr>
<th>Per Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of users impacted</strong></td>
</tr>
<tr>
<td>1,339</td>
</tr>
<tr>
<td><strong>Average net productivity gains</strong></td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td><strong>Productive hours gained</strong></td>
</tr>
<tr>
<td>49,300</td>
</tr>
<tr>
<td><strong>End-user impact (FTE equivalent per organization per year)</strong></td>
</tr>
<tr>
<td>26.2</td>
</tr>
<tr>
<td><strong>Value of end-user time</strong></td>
</tr>
<tr>
<td>$1.84M</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020
ROI Summary

IDC’s analysis of the financial and investment benefits related to study participants’ use of Lumen Voice and UC&C is presented in Table 9. IDC calculates that on a per-organization basis, interviewed organizations will achieve total discounted five-year benefits of $12.2 million ($6.57 million per 1,000 users) based on IT/communications staff efficiencies, improved performance/reliability, better business results, and lower costs. These benefits compare with projected total discounted investment costs over five years of $2.04 million on a per-organization basis ($1.1 million per 1,000 users). IDC calculates that at these levels of benefits and investment costs, these organizations will achieve a five-year ROI of 497% and break even on their investment in approximately seven months.

TABLE 9
Three-Year ROI Analysis

<table>
<thead>
<tr>
<th></th>
<th>Per Organization</th>
<th>Per Employee Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit (discounted)</td>
<td>$12.2M</td>
<td>$6.57M</td>
</tr>
<tr>
<td>Investment (discounted)</td>
<td>$2.04M</td>
<td>$1.10M</td>
</tr>
<tr>
<td>Net present value</td>
<td>$10.1M</td>
<td>$5.47M</td>
</tr>
<tr>
<td>ROI (NPV/investment)</td>
<td>497%</td>
<td>497%</td>
</tr>
<tr>
<td>Payback</td>
<td>6.4 months</td>
<td>6.4 months</td>
</tr>
<tr>
<td>Discount factor</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>

n = 8, Source: IDC In-depth Interviews, December 2020

Challenges/Opportunities

Organizations have many options today for voice and unified communications as a service, with the vast majority providing a broad range of integrated voice, messaging, and conferencing capabilities. Lumen must continue to provide turnkey solutions with enterprise-grade network quality, reliability, and customer support options but innovate ways to make customizations of its solution highly scalable for customers. Lumen’s ability to innovate on how to enable scalable customizations for its customers will keep its solutions relevant and future proofed in the eyes of its customers.
Conclusion

It is clear from this white paper that Lumen has delivered significant benefits in the areas of employee efficiencies, performance, reliability—ultimately delivering attractive business outcomes and cost savings to customers. The bottom line is, today’s world is one in which minimizing employee downtime and helping IT, an organization that is pulled in many directions, are priorities. Customers demand new and improved business engagements, and vendors such as Lumen that deliver flexibility, support and implementation services, and solutions that are duly focused on user experience clearly drive positive outcomes for clients.

Appendix: Methodology

IDC’s standard ROI methodology was utilized for this project. This methodology is based on gathering data from current users of the Lumen Voice and UC&C solution as the foundation for the model.

Based on interviews with organizations using it, IDC performed a three-step process to calculate the ROI and payback period:

1. **Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of Lumen Voice and UC&C.** In this study, the benefits included staff time savings and staff productivity benefits and operational cost reductions.

2. **Created a complete investment (five-year total cost analysis) profile based on the interviews.** Investments go beyond the initial and annual costs of using Lumen Voice and UC&C and can include additional costs related to migrations, planning, consulting, and staff or user training.

3. **Calculated the ROI and payback period.** IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations’ use of Lumen Voice and UC&C over a five-year period. ROI is the ratio of the net present value (NPV) and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings. For purposes of this analysis, based on the geographic locations of the interviewed organizations, IDC has used assumptions of an average fully loaded salary of $100,000 per year for IT staff members and an average fully loaded salary of $70,000 for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
The net present value of the five-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.

Further, because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Note: All numbers in this document may not be exact due to rounding.
About the Analysts

Harsh Singh
Senior Research Analyst, Business Value Strategy Practice, IDC

Harsh Singh is a Senior Research Analyst for the Business Value Strategy Practice, responsible for developing return-on-investment (ROI) and cost-savings analysis on enterprise technological products. Harsh's work covers various solutions that include datacenter hardware, enterprise software, and cloud-based products and services. Harsh's research focuses on the financial and operational impact these products have on organizations that deploy and adopt them.

More about Harsh Singh

Denise Lund
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Denise Lund is a Research Director on IDC’s worldwide telecom team. Her research focuses on advanced communications services including VoIP and unified communications-as-a-service (UCaaS). In this position, she provides coverage of voice communications including fixed and legacy voice (local, long distance, and PRI ISDN) and IP voice (hosted VOIP with/without UC, SIP trunking, IP phone) as well as emerging migration and usage trends that’s occurring in the voice market. In addition to fixed telecom research, Denise's research has a strong emphasis on the Unified Communications-as-a-Service (UCaaS) market, particularly from the perspective of telecom and cable providers and OTT vendors. Denise brings numerous years of experience in working with communication service providers in the U.S. and globally, as well as with software vendors in the cloud, app development, and app security markets.

More about Denise Lund
About IDC
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