Wired and wireless access network infrastructure enables devices to connect to the enterprise wired or wireless LAN network. These devices may include laptops, smartphones, tablets and more. I&O leaders can learn from the implementation experience of their peers shared on Gartner Peer Insights.

Overview

Gartner Peer Insights is a free peer review and ratings platform designed for enterprise software and services decision makers. Reviews go through a strict validation and moderation process to ensure they are authentic.

We analyzed 183 Peer Insights reviews to identify lessons learned implementing wired and wireless LAN (WLAN) access infrastructure. This report focuses on the responses to the questions: “If you could start over, what would your organization do differently?” and “What one piece of advice would you give other prospective customers?” To browse all reviews, see the full list of Wired and Wireless LAN Access Infrastructure reviews on Peer Insights.

Peer Lessons Learned
This “Peer Lessons Learned” summarizes clients’ firsthand experiences with implementing wired and WLAN access infrastructure. The peer advice results both from successful implementation of projects and learnings based on what went wrong. This peer perspective, along with the individual detailed reviews, is complementary to expert research and provides a holistic view to the implementation process. Reviewers who submitted their lessons learned represent a cross-section of small- to midsize and large organizations. See Figure 1 for demographic details.

**Figure 1. Reviewer Demographics**

<table>
<thead>
<tr>
<th>Job Role</th>
<th>Number of Reviewers</th>
<th>Enterprise Industry</th>
<th>Number of Reviewers</th>
<th>Enterprise Size</th>
<th>Percentage of Reviewers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure and Operations</td>
<td>80</td>
<td>Education</td>
<td>44</td>
<td>30B – USD</td>
<td>7%</td>
</tr>
<tr>
<td>Enterprise Architecture and Technology Innovation</td>
<td>23</td>
<td>Services</td>
<td>31</td>
<td>10B - 30B USD</td>
<td>4%</td>
</tr>
<tr>
<td>Technical</td>
<td>18</td>
<td>Finance</td>
<td>25</td>
<td>3B - 10B USD</td>
<td>9%</td>
</tr>
<tr>
<td>Other CoO</td>
<td>13</td>
<td>Communications</td>
<td>16</td>
<td>1B - 3B USD</td>
<td>11%</td>
</tr>
<tr>
<td>CIO</td>
<td>11</td>
<td>Manufacturing</td>
<td>16</td>
<td>500M - 1B USD</td>
<td>13%</td>
</tr>
<tr>
<td>Analyst</td>
<td>11</td>
<td>Healthcare</td>
<td>12</td>
<td>250M - 500M USD</td>
<td>8%</td>
</tr>
<tr>
<td>Business</td>
<td>10</td>
<td>Energy and Utilities</td>
<td>9</td>
<td>&lt;50M USD</td>
<td>16%</td>
</tr>
<tr>
<td>Security and Risk Management</td>
<td>8</td>
<td>Retail</td>
<td>8</td>
<td>Government/Public Sector</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>Other</td>
<td>22</td>
<td></td>
<td>26%</td>
</tr>
</tbody>
</table>

Below are some key lessons learned from Peer Insights reviewers to help I&O leaders improve the implementation process of wired and WLAN access infrastructure.

**Lesson 1: Analyze Organizational Needs, and Communicate Them Clearly to Stakeholders and Project Leaders**

A cross section of peers urges I&O leaders to analyze their organizational network performance needs. It is pivotal to involve stakeholders and team leaders in all initial project discussions and communicate your requirements clearly to them. A well-designed architecture and better understanding paves way for a better platform selection and hassle-free deployment.

A peer adds:
Do your homework to understand what are your needs prior to investing in any product. In case you don’t have capabilities for that, ask for workshops from the vendor or any other consulting services.

— Infrastructure and Operations Professional, Finance Sector

A peer states:

Start analyzing the needs of your organization and monitoring the output of the existing platform to provide logical inputs to the team to help solve your business needs.

— Business Professional, Service Sector

Peer recommendations include:

- Define your requirements better on the front end of the project.
- Communicate more often with the stakeholders and the engineers assigned to the project.
- Carefully review your requirements before purchasing any solution. Ensure you are not leaving out anything important.
- Design the right architecture according to your requirements so that the vendor selection would pave the way for easy deployment.
- Evaluate your long- and short-term needs to avoid a gap or unnecessary reengineering in the future.

Recommended reading:

Magic Quadrant for Wired and Wireless LAN Access Infrastructure
Lesson 2: Select Wired/Wireless Networking Solutions That Help You Grow and Suit Your Organization’s Vision

A variety of peer reviewers opine that user requirements and expectations are ever-evolving. Consider vendors that not only meet your business requirements and help you grow to meet the user demands but share your technology roadmap as well. Conduct proper research about what your in-house resources are comfortable using and whether the vendor is able to offer an integrated set of products that meet the business demands.

A reviewer opines:

Do your due diligence and compare as many products as you can. Select the best product that meets your needs but keep in mind the direction the vendor is going. Check if they have a very tightly integrated set of products or have put together a variety of products they acquired through buyouts which they are trying to pass off as a cohesive solution.

— Infrastructure and Operations Professional, Education Sector

Another peer recommends:

Our RFP process happened right at the moment Wi-Fi 6 was becoming a true standard and most vendors were offering pre-standard hardware. We may have been better served to evaluate differently to save a lot of back and forth when we ultimately pivoted, but in the end it worked out.

— Infrastructure and Operations Professional, Education Sector

With focus on involving your resources in making a vendor selection, a peer says:
User requirements and expectations change constantly. The use of space within the physical infrastructure changes. Choose networking solutions that allow you to respond flexibly with a hardware and software platform that your engineers are comfortable with.

— Enterprise Architecture and Technology Innovation Professional, Education Sector

Peer recommendations include:

- Have a detailed and well-thought-out vision on the future network environment. Evaluate each vendor based on a structured set of criteria. Do your homework on what current staff can handle versus growth versus what to contract out.

- Evaluate the products, and study their abilities and philosophy. Have vendors prove they can meet your most critical business needs. Don’t settle for less than your business demands.

- Set a standard for wireless networking. Figure out what you need and move forward with a single vendor that meets that need. Different vendors cause different problems in different integrations.

- Issue an RFI to have a wider understanding of different vendors’ capabilities.

- Ensure you’re considering the larger picture in the design phase (considering all the various components, integrations and options available). Many of the options can help reduce overhead and management if implemented in tandem.

Recommended reading:

Critical Capabilities for Wired and Wireless LAN Access Infrastructure

Lesson 3: Allocate Time for Upfront Design Planning for Wired and WLAN Solution Implementation
Peers advise upfront design planning to make good use of all the product capabilities. If you’re diligent from the get go of the project, chances for errors, changes and delays can be minimized while deploying.

A peer advises to focus on the planning phase:

I would increase the time we spent on upfront design planning. The solution could be very simple to implement, but there are many nuances and options which should be considered. We made a lot of changes post-implementation. I wish we would’ve managed prior to implementation.

— CIO, Education Sector

A peer suggests:

Proper placement of controllers and overlapping zones, and removing redundant controllers are important to provide the level of service required. Understanding the bandwidth requirements, number of users, types of service supported and whether it is just for guests or is being deployed as backbone to replace the wired network will determine the cost and scale of the deployment. Plan well since small details are as important as the big ones.

— Infrastructure and Operations Professional, Healthcare Sector

Another peer adds:
Don’t expect a pure like-for-like service replacement. Understand the limitations of your existing network. Being diligent in your planning will ensure success of your infrastructure replacement.

— Enterprise Architecture and Technology Innovation Professional, Healthcare Sector

Peer recommendations include:

- Have proper planning ahead of time; consider expansion as a possibility since switching may be a problem if you are running 24/7 operations.

- Spend time in upfront planning and mapping network coverage aligned with network performance requirements. Small errors in the planning stage can mean a huge amount of work down the road correcting them.

- Plan well ahead and ensure all the built-in capabilities of the product (e.g., built-in wireless controllers, point of entry [POE] and advanced capabilities) are used.

- Plan for the breadth of services from the start. Go into more detail and planning with the design and implementation schedule.

- Initiate delivery and contractual time frames, and plan accordingly to minimize possible delays.

Recommended reading:

Next-Gen Campus Connectivity Must Start by Defining the End-User Experience

Lesson 4: Select Appropriate Deployment Type Depending on the Size of Your Organization

A wide section of peer reviewers suggests that the deployment should not be rushed into and there’s a need to understand different configurations of the solution before using it. As a first step, it is important to understand your infrastructure and then roll out deployment for a smaller environment first.

A peer highlights the importance of understanding the solution before deploying:
We were in a rush to deploy and definitely did not fully understand the inner workings of the solution before deploying. Would have liked to have had the ability to play with different configurations as there are many different ways you can accomplish a solution.

— Enterprise Architecture and Technology Innovation Professional, Education Sector

A peer adds:

I think the one thing that we could have done differently is come up with a schema for all the Wi-Fi service set identifiers (SSIDs) prior to deployment. Now we are stuck with some named networks that aren’t accurate.

— Analyst, Government or Public Sector

Peer recommendations include:

- Learn about the deployment carefully so that you can set up network access capabilities (NAC) properly instead of rushing into it.
- Choose appropriate type of deployment depending upon the size of organization; set up configuration details before using the solution.
- Understand infrastructure first, and plan deployment and rollover properly. Prefer deploying a proof of concept in a smaller environment first.
- Conduct professional wireless site surveys to precisely determine an ideal location for the deployment of each wireless access point.

Recommended reading:

Best Practices for Implementing Wireless (Wi-Fi) Network Guest Access
Methodology

Of the Peer Insights survey data considered for this market, only those responses meeting the following criteria were included in this synthesis:

- Reviews less than 12 months old.
- Responses that pertain to the project experience and are not tied to the capabilities of a vendor.
- Reviews were clustered into the top-four most-referenced categories (lessons learned) and then listed in order of relevant phases in the project life cycle.

The results of this synthesis are representative of the respondent base and not necessarily the market as a whole.

“The data used in this report is drawn from reviews on Peer Insights, a crowdsourced enterprise review platform that relies on dynamic data. Key to maintaining the integrity of the site is our ongoing moderation and validation of those reviews. Reviews are examined before publishing to the site and periodically, post-publishing. Due to the dynamic nature of the data, the external Peer Insights site will always have the most updated view of the data in this report.”

Document Revision History

Gartner Peer Insights ‘Lessons Learned’: Implementing Wired and Wireless LAN Access Infrastructure - 11 June 2020

Peer Lessons Learned: Implementing Wired and Wireless LAN Access Infrastructure - 9 May 2019

Recommended by the Author

Some documents may not be available as part of your current Gartner subscription.

- Magic Quadrant for Wired and Wireless LAN Access Infrastructure
- Optimize Costs by Extending the Life Cycle of Campus and Branch Office Networking Equipment
- Best Practices for Implementing Wireless (Wi-Fi) Network Guest Access
- Critical Capabilities for Wired and Wireless LAN Access Infrastructure