

# IT Key Metrics Data 2023: Infrastructure Measures — Executive Summary

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Initiatives: [Technology Finance, Risk and Value Management](#); [I&O Operations Management](#); [I&O Organizational Strategy](#)

This research provides an overall summary of the Infrastructure Measures from the IT Key Metrics Data 2023 report series.

## Overview

Benchmarking is a foundational component of cost management and mature IT financial management practices. This report aims to give an understanding of the overall Infrastructure spending relative to total IT Spending and contextualize it through distributions and workload-denominated metrics.

## Key Findings

- The cross-industry Infrastructure Spending as a percent of total IT Spending is 24%. This is distributed as 14% and 10% on Data Center and Network respectively.
- The cross-industry Infrastructure Staff as a percent of total IT Staff is 16%. This is distributed as 9% and 6% on Data Center and Network respectively.
- The spending distribution across Infrastructure functions continues to show little fluctuation year-on-year which suggests a steady-state of spending mix that is not substantially impacted by economic unrest.

## Recommendations

- Evaluate your organization by leveraging the available published content or receive a report tailored to your organization by completing the Infrastructure self-service tool.

### [IT Key Metrics Data Comparison Tool: Data Center & Network](#)

- Refer to the available supporting documentation to better understand the consensus model and the methodology behind the metrics.

## Infrastructure Measures – Data Center Framework Definitions

## Infrastructure Measures – Network Framework Definitions

- Use the [Practitioners Guide](#) to best prepare your data for comparison.
- Schedule an [inquiry](#) with a Gartner Expert to address alignment questions or to review your results and gain valuable insight based on your submission.

### Introduction to Infrastructure Benchmarking

In a rapidly changing environment, I&O leaders need to have a good understanding of their own performance in terms of efficiency and effectiveness, not only at the overall level, but also by different services. To that direction, benchmarking continues to be a foundational capability to identify opportunities for smarter spending.

**Figure 1: 4-Step process to Identify Opportunities for Smarter Spending**

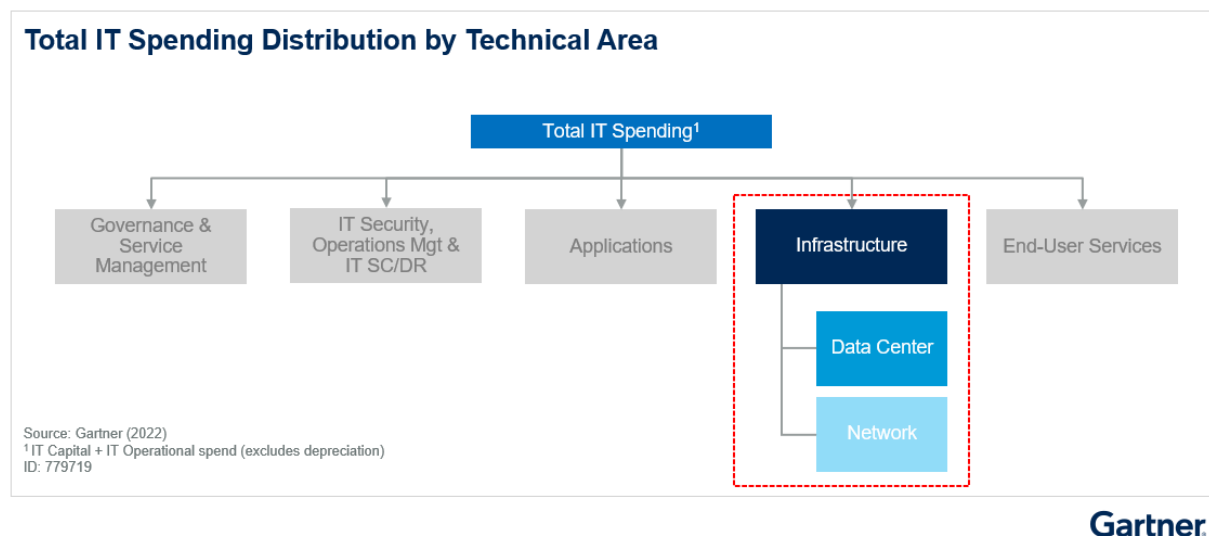


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To support Step 1, Gartner IT Key Metrics Data Comparison Tools analyze spending vs. the industry to identify optimization opportunities and to help answer questions such as:

- *“How does IT spending and staff compare to those of my peers?”*
- *“Where does my IT spending and staff vary from peers?”*
- *“Where do I have potential for cost savings?”*

This report contains efficiency metrics related to the Infrastructure environment starting with the relative spending and staff levels compared to overall IT, followed by distributions, unit cost and productivity. Additional metrics and level of detail can be found in the targeted Infrastructure reports or in the dedicated [self-service tool](#).

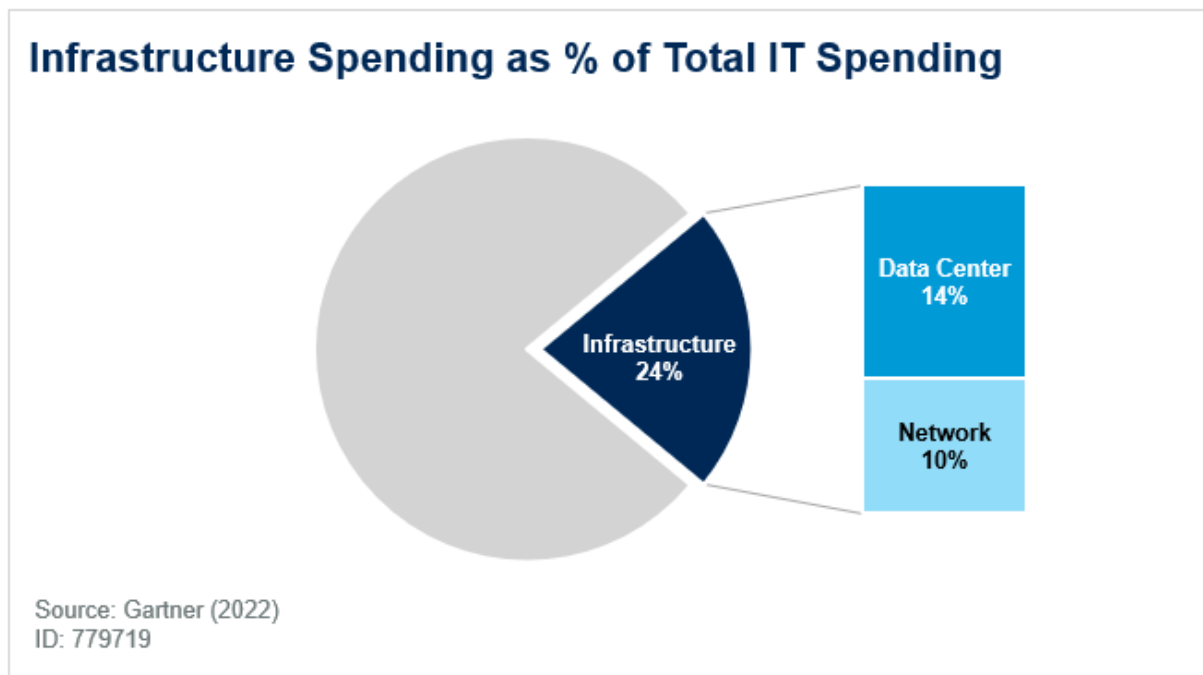
**Figure 2: Technical Cost Management View**

More details on the Gartner consensus model can be found in [IT Key Metrics Data 2023: Industry Measures – Framework Definitions](#)

### Infrastructure Spending as a Percent of Total IT Spending

Key efficiency metric that helps understand the relative level of IT spending to support the Infrastructure environment from a total IT portfolio perspective. This metric should be considered within the context of the overall technology & sourcing strategy. Infrastructure services tend to be delivered centrally so federated business models profit from economies of scale in this technical area.

Figure 3: Infrastructure Spending as a Percent of Total IT Spending

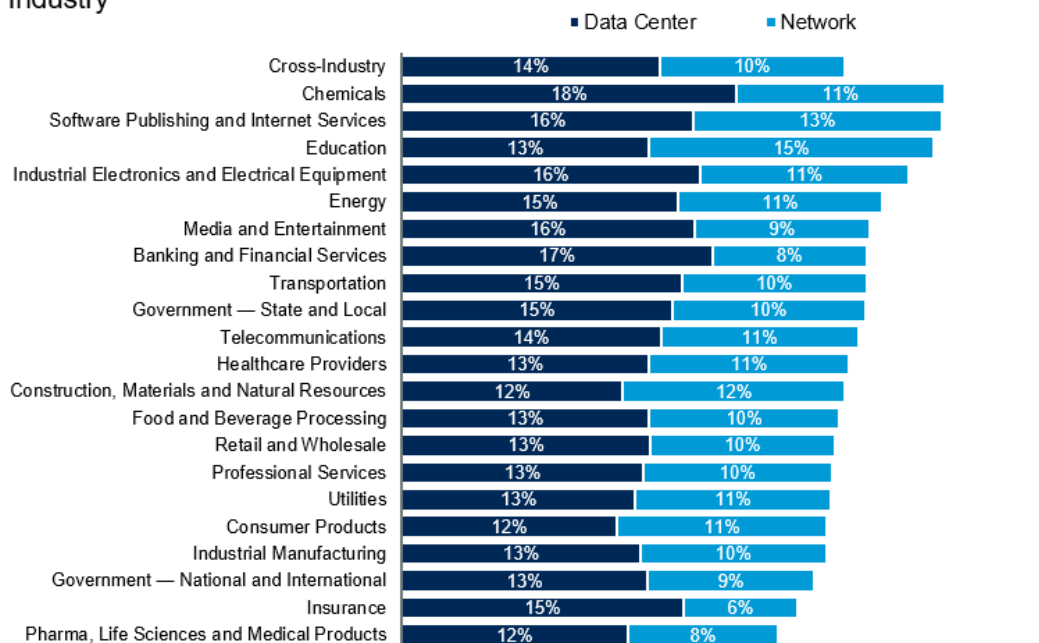


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Figure 4: Infrastructure Spending as a Percent of Total IT Spending by Industry

## Infrastructure Spending as % of Total IT Spending

By Industry



Source: Gartner (2022)

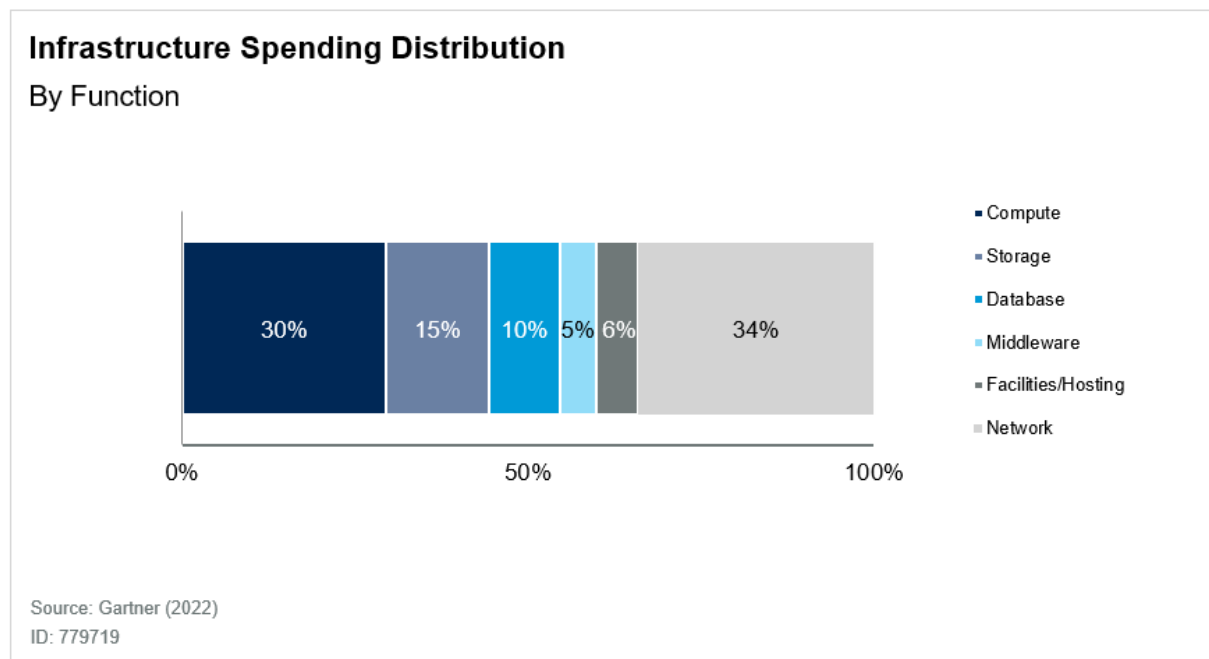
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## Infrastructure Spending Distribution by Function

This is a more granular view of the previous distribution metric between Data Center and Network spending which further unpacks the Data Center spending to the individual functions.

It is not uncommon to reduce spending in one function only to have the follow-on effect of passing this spending off to another function. By monitoring investments across all functions, these spending transfers within IT can be more visible.

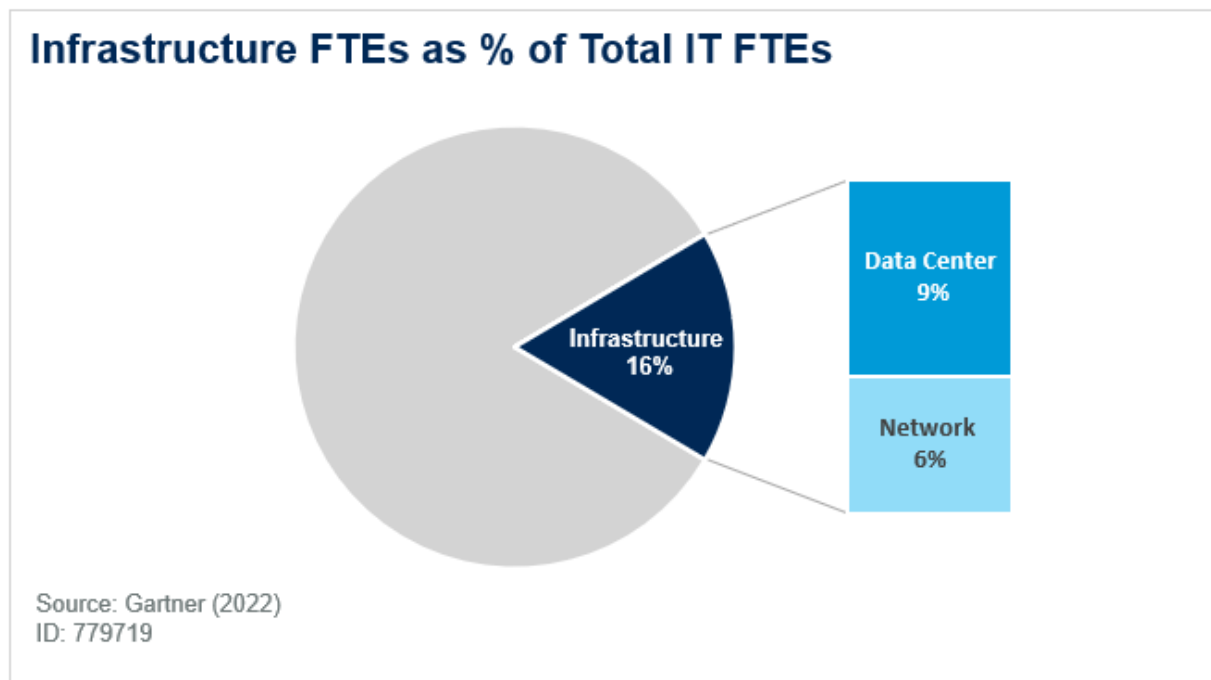
**Figure 5: Infrastructure Spending Distribution by Function**

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**Infrastructure FTEs as a Percent of Total IT FTEs**

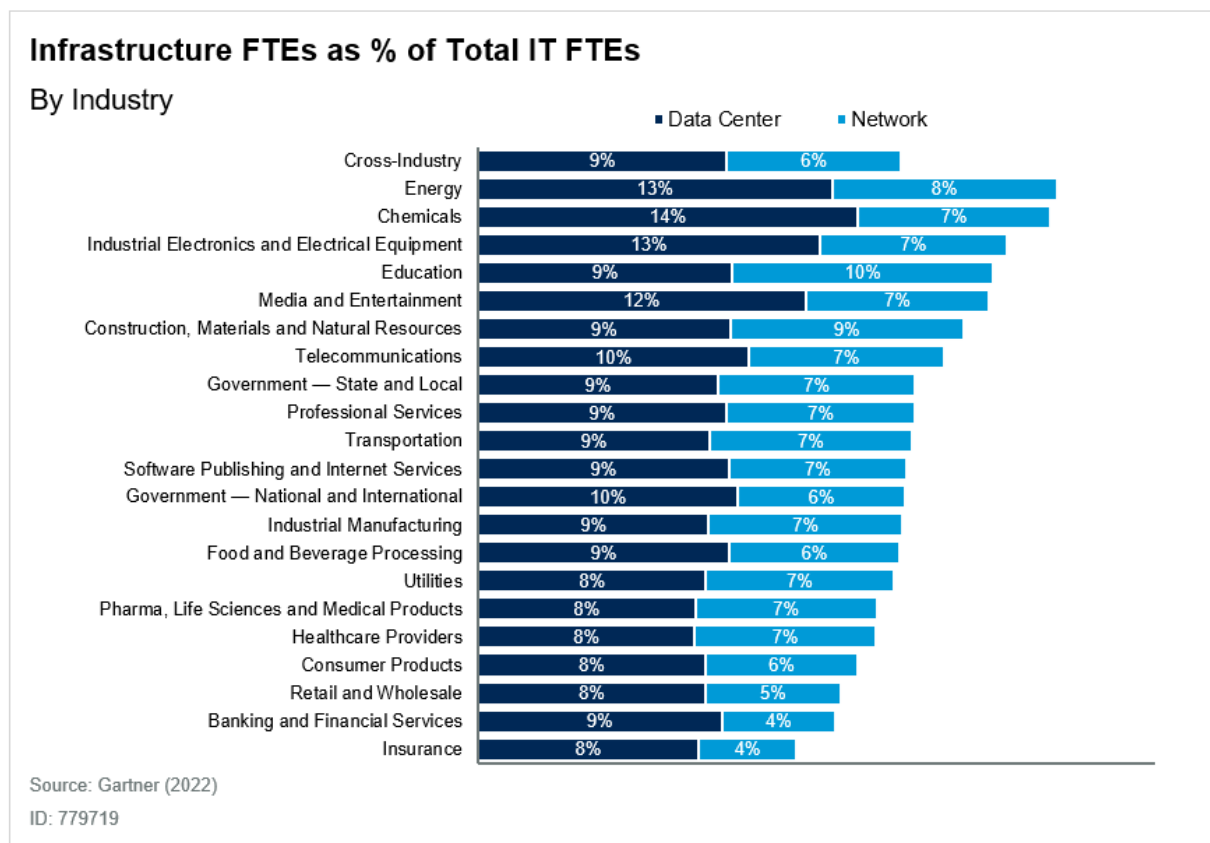
This is the core staff metric and serves as a measure of IT support intensity from a human capital perspective. It can assist in identifying whether staff size is appropriate and should be considered within the context of the overall sourcing strategy and future state objectives. Variables to consider in tandem with this metric include: IT staffing distribution: contractors versus insourced FTE, the percentage of the environment outsourced (supported by a third party), as well as the evolving business requirements.

Figure 6: Infrastructure FTEs as a Percent of Total IT FTEs



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Figure 7: Infrastructure FTEs as a Percent of Total IT FTEs by Industry

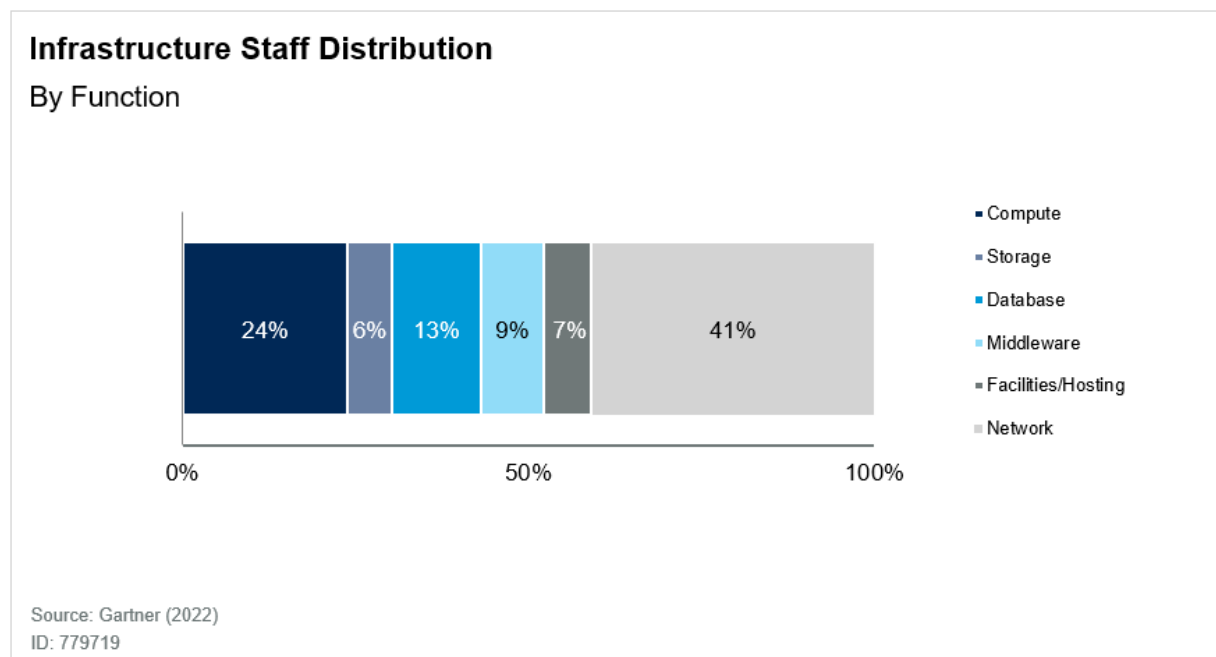


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### Infrastructure Staff Distribution by Function

This is a more granular view of the previous distribution metric between Data Center and Network FTE which further unpacks the Data Center staff to the individual functions.



**Figure 8: Infrastructure Staff Distribution by Function**

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### Annual Unit Cost per Workload Type

Unit costs are an alternative way of evaluating the relative cost efficiency level of the Infrastructure individual sub-functions. They should be considered within the context of business requirements, service levels delivered, environment architecture and scale (i.e. client density, users, instances, sites, number of operating systems deployed)

Figure 9: Annual Infrastructure Unit Cost per Workload Type

Annual Infrastructure Unit Cost per Workload Type			
Technical Area and Functions		Workload	Cost per Workload Unit
Infrastructure	Windows	OS Instances	\$1,720
	Linux x86	OS Instances	\$2,221
	UNIX	OS Instances	\$5,373
	Mainframe	Installed MIPS	\$1,119
	Storage	Raw Configured Terabytes	\$508
	Network	Users	\$674

Source: Gartner (2022)  
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Workload Supported per Infrastructure FTE

Understanding the productivity of your staff in terms of units supported can be very helpful in establishing efficient and effective workflows as well as ensuring your support staff is the “right size.” Productivity should be considered within the context of business requirements, quality of service and sustainability.

Figure 10: Infrastructure FTE Productivity per Workload Type

Annual Infrastructure FTE Productivity per Workload Type			
Technical Area and Functions		Workload	Workload Supported per FTE
Infrastructure	Windows	OS Instances	317
	Linux x86	OS Instances	223
	UNIX	OS Instances	120
	Mainframe	Installed MIPS	1,434
	Storage	Raw Configured Terabytes	2,150
	Network	Users	747

Source: Gartner (2022)  
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## Conclusion

A successful IT performance measurement program communicates metrics that are important to a target audience. By quantifying spending and staff relative to a defined framework, IT leaders can determine relevant cost drivers through:

1. Top level efficiency and productivity metrics
2. Variances below the top level of spending
3. The relation of one metric to another
4. Environmental factors within the organization

The [IT Key Metrics Data Comparison Tool: Data Center & Network](#) as well as the published research can help you analyze the aforementioned spending & identify opportunities for targeted cost management improvements.

## Recommended by the Authors

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

[“IT Key Metrics Data 2023: Working with IT Budget and Comparison Tools”](#)

[“IT Key Metrics Data 2023: Infrastructure Measures — Practitioners Guide to Establish a Baseline”](#)

[“IT Key Metrics Data 2023: Infrastructure Measures — Windows Server Analysis”](#)

[“IT Key Metrics Data 2023: Infrastructure Measures — Linux x86 Server Analysis”](#)

[“IT Key Metrics Data 2023: Infrastructure Measures — UNIX Server Analysis”](#)

[“IT Key Metrics Data 2023: Infrastructure Measures — Mainframe Analysis”](#)

[“IT Key Metrics Data 2023: Infrastructure Measures — Storage Analysis”](#)

[“IT Key Metrics Data 2023: Infrastructure Measures — Network Analysis”](#)

[“Create a Culture of Smart Spending”](#)

## About This Research

### Demographics

IT Key Metrics Data (ITKMD) 2023 cohort represents over \$14 trillion in total revenue and \$564 billion in total IT spending. In 2022, Gartner used newly collected 2,582 data points in total from public and private enterprises from more than 80 countries in 21 industry sectors to contribute toward all the IT Key Metrics Data series of reports. The Infrastructure measures within the ITKMD series are based on 602 data points.

For more information, including the distribution of data points by region, see [“IT Key Metrics Data 2023: Demographics.”](#)

## Evidence

This research contains relevant database averages, medians and ranges from a subset of metrics and prescriptive engagements available through [Gartner Benchmark Analytics](#) consulting-based capabilities.

Calculations were made using worldwide observations.

## Document Revision History

[IT Key Metrics Data 2022: Infrastructure Measures — Executive Summary - 16 December 2021](#)

## IT Key Metrics Data 2021: Infrastructure Measures — Executive Summary - 18 December 2020

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