IT Key Metrics Data 2024: Applications Measures– Analysis

Published 14 December 2023 - ID G00801287 - 10 min read

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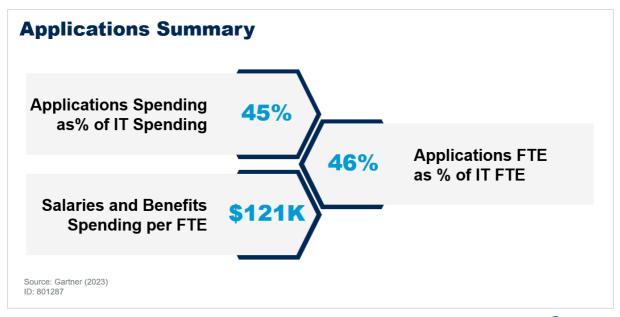
Initiatives: Technology Finance, Risk and Value Management; Application Architecture and Integration for Technical Professionals

The modernization of the digital workplace will bring along new spending requirements, and IT cost optimization will become increasingly important. IT leaders must quantify and communicate the benefits of collaboration, innovation, and transformation being promised, as well as the steps they take to keep unnecessary spending in check. This research contains high-level IT Applications spending and staff efficiency metrics which should be used as part of a perennial cost and value optimization program. The published information includes data collected throughout 2023 from a global audience of CIOs and IT leaders.

Overview

The aim of this report is to help IT organizations assess their Applications spending and staff efficiency at a high level through the use of resource distributions and practice metrics. These KPIs can be found in the summary figure below as well as throughout the report in more detail and context.

Figure 1: Applications Summary



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Key Findings

- Applications spending continues to take more of the IT Budget than other areas such as infrastructure. This is positive because it is often a source of competitive differentiation.
- Usage of Software as a Service continues to increase making good asset management policies critical for cost control.
- The share of applications spending on development versus support has stayed constant at around 50% each. We infer from this that it takes as many resources to support an existing application over its lifetime, as it does to build a new one.

Recommendations

- Evaluate your organization by leveraging the available published content or receive a report tailored to your organization by completing the End-User Services & Application Portfolio Budget & Efficiency Tool.
- Refer to the available supporting documentation such as the Applications Framework Definitions to better understand the consensus model and the methodology behind the metrics.
- Follow the Practitioner's 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.

Clients improve business performance by benchmarking their spending and best practices against Gartner's IT performance repository, the largest in the industry, drawing on over 5,000 IT benchmarks a year. The scope of this high-level IT Applications research includes provisioning and management of all business applications within an enterprise.

This report follows a top-down approach to the way the metrics are presented by starting with relative spending as the main spending efficiency indicator. We then strive to understand what is the effect of each asset to the unit cost by examining separately Personnel, Software and External Services. The benefit of this method is that it reveals which elements of spending draw the most funds and identifies the key cost drivers for more actionable recommendations.

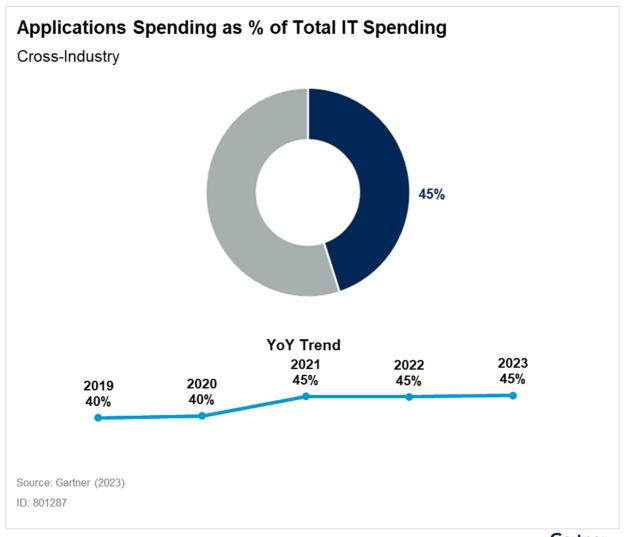
The metrics explored are database medians and do not account for individual variations of service quality, complexity or demand which may be justified by specific business needs.

Applications Spending as a Percent of Total IT Spending

Applications spending as a percent of total IT spending is helpful in understanding the relative level of investment to support the applications portfolio.

Determining the right level of investment involves much more than "matching" a database average. Factors such as level of risk, past investment, and organizational culture also play important roles. This metric should be considered within the context of the overall information security and risk management strategy. That is, as the technology environment plays a lesser or greater role in mission-critical business processes, so will the need to mitigate risk by maintaining and managing a secure technology environment.

Figure 2: Applications Spending as a Percent of Total IT Spending



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Applications Spending Distribution: Development Versus Support

Distribution of spending by development versus support provides insight into whether organizations are placing emphasis on new capabilities or supporting existing applications and functionality.

Applications Spending: Development vs. Support Cross-Industry 2019 49% 51% Development Support 2020 49% 51% 2021 48% 52% 2022 49% 51% 2023 48% 52% 0% 50% 100% Source: Gartner (2023) Note: Totals may not equal 100% due to rounding ID: 801287

Figure 3: Applications Spending Distribution: Development Versus Support

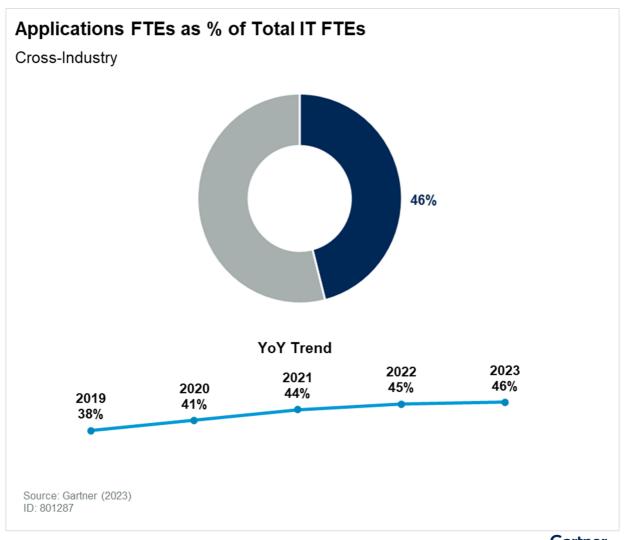
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Applications FTEs as Percent of Total IT FTEs

Applications staff typically make up a large component of total IT staff. This measure, especially when viewed within industry, and in conjunction with outsourcing levels can be helpful in understanding the role of applications staff and approaches to applications staffing within IT organizations.

Understanding the relative level of applications FTEs dedicated to an IT environment can also assist in identifying whether staff size is appropriate. This 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: contract versus insourced FTE, the percentage of the environment outsourced (supported by a third party), as well as the evolving business requirements.

Figure 4: Applications FTEs as Percent of Total IT FTEs



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Annual Salaries and Benefits Spending per Applications FTE

Compensation metric that provides the median annual spending on salaries and benefits for an Applications FTE. This cost will vary depending on geographic location, experience, and expertise. This measure is best used within the context of the skill requirements for the various roles within the technology environment depending on the environment structure and level of complexity.

Salaries and Benefits Spending ('000 USD) Per Applications FTE = Range* = Median = Interquartile Range \$80K \$49K \$167K \$220K \$121K **YoY Trend** 2022 2021 2019 2023 \$131K 2020 \$122K \$121K \$121K \$119K

Figure 5: Annual Salaries and Benefits spending per Applications FTE ('000 USD)

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Applications FTE Distribution: Insourced Versus Contractors

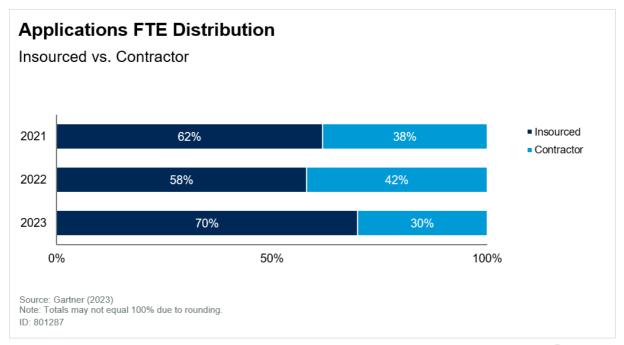
* Range includes the 10th to 90th percentile of the sample.

The distribution of Applications headcount between insourced and contract FTEs can help provide a view of the function's staffing strategy. IT contract labor or contractor usage can be an effective approach to maintaining flexibility and agility when business conditions are changing. However, keeping contractors for extended periods can be more costly and limit process standardization if the associated knowledge, IP and processes are not well documented and captured within the enterprise.

Source: Gartner (2023)

ID: 801287

Figure 6: Applications FTE Distribution: Insourced Versus Contractors

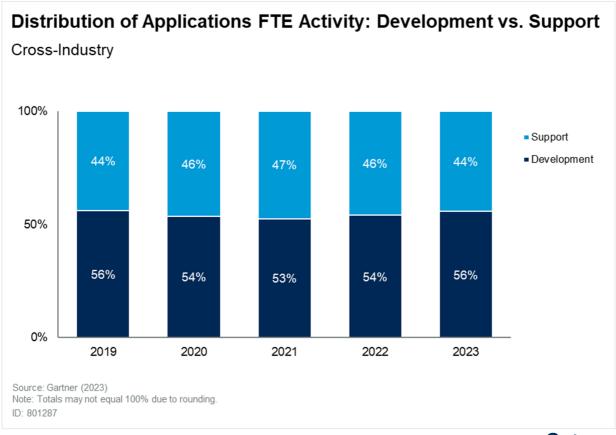


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Applications FTE Distribution: Development Versus Support

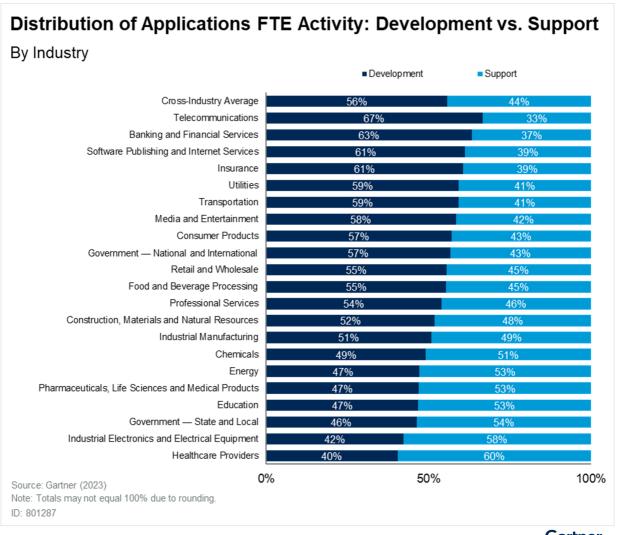
Distribution of Applications FTE provides insight into the level of effort dedicated to developing new applications versus supporting the existing portfolio.

Figure 7: Applications FTE Distribution: Development Versus Support



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Figure 8: Applications FTE Distribution: Development Versus Support by Industry



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Applications Spending Distribution by Application Type

The mix of any organization's investments should match the organizational goals. If efficiency is desired, it may be more beneficial to have a higher investment in ERP. If driving revenue and innovation is the vision then one might expect to see a higher investment in Digital and Externally Focused Applications.

Applications Spending Distribution by Application Type ■Internal Business and Vertical 2021 66% 15% 13% Specific Applications Digital and Externally Focused Applications 2022 70% 13% 12% Workplace Applications (Customization and Support) 2023 68% 14% 13% Business Process Outsourcing and Other Applications 0% 50% 100% Source: Gartner (2023) Note: Totals may not equal 100% due to rounding ID: 801287

Figure 9: Application Budget Distribution by Application Type

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Applications Spending Distribution by Asset Type

This metric provides an understanding of how IT Service Desk spending is dispersed across the Gartner consensus model asset classes. This distribution helps to outline personnel versus non-personnel related cost allocations and determine whether their approach matches their strategy.

It is not uncommon to reduce spending in one asset only to have the follow-on effect of passing those costs off to another asset. By monitoring investments across all assets, such cost transfers within IT can be more visible.

Applications Spending Distribution by Asset 2021 38% 40% 21% ■ Personnel 2022 40% 38% 22% ■ Software External Services 2023 43% 39% 18% 50% 100% 0% Source: Gartner (2023) Note: Totals may not equal 100% due to rounding ID: 801287

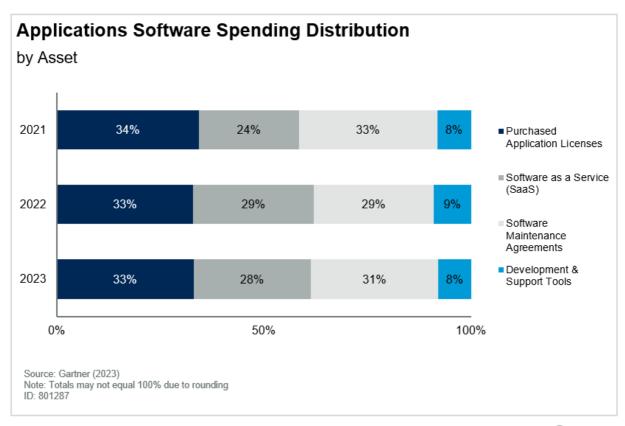
Figure 10: Applications Spending Distribution by Asset Type

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Applications Software Spending Distribution

In the application model software spending can come in a variety of forms. Purchased Applications are large one-time costs. They may have some maintenance fees associated with them to cover minor fixes and upgrades. Purchasing applications this way allows organizations to use them for as long as possible to keep costs low. The risk here is that waiting a long to upgrade multiple applications can require a spike in spending that is difficult to justify. With Software as a Service companies only pay for use on a per period per user basis and new functionality is included. The risk here is managing usage so that you only pay for what you need. Development and Support Tools are important in allowing personnel building custom applications to operate efficiently.

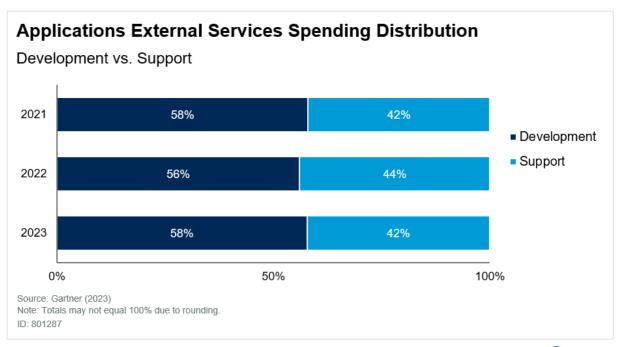
Figure 11: Applications Software Spending Distribution



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Applications External Services Spending Distribution: Development Versus Support

Figure 12: Applications External Services Spending Distribution: Development Versus Support

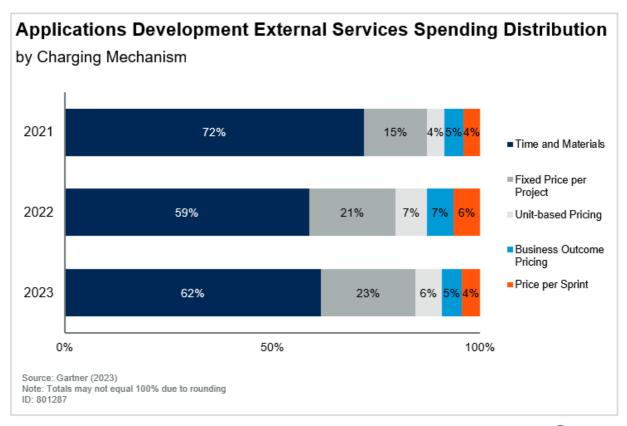


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Application Development External Services Spending Distribution

Any agreement for application development responsibilities with an External Services provider has a pricing mechanism; each one with its advantages and disadvantages. Time and Materials are simple, but it has little incentive for quality or efficiency. Fixed Price per Project is also simple but requires a good understanding of the resources that will need to go into completion. Unit-based pricing is useful as it uses an estimation of workload, but the estimation of cost per unit can be difficult to come up with. Business outcome pricing can motivate the service provider to deliver quality but also saddles them with risk.

Figure 13: Applications Development External Services Spending Distribution



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Applications Support External Services Spending Distribution

The same principles apply to Applications Support externalization charging mechanisms as they do for Applications development in the previous figure.

Applications Support External Services Spending Distribution by Charging Mechanism 2021 47% 33% 17% ■ Time and Materials Fixed monthly price 2022 40% 36% 15% 9% Price per application per month Price per Ticket 2023 38% 40% 14% 8% 0% 50% 100% Source: Gartner (2023) Note: Totals may not equal 100% due to rounding ID: 801287

Figure 14: Applications Support External Services Spending Distribution

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Applications FTE Distribution by Role

There are many different terms used to describe roles in Applications. Here we have a distribution of two main categories. The development/tester/business analyst role includes personnel who are involved directly in building, supporting, or creating standards for applications. Scrum Masters/Team Leaders and Management/Administration are involved in personnel management and support for this function.

0%

ID: 801287

Source: Gartner (2023)

Applications FTE Distribution by Role 2021 86% 14% ■Developers/Testers/ Business Analysts 2022 82% 18% ■ Management/ Administration/ Scrum Masters/Team Leaders 2023 82% 18%

50%

Figure 15: Applications FTE Distribution by Role

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100%

Applications FTE Distribution by Activity

Note: Totals may not equal 100% due to rounding

Applications personnel, regardless of role, may spend time allocated to various activities. New Functionality Delivery includes the creation of new applications and major functional enhancements to current applications. Most organizations want to maximize the labor towards these activities which are likely to improve business metrics. However, everything that is created must also be supported. The other activities here are necessary to keep operations running. If an organization does better a job at building new functionality they often have a lower workload in supporting it after it has been deployed.

Applications FTE Distribution by Activity ■ New Functionality Delivery 2021 54% 11% 14% 10% ■ Minor Enhancements Business Unit Support Break/Fix 2022 54% 15% 6% 15% Maintenance Technical Upgrades Other 2023 55% 13% 11% 9% 12% 0% 50% 100% Note: Totals may not equal 100% due to rounding * The "Technical Upgrades" and "Other" categories were grouped into Maintenance in 2022 Source: Gartner (2023) ID: 801287

Figure 16: Applications FTE Distribution by Activity

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Percent of Applications FTE Effort Using Waterfall vs. Other Methodologies

The figure below indicates the distribution of time spent by associates between applications using waterfall versus other development methodologies.

Waterfall Development: In waterfall development, each phase of development is discretely defined with clear gating criteria into the next phase, i.e., Analysis, Design, Development, Integration, System Test, and Implementation.

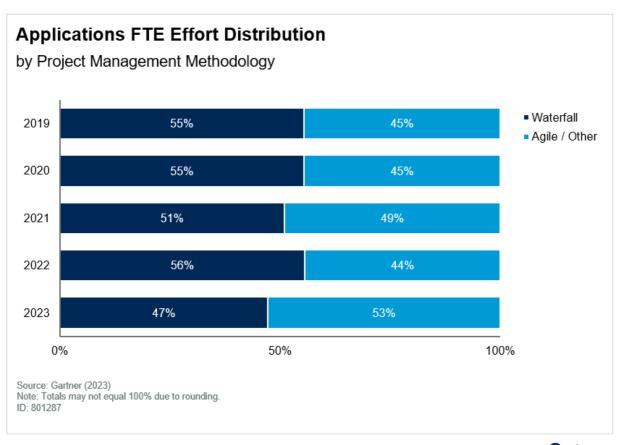
Other Development Methodologies:

These typically include:

Iterative Development: In iterative development, an application is developed in small sections called iterations. Each iteration is reviewed and critiqued by the software team and potential end-users; insights gained from the critique of an iteration are used to determine the next step in development.

- Agile Development: This is not a single method; rather, it is a term used for a set of methods or best practices typified by XP, Scrum, and DSDM. These methods have common principles that are summarized in the Agile Manifesto:
 - Individuals and interactions over processes and tools
 - Working software over comprehensive documentation
 - Customer collaboration over contract negotiation
 - Responding to change over following a plan

Figure 17: Applications FTE Effort Distribution by Project Management Methodology



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Applications FTE Effort Distribution: Product vs. Project Approach

The figure below indicates the distribution of time spent by associates between applications using product versus project approaches.

Project approaches to application development treat the work as a one-time effort with the aim of creating a product or service. It has a start and end date, as well as a defined result.

Product approaches to application development differ from a project approach as they don't look at it as a one-time effort. In a product approach, the application evolves and adapts to business needs to prove its worth.

Applications FTE Effort Distribution by Output Approach 2021 64% 36% ■ Project Product 2022 61% 39% 2023 60% 40% 0% 50% 100% Source: Gartner (2023) Note: Totals may not equal 100% due to rounding. ID: 801287

Figure 18: Applications FTE Effort Distribution: Product vs. Project Approach

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Conclusion

A successful IT performance measurement program communicates metrics that are important to a target audience. This remains true when communicating IT investments to the business. The metrics and benchmarks that Gartner has identified here provide a high-level view of current trends in IT by industry. They also reveal trends in business alignment, staffing, technology and outsourcing. They can be used to assist in communicating alignment with the business and in evaluating targets in key technology areas. They provide context for key business decisions and internal performance measures.

Recommended by the Authors

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

"Prioritize Business Domains for Application Rationalization"

"How to Maximize the Benefits of Windows Modern Management"

"5 Governance Steps to Accelerate Your Project to Product Transition"

"Using TIME for Application and Product Portfolio Triage: Data From the Field"

"IT Score for Applications"

"Enterprise Applications Strategy Primer for 2023"

About This Research

This research contains relevant database medians and ranges from a subset of metrics and prescriptive engagements available through Gartner Benchmark Analytics consulting-based capabilities.

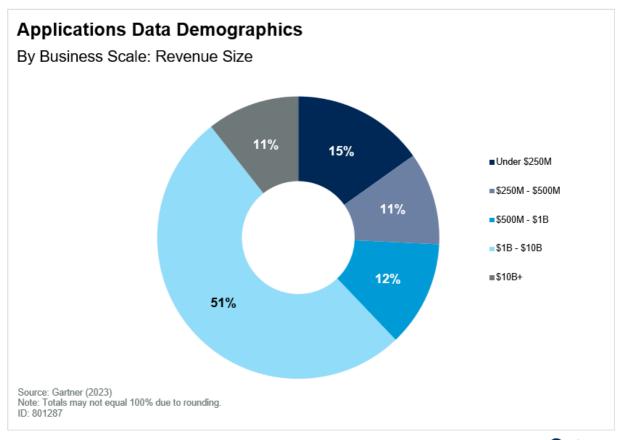
Calculations were made using worldwide observations.

Evidence

Applications Analysis Data Demographics by Environment Size: The niche subsector, business scale and tolerance to risk along with the future state strategy of each organization drive many of the variables required to understand the appropriate level of Applications investment required.

To offer some high-level insight into the data used for analysis, we have outlined the distribution of the data by revenue (Figure 16).

Figure 19: Applications Data Demographics by Revenue Size



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Document Revision History

IT Key Metrics Data 2023: Applications Measures — Analysis - 8 December 2022

IT Key Metrics Data 2022: Applications Measures — Analysis - 16 December 2021

IT Key Metrics Data 2021: Applications Measures — Total Cost and Staff Analysis - 18 December 2020

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