

Critical Capabilities for Infrastructure and Operations Business Value Dashboard Tools

Published 1 April 2014 - ID G00258355 - 19 min read

ARCHIVED This research is provided for historical perspective; portions may not reflect current conditions.

By Analysts Jeff Brooks, Robert Naegle

Initiatives:Infrastructure, Operations and Cloud Management

To quantify the value they contribute to business performance, some infrastructure and operations leaders are adopting tools that report and share metrics. I&O leaders should evaluate these business value dashboards against the capabilities that are critical to their implementation, use and support.

This Critical Capabilities is related to other research:

View All Magic Quadrants and Critical Capabilities

Overview

Key Findings

- No vendor in the emerging infrastructure and operations business value dashboard market completely meets all of Gartner's requirements, and no single product meets every IT organization's needs perfectly in all scenarios.
- Only six vendors meet Gartner's threshold to participate in this review of IOBVD critical capabilities.
- Most vendors approach the IOBVD market from adjacent markets, such as IT operations analytics, business intelligence and performance monitoring.
- Out-of-the-box metrics for business value and IT operations are major differentiators among the vendors we reviewed.
- Vendors use widely varied graphic approaches to visualize business value.
- IOBVD offerings need further enhancements, especially in their provisioning of out-of-the-box metrics, ease of integration with other data sources and graphic representations of data.

Recommendations



- Before selecting an IOBVD solution, consider how this product will factor into larger business value initiatives.
- Explicitly identify goals for your IOBVD project that focus on the benefits for business users,
 rather than IT users.
- Use Gartner's ITScore for I&O to evaluate your organization's maturity and to determine whether an IOBVD tool will enable you to reach your desired outcomes.
- Review the use-case charts to determine which tool best fits your requirements.

What You Need to Know

Vendors vary widely in the emerging infrastructure and operations business value dashboard (IOBVD) market, and they take many different approaches to addressing infrastructure and operations (I&O) organizations' need to map I&O performance metrics to business value. Gartner clients using IOBVD solutions are generally early adopters that have established a concept or definition of business value and are looking to demonstrate how I&O delivers value against it. IOBVD tools are available on-premises and through a SaaS model.

Here, we focus on the IOBVD critical capabilities essential to the selection of an appropriate tool. Gartner clients looking to deploy an IOBVD during the next 12 months should use this research to understand how many vendors in this space deliver the capabilities necessary to deliver against required expectations. Evaluations of the vendors in this research, as well as those not appearing in this analysis, should take into consideration the importance of product capabilities by individual use case.

Analysis

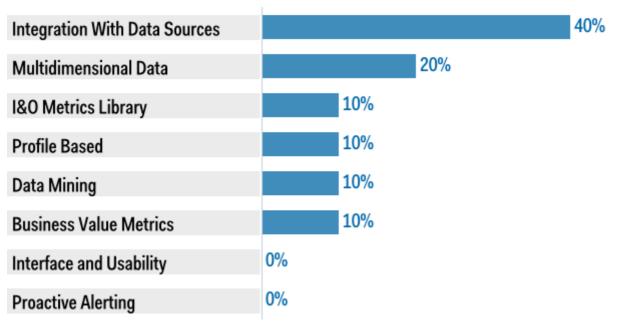
Critical Capabilities Use-Case Graphics

Each product or service that meets our inclusion criteria has been evaluated on several critical capabilities (see Figure 1, Figure 2 and Figure 3) on a scale from 1.0 (lowest ranking) to 5.0 (highest ranking).

Vendors' Product Scores for Use Cases

Figure 1. IOBVD Administrator Use Case

Capabilities and Weights - IOBVD Administrator

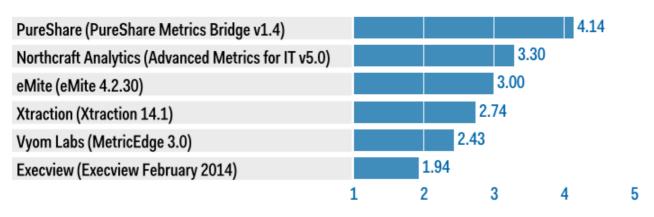


As of April 2014

Source: Gartner (April 2014)

Figure 2. Executive Leadership and End Users Use Case

Product Scores - Executive Leadership and End Users

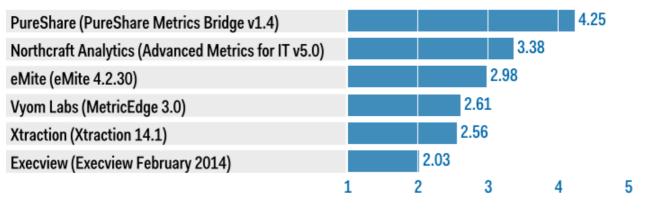


As of April 2014

Source: Gartner (April 2014)

Figure 3. I&O Leadership Use Case

Product Scores - I&O Leadership



As of April 2014

Source: Gartner (April 2014)

Vendors

eMite (eMite 4.2.30)

This report evaluates the v.4.2.30 release of eMite's eponymous IOBVD product. Of a total possible critical capability score of 40, eMite v.4.2.30 scored 25.9.

eMite offers a wide variety of charting options and a number of options for graphical gauges and presentation. Its end-user-driven interface enables users to create dashboards tailored to specific audiences' needs. eMite's graphical user interface (GUI) was one of the strongest among the products we reviewed, although some of its graphical elements are fairly plain.

eMite's online analytical processing cube makes multidimensional charting simple to execute. eMite also excelled in its robust data drill-down capabilities, which enable users to dive quickly and deeply into any supporting data represented in a chart, graph or table.

During our demo, the critical capabilities scenarios we ran presented screens that were more complex to navigate than those used in other products we reviewed. Configuring dashboards through eMite was simple, but the resulting charts were lackluster.

Although eMite offers a wide variety of out-of-the-box connectors to various data sources, the I&O metrics library itself seemed to be constrained to mostly IT service desk types of measures. eMite may be used to create value-based dashboards; however, it lacks out-of-the-box, value-based reports.

The eMite IOBVD is available for deployment as SaaS or as an on-premises solution, through a perpetual or subscription license. The product is also available for mobile devices, through anHTML5 offering for generic mobile platforms and Silverlight for Windows-based mobile devices, and as an app for iOS7 devices. The eMite administration interface is also accessible through HTML and Silverlight.



Execview (Execview February 2014)

We evaluated the February 2014 Execview IOBVD product for this research. Of a total possible critical capability score of 40, Execview scored 15.4.

Execview offers users a variety of charting options, although the GUI itself is basic and lacks the flair of some competing offerings. Users can build different dashboards for various users and profiles, and can adjust and configure graphing and table settings, such as choosing data or display order. The administrator controls dashboard sets.

Execview's solution is highly focused on reporting and dashboarding for IT service desk metrics and related IT service management (ITSM) processes. Users can take advantage of a variety of out-of-the-box metrics; however, these metrics are limited to those commonly used to measure IT service desk performance. Execview users can easily drill into a dataset, but the solution moves directly from a chart to a complete data table without offering the ability to drill down into specific chart components to obtain further views and perspectives on the data.

Although the Execview tool is flexible enough to import data from a wide variety of data sources, it uses flat files to import data, rather than out-of-the-box integration adapters. Execview also lacks a way to handle unstructured data sources and cannot provide real-time data integration. Although Execview enables users to create thresholds for alerts, it offers only onscreen alerting.

Execview's IOBVD is available for deployment only through hosted and SaaS options. The product is available withmobile access to scorecards through native browsers.

Northcraft Analytics (Advanced Metrics for IT v5.0)

For this research, we evaluated the v.5.0 version of Northcraft Analytics' IOBVD offering, Advanced Metrics for IT. Of a total possible critical capability score of 40, Advanced Metrics for IT scored 27.5.

Advanced Metrics for IT has a strong interface that emphasizes deeper analytics and focuses on the tool's ease of usability for the end user. An end user viewing a dashboard will find intuitive controls for filtering and sorting data. In addition, the dashboards are touch-sensitive when displayed on a touchscreen, enabling users to quickly and easily dig deeper into datasets to explore what the numbers mean.

Advanced Metrics for IT has a robust I&O library of ITSM metrics, as well as a library for event and capacity measures. The tool makes it easy to pull from a variety of data sources, and to display and investigate a multitude of data points. Advanced Metrics for IT excels in data drilling, enabling the user to drill down, as well as drill across datasets to gain greater understanding of the data.

Although Advanced Metrics for IT can be integrated with numerous data sources, most of them center on common ITSM solutions. Northcraft Analytics will continue to develop additional connections based on customer needs, but the number of out-of-the-box connectors is limited. Northcraft Analytics offers basic out-of-the-box business value metrics. The solution is capable of



pulling data from numerous sources, but turning existing datasets into value-based reports and dashboards requires development work. Its value metrics are limited in breadth and offer only cost data.

Northcraft Analytics IOBVD is available for deployment through SaaS, on-premises or as a hybrid. The product is also available withmobile access for iPad through Safari and a virtual private network connection, HTML5 and as a select set of native apps. Although Northcraft analytics uses Microsoft's Performance Point and Microsoft Reporting Services out-of-the-box for visualization, its open architecture enables users to tap into visualization consoles and tools.

PureShare (PureShare Metrics Bridge v1.4)

For this research, we evaluated the v.1.4 release of PureShare's IOBVD product, PureShare MetricsBridge. Of a total possible critical capability score of 40, PureShare MetricsBridge scored 34.4.

PureShare MetricsBridge received the highest overall score against the eight critical capabilities, due to its intuitive nature, strong graphical elements and large library of out-of-the-box I&O metrics, as well as its business value reports.

PureShare offers a library of graphical options ranging from simple tables and charts to gauges and dials. Users will find it easy to drag and drop dashboard elements to create their desired reporting platform, or to create charts that feature targets and thresholds, as well as moreadvanced charts with multiple data elements that span differing Y axes. Users can also share the custom dashboard elements they have created with other system users.

We gave MetricsBridge high marks for its multidimensional reporting. Users of MetricsBridge can use a simple click-through to drill into existing charts to gain greater insight into supporting data.

Despite PureShare's high overall score across the critical capabilities, some aspects of the look and feel of the interface could be improved. PureShare users would benefit from further out-of-the-box integration across the broader IT operations management (ITOM) tools market and from improvement in the tool's handling of real-time data and unstructured data sources.

PureShare's IOBVD is available for deployment on-premises or as a hosted solution. The product is also available for use through mobile devices, where it is presented to users as a device-agnostic HTML5-based app.

Vyom Labs (MetricEdge 3.0)

For this research, we evaluated the v.3.0 release of Vyom Labs' IOBVD product, MetricEdge. Of a total possible critical capability score of 40, MetricEdge scored 20.5.

MetricEdge offers a fairly basic, but intuitive interface, removing much of the complexity in other providers' offerings; however, this also results in a smaller range of options for graphical



capabilities. Our critical capabilities demo focused only on the administrators' view and use of the tool, making it difficult to score it from an end user's perspective.

Although MetricEdge provides multidimensional capabilities across line graphs and bar charts, creating more-complex charts is difficult. MetricEdge contains out-of-the-box integrations for some of the larger ITOM vendors (such as BMC Software and HP) and is capable of using data from any spreadsheet-based source for charting, if that data is first formatted into Vyom Labs' specific template. MetricEdge offers the option of real-time data integration, as well as the ability to warehouse the data for scheduled updates.

MetricEdge provided "good enough" functionality for data drilling and proactive alerting, but some areas could be improved, such as offering more ways to alert users when thresholds have been achieved. Vyom Labs contains a good start for out-of-the-box business-value metrics, but needs to broaden the scope of available reporting.

Vyom Labs' IOBVD is available for deployment via SaaS and on-premises, as well as through a hybrid model. The product also can be used through mobile devices, as well as native apps available for the iPad, iPhone and Android.

Xtraction (Xtraction 14.1)

For this research, we evaluated the v.14.1 release of Xtraction's IOBVD product, which shares the company's name. Of a total possible critical capability score of 40, Xtraction scored 21.2.

Xtraction has a complete set of charting options, including bubble and area charts, but it lacks graphical options, such as gauges and dials. Setting up a new user is a simple process through which the user is able to establish criteria for any new account. This enables the administrator to provide end users with a flexible configuration environment that is responsive to their business needs.

One of Xtraction's strengths is its numerous integrations with data sources, which will make it easy to pull real-time data and update dashboards on the fly; however, Xtraction does not offer solid support for the direct handling of unstructured data. The solution also enables the user to choose from many out-of-the-box I&O metrics to assist in the easy creation of dashboards.

Xtraction offers a simple option for establishing thresholds in the charts; however, its only alerting option is onscreen alerting. Xtraction offers dashboards and charting options for business value; however, this function can only be performed through a service engagement or a custom creation. The solution does not contain any out-of-the-box business value reports, which could provide a starting point for users.

The critical capabilities demo suggests that Xtraction dashboards will require consulting services. Although some parts of the interface were intuitive to use after they were created, during the demo process, the combination of small control and navigation icons and interaction with multiple configuration screens did not appear to be intuitive. Some training and time spent ramping up on



the product may be required before users become comfortable with the options for interfacing with the configuration. In addition, the GUI itself was not visually pleasing — it included demo dashboards that feature large, colored blocks with simple numeric indicators of performance or exceptions.

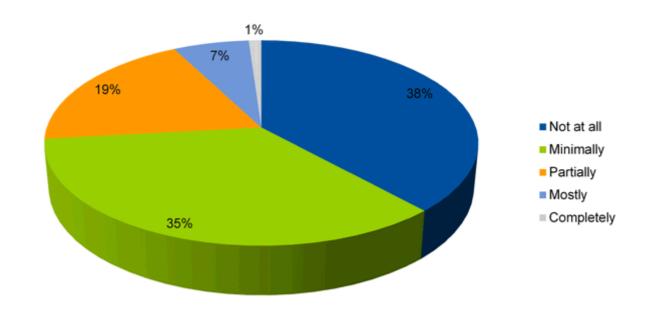
Xtraction's IOBVD is only available for deployment on-premises. The product is also available for use on mobile devices through an app for iOS products. Other mobile devices can use Xtraction via a mobile Web browser.

Context

I&O leaders face a growing need to demonstrate value to the business. IOBVD tools are designed to track I&O effectiveness metrics and map them to relevant business value. The key to demonstrating business value is understanding how the business measures success, then mapping the I&O metrics accordingly (see "Demonstrate I&O Value Through Business-Focused Metrics"). Because most Gartner clients can't define strong metrics for business value, we consider this market to be in its infancy; however, organizations should view this as an opportunity to become part of the small vanguard that's using IOBVD tools and an integrated dashboard to tell the story of how they're generating business value with metrics.

Figure 4 shows that only 1% of clients that have used Gartner's ITScore for Infrastructure and Operations (ITSIO) to assess maturity have completely implemented integrated dashboards across I&O. Only 7% have "mostly adopted," whereas 92% have "partially adopted, or less" the use of dashboards.

Figure 4. Are Your Business and ITOM Metrics (e.g., Dashboards, Monitoring and Automation for Optimized Business Processing) Fully Integrated?



n=1390



Source: Gartner (April 2014)

I&O organizations that have attained higher ITSIO maturity levels use IOBVDs (see "ITScore for Infrastructure and Operations" [Note: This document has been archived; some of its content may not reflect current conditions.]). Successful IOBVD initiatives require that I&O leaders:

- Understand the business values and how IT factors into that value equation
- Map the appropriate I&O metrics to business value

This starts to occur as I&O organizations reach ITSIO Level 3 and higher. At a lower maturity level — for example, at ITSIO Level 1 and Level 2 — I&O organizations often haven't established a good definition of the business value of the IT services they deliver. These less-mature organizations frequently offer their raw I&O performance and productivity metrics as a statement of value. Unfortunately, such presentations can negatively affect the business' perception of I&O's contribution and value, as the lines of business seldom understand or appreciate these raw metrics.

Product/Service Class Definition

IOBVDs are used to quantify the business value of I&O performance to support business and IT leaders' decisions. BVDs are composed of audience-specific sets of business value metrics (themselves combinations of prioritized business objectives, business performance measures and I&O performance measures) that are delivered through presentation and reporting mechanisms.

The collaboration between business and IT leaders is the heart of IOBVDs, as they work to redefine I&O performance measurement. This collaboration has the potential to dramatically shift tactical and strategic investments across the people, process and technology dimensions of I&O. IOBVDs provide the data that sparks the insights needed to discover new ways of doing business and identify new business opportunities.

Critical Capabilities Definition

Eight critical capabilities are essential to the selection of appropriate IOBVD tools:

Interface and Usability

The IOBVD tool must provide a variety of graphics and chart options for presenting data to the user. The tool must enable users to easily switch among viewing options.

Multidimensional Data

The IOBVD tool must enable administrators and users to create multidimensional reports, charts and graphics that demonstrate advanced analytical capabilities.

Integration With Data Sources



The IOBVD tool must provide connectors to commercially available data sources (which must include ITSSM tools), as well as a means to pull data from other data sources. The IOBVD tool must be able to pull both structured and unstructured data.

I&O Metrics Library

The IOBVD tool must provide out-of-the-box common I&O metrics used to show productivity, efficiency and satisfaction.

Profile Based

The IOBVD tool must be profile-based. This enables IOBVD users to create their own dashboards; it must also suggest appropriate measures that are pertinent to specific types of users.

Data Mining

The IOBVD tool must enable users to easily modify views of data, and it should include the ability to easily filter, sort and click through to gain greater insight into the meaning of the data.

Proactive Alerting

IOBVD should enable users to set thresholds and targets for reports and dashboard elements, as well as provide real-time alerting when targets and thresholds have been achieved.

Business Value Metrics

IOBVD must provide the means to translate I&O measures into value statements that show how I&O contributes to the growth or operational efficiency of the business. IOBVD tools must contain a library of business value reports and dashboard components (see Note 1).

Use Cases

There are three major use cases for IOBVD tools:

IOBVD Administrator

Creation and management of IOBVD measures, as well as the creation of user profiles. This role includes the I&O analysts who manage the IOBVD tool.

Executive Leadership and End Users

Organizational executives, end users/business users viewing the IOBVD to gain understanding of I&O's performance and value contribution. This role includes C-level executives, as well as members of the business units the I&O team supports.

I&O Leadership

Reporting on performance, efficiency, impact and value creation for use in organizational and strategy change. This role includes the I&O leadership team (e.g., service desk manager, network engineering management and vice president of service delivery).

Inclusion Criteria

Gartner, Inc. | 258355



In this research, we included software products for evaluation based on the following criteria:

- The products must cover the core IOBVD functions.
- The products must have been in general availability and deployed in customer environments as of 1 February 2014.
- Client inquiries helped us determine which participants were of interest to Gartner clients.

Critical Capabilities Rating

The critical capabilities weightings for the three major use cases are shown in Table 1 and the product ratings for the critical capabilities are shown in Table 2.

Table 1: Weighting for Critical Capabilities in Use Cases

Critical Capabilities	IOBVD Administrator	Executive Leadership and End Users	I&O Leadership ↓
Interface and Usability	0.0%	40.0%	25.0%
Multidimensional Data	20.0%	10.0%	10.0%
Integration With Data Sources	40.0%	0.0%	0.0%
I&O Metrics Library	10.0%	0.0%	15.0%
Profile Based	10.0%	20.0%	5.0%
Data Mining	10.0%	10.0%	10.0%
Proactive Alerting	0.0%	0.0%	15.0%
Business Value Metrics	10.0%	20.0%	20.0%
Total	100.0%	100.0%	100.0%

Critical IOBVD Executive Leadership and Leadership Administrator End Users

As of April 2014

Source: Gartner (April 2014)

Table 2: Product Rating on Critical Capabilities

Product or Service ↓ Ratings	eMite (eMite ↓ 4.2.30)	Execview (Execview February 2014)	Northcraft Analytics (Advanced Metrics for IT v5.0)	PureShare (PureShare Metrics ↓ Bridge v1.4)	Vyom La (MetricE 3.0)
Interface and Usability	3.1	2.4	3.5	3.8	2.
Multidimensional Data	4.0	1.0	4.0	5.0	2.
Integration With Data Sources	3.7	1.7	3.0	4.2	2.
I&O Metrics Library	2.5	2.0	4.0	4.3	2.
Profile Based	3.3	2.0	3.0	4.3	2.
Data Mining	4.0	2.0	5.0	4.0	3.
Proactive Alerting	3.8	3.0	3.0	4.5	3.
Business Value Metrics	1.5	1.4	2.0	4.3	2.

Product or Service ↓ Ratings	eMite (eMite ↓ 4.2.30)	Execview (Execview February 2014)	Northcraft Analytics (Advanced Metrics for IT v5.0)	PureShare (PureShare Metrics ↓ Bridge v1.4)	Vyom La (MetricE 3.0)

Source: Gartner (April 2014)

To determine an overall score for each product in the use cases, the ratings in Table 2 are multiplied by the weightings shown in Table 1. These scores are shown in Table 3.

Table 3: Product Score in Use Cases

Use Cases	eMite (eMite ↓ 4.2.30)	Execview (Execview February 2014)	Northcraft Analytics (Advanced Metrics for IT v5.0)	PureShare (PureShare Metrics ↓ Bridge v1.4)	Vyom Labs (MetricEdg 3.0)
IOBVD Administrator	3.41	1.62	3.40	4.37	2.44
Executive Leadership and End Users	3.00	1.94	3.30	4.14	2.43
I&O Leadership	2.99	2.03	3.38	4.25	2.61

Source: Gartner (April 2014)

Note 1



How Do I Measure the Business Value of I&O?

Contributions to growth are determined by measuring the progress made toward specific strategic outcomes, then expressing it in quantified, time-bound terms. Where I&O is concerned, the terms used are often capacity and/or capability — for example, the ability to support X% more customers/shipments/transactions, the ability to operate in specific regions or the ability to offer hours of availability per unit of IT spending.

Ultimately, contribution to operational efficiency should be measured in terms of (IT) price for (enterprise) performance. Examples of such metrics include IT spending per employee and IT spending per customer.

I&O leaders can use additional metrics to provide context (such as selling, general and administrative expenses per employee and revenue per employee) and to track trends over time that demonstrate increasing efficiencies as enterprise performance increases.

Critical Capabilities Methodology

This methodology requires analysts to identify the critical capabilities for a class of products or services. Each capability is then weighted in terms of its relative importance for specific product or service use cases. Next, products/services are rated in terms of how well they achieve each of the critical capabilities. A score that summarizes how well they meet the critical capabilities for each use case is then calculated for each product/service.

"Critical capabilities" are attributes that differentiate products/services in a class in terms of their quality and performance. Gartner recommends that users consider the set of critical capabilities as some of the most important criteria for acquisition decisions.

In defining the product/service category for evaluation, the analyst first identifies the leading uses for the products/services in this market. What needs are end-users looking to fulfill, when considering products/services in this market? Use cases should match common client deployment scenarios. These distinct client scenarios define the Use Cases.

The analyst then identifies the critical capabilities. These capabilities are generalized groups of features commonly required by this class of products/services. Each capability is assigned a level of importance in fulfilling that particular need; some sets of features are more important than others, depending on the use case being evaluated.

Each vendor's product or service is evaluated in terms of how well it delivers each capability, on a five-point scale. These ratings are displayed side-by-side for all vendors, allowing easy comparisons between the different sets of features.

Ratings and summary scores range from 1.0 to 5.0:

1 = Poor: most or all defined requirements not achieved



- 2 = Fair: some requirements not achieved
- 3 = Good: meets requirements
- 4 = Excellent: meets or exceeds some requirements
- 5 = Outstanding: significantly exceeds requirements

To determine an overall score for each product in the use cases, the product ratings are multiplied by the weightings to come up with the product score in use cases.

The critical capabilities Gartner has selected do not represent all capabilities for a product/service; therefore, may not represent those most important for a specific use situation or business objective. Clients should use a critical capabilities analysis as one of the several sources of input about a product/service before making an acquisition decision.

Recommended by the Authors

I&O Value Takes Center Stage With the Business Value Dashboard

Demonstrate I&O Value Through Business-Focused Metrics

First Steps in Building an I&O Business Value Dashboard

ITScore for Infrastructure and Operations

How Products and Services Are Evaluated in Gartner Critical Capabilities

Recommended For You

Quality Design Drift Metric (Kimberly-Clark)

Design Quality Metric Library

Quality Design Robustness Metric (Nexteer)

Quality Design Innovation Index — Metric Only (LevelSun)

Quality Design Change Categorization (Cubic Corporation)

© 2020 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. and its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. It consists of the opinions of Gartner's research organization, which should not be construed as statements of fact. While the information contained in this publication has been obtained from sources believed to be reliable, Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information. Although Gartner research may address legal and financial issues, Gartner does not provide legal or investment advice and its research should not be construed or used as such. Your access and use of this



publication are governed by Gartner's Usage Policy. Gartner prides itself on its reputation for independence and

objectivity. Its research is produced independently by its research organization without input or influence from any third party. For further information, see "Guiding Principles on Independence and Objectivity."

About Gartner Careers Newsroom Policies Privacy Policy Contact Us Site Index Help Get the App

© 2020 Gartner, Inc. and/or its Affiliates. All rights reserved.