

451 Research's

2022 Research Agenda

Key topics, coverage and planned deliverables



451 Research

S&P Global

Market Intelligence

Your radar into market disruption, innovation and digital transformation in the IT space.

451 Research, a technology research group within S&P Global Market Intelligence, provides a holistic view of innovation across the entire enterprise IT landscape through a combination of expert analyst insight, backed by differentiated data. Our analysts interact with key industry decision-makers every day to deliver the essential intelligence necessary to understand the pivotal role that digital transformation is playing in reshaping our world.

Our research spans nine channels that align with the prevailing issues driving IT innovation, helping clients implement, invent and invest in digital transformation. The research agenda for each channel outlines key topics, analyst coverage and planned deliverables to support our clients' critical business decisions. The pace and extent of this transformation means that many trends span multiple channels; our research approach encourages analyst collaboration both within and between channels, allowing us to surface emerging trends before anyone else. Additionally, for a higher-level perspective on the key trends that will drive digital transformation in 2022 at a strategic level, please refer to our latest [Big Picture report](#).



Applied Infrastructure &
DevOps



Cloud & Managed
Services Transformation



Cloud Native



Customer Experience &
Commerce



Data, AI & Analytics



Datacenter Services &
Infrastructure



Information Security



Internet of Things



Workforce Productivity &
Collaboration

451 Research

S&P Global

Market Intelligence

Cloud & Managed Services Transformation

We are entering an era when cloud will no longer be seen as a separate IT category: quite simply, it is IT. Cloud plays a key role in enterprise IT's evolution toward the 'as a service' approach to technology delivery and consumption. The cloud operating model is taking hold, and organizations have choices for how they buy IT, where it gets deployed, how it gets integrated and managed, and how it gets used to drive the business forward. As the worlds of hardware, software, managed services, applications and distribution converge, all IT industry players are service providers now. The Cloud & Managed Services Transformation Channel tracks not only how enterprises are reinventing their IT environments but also how cloud is transforming an industry now tasked with delivering optimized IT experiences anywhere and everywhere.



Analysts



Melanie Posey

Research Director

[BIO >](#)



Nicole Henderson

Research Analyst

[BIO >](#)



Jean Atelsek

Research Analyst

[BIO >](#)



Jay Lyman

Senior Research Analyst

[BIO >](#)



Liam Eagle

Research Director, Head of Voice of the Enterprise & Voice of the Service Provider

[BIO >](#)



Agatha Poon

Senior Research Analyst

[BIO >](#)



William Fellows

Research Director

[BIO >](#)



James Sanders

Research Analyst

[BIO >](#)

Key Research Topics and Themes for 2022

Implementation approaches, use cases and management strategies for multicloud/hybrid begin to take shape

As hybrid (on- and off-premises; private and public cloud) and multicloud (multiple public cloud environments) architectures become increasingly common, we will analyze why, how and where organizations are taking this approach to their IT environments and evolution of the use cases.

[LEARN MORE >](#)

'Cloud anywhere' and the convergence of on-premises private cloud, on-premises public cloud, edge, and cloud native

The cloud operating model (flexible, on-demand infrastructure managed independently of the applications on top) once applied only to public cloud. Now that the flexible deployment model is extending to on-premises, the edge and the application layer, location becomes yet another vector in enterprises' workload placement decisions.

[LEARN MORE >](#)

The evolving landscape of cloud ecosystems

While hyperscalers are positioned at the center of cloud discussions, cloud does not happen in a vacuum. Multiple entities participate in the emerging 'cloudverse' – in cloud marketplaces as buyers, sellers and enablers; through technology, solution development and go-to-market partnerships; and as integrators offering advisory, implementation and optimization services. The balance of power and competitive dynamics of cloud ecosystems are changing, and we will explore this evolution in 2022.

[LEARN MORE >](#)

Outcome-oriented approaches to observability

IT practitioners enjoy a wealth of options for monitoring infrastructure and applications, but tight integration between tools and within software development lifecycles is vital to delivering actionable value, rather than simply projecting metrics, traces and logs on a pane of glass.

[LEARN MORE >](#)

From cloud management to control planes

The cloud management market keeps evolving – with waves of innovation and consolidation – as requirements for building, operating, securing and optimizing workloads 'here, there and everywhere' expand exponentially with the advent of cloud-native and multicloud. Cloud providers, systems vendors and ISVs are trying to solve this resulting complexity in the hope of winning the ultimate prize: hosting the management plane that enables visibility and control of distributed applications across heterogeneous environments.

[LEARN MORE >](#)

Managed and professional services assume a key role in the execution of enterprise cloud strategies

As a hybrid, multicloud mix of venues and vendors becomes a common enterprise cloud strategy, and as cloud service portfolios continue to expand, service providers offering managed and professional services for public cloud work to position themselves as key partners for organizations looking to overcome complexity and execute on business and IT outcomes.

[LEARN MORE >](#)

The next wave: app modernization in the enterprise

Updating application architectures to take advantage of cloud services, reduce costs and increase adaptability has become a competitive necessity. Many enterprises have already picked the low-hanging fruit of cloud transformation – the easy wins in terms of ROI. The next phase – decomposing big, gnarly legacy applications by carving away functional blocks that can be maintained independently – is tougher. This won't be easy or straightforward, but vendors and ISVs are tackling the challenge with modern techniques that promise to reduce the toil and speed ROI.

[LEARN MORE >](#)

Pricing model evolution: shift to 'as a service' brings new billing methods

Hardware vendors and service providers are implementing usage-based billing to better compete with the pay-as-you-go cost-efficiency of public cloud service offers. Meanwhile, as cloud deployments grow, customers are struggling to keep costs under control and take advantage of commitment discounts without leaving resources on the table.

[LEARN MORE >](#)

Enterprise utility and readiness for a quantum computing future

Quantum computers are expected to exponentially speed up certain classes of workloads. Identifying business problems suitable for quantum computers and devising algorithms to convey those problems as quantum hardware develops is essential to extract value from this emerging technology, as is scoping out potential security implications of a quantum future.

[LEARN MORE >](#)

Will cloud suppliers win the edge?

The edge computing market has been born out of necessity and a healthy degree of speculation of demand to come. Many actors are competing for a central role in this new edge application stack and there are no clear winners yet – so what is the opportunity for the cloud suppliers? There are key questions left to be answered around core technologies, standards, business models and ROI.

[LEARN MORE >](#)

Alternative cloud infrastructure vendors and their evolving prospects in a market dominated by a handful of hyperscalers

Roughly a quarter of the public cloud infrastructure market is made up of a longer tail of dozens of smaller companies (such as smaller cloud infrastructure companies, former hosting companies, and adjacent businesses with cloud offerings). These tend to provide a core subset of the total hyperscaler capabilities with an emphasis on simplicity, ease of use, and lower cost.

[LEARN MORE >](#)

Verticalization and the rise of industry-led approaches to cloud transformation

Cloud is a priority for organizations across industry segments, but how enterprises approach transformation and handle roadblocks around governance, compliance, security and customer experience are unique according to sector. Hyperscalers, ISVs and other service providers play a key role in bringing enterprises in financial services, healthcare, retail, supply chain and manufacturing along a transformation journey that elevates how they serve customers, both internal and external, while ensuring regulatory compliance and data privacy.

[LEARN MORE >](#)

Relentless pursuit of accurate tech market data that serves as the base for our qualitative research.

Please select a product below to learn more.



Cloud Price Index >

Analysis on the cost of public and private cloud computing globally, enabling buyers and sellers to make data-driven, strategic decisions.



Datacenter KnowledgeBase >

Provides critical datacenter intelligence to help identify opportunities for maximum effect at the most cost-effective price by detailing datacenter capacity and capabilities at a broad global level and a granular, site level.



Market Monitor & Forecast >

Five-year forecast of revenues, participants, distributions and growth rates sectors and companies that make up specific marketplaces.



M&A KnowledgeBase >

Global database of 60,000+ tech M&A transactions that includes undisclosed valuations and more than 650 sector classifications.



Voice of the Connected User Landscape >

Insight into ever-changing connected technology buying behavior and preferences.



Voice of the Enterprise >

Rapid, relevant and predictive insight on customer sentiment, technology choices and spending plans.



Voice of the Service Provider >

Qualifies and quantifies buying behaviors, business drivers and strategic priorities for the expanding universe of tech service providers.

Our analysts engage directly with IT industry leaders to understand current market dynamics.



Market Insight >

Produced daily by our global team of expert analysts, our Market Insight reports provide the critical analysis, insight and data you need to stay informed and competitive on the markets, players and issues you care about, in a highly consumable format.

Impact Reports

Briefing-driven analysis of a specific vendor, covering the impact its business model, services, technologies and go-to-market strategy will have on the market. A company SWOT analysis is included in every report.

Spotlight Reports

Analysis of new developments in a market sector or technology area that builds on previously published analysis to provide context and real-time updates on innovation and disruption as it happens.

Analyst Notes

Concise research notes that highlight and contextualize a recent market or vendor development.

Deal Analyses

Event-driven analysis of a tech acquisition, including the deal rationale and an examination of its broader impact on competitors, adjacent players and the overall market.

IQ Reports

Sector IQ, Acquirer IQ, Target IQ and Debut IQ reports provide **anticipatory analysis of potential M&A activity or consolidation trends**. Analysis is focused on a specific sector or company likely to acquire, likely to be acquired, or that has just completed an IPO.

User Deployment Reports

Accounts and analysis of real-world end-user deployment experiences with new, innovative technologies, products and services, providing a 'sanity check' on what vendors and VCs are telling our analysts.



Technology & Business Insight >

Designed to complement our Market Insight service, Technology & Business Insight are longer-form reports that offer a comprehensive view of the dynamics impacting specific technology markets and sectors, showcasing a broader view where technologies are disrupting and impacting multiple market segments or within a key ecosystem.

CONTACTS

The Americas

+1 877 863 1306

market.intelligence@spglobal.com

Europe, Middle East & Africa

+44 20 7176 1234

market.intelligence@spglobal.com

Asia-Pacific

+852 2533 3565

market.intelligence@spglobal.com

www.spglobal.com/451-research

www.spglobal.com/marketintelligence

Copyright © 2022 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable. No content (including index data, ratings, credit-related analyses and data, research, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global Market Intelligence or its affiliates (collectively, S&P Global). The Content shall not be used for any unlawful or unauthorized purposes. S&P Global and any third-party providers, (collectively S&P Global Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Global Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON "AS IS" BASIS. S&P GLOBAL PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Global Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global Market Intelligence's opinions, quotes and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global Market Intelligence may provide index data. Direct investment in an index is not possible. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Global Market Intelligence assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global Market Intelligence does not endorse companies, technologies, products, services, or solutions.

S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the right to disseminate its opinions and analyses. S&P Global's public ratings and analyses are made available on its websites, **www.standardandpoors.com** (free of charge) and **www.ratingsdirect.com** (subscription), and may be distributed through other means, including via S&P Global publications and third-party redistributors. Additional information about our ratings fees is available at **www.standardandpoors.com/usratingsfees**.