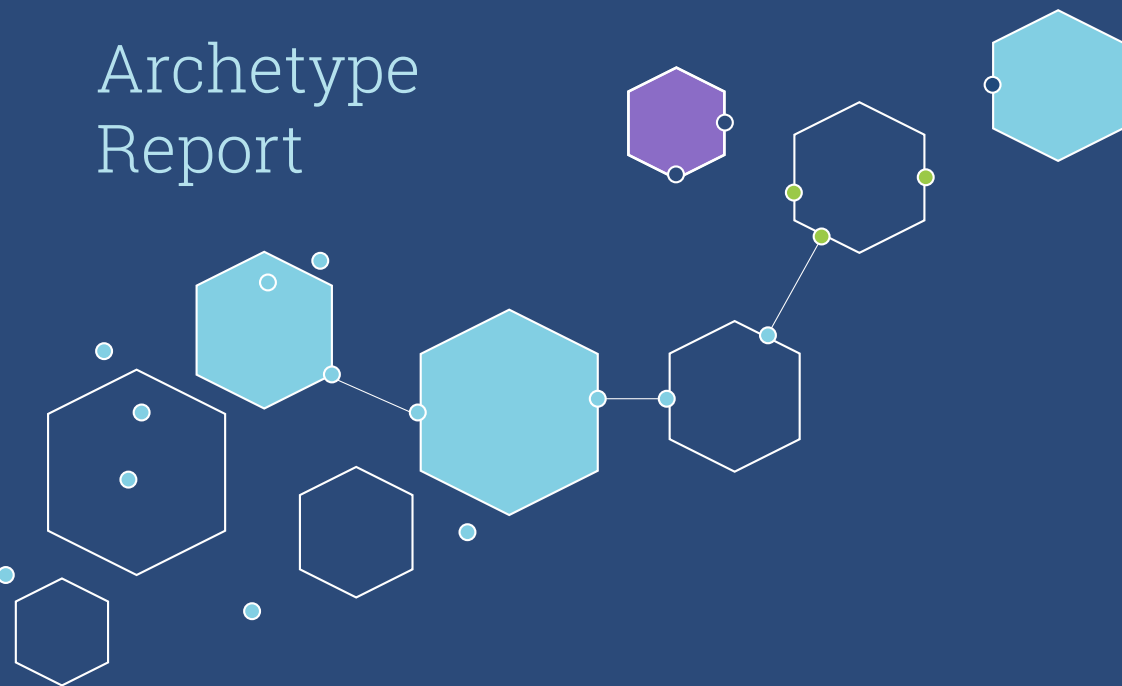




Next-Gen Private/Hybrid Cloud - Data Center Services & Solutions

Archetype Report



A research report
aligning enterprise
requirements and
provider capabilities

July 2021

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About this Report

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The research and analysis presented in this report includes research from the ISG Provider Lens™ program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of April 2021, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars (\$US) unless noted.

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ISG Provider Lens™ delivers leading-edge and actionable research studies, reports and consulting services focused on technology and service providers' strengths and weaknesses and how they are positioned relative to their peers in the market. These reports provide influential insights accessed by our large pool of advisors who are actively advising outsourcing deals, as well as large numbers of ISG enterprise clients who are potential outsourcers.

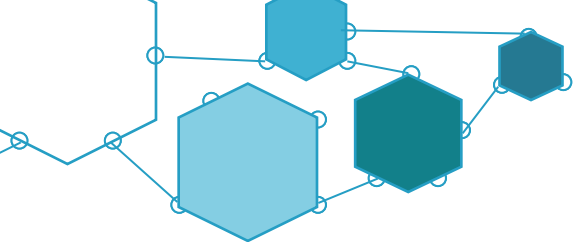
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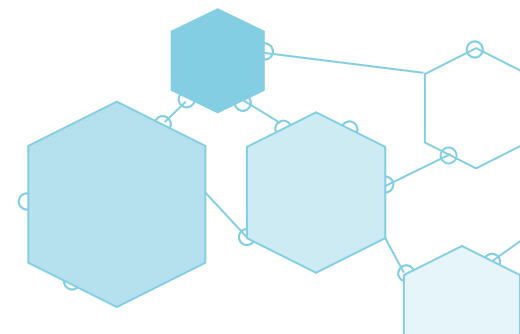
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EXECUTIVE SUMMARY

During the last financial year, the adoption of private and hybrid cloud has been gaining significant traction, and more popularly over public cloud. This has led to complex infrastructure environments and, therefore, enterprises are finding it difficult to manage these environments. ISG has observed that enterprises are still hesitant to move their critical workloads to the public cloud mainly due to security and control concerns, although they are ready to develop new greenfield applications on the cloud.

Enterprises have realized that outsourcing their IT infrastructure management is a great way to realign their IT with business objectives in the most cost-effective manner and to gain other benefits such: as access to specific IT skills not found in standard IT departments; availability of shared resources such as facilities managers, security, engineers and other technical staff; and help predict costs that can facilitate better budget control. While enterprises outsource the managed services, they are also looking to engage further with these service providers to have a long-term strategic relationship and innovate solutions specific to their industries.



The COVID-19 pandemic globally had a huge impact on IT outsourcing in terms of business decisions and technology investments planned for 2021. ISG has observed that the number of companies planning to outsource their managed services activities has been rising since the last year, and this trend is expected to continue in the future. In the beginning of the pandemic, enterprises scaled down some of their teams and froze IT outsourcing. A few months into the crisis, they introduced new ways of working in terms of delivering everything virtually and remotely and scaled up their IT development teams. Many enterprises that never outsourced are planning to begin outsourcing for the first time in 2021. Although enterprises have embraced a virtual managed services model, their delivery expectations have not changed. Most managed services are now virtually and remotely delivered, including transition and migration of workloads, sales and due diligence, meetings and more. These activities are being handled virtually and remotely because doing so is faster, better and cost effective. Managed hosting and colocation providers have also realized the importance of the cloud ecosystem, and have adapted their business models to integrate themselves as key parts of the IT infrastructure lifecycle.

Enterprises also saw a significant increase in calls to their service desks in the initial weeks of the pandemic, with connectivity, security requirements and application usage as the primary concerns. Service providers put in extra efforts and remotely supported incidents by providing all service desk agents with virtual desktops in the cloud, along with remote access to cloud-based service desk platforms, to ensure there were no disruptions in the services. During the COVID-19 pandemic, service providers have been able to reduce the need for in-person support by harnessing technologies such as virtual desktops, unified endpoint management, hyperconverged infrastructure (HCI) implementations and more.

ISG has also observed that while enterprises are selecting a service provider for their IT buying requirements, the top three key selection criteria included automation, a good track record with business continuity plans (BCP) and a robust infrastructure management platform. Automation, being a top priority, is required to handle complexity and monitor or manage costs. It is especially important for large global enterprises that have a siloed infrastructure across the globe.

As pointed out last year, the data center industry continues to face a talent shortage. Employees with vast experience have either retired or moved to management positions, while a small percentage of the workforce has less than five years of experience. Also, diversity has been challenging in this domain, as few women opt to join the data center business and comprise a fraction of the entire workforce in the industry. The industry should focus on hiring and training new candidates and creating an attractive proposition for becoming a part of this industry.

As there is a push from the enterprise community for outsourcing, the service providers are successful in bringing in new clients, especially those catering to the midmarket. Enterprises that are exploring the feasibility to outsource their managed infrastructure operations and are willing to experiment with the cloud are leading the market. However, this market segment is witnessing intense competition, which will eventually erode service margins. Service providers in this space have gone above and beyond to satisfy their customers.

Introduction

This ISG Provider Lens™ report summarizes the relative capabilities of 30 and private/hybrid cloud and data center outsourcing service providers and their abilities to address the requirements of four typical, frequently encountered categories of enterprise buyers (archetypes). Each archetype represents a unique set of business and technological needs and challenges. Our research found no shortage of providers with capabilities adequate to satisfy the private/hybrid cloud and data center outsourcing needs across most user archetypes. This is due, in large part, to two core realities regarding the archetypes:

1. The characteristics of each archetype are moving targets because the relative importance of different requirements can vary based on business and/or technological environment changes, while the core requirements rarely change.
2. Most enterprises, especially larger firms, tend to include multiple archetypes. Each archetype's requirements evolve based on business and technological changes, along with the presence and value of each archetype within the enterprise. Therefore, enterprises have an ongoing series of choices when it comes to service provider selection. They will need to strike a balance between optimal business value and relative cost of the provider engagement, integration and management. Market changes, new business models, fluctuating economic factors and other variables will continually add to and subtract from user needs.

About This Research

This report uses research and analysis from ISG's long-running work with enterprise clients and data center outsourcing services providers to identify and examine key changes, approaches and buyers of private and hybrid cloud managed services. ISG maps the user-side requirements to provider-side offerings and capabilities. Not every user enterprise has the same type of requirement. The report covers four buyer archetypes, detailed in the following sections, to identify and assess buy-side requirements for business value relative to provider-side offerings and capabilities. All revenue references are in U.S. dollars (\$US) unless noted.

The assessment methodology has been developed and refined over several years of working with buyers to understand and articulate their services requirements, and from working with services providers to understand how these buyer requirements influence the development of suitable solutions and go-to-market strategies.

This report assesses the capabilities of 30 providers. Some service providers that are typically included in our work are not included in this report because they were unable to or declined to participate. They may be included in future versions of this report, based on merit and on the services providers' willingness to provide current and relevant materials. Readers should not make any inferences based on a services provider's absence from this report.



How to Use This Report

This report is intended to provide advice founded on ISG's experienced-based, proprietary assessment of services providers' relative suitability to the needs of the typical private/hybrid cloud and data center outsourcing services customer. This advice is then applied across each of the four archetypes as profiled. No recommendation or endorsement is indicated, suggested or implied. Clients must make the decision to engage with any provider based not only on their specific, current workplace needs, but also on other factors such as cost, culture and timing.

This report is organized as follows:

Client Archetype Description: This section identifies and describes the most common user-side archetypes that we have identified in our ongoing research and analysis.

Assessments by Archetype: These sections first detail each of the client archetypes, along with the types of service offerings that each typically requires to realize the most business value. Each archetype section includes our assessment of the relevant capabilities and positioning of the services providers surveyed and interviewed. It covers the relative suitability of the providers for each archetype based on the information they have provided to ISG. These assessments are developed using the data, analysis and comparative methodology described in the Methodology section.

Methodology: In this section, we outline and explain how we developed and applied the data, analysis and insights provided in this report.

Please note: *This report presents services providers' known capabilities in the context of user enterprises' typical project needs (which are categorized as specific archetypes). This report is not meant to rank providers or to assert that there is one top provider with capabilities that can meet the requirements of all clients that identify themselves as a particular archetype.*

CLIENT ARCHETYPE DESCRIPTIONS

The client archetypes used in this report (and in our ongoing advisory and consulting engagements) represent the various types of clients ISG has observed and how we classify them according to their relative outsourcing maturity and objectives. Each client archetype encapsulates the typical characteristics of a specific type of buyer that is looking to outsource one or more processes or functions. The use of archetypes enables us to develop sets of characteristics and needs that can be applied uniformly and repeatedly across multiple environments, industries, provider types and other variables within one service line.

The archetypes are not meant to be comprehensive examinations of all potential or likely client situations and requirements. They are meant to provide a simple, relevant and repeatable set of user-side requirements, against which a similarly simple, relevant set of provider capabilities can be assessed.

The archetypes included in our reports are based on the most current marketplace knowledge regarding prevalent buy-side goals, resources, initiatives and requirements. Archetype characteristics are also developed (and refined over time) based on our advisory and consulting work with enterprise clients and IT service providers, and on our global business IT market research and advisory programs.

Note: None of the service providers that have participated in this study are confined to a particular archetype in terms of their portfolio of services. While each service provider is best suited to a particular archetype based on its strengths and other characteristics, they all have some elements of services that are applicable across all the archetypes.



TRADITIONAL ARCHETYPE

These clients have limited outsourcing experience and engage with service providers through selective outsourcing. They only outsource a fraction of their data center operations. This is done through one or a mix of the following options: staff augmentation, project-based work or partial outsourcing of ongoing infrastructure management. Cost optimization is the primary driver for such engagements. Project work typically includes standardization, consolidation and expansion of virtualization. Infrastructure automation and cloud enablement efforts are still evolving. While these clients are receptive to the benefits offered by public clouds, mid- to large-scale hybrid cloud deployment initiatives are in a rudimentary stage. Also, outsourcing contract sizes are not large.

MANAGED SERVICES ARCHETYPE

These clients have already signed small outsourcing contracts with a focus on cost optimization and are now willing to transfer greater operational responsibility to an outsourcing service provider. However, budgets are constrained, and deal sizes are not large (typically an annual contract value of \$5–\$15 million). While the focus is still on tactical service-level agreements (SLAs), these clients are willing to embrace some transformation elements such as making modest investments in automation and cloud. The outsourcing engagement scale is considerable compared to the Traditional archetype. The Managed Services client is willing to engage in a multi-sourcing model and work with midsize providers owing to their flexibility and responsiveness. In addition to optimizing ongoing infrastructure management, this archetype client also aims to achieve a moderate level of hybrid cloud adoption as a short- to mid-term goal.



A3

TRANSFORMATIONAL ARCHETYPE

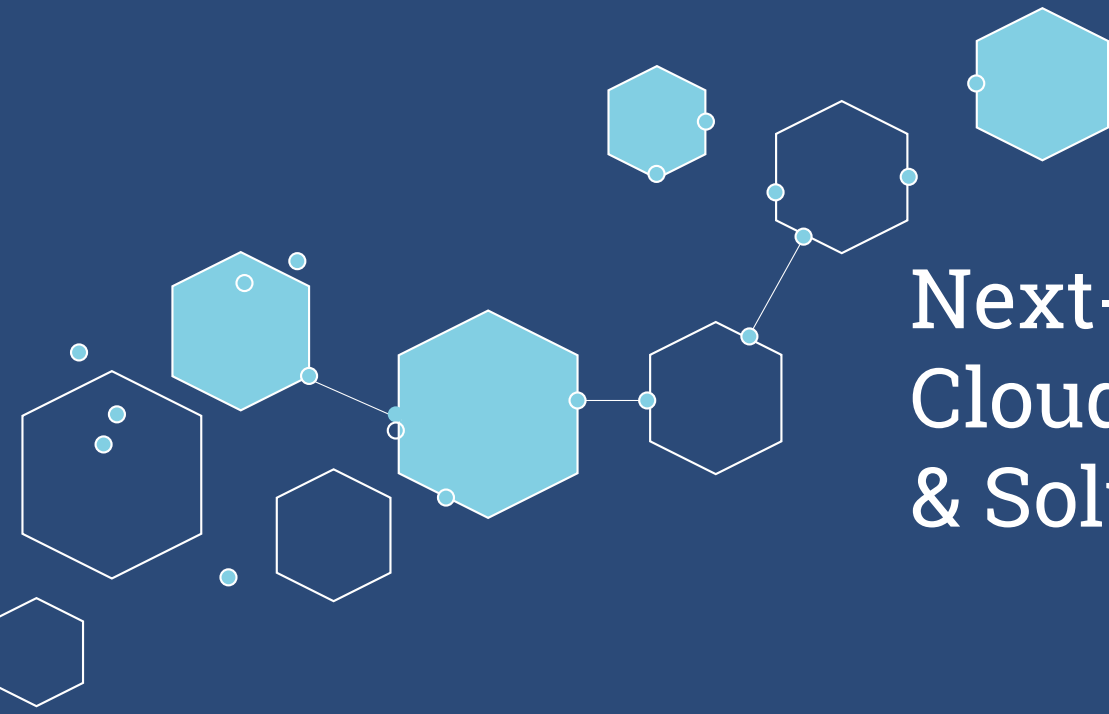
These clients are third-generation outsourcers with a preference for an optimized mix of onshore, nearshore and offshore delivery models. They are not severely constrained by budgets and undertake large transformation initiatives. They view service providers as strategic partners that would be willing to participate in gainshare deals. These clients want to provide IT services to their business units through an as-a-service, utility-based model. Accordingly, their short- to mid-term goals include increasing the adoption of private clouds that have core functionalities of self-service and high levels of automation, orchestration and chargeback. Long-term goals revolve around issues such as ensuring high availability of infrastructure resources to support business.

These clients seek to simplify hybrid IT management through unified monitoring and management tools. Advanced technologies such as machine learning (ML) are preferred for eliminating lower-level infrastructure management and service desk tasks. Transformational clients want service providers to adopt modern infrastructure management practices, such as the use of configuration management tools that codify and automate infrastructure management.

PIONEERING ARCHETYPE

These clients seek to extend their transformation initiatives with investments in software-defined networking (SDN) and storage, in some cases to attain an end-to-end software-defined data center (SDCC). They seek service providers with the knowledge and experience in software-defined enabling tools, including hyperconverged storage systems. They view service providers as strategic partners with a commitment to participate in gainshare deals that include business outcomes. These clients have already achieved a significant level of cloud adoption and are now focused on further optimizing their hybrid cloud management capabilities, including next-generation practices such as AI/ML-led automation, HCI implementations, and focus on containerization and workload portability. Pioneering archetype clients strive to improve the productivity of developers by providing an abstraction layer over complex infrastructure and its operations. They prefer service providers that can manage infrastructure with a DevOps-oriented approach.

A4



Next-Gen Private/Hybrid Cloud - Data Center Services & Solutions Archetypes



TRADITIONAL ARCHETYPE

These clients prefer to have substantial control over their IT organization. They view outsourcing as a means to fill certain gaps in skills through staff augmentation or by offloading a part of the management of their non-mission critical IT assets, primarily from a cost containment perspective. They outsource small- to midsize projects such as standardization or incrementally increasing the virtualization footprint. Traditional archetype clients evaluate service providers primarily on their ability to deliver these services cost effectively. Ongoing infrastructure management for some of their IT assets is primarily achieved through remote infrastructure management (RIM) services from low-cost delivery centers. Infrastructure transformation initiatives are in the nascent stage. Service quality and alignment with industry-standard practices such as information technology infrastructure library (ITIL) are still evolving.

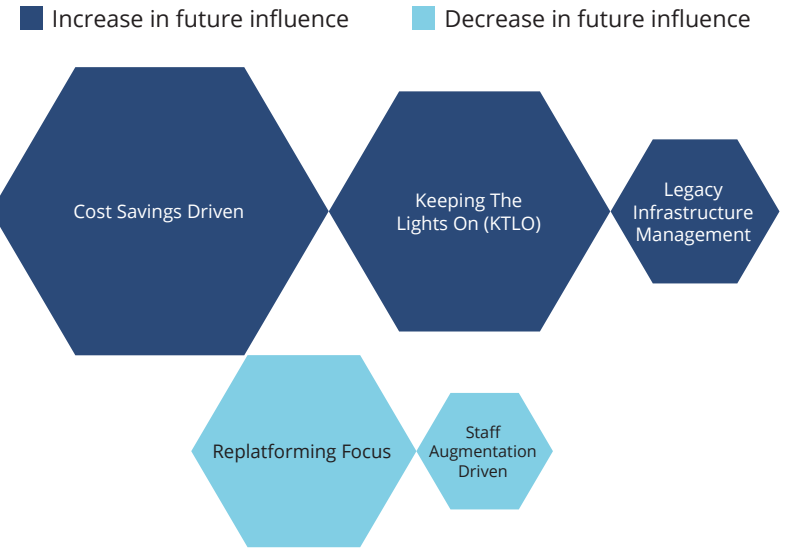
A Traditional Archetype: Client Objectives

- Infrastructure monitoring and management services to identify cost drivers and improve efficiency
- Project work such as standardization and virtualization to drive up capacity utilization and set up simplified infrastructure management practices
- Requirement of service providers with strong knowledge of technology and experience in managing virtualized environments



Fig 1

Traditional Archetype: Influence of Provider Capabilities



Size based on relative current importance in the archetype profile



Traditional Archetype Leaders



Score 4 out of 4



Score 3 out of 4



Score 2 out of 4



Score 1 out of 4

Of the 30 service providers included in our research, ISG found nine that stand out above the others as matching the traditional services buyers based on our assessment of their capabilities. These nine, referred to as Archetype Leaders, and their relevant capabilities are presented in Figure 2 and briefly examined in the following sections.

Note: The service providers listed are arranged in alphabetical order. No ranking is implied.

AI	Traditional Archetype Leaders				
	Staff augmentation driven	Replatforming focus	Legacy infrastructure management	Keeping the lights on (KTLO)	Cost savings driven
Atos					
Coforge					
Ensono					
HCL					
Lumen					
Microland					
Persistent Systems					
TCS					
UST					

OTHER NOTEWORTHY PLAYERS – TRADITIONAL ARCHETYPE

Some other providers scored high in one or more areas that are important for the Traditional archetype client. However, they were not categorized as Leaders for this archetype because they did not rate high in enough categories.

Noteworthy providers (services providers with a high score in one or more categories) for Traditional archetype clients are:

Fig 3 Other Noteworthy Players – Traditional Archetype



Staff augmentation driven

Mindtree

Tech Mahindra

Zensar Technologies

Replatforming focus

Flexential

Fujitsu

Unisys

Legacy infrastructure management

DXC Technology

Fujitsu

IBM

NTT

Unisys

Keeping the lights on (KTLO)

DXC Technology

Hexaware

Rackspace Technology

T-Systems

Wipro

Cost savings driven

Cognizant

Hexaware

Mindtree

Mphasis

Zensar Technologies

A2 MANAGED SERVICES ARCHETYPE

These clients have prior experience in outsourcing a part of their data center operations and are willing to transfer additional responsibility to service providers. While their focus is mainly on cost reduction, they also consider it important to improve IT productivity by leveraging the expertise of an outsourcing partner. This archetype is looking for a broader suite of managed services with some transformation elements. Ongoing monitoring and management operations have evolved considerably, and the Managed Services archetype client is now considering ways to introduce automation to reduce or eliminate some mundane tasks. With cloud adoption accelerating, the focus is now on gradually increasing its penetration within organizations with a mid- to long-term vision. Although SLAs are still tactical, this archetype may want to experiment with strategic, outcome-focused SLAs. Service standardization is being enabled through industry-standard practices such as ITIL. Outsourcing contract sizes range from medium to large.

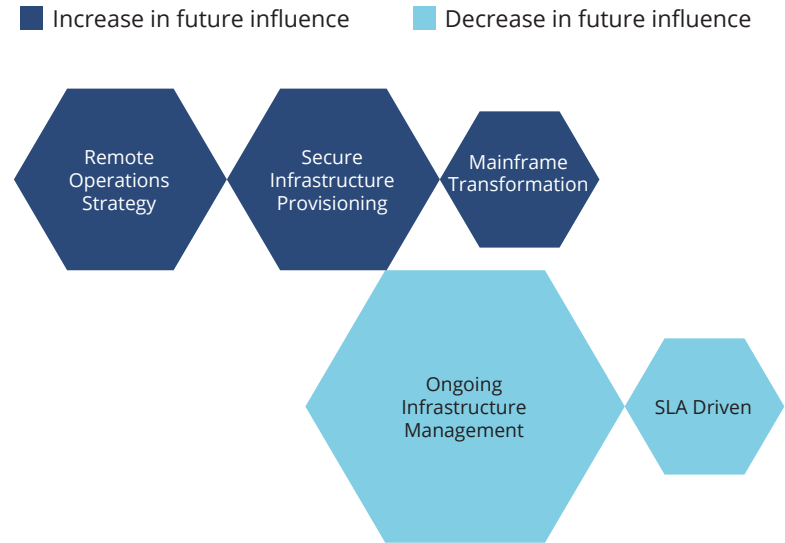
A2 Managed Services: Client Objectives

- Ability to scale up operations
- Ongoing infrastructure monitoring from a mix of low-cost and nearshore locations
- Extending virtualized environment to a cloud-based environment, offered internally through a service catalog
- Ability to centrally manage infrastructure resources spread across legacy, private cloud, colocation and public cloud environments
- Automation tools and services to relieve L1 staff of mundane IT work and reduce costs



Fig 4

Managed Services: Influence of Provider Capabilities



Size based on relative current importance in the archetype profile

Fig 5

Managed Services Leaders

● Score 4 out of 4

◐ Score 3 out of 4

◑ Score 2 out of 4

◒ Score 1 out of 4

Of the 30 service providers included in our research, ISG found 11 that stand out above the others as matching the managed services based on our assessment of their capabilities. These 11, referred to as Archetype Leaders, and their relevant capabilities are presented in Figure 5 and briefly examined in the following sections.

Note: The service providers listed are arranged in alphabetical order. No ranking is implied.

A2	Managed Services Leaders				
	Ongoing infrastructure management	SLA driven	Remote Operations Strategy	Mainframe Transformation	Secure infrastructure provisioning
Atos	◑	◑	◑	●	●
DXC	◑	◑	●	●	◑
Ensono	◑	◑	◑	●	●
Fujitsu	◑	◑	◑	●	●
Hexaware	●	◑	●	◑	◑
Mindtree	●	●	●	●	◑
Mphasis	●	◑	●	◑	●
Rackspace Technology	●	●	●	◑	◑
Tech Mahindra	●	◑	●	◑	◑
Unisys	●	◑	●	●	●
Zensar Technologies	●	◑	●	◑	●

Unisys

Unisys is a global IT services provider with its headquarters in Pennsylvania, U.S. The company offers data center consolidation, migration, optimization and automation services, along with transformation and modernization of legacy infrastructure. Unisys has 12 cloud operation centers globally and employs approximately 3,500 people worldwide to offer infrastructure services. Unisys has considerable experience in large-scale management services, where the key features are high availability, high transaction volume and high security. The global presence of advisors and solution delivery experts, with capabilities to work with clients continually to deploy, optimize and manage infrastructure operations, makes Unisys a credible partner.

Unisys' CloudForte® solution accelerates migration to the cloud and modernizes applications efficiently. It has also helped enterprises optimize their hybrid or multi-cloud infrastructure costs. Its features include automated governance and workflow, automated provisioning, self-service blueprints, secure environments, cost management, reporting and advanced analytics. Unisys continues to focus on harnessing machine learning for intelligent capacity management and incident forecasting in a hybrid and multi-cloud environment with the aim to reduce incident-related tickets by up to 75 percent. Unisys's Stealth® is a proprietary security software suite that includes a separate offering for cloud infrastructure, Stealth(cloud)™, which extends protection across the hybrid cloud and on-premises infrastructure of an enterprise, offering a zero-trust network. The high focus on security enables Unisys to operate in highly regulated environments with a skilled workforce and secure solutions.



OTHER NOTEWORTHY PLAYERS – MANAGED SERVICES ARCHETYPE

Some other providers scored high in one or more areas that are important for the Managed Services archetype client. However, they were not categorized as Leaders for this archetype because they did not rate high in enough categories.

Noteworthy providers (services providers with a high score in one or more categories) for Managed Services archetype clients are:

Fig 6 Other Noteworthy Players – Managed Services Archetype



Ongoing Infrastructure Management

Cognizant
Infosys
Persistent Systems
Wipro

SLA-driven

Lumen
Microland
UST

Remote Operations Strategy

Capgemini
LTI
Microland
Persistent Systems
TCS
T-Systems
Wipro

Mainframe Transformation

Capgemini
IBM
NTT
TCS

Secure Infrastructure Provisioning

Accenture
Coforge
Cognizant
HCL
IBM
NTT



TRANSFORMATIONAL ARCHETYPE

These clients have set an agenda to provide IT as a utility service across the organization. They have a decent level of cloud adoption and a desire to go further with features such as policy-based self-service provisioning, a robust governance structure, and chargeback mechanisms for metered billing by business units. They undertake massive transformational projects and prefer to work with service providers that have achieved a significant scale of operations. Transformational archetype clients want to achieve high hybrid cloud adoption levels and prefer a multi-cloud environment that is centrally managed using sophisticated cloud management platforms. They also aspire to achieve workload portability across some of their multi-cloud components.

Transformational archetype clients have diverse technology requirements and prefer system integrators that can aggregate the best-of-breed technologies and offer unified solutions. Considering the scale and complexity of their environments, these clients need consulting services and seek providers with a strong partner ecosystem to consult on a wide range on emerging technologies. Automation initiatives include the adoption of machine learning technologies to incorporate self-healing systems for infrastructure resiliency.

A3 Transformational Archetype: Client Objectives

- Driving down manual IT intervention in operations through self-service models via service catalog
- Hybrid cloud model adoption, including multiple public cloud providers to avoid vendor lock-in
- Migrating mission-critical workloads such as SAP from dedicated equipment to a hybrid cloud solution
- Reducing manual infrastructure management practices through automation
- Aggressive SLAs around MTTA and MTTR, as well as business outcomes
- Considerably reduce investments in the run part of their IT management activities and redirect savings into the change part



Fig 7

Transformational Archetype: Influence of Provider Capabilities

■ Increase in future influence ■ Decrease in future influence



Size based on relative current importance in the archetype profile

Fig 8 Transformational Archetype Leaders

● Score 4 out of 4

◐ Score 3 out of 4

◑ Score 2 out of 4

◒ Score 1 out of 4

Of the 30 service providers included in our research, ISG found seven that stand out above the others as matching the transformational based on our assessment of their capabilities. These seven, referred to as Archetype Leaders, and their relevant capabilities are presented in Figure 8 and briefly examined in the following sections.

Note: The service providers listed are arranged in alphabetical order. No ranking is implied.

A3	Modernization of legacy infrastructure	Hybrid cloud management	Outcome based pricing	Industry specific solutions	Customer experience focus
Accenture	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Capgemini	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Cognizant	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
HCL	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Infosys	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
TCS	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Wipro	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>

OTHER NOTEWORTHY PLAYERS – TRANSFORMATIONAL ARCHETYPE

Some other providers scored high in one or more areas that are important for the Transformational archetype client. However, they were not categorized as Leaders for this archetype because they did not rate high in enough categories.

Noteworthy providers (services providers with a high score in one or more categories) for Transformational archetype clients are:

Fig 9 Other Noteworthy Players – Transformational Archetype



Modernization of Legacy Infrastructure

Atos
DXC Technology
Ensono
Fujitsu
IBM
Mindtree
Unisys

Hybrid Cloud Management

Coforge
Hexaware
IBM
Mindtree
Mphasis
Zensar Technologies

Outcome-based pricing

Rackspace Technology

Industry-specific Solutions

Ensono
IBM
Microland
Tech Mahindra
Unisys

Customer Experience Focus

Coforge
Hexaware
Mphasis
Persistent Systems
Rackspace Technology
Zensar Technologies

A4 PIONEERING ARCHETYPE

These clients have fewer budget constraints than other archetypes and are focused on strategic initiatives that are aimed at business process enhancement. They are at the forefront of IT management practices among their peers. Tactical priorities, such as near-term management cost reduction, are lower on the agenda as compared to improving developer productivity by supporting a DevOps-oriented infrastructure with programmatic capabilities. By creating an abstraction layer over the underlying infrastructure, these clients seek to achieve faster time to market and simplified hybrid cloud management. The move towards such an environment may be carried out through a gradual transformation of data center components, or relatively quickly using single-vendor solutions (for example, hyperconverged solutions). Such clients also find this similar to achieving a public cloud-like experience in their own data centers in the long term, with their cost per virtual machine dropping, as scale and process maturity evolve.

A4 Pioneering Archetype: Client Objectives

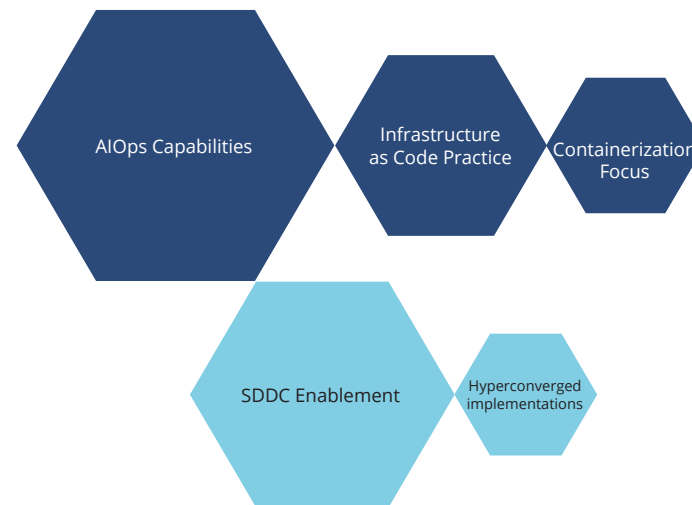
- Focus on managing application delivery and reducing effort to manage the underlying infrastructure
- Software-defined infrastructure for operational agility
- Significant hybrid cloud adoption, including workload portability wherever feasible
- Infrastructure automation capabilities to support DevOps environments
- View outsourcing as a strategic partnership activity and willing to engage in outcome-based deals



Fig 10

Pioneering Archetype: Influence of Provider Capabilities

■ Increase in future influence ■ Decrease in future influence



Size based on relative current importance in the archetype profile

Fig 11 Pioneering Archetype Leaders

● Score 4 out of 4 ● Score 3 out of 4 ● Score 2 out of 4 ● Score 1 out of 4

Of the 30 service providers included in our research, ISG found six that stand out above the others as matching the pioneering archetype based on our assessment of their capabilities. These six, referred to as Archetype Leaders, and their relevant capabilities are presented in Figure 11 and briefly examined in the following sections.

Note: The service providers listed are arranged in alphabetical order. No ranking is implied.

A4	SDDC enablement	Infrastructure as Code practice	AIOps capabilities	Containerization focus	Hyperconverged implementations
Accenture	●	●	●	●	●
HCL	●	●	●	●	●
IBM	●	●	●	●	●
Infosys	●	●	●	●	●
TCS	●	●	●	●	●
Wipro	●	●	●	●	●

OTHER NOTEWORTHY PLAYERS – PIONEERING ARCHETYPE

Some other providers scored high in one or more areas that are important for the Pioneering archetype client. However, they were not categorized as Leaders for this archetype because they did not rate high in enough categories.

Noteworthy providers (services providers with a high score in one or more categories) for Pioneering archetype clients are:

Fig 12

Other Noteworthy Players – Pioneering Archetype



SDDC Enablement	Infrastructure as Code Practice	AIOps Capabilities	Containerization Focus	Hyperconverged Implementations
Atos	Hexaware	Capgemini	Coforge	Atos
Fujitsu	Rackspace Technology	Coforge	Cognizant	DXC Technology
Tech Mahindra		Cognizant	Mphasis	Fujitsu
Unisys		LTI	Rackspace Technology	Unisys
		Zensar Technologies		

SERVICE PROVIDERS ACROSS ARCHETYPES

	Traditional Archetype	Managed Services Archetype	Transformational Archetype	Pioneering Archetype
Accenture	☐	✓	*	*
Atos	*	*	✓	✓✓
BT	☐	☐	☐	☐
Capgemini	☐	✓✓	*	✓
Coforge	*	✓	✓✓	✓✓
Cognizant	✓	✓✓	*	✓✓
DXC	✓✓	*	✓	✓
Ensono	*	*	✓✓	☐
Flexential	✓	☐	☐	☐
Fujitsu	✓✓	*	✓	✓✓

* = Leaders

✓ = Noteworthy Providers (number of check marks indicates the provider receiving full Harvey balls and also indicates the degree of alignment with the client archetype)

☐ = Other Providers (the service provider did not qualify for a leader or a noteworthy mention for the client archetype)

NOTE: All Service Providers evaluated for this report have the abilities to service all four archetypes, only those with the best fit to the capability requirements were identified as Leaders or Noteworthy Providers

SERVICE PROVIDERS ACROSS ARCHETYPES

	Traditional Archetype	Managed Services Archetype	Transformational Archetype	Pioneering Archetype
HCL	*	✓	*	*
Hexaware	✓✓	*	✓✓	✓
IBM	✓	✓✓	✓✓✓	*
Infosys	□	✓	*	*
LTI	□	✓	□	✓
Lumen	*	✓	□	□
Microland	*	✓✓	✓	□
Mindtree	✓✓	*	✓✓	□
Mphasis	✓	*	✓✓	✓
NTT	✓	✓✓	□	□

* = Leaders

✓ = Noteworthy Providers (number of check marks indicates the provider receiving full Harvey balls and also indicates the degree of alignment with the client archetype)

□ = Other Providers (the service provider did not qualify for a leader or a noteworthy mention for the client archetype)

NOTE: All Service Providers evaluated for this report have the abilities to service all four archetypes, only those with the best fit to the capability requirements were identified as Leaders or Noteworthy Providers

SERVICE PROVIDERS ACROSS ARCHETYPES

	Traditional Archetype	Managed Services Archetype	Transformational Archetype	Pioneering Archetype
Orange Business Services	☐	☐	☐	☐
Persistent Systems	*	✓✓	✓	☐
Rackspace Technology	✓	*	✓✓	✓✓
TCS	*	✓✓	*	*
Tech Mahindra	✓	*	✓	✓
T-Systems	✓	✓	☐	☐
Unisys	✓✓	*	✓✓	✓✓
UST	*	✓	☐	☐
Wipro	✓	✓✓	*	*
Zensar Technologies	✓✓	*	✓✓	✓

* = Leaders

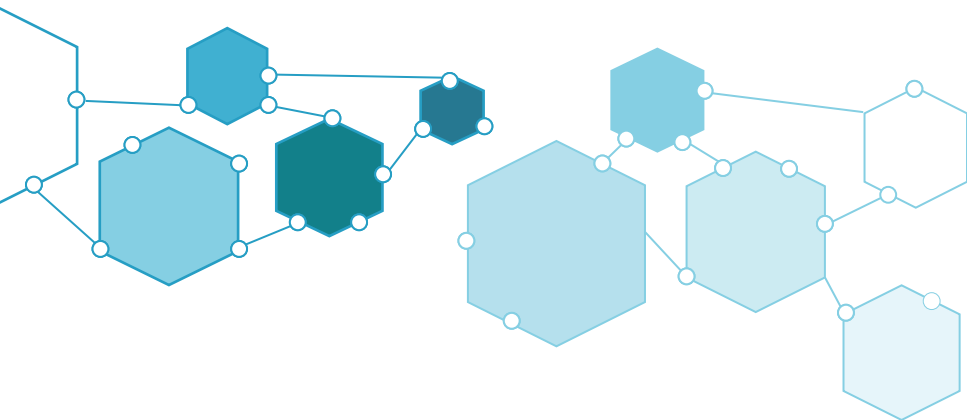
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NOTE: All Service Providers evaluated for this report have the abilities to service all four archetypes, only those with the best fit to the capability requirements were identified as Leaders or Noteworthy Providers

GUIDANCE

This report highlights four different client archetypes for private/hybrid cloud and data center managed and transformation services. The archetypes are based on the journey that a client organization takes from siloed data center components to standardization, consolidation, virtualization and cloud enablement. The associated change is not just from a technology standpoint but also encompasses infrastructure management practices that evolve along this journey.



The report also distinguishes the archetypes based on buyer objectives and constraints. For example, the Traditional archetype is bound by budget constraints and views IT more as a support function than a business enabler. This archetype has limited outsourcing experience and prefers a phased approach to transfer responsibility to a service provider. On the other hand, the Managed Service archetype has prior outsourcing experience and is comfortable in offloading significant control over data center management. Transformational and Pioneering archetypes have a different mindset based on years of outsourcing experience, expertise and relatively lesser budget constraints. They view service providers as strategic partners that can innovate and participate in gainshare deals based on business outcomes.

As more clients embrace infrastructure transformation initiatives, the Traditional archetype may gradually become less visible. This is because quite a few organizations have already achieved a significant virtualization footprint and now focus on achieving an agile infrastructure state through cloud enablement. Managed services clients that outsourced large portions of infrastructure monitoring and management services are now turning to automation to reduce the dependency on labor-intensive outsourcing models. Transformation projects that span cloud advisory services, private and hybrid cloud deployments, application migration and other services are becoming more mainstream. Software-defined infrastructure and hyper-converged infrastructure implementations are still in its early stages of adoption, and in the next few years, we should see accelerated activity in this area.

Enterprise Leadership Actions

Leverage mature providers for transformation engagements: Many enterprises are realizing that outsourcing their infrastructure operations helps them focus more on their business and also to lower costs. The tools developed for assessing, planning and automating migrations have reached the desired level of maturity and reliability that allow for predictive results. The same tools provide a better understanding of the benefits of moving to the cloud, including the architecture and financial impacts, providing better business cases. This enables enterprises to make decisions regarding which workloads to move to the cloud and which ones to retain in the existing infrastructure, leading to improved operating efficiencies. Enterprises need to trust the service providers in helping with their digital transformation journey.

Move to a strategic partnership with service providers: While selecting an outsourcing partner, enterprises must give preference to providers that offer long-term benefits by providing a five-year roadmap for transformation engagements. Considering long-term relationships and continued business, providers must be able offer cost savings and better customer experience by automating IT infrastructure managed services. Enterprises must also look for providers that can jointly invest in developing solutions and work on a gainshare model based on business outcomes, along with having a joint go-to-market strategy. It seemingly becomes a win-win strategy for both the enterprise client and the service provider.

Engage with midmarket providers: First generation outsourcers that are concerned with costs should evaluate hybrid cloud services by considering the exit clause, as these enterprises mainly opt for short-term contracts. Enterprise clients here can look into the providers to the Traditional archetype that have a medium market capitalization and provide the opportunity to determine how they can leverage them more cost efficiently and offer enhanced customer experience. Midmarket providers are used here as they are determined to get more business and put in extra efforts for client satisfaction in order to retain and gain additional business in the upcoming years.

Provider Leadership Actions

Invest in security solutions: In the last year, cyberattacks on enterprises have significantly grown, and ISG believes that they will continue to grow even more in the upcoming years. Especially as the world is increasingly working remotely, cybersecurity has become of prime importance. Service providers should focus on building new solutions and intellectual properties for providing a secure environment for the client's data and infrastructure, because in the coming years enterprises will select providers that have a good track record of securing clients' digital assets.

Industry-specific solutions: While all industries need technology, technology does not play the same role in all of them. Service providers need to come up with industry- and vertical-specific solutions and adhere to the compliance, regulations and guidelines of that particular industry, so that they can cater to enterprise clients in it. This will instill confidence in enterprise clients that the service provider has deep knowledge and expertise about the client's industry rules and regulations.

Automation through AI and machine learning technologies: Automation is not new to this domain, and a basic level of automation has been in place several years. However, in the last few years, we have seen several providers conducting proofs of concepts for clients and were successful in achieving better results. Enterprises are preparing for the adoption of AI solutions and are seeking new metrics and indicators such as cost optimization, utilization levels, response time and automation levels. Service providers must focus and invest in AI and machine learning technologies for automating their infrastructure managed services, which will allow them to help enterprises gain significant benefits such as improving efficiencies of IT operations, predicting failures, optimizing processes, detecting anomalies, analyzing defects, and more in complex hybrid cloud environments.

Reskill/upskill employees: Providers with large-scale operations can offer skilled practitioners; however, that cannot compensate for lower levels of quality as it cannibalizes their business. As the industry is falling short of having talented pool of engineers, providers need to bring in new resources and train them to reduce the potential skills gap.

Appendix



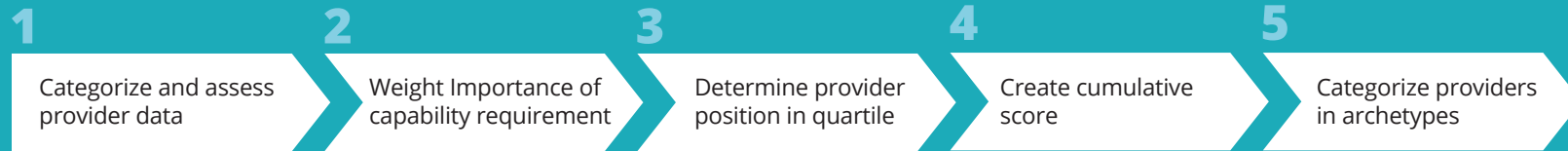
APPENDIX

Methodology

As previously noted, this report uses four archetypal sets of buy-side client requirements to assess the relative suitability of private/hybrid cloud and data center outsourcing services providers. Data regarding the providers' capabilities and positioning was provided to ISG via briefings, ISG advisor interviews and surveys of service providers, including client references if appropriate.

Private/hybrid cloud and data center outsourcing services providers (SPs) shared their data across different service dimensions through the research initiatives noted above. These dimensions cover their technological competency, preferred engagement models, scope of work performed, service capability, functional expertise and industry and regional presence.

Report Methodology







Methodology Details

- 1 The data provided by the services providers were categorized and assessed according to the private/hybrid cloud and data center outsourcing services requirements described for each of the four client archetypes. In cases in which provider descriptions and data were not worded as precisely as our archetype requirements, our private/hybrid cloud and data center outsourcing services analysts relied on their expertise and experience to classify provider capabilities.
- 2 Each archetype capability requirement was weighted based on its relative importance to that archetype's typical requirements. Weightings for each archetype's requirements add up to a total of 100 percent. Specific weightings are not disclosed in this report. The relative importance of each capability requirement is depicted in illustrations at the beginning of each archetype section using differently sized hexagon icons.
- 3 Once the relative ability of each services provider was assessed for each of the archetype requirements, each provider was then positioned in a relevant quartile (e.g., top 25 percent, second 25 percent and so on). The top quartile was awarded a numerical "capability score" of 4/4; the second quartile earned a score of 3/4, the third quartile earned a score of 2/4, and the fourth quartile earned a score of 1/4. Those with no capabilities to meet the archetype requirements were not included in the assessment.
- 4 Provider capability scores from Step 3 were then multiplied by the weightings developed for each client archetype requirement in Step 2. The results for each provider were then totaled to develop a cumulative score for each service provider. These cumulative scores are not disclosed in this report.
- 5 The cumulative scores were then used to identify the services providers most well suited for each archetype's requirements. These providers are listed alphabetically and briefly profiled in each archetype section. Where relevant, additional services providers with noteworthy capabilities are also mentioned (e.g., providers that may have scored well on a specific requirement but not across all the requirements for that archetype).

Please note: This report simply presents services providers' known capabilities in the context of user enterprises' typical project needs. This report is not meant to rank providers or to assert that there is one top provider with abilities that meet the requirements of all clients that identify themselves with a particular archetype.

Fig 13 Provider Capability Scores as Harvey Balls

Score	Harvey Ball representation
Score 4 out of 4	
Score 3 out of 4	
Score 2 out of 4	
Score 1 out of 4	

The cumulative score for each of the selected services providers against each archetype requirement is represented using Harvey Balls. For example: if a provider is assessed with a score of 4 out of 4, then a full Harvey Ball is used to represent their capability against that requirement. Similarly, if a provider is assessed a score of 1 out of 4, then a one-quarter Harvey Ball is used, as shown in below.

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Shashank Rajmane has more than a decade of extensive research experience and has led the ISG Provider Lens™ studies — Public Cloud Services & Solutions, and Private/Hybrid Cloud & Data Center Outsourcing Services. He leads the efforts for the U.S. geography along with global geography reports. Apart from authoring these reports, Shashank has been part of many consulting engagements and helps ISG's enterprise clients select the right service providers and vendors based on their IT buying requirements. He is also responsible for authoring whitepapers, thought leadership papers, briefing notes, blogs and service provider intelligence reports, especially in the next-generation cloud and infrastructure services domain. He has also authored several research papers on best practices for choosing cloud vendors and cloud management platforms, along with writing several whitepapers on the cloud industry.



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ISG Provider Lens™ Archetype Report: Next-Gen Private/Hybrid Cloud - Data Center Services & Solutions

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