

Market Trends: Application Service Providers Must Innovate to Deliver More Value Rapidly in a Digital World

Published: 28 February 2017 **ID:** G00318827

Analyst(s): Susan Tan, Allie Young, Patrick J. Sullivan

Successful application service providers help clients innovate and transform to digital businesses while freeing budget to fund the changes. Technology product management leaders must innovate offerings and develop new capabilities while using bimodal and microservices approaches to drive value.

Key Findings

- Shortening time to value and delivering greater value to the business are key themes that buyers look for in an application service provider in the digital world.
- A tectonic shift is underway that changes service providers' operational models from labor-centric delivery to more automated delivery and higher asset leverage.
- The need to pull together a wide range of skills, competencies, technologies and capabilities dynamically and rapidly to provide a successful digital solution requires application service providers to make acquisitions as well as expand participation in different types of ecosystems.
- Emerging opportunities for service providers exist in helping enterprises apply disruptive technologies such as AI, IoT, AR/VR, 3D printing and blockchain for business value.

Recommendations

How technology product management leaders can exploit IT services market dynamics:

- Create a portfolio of bimodal offerings inclusive of Mode 1 offerings that help clients optimize costs and modernize back-end systems and Mode 2 offerings that explore and exploit new digital opportunities to shorten time and deliver greater value to the business.
- Invest in intellectual property to rapidly assemble and adapt solutions to each client's unique needs, including using microservices, assets and libraries of components, as well as accelerating automation and infusing AI into assets.

- Build into your strategic plans acquisitions and new ecosystem participation to fill in gaps in your competencies.
- Improve your ability to capture opportunities presented by new and emerging disruptive technologies by establishing labs and centers of excellence, engaging early adopter clients, and building prototypes with partners and/or clients to demonstrate the application of technologies.

Table of Contents

Introduction.....	2
Market Trend.....	4
Coexistence: A Tale of Two Application Services.....	4
Providers' Operating Models Change to Deliver Speed, Innovation and Impact.....	5
Business Buyers Demand an Iterative Approach With Early Realization of Value.....	5
Accelerators and Automation Complement Microservices Development on Cloud Platforms for Speed and Agility.....	6
Intelligent Automation Services Drive Opportunities but Require New Capabilities and Investments.....	7
Acquisitions and Ecosystem Expansion Accelerate Access to New Capabilities.....	8
Disruptive Technologies Create Long-Term Opportunities.....	11
Vendors to Watch.....	12
Gartner Recommended Reading.....	14

List of Tables

Table 1. Intelligent Automation Services Opportunities for Service Providers.....	8
Table 2. Three Approaches to Accelerate Access to New Capabilities.....	10

List of Figures

Figure 1. Top Drivers to Undertake the Following IT Initiative (Up to Three Responses Allowed).....	3
Figure 2. Bimodal Approaches.....	4

Introduction

Through 2019, every \$1 enterprises invest in innovation will require an additional \$7 in core execution.

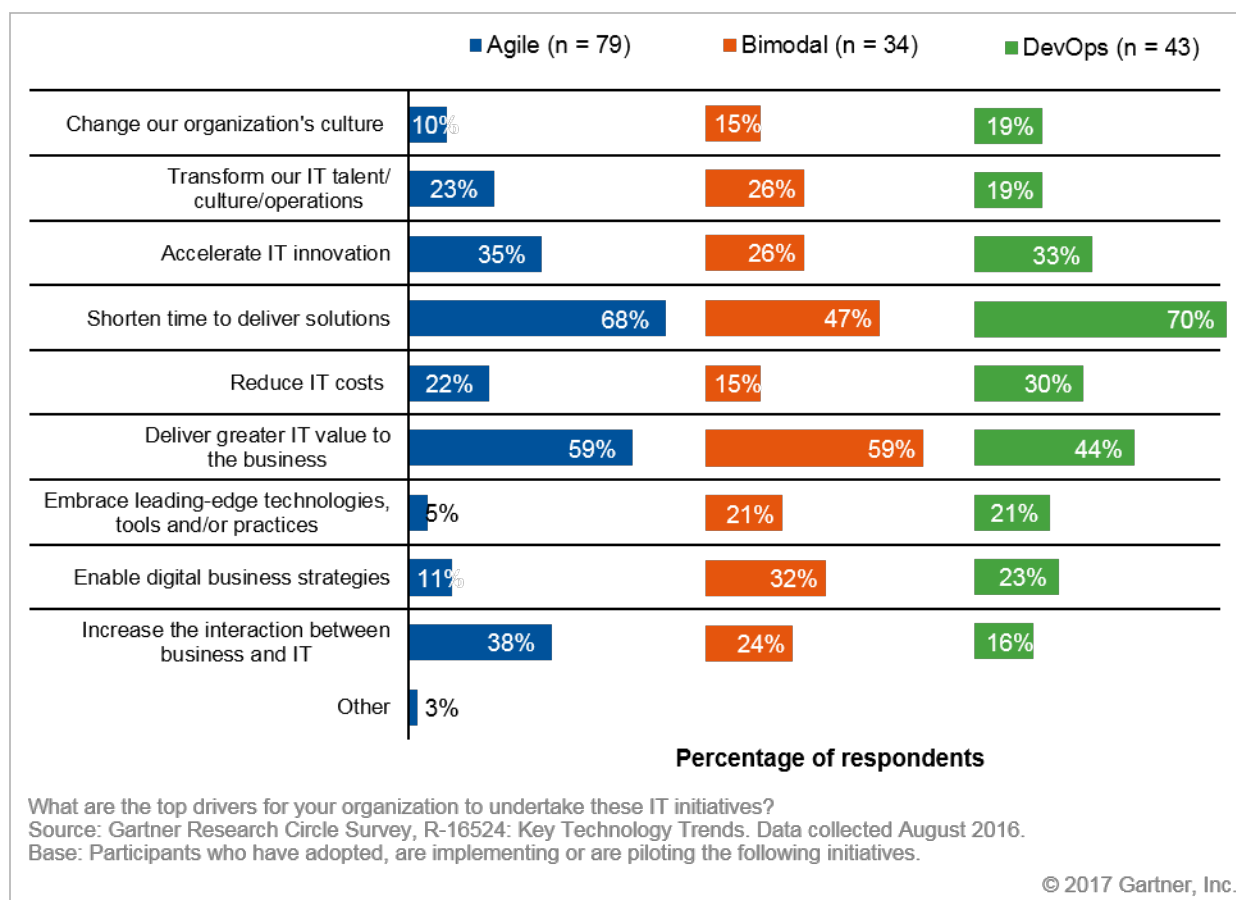
Through 2020, 50% of IT services market growth will be directly attributable to digital technologies.

By 2020, 30% of new solutions implemented by IT services providers will include artificial intelligence (AI) technologies.

Enterprises are facing an unprecedented level of change, brought about by convergence of the major forces of digitalization, globalization and a plethora of disruptive technologies and competitors. More than ever, businesses need to innovate and respond to their changing environment quickly and appropriately. IT is seen as an integral part of executing their response, but all too often, IT initiatives take too long and deliver too little value.

Figure 1 shows the top drivers for organizations to undertake three specific IT initiatives — agile, DevOps and bimodal. It illustrates how businesses want their IT initiatives to deliver greater value to the business and to shorten the time to deliver solutions.

Figure 1. Top Drivers to Undertake the Following IT Initiative (Up to Three Responses Allowed)



Source: Gartner (February 2017)

Shortening time to value and delivering greater value to the business are key themes that will shape the application service market in a digital world. Past values of delivering low-cost services, meeting

contract metrics, and keeping pace with technology changes remain important but are no longer sufficient to win the trust of critical clients that are leading change in their industries.

Technology product management leaders responsible for application services must use bimodal, agile, DevOps and other disruptive approaches to transform how they sell and deliver application services to ensure their relevance to clients as the ensuing market trends play out fully in the next one to three years.

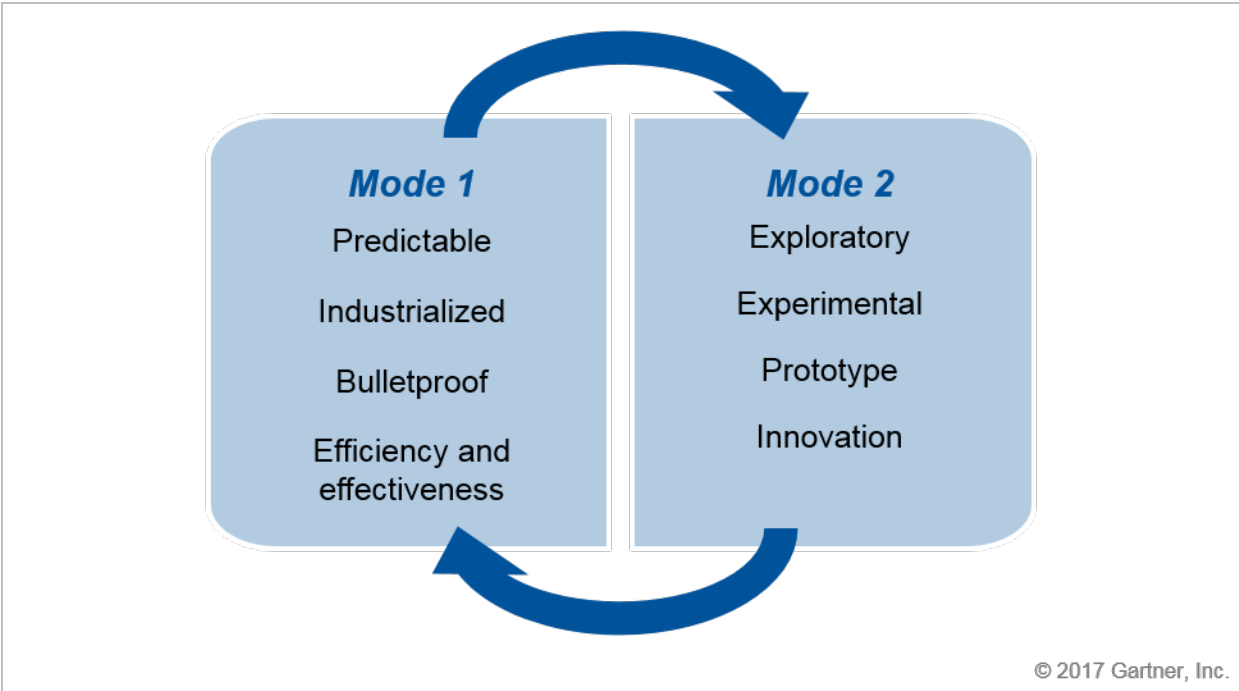
Market Trend

Coexistence: A Tale of Two Application Services

Application services must address two distinct business realities that clients prioritize: (1) achieve cost savings from optimized IT environments, including renovating the core systems, and (2) "exploit the new" with IT innovation. Application service providers cannot be a "one-trick pony" — supporting one goal but ignoring the other. They must support the innovative, experimental solutions supporting digital businesses at the same time that they optimize and manage the industrialized nondifferentiating applications supporting the back office. These two modes of application services are the new norm for competitiveness.

Figure 2 shows bimodal approaches.

Figure 2. Bimodal Approaches



Source: Gartner (February 2017)

- The juxtaposition of these two seemingly polar opposite goals must be aligned seamlessly to achieve a modernized and holistic approach to enterprise application environments.
- Bimodal approaches/work styles will define how IT organizations achieve the two prevailing needs: one work style will be focused on predictable work involving renovation and transformation of the core IT/legacy environment, and the other will be focused on business-driven innovation and exploration work where the requirements may not be fully known.
- Innovative applications to support digital business need to be supported by flexible, robust back-end IT systems. Many enterprises have brittle, inflexible back-end systems that need to be modernized, creating ample opportunities for service providers in the run environment.
- Service line offerings will give way to a more comprehensive, integrated set of services that delivers complete solutions. In the past, "design/develop/deploy" application services were segregated from the ongoing management of applications, but these lines are being blurred as new practices of continuous development are being adopted. Application service providers must evolve a holistic life cycle approach to clients; this will likely entail a different balance of technical and business capabilities, continuous refresh of skill sets and performance metrics, business outcome-oriented value propositions, and go-to-market approaches that demonstrate that they can support enterprise applications' dual requirements for innovation and cost optimization. See "IT Services Providers Must Demonstrate New Characteristics to Succeed in Bimodal Work Styles" for a more in-depth discussion on what changes service providers must undertake in order to execute successfully in Mode 1 and Mode 2 engagements.

Providers' Operating Models Change to Deliver Speed, Innovation and Impact

Virtually all business initiatives incorporate technology, and virtually all technology decisions are part of business decisions. A recent survey of CIOs indicated that 79% of technology decisions are made by cross-functional teams.¹ CIOs and IT leaders focus heavily on the estimated \$3.8 trillion of enterprise IT spending in 2016,² but this spending does not include digital marketing or technology spending in product development for the Internet of Things (IoT). Estimated spending in these areas will be \$3.5 trillion for digital marketing and \$1.9 trillion for product development by 2020 (see "Define Digital Technologies to Decide Who Budgets for Them"). The ability to sell and deliver services to business units will be critical to capture the larger revenue opportunity that is beyond the traditional IT budget.

Business Buyers Demand an Iterative Approach With Early Realization of Value

It is clear that business buyers are increasingly involved in technology decisions (see "Survey Analysis: Business Buyers Continue to Gain Power in IT Purchase Decisions"). This is true of new initiatives, as well as investments within IT such as modernization of infrastructure or tools, which are also viewed as corporate investments and must be justified relative to other investments. Application service providers must become advisors and partners to business buyers as well as IT buyers and also communicate the value of all services relative to the business outcomes (not just IT cost savings).

Given business buyers' demand for additional business capabilities with minimal time to realization, the approach to projects has dramatically changed:

- The large custom projects that drove application development and management in the past are few in number today. The current desire is for small quick projects that bring smaller impact, but the impact is realized within months.
- The approach is also to have continuous and incremental improvement through a continual stream of smaller related projects that focus on business outcomes. The preferred approach is to utilize agile methodologies and Mode 2 ideation sessions with active participation from business buyers to develop the vision and requirements for each initiative.

Design thinking and customer journey mapping are utilized by most application service providers to bring an outside-in mentality to business initiatives and to complement this ideation. To turn the vision into reality, Mode 1 efforts continue to be needed to assure that the small initiatives are secure, reliable and scalable and that they achieve the desired value, leading us to predict that, "Through 2019, every \$1 enterprises invest in innovation will require an additional \$7 in core execution." (See "Predicts 2017: IT Services Market Opportunities Expand in the Digital Era.") DevOps is just starting to be used to extend the agile development into continuous short production releases. Application service providers must bring business-focused agile development along with bimodal styles of interaction to clients. This approach is most effective with increased alignment with business and IT buyers and when it leverages consultative capabilities that are proximal to clients.

Accelerators and Automation Complement Microservices Development on Cloud Platforms for Speed and Agility

Agile and DevOps methodologies by themselves are not adequate to address client expectations and to increase provider profitability. The required speed and expected quality are not possible through traditional labor-based approaches alone. Automation, tools, intellectual property (IP) assets, accelerators and solutions enable rapid value to clients while leveraging predeveloped components that can be adapted and integrated as part of engagements. For example, DevOps is only feasible if regression testing is highly automated, and integration of SaaS software is most efficient through leveraging standard connectors and accelerators. This shift to automated componentry is not new and goes back to service-oriented architecture (SOA) mechanisms. However, the market demand for adaptable and configurable services that have been the hallmark of SaaS solutions is now expected. Providers are investing in platforms that allow component-based development based on converged infrastructure as a service (IaaS) and platform as a service (PaaS)³ (Amazon Web Services, Azure, Force.com) with microservices, have API-based access to enterprise software, are surrounded by security and are accompanied by analytics. This approach enables providers to rapidly assemble and adapt solutions to the unique needs of each client while leveraging assets and libraries of components across clients (see "Mediated APIs: An Essential Application Architecture for Digital Business").

The above approach requires a considerable change in operational models for application service providers that are moving from labor-centric delivery to asset plus labor. This move not only cannibalizes traditional delivery models, but also requires investment into software, architecture, IP

assets and training that are more similar to software firm operating models than to service firms. Increased investments in R&D will potentially reduce margins during the investment phase, with the shift from labor to asset-plus's high investments, but these investments will be needed for long-term competitive advantage. This move also changes the contracting and sourcing strategies; client contracts must become value-based and outcome-based to benefit from reduced labor delivery. The new client contracts will require providers to assume increased risk related to the clients achieving business outcomes and for the clients to shift from IT cost orientation reflected in labor rate comparison to business outcome orientation.

Intelligent Automation Services Drive Opportunities but Require New Capabilities and Investments

Intelligent automation services are services that include automation tools and artificial intelligence (AI) technologies, principally machine learning, natural-language processing, natural-language generation, and image recognition. Opportunities for application service providers to embrace intelligent automation are in two broad segments as shown in Table 1.

Table 1. Intelligent Automation Services Opportunities for Service Providers

Segment	SPAs	Impact	Opportunities	Actions Required
Application Management Services (AMS)	<p>Through 2021, the majority of service providers will use intelligent automation service techniques, lowering the cost of commodity services by 15% to 25% annually.</p> <p>Over the next four years, the number of employees in service providers' outsourcing delivery organizations will have been reduced by more than 20%.⁴</p>	<p>Intelligent automation in AMS promises 20%-30% lower costs, as well as more intelligent and more predictable and consistent services to clients, thereby enabling clients to free up budget to fund digital programs.</p>	<p>Market share gain via winning outsourcing deals that are recompeted as well as increased penetration into existing clients across all application services.</p> <p>Conversely, failure to automate threatens competitive positioning.⁵</p>	<p>Upfront investments into readily deployable intelligent automation platforms that include automation tools and AI technologies.</p> <p>Shift business model (from labor arbitrage to technology arbitrage) and pricing model (from labor-based to fixed fee or outcome-based).</p> <p>Retool the workforce to work in a more automated and intelligent process.</p>
Consulting and Implementation (C&I) Services	<p>By 2021, smart machine services will enter mainstream adoption, with 30% adoption by large companies.</p> <p>By 2020, 25% of customer service and support operations will integrate smart technology virtual customer assistants across engagement channels.</p> <p>By 2020, smart machines will be a priority for more than 30% of CIOs.</p>	<p>AI will profoundly change the way work is done and how value is created. AI technologies give enterprises the next level of productivity, cost savings and transform their products and processes into learning assets that enable unparalleled insights and hyperpersonalization.</p>	<p>Help enterprises assess, select, implement, change and adapt to a world where humans and machines work together.</p>	<p>Retool capabilities and talent for AI technologies.</p> <p>Identify and infuse AI technologies into solutions.</p> <p>Drive client dialogue and workshop with top accounts.</p> <p>Promote industry vision of AI solutions and benefits to clients.</p>

AI = artificial intelligence; SPAs = Strategic Planning Assumptions

Source: Gartner (February 2017)

Acquisitions and Ecosystem Expansion Accelerate Access to New Capabilities

Application service delivery's ability to address the needs of the business buyers requires the ability to dynamically and rapidly pull together a wide range of skills, competencies, technologies and

capabilities. This is not possible through traditional labor-based models, even though large offshore "factories" provide 24/7 execution. It is also not possible to grow the depth and breadth of skills needed in a manner that is quick enough to match buyer needs or economically enough to achieve desired margins. Application service providers are leveraging external sources of skills, technology and solutions rather than relying on internal skills to build and deploy from scratch.

There are three forms in which these approaches are taking place; each is described in Table 2. However, the driving factor remains the requirement to deliver higher value to clients in a shorter time period while minimizing operational costs. All three approaches require significant investment, so providers must refine their market strategy and focus to achieve the desired outcomes.

Table 2. Three Approaches to Accelerate Access to New Capabilities

Type	Reason	Impact	Example	Action Required
Partnership with technology providers	<ul style="list-style-type: none"> Joint investments Joint marketing Ability to create full scope solutions for specific market sectors or platforms for specific use cases 	<ul style="list-style-type: none"> Increased capacity for investments Reduce deployment time and costs Ability to differentiate with assets 	<ul style="list-style-type: none"> Deloitte Patient Connect Capgemini's next generation Application Development and Maintenance Platform Tata Consultancy Services (TCS) Intelligent Urban Exchange 	<ul style="list-style-type: none"> Identify key vendors in emerging segments like the Internet of Things, artificial intelligence and cloud services that align with your digital service offerings Preintegrate their solutions with your own intellectual property to take to market
Acquisitions	<ul style="list-style-type: none"> Rapidly fill critical skills gaps, e.g., design skills Rapidly scale skills needs in growth segments, e.g., cloud migration skills 	<ul style="list-style-type: none"> Ability to win digital deals that require different skill sets Ability to capture opportunities in high-growth markets Ability to gain dominant market share and economic efficiencies Ability to expand into new geographies and/or new services 	<ul style="list-style-type: none"> Digital agencies buying technology capabilities: Publicis bought SapientNitro and Razorfish (after the acquisition, it changed the name to Publicis.Sapient) Technology companies buying design capabilities: Accenture bought Fjord, Chaotic Moon and other agencies Consultants buying cloud capabilities: Aon Hewitt bought Kloud and OmniPoint's 	<ul style="list-style-type: none"> Evaluate market needs and your skills gaps in targeted emerging and hot segments Calculate the trade-off between hiring/retraining and acquisitions, taking into account speed of ramp up and opportunity costs Present a business case for acquisition to management

Type	Reason	Impact	Example	Action Required
			<ul style="list-style-type: none"> Workday Services company Technology companies buying SaaS specialists: Wipro bought Appirio; Mindtree bought Magnet 360 	
Partnerships with online talent marketplaces	<ul style="list-style-type: none"> Tap into niche skills whenever needed instead of having these niches in-house Augment and supplement resources when demand exceeds in-house capacity 	<ul style="list-style-type: none"> Reduce need to hire for specialized skills Reduce need to hire for maximum demand, thereby maximizing utilization of in-house resources 	<ul style="list-style-type: none"> Applause supporting testing service providers, including TCS, IBM, Accenture and Deloitte Deloitte's partnership with 10EQS 	<ul style="list-style-type: none"> Evaluate digital skills needs and do a cost-benefit analysis of hire versus partnership Engage with online and crowdsourcing marketplaces for potential partnership

Source: Gartner (February 2017)

All three skills access approaches feature utilizing other partners to advance their delivery from a speed and/or a cost efficiency perspective. Ecosystems are expensive to develop, groom and maintain with solution development, marketing, sales and relationship management. These ecosystems must be built and grown prior to client delivery. This requires levels of investment that are more similar to software firms and are less typical of service firms. The level of investment requires firmwide focus and commitment to only a few markets and solutions that are of highest strategic impact; it cannot be done in an opportunistic manner or on behalf of a single client or practice.

Disruptive Technologies Create Long-Term Opportunities

The plethora of new and disruptive technologies — for example, IoT, AI, blockchain, augmented reality/virtual reality (AR/VR) and 3D printing — is an opportunity for service providers to help their

clients sort through the hype and figure out which technologies have the potential for real business value (see "Top 10 Strategic Technology Trends for 2017"). The business value of any disruptive technology will vary depending on the client's industry as well as processes. Service providers need to have a point of view on promising technologies for specific industries as well as come up with use cases using those technologies and the benefits that can accrue from their use.

While each disruptive technology is different in its application, they all provide the following opportunities for service providers:

- Identifying use cases, creating business cases, building proofs of concept and formulating roadmaps
- Ideating new business initiatives or new revenue streams and operationalizing them
- Rethinking and renovating existing systems, such as ERP, CRM and supply chain operations
- Integrating back-end and legacy systems to fully support a new end-to-end solution
- Identifying security issues as well as direct and indirect risks with the new technology and implementing mitigating processes and systems
- Developing ecosystem partners with technology and specialist firms to expand offerings
- Helping clients set up centers of excellence for mobilizing resources, hiring talent, creating governance and processes, and knowledge management for the disruptive technology
- Establishing organizational change management and training

To be in a position to capture opportunities presented by new and emerging disruptive technologies, service providers must invest early to be prepared when the market is ready. Preparation must include establishing labs and centers of excellence to assess, evaluate and test the application of these technologies to business problems; engaging early adopter clients on experimenting with using these technologies on an existing pain point or in creating a new line of business; creating a point of view on how these technologies can be leveraged for competitive advantage in select industries; and building prototypes with partners and/or clients to demonstrate the application of the technologies.

Vendors to Watch

Many service providers participate in the application service market. The following service providers, listed in alphabetical order, are chosen because they have made significant investments and strategic alignment with at least three of the five trends identified above.

- Accenture: Accenture is an application service provider in traditional as well as new digital solutions. Accenture Liquid Studios exemplify Mode 2 rapid, experimental, multidisciplinary approach while Accenture's four-tier global delivery model epitomizes industrialized factory methods.

- Capgemini: The Fahrenheit 212 acquisition and Capgemini's global network of Applied Innovation Exchange (AIE) centers to support collaboration with clients are supported by deep processes and methodologies for application development, management and modernization. Capgemini is also investing in automation to reduce labor and increase speed in development and management.
- Cognizant: Cognizant's greater focus on digital, intellectual property and platforms improves its positioning in application services. Its recent acquisitions (e.g., KBACE Technologies, Idea Couture and Cadient Group) expand its cloud, experience, design and marketing capabilities.
- Deloitte: Stressing "making an impact that matters" to clients, employees and society, Deloitte delivers impact by addressing complex client issues through leveraging the full range of capabilities, including business consulting (strategy, financial, risk, merger and acquisition), technology consulting, technology integration and managed services. Deloitte has invested in blockchain, IoT and analytic solutions. Deloitte Digital has taken the lead on most front-office and digital transformational initiatives with bimodal approaches.
- EY: Business performance and transformation focus, coupled with C-level relationships, have propelled EY as a strong contender of application services in select markets, principally in SAP, Pega, Microsoft and Guidewire applications, and in the areas of digital, analytics and cybersecurity.
- IBM: A key differentiator for IBM will be its ability to use its full range of capabilities to build and run application solutions that increase customer value through using its cognitive technologies, interactive and design capabilities, industry-specific knowledge and cloud prowess.
- Infosys: Design Thinking and Living Labs support co-innovation with clients; Infosys has also invested in software for analytics (Infosys Mana) as well as automation tools to replace labor, such as AssistEdge and repeatable industry platforms.
- Janeiro Digital: Janeiro Digital is a boutique digital consulting firm proposing a high-touch, high-intimacy approach to support large enterprises in digital transformations. It utilizes a proprietary agile ideation approach (RADD) and an accompanying platform (XForm) to accelerate the development and design of architecture, user interfaces, analytics and integration.
- Mindtree: Mindtree's Agile Center of Excellence and its Continuous Delivery Transformation offering merge application development best practices (agile, DevOps) and automation along with cultural change to support their clients' top initiatives for application services.
- PwC: PwC brings together business consulting, technology and customer-centric experience perspectives. PwC targets large enterprises with complex business change. It offers the full range of capabilities, from service through execution, and has made acquisitions to support digital consulting and execution (Ant's Eye View, BGT, Booz & Co., fluid HK, Nealite, Outbox Group).
- Tata Consultancy Services (TCS): Leveraging high levels of standardization, automation, AI and platforms, TCS aims to help clients "reimagine" their business operations through the use of technologies. TCS utilizes innovation centers around the globe along with proprietary software

(ignio, Digital Software & Solutions, TCS MasterCraft) to accelerate delivery of application services to improve business and IT operations.

- Wipro: Wipro is increasing competitiveness through early emphasis on intelligent automation in service delivery (ServiceNXT, Holmes), a large library of prebuilt assets, and acquisitions to fill gaps in geography (cellent — German-speaking Europe), industry (HealthPlan Services — insurance) and capability (Designit — design; and Appirio — cloud services).

Gartner Recommended Reading

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

"Market Insight: Digital Disruption in the IT Services Industry"

"Market Insight: Application Outsourcers Will Find Opportunity in Cloud Shift"

"Predicts 2017: Automation Is the Heart of IT Service Providers' Drive to Improve Operational Effectiveness"

"Predicts 2017: IT Services Market Opportunities Expand in the Digital Era"

"Market Insight: What Clients Look for in a SAP Implementation Partner"

"Competitive Landscape: SAP S/4HANA Service Providers"

Evidence

¹ "The 2017 CIO Agenda: Seize the Digital Ecosystem Opportunity"

² "Forecast Analysis: IT Spending, Worldwide, 3Q16 Update"

³ "Market Trends: The Convergence of IaaS and PaaS Cloud Services"

⁴ "Exploit IT Services Market Dynamics Primer for 2017" discusses how intelligent automation will impact the IT services opportunity.

⁵ "Understand the Impact of Intelligent Automation Services on IT Service Providers' Strategy" details the benefits and imperatives for service providers.

This document is published in the following Market Insights:

Consulting & Solution Implementation Services Worldwide
IT Outsourcing Worldwide

GARTNER HEADQUARTERS

Corporate Headquarters

56 Top Gallant Road
Stamford, CT 06902-7700
USA
+1 203 964 0096

Regional Headquarters

AUSTRALIA
BRAZIL
JAPAN
UNITED KINGDOM

For a complete list of worldwide locations,
visit <http://www.gartner.com/technology/about.jsp>

© 2017 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. or its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. If you are authorized to access this publication, your use of it is subject to the [Usage Guidelines for Gartner Services](#) posted on gartner.com. 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 and shall have no liability for errors, omissions or inadequacies in such information. This publication consists of the opinions of Gartner's research organization and should not be construed as statements of fact. The opinions expressed herein are subject to change without notice. Although Gartner research may include a discussion of related legal issues, Gartner does not provide legal advice or services and its research should not be construed or used as such. Gartner is a public company, and its shareholders may include firms and funds that have financial interests in entities covered in Gartner research. Gartner's Board of Directors may include senior managers of these firms or funds. Gartner research is produced independently by its research organization without input or influence from these firms, funds or their managers. For further information on the independence and integrity of Gartner research, see "[Guiding Principles on Independence and Objectivity](#)."