



# Agile Software Development

Excerpt for Infosys

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**TOP 10**  
HFS

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“The agile services market continues to wrestle with the conventions of traditional buyer and seller relationships. It’s clear now that successful engagements are based on a relationship that values equality of opinion and empowerment with a focus on delivering real business results.”

*—Jamie Snowdon, Chief Data Officer*

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# Introduction

- Agile software development has moved beyond its early phases, where initial results were compelling but hard-won. As the methodology, practices, and toolsets become more embedded in day-to-day business and IT, the practice must evolve to continue to deliver value. This is particularly evident in the service provider community, which must embrace agile practices and evolve them to make the most impact in their unique environments. This research examines how providers in the community are evolving their practices to support agile software development.
- Appetite for agile delivery capabilities is forcing the buy-side to reconsider how it approaches external services. Traditional approaches that rely on buyer-seller dynamics do not provide the flexibility and equality of voice that true agile delivery requires. As a result, both enterprises and providers are working to develop a culture that enables professionals from both sides to engage on an equal footing to ensure the outcome is the best for all parties. As this trend develops, we're likely to see shifts in talent pools and commercial models as specific skillsets become more valuable and pricing develops to incentivize the right behaviors from both buyers and providers.
- This study seeks to understand how these and other trends are developing in the market and which providers are leading the charge in the competitive agile development services market.

# Research methodology

The research is the result of data collected in Q1 and Q2 2020 through provider RFIs, structured briefings, client reference interviews, and from publicly available information sources. This information is supplemented by key findings from a large G2000 survey of enterprise leaders.

Agile software development services providers were assessed on the following three main dimensions:



33.3%

## Voice of the customer

- Candid feedback from client references and over 600 G2000 responses to the IT services satisfaction survey.



33.3%

## Ability to execute

- Methodology and approach
- Partnerships
- Breadth and scale
- Client results
- Pricing and commercial models



33.3%

## Innovation capability

- Marketing and thought leadership
- IP and accelerators
- Tools and technology
- Vision for investments
- Talent development and strategy

# Providers covered in this report

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TOP 10  
HFS

accenture

Atos

Capgemini

Cognizant

DXC.technology

HCL

IBM

Infosys

LTI  
Let's Solve

Mindtree  
A Larsen & Toubro Group Company

Mphasis  
The Next Applied

NIIT  
technologies  
Engage With The Emerging

NTT DATA

TATA  
TATA CONSULTANCY SERVICES

Tech  
Mahindra

virtusa

wipro





















































































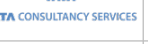










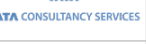
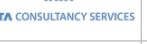








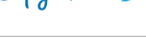


































ZenSar

# Summary of agile software developers in this report

Service providers (alphabetical order)	HFS point of view
<b>Accenture</b>	Clients benefit from global delivery and a well-provisioned talent pool
<b>Atos</b>	End-to-end enterprise agile transformation partner, focused on high-end enterprise engagements
<b>Capgemini</b>	An innovative agile provider with robust tools and accelerators and dense partnership ecosystem
<b>Cognizant</b>	Mature agile player with strong investments in talent and tools
<b>DXC</b>	Trusted partner with increased capability through Luxoft acquisition
<b>HCL</b>	Client-focused player offering services in the sweet-spot of value and service excellence
<b>IBM</b>	One of the leading players in this space with strong tools, frameworks, expertise, and ability to deliver at scale
<b>Infosys</b>	Agile delivery heavyweight with well-stocked talent pool
<b>LTI</b>	Hungry, customer-driven provider looking to up its game with higher-value services
<b>Mindtree</b>	Competitive commercial model blended with agile practices and consulting services makes Mindtree a strong player in this space
<b>Mphasis</b>	Growing agile services firm with an emphasis on flexibility
<b>NIIT</b>	End-to-end product management expertise across domains with strong frameworks
<b>NTT DATA</b>	Strong end-to-end development player with broad tools and methodologies
<b>TCS</b>	Global delivery capabilities supported by evolving technical expertise
<b>Tech Mahindra</b>	Customer-driven, flexible player that knows the agile playbook
<b>Virtusa</b>	Provider with strong investments in talent and one of the industry's best frameworks
<b>Wipro</b>	Flexible partner with a track record of transforming client operations
<b>Zensar</b>	Increasingly trusted partner driving holistic agile story

# HFS Top 10 agile development provider rankings

**T<sup>HFS</sup> P10**

Rank	Overall HFS Top 10 position	Execution						Innovation						Voice of the customer
		Methodology and approach	Partnerships	Scale and breadth	Client results	Commercial models and price	Overall execution	Marketing and thought leadership	IP and accelerators	Tools and technology	Vision for investments	Talent development and strategy	Overall innovation	
#1														
#2														
#3														
#4														
#5														
#6														
#7														
#8														
#9														
#10														



# Notable performances in HFS Top 10 agile development services



HFS Podium Winners								
Top three providers overall across execution, innovation, and voice of the customer criteria								
#1 			#2 			#3 		
Execution powerhouses			Innovation champions			Outstanding voice of the customer		
Top three providers on execution criteria			Top three providers on innovation criteria			Top three providers on voice of the customer criteria		
#1 	#2 	#3 	#1 	#2 	#3 	#1 	#2 	#3 
Other notable top three performances								
<ul style="list-style-type: none"><li>• Virtusa for positive voice of the customer results alongside effective commercial models</li><li>• Tech Mahindra for delivering high-value client results with a correspondingly high voice of the customer rating</li><li>• Cognizant for its compelling vision for investments and its talent and development strategy</li></ul>								

Notes: The service providers assessed in this report include (in alphabetical order): Accenture, Atos, Capgemini, Cognizant, DXC, HCL, IBM, Infosys, LTI, Mindtree, Mphasis, NIIT, NTT DATA, TCS, Tech Mahindra, Virtusa, Wipro, Zensar

- **Successful agile relies on mutual investment and engagement:** As a practice and approach, agile has evolved over the last decade to become the mainstay of application development. As stakeholders mature this approach, it's becoming increasingly important for both providers and enterprises to be equally invested in a project's success. This investment moves beyond fiscal concerns to the day-to-day conduct of professionals from both teams, such as provider-side developers pushing back on client managers if the approach is not the right way forward. This development is an uncomfortable shift for some providers. Historically, the focus on pleasing customers has been sacrosanct, forcing a significant cultural shift for those wanting to adopt and exploit true agile practices. On the other hand, enterprise leaders expect this new culture to be embedded in engagements described as "agile." Providers who are successful at pivoting to this new demand typically score well in areas such as the voice of the customer and client results in this research.
- **Approach flexibility is an inconsistent differentiation point:** The shift in culture extends beyond teams and into contracts. Clients look for providers that are flexible in multiple ways. At its simplest, they expect providers to be able to flex resources if necessary. However, as a construct of agile engagements, flexibility has moved away from being the traditional differentiator for many firms, particularly smaller and mid-tier IT service providers where this level of flexibility has become uniform and generally accepted by the market. The major IT services firms, however, can still use flexibility as a differentiator as larger sprawling operations and complex management structures make degrees of agility challenging.

# Research summary highlights

TOP 10  
HFS



## Highlight #1: Investment in people

Clients are pushing for providers to support training and development initiatives not only in their own teams but also within client delivery teams. As a result, we have seen some firms consistently innovate and market themselves for their capacity to bring resources and experience to training initiatives to ensure all teams have a consistent approach to agile delivery.



## Highlight #2: Flexibility of approach

The provider community is quick to advise of its approach flexibility when it comes to agile engagements. However, clients advise that definitions vary considerably, particularly when it comes to the detail buried in complex commercial models. Providers must bring greater flexibility to engagements—at scale—as enterprise executives advise this is becoming an important part of shortlisting.



## Highlight #3: Staff augmentation with closer scrutiny

Clients advise that they want the right people, in the right place, at the right time—an approach particularly vital for fast-moving agile engagements. However, they also advise they are placing greater scrutiny on the quality of talent to ensure consistency of skills and approaches across teams. Arguably, agile approaches make it much harder to have weaker members of a team and easier for clients to scrutinize and push back on.



## Highlight #4: Emphasis on partnerships

Enterprise clients tell us that they now expect providers to be more proactive when it comes to overall investment in engagements, from absolute price to flexing additional resources. Many tell us that some engagements have been closed because providers weren't proactive enough and they had to continue pushing to get the best deal possible.

# Provider profile



Dimension	Rank	Strengths	Opportunities
HFS Top 10 position	# 1	<ul style="list-style-type: none"><li><b>Well-stocked talent pool:</b> Infosys has one of the largest talent pools in the agile software development market. Clients attest to the firm’s ability to bring a strong bench to engagements. In particular, clients highlight the firm’s technical expertise and ability, and that it often brings innovative and highly technical solutions to engagements.</li><li><b>Talent development:</b> According to clients, Infosys has a strong track record of investing in its talent, including sweeping, organization-wide training initiatives and ongoing development efforts underpinned by the firm’s Wingspan platform.</li><li><b>Evolved toolsets:</b> Infosys has pulled its experience and exposure to the agile services delivery space into a powerful set of accelerators, including evolved testing automation.</li><li><b>Localization program:</b> Infosys is investing heavily in localization, emphasizing building delivery capabilities onshore and nearshore for clients in the US and Europe. These investments are a boon to clients looking to build closer relationships with their provider and align more closely with agile practices, which can be challenging to manage across distance and time zones.</li></ul>	<ul style="list-style-type: none"><li><b>Continue evolving business focus:</b> Like many of its competitors, Infosys has been forging beyond its technical heritage to focus on specific business challenges and evolve its narrative beyond IT audiences. Infosys has come along way since we last examined its application development and management capabilities in 2018, but it must continue to evolve approaches to focus more on real business challenges and bring its technical expertise and capabilities to provide solutions.</li></ul>
Ability to execute			
Methodology and approach	# 7		
Partnership	# 4		
Breadth and scale	# 5		
Client results	# 2		
Pricing and commercial models	# 5		
Innovation capability			
Marketing and thought leadership	# 4		
IP and accelerators	# 6		
Tools and technology	# 5		
Vision for investments	# 5		
Talent development and strategy	# 4		
Voice of the customer	# 1		

Acquisitions and partnerships	Solution portfolio	Operations and key clients
<p><b>Key partnerships:</b></p> <ul style="list-style-type: none"><li>Global Strategic Partner: AWS, RedHat, Pivotal, VMware, Dynatrace, MS, Docker, Perfecto Mobile, NetApp, HP, CISCO, Google, Neotys Lab, ServiceNow, Elastic, BMC software, Checkmark, Synopsys, Splunk, NewRelic, Hashicorp, MicroFocus, CA, IBM</li><li>Gold Partner: Safe</li><li>Platinum Partner: Scrum@Scale</li><li>Others: Kubernetes, Chef, Mesosphere, Junit, Selenium, Atlassian, Tricentis</li></ul> <p><b>Acquisitions:</b> 2020: Simplus; 2018: Wongdoody, Fluidio; 2017: Brilliant Basics</p>	<ul style="list-style-type: none"><li><b>Infosys DevOps Platform (IDP):</b> Enterprise-class, integrated, open-source platform that helps organizations accelerate their agile and DevOps transformation journey.</li><li><b>Infosys Distributed Agile:</b> Integrated agile and DevOps solutions and accelerators geared for all types of work relevant to an IT organization, with a playbook to quickly set up a distributed operating model, contextualized to a client’s specific needs.</li><li><b>Infosys PANDIT:</b> AI-based testing platform that helps clients improve agility and predictability while optimizing efforts in testing by integrating AI.</li><li><b>Infosys Artificial Intelligence-Led DevOps Testing Solution:</b> Designed to continuously monitor test runs and get actionable insights for testing in a DevOps scenario.</li></ul>	<p><b>Agile Professionals:</b> ~68,000; Agile enabled: 150,000</p> <p><b>Delivery center locations:</b></p> <ul style="list-style-type: none"><li>India: 75% of delivery</li><li>Europe: 5%</li><li>USA: 14%</li><li>Rest of the world: 6%</li></ul> <p><b>Key clients include:</b></p> <p>Leading telecom company in Australia, telecom giant in the US, the Australian government, a Fortune 100 multinational bank, a leading investment bank in the US, a Fortune 500 leading European bank, a leading Investment firm in Singapore, a 150-year-old financial services fortune 100 company, one of the leading diversified healthcare companies in the US, largest writer of US commercial property and casualty insurance, a global insurance provider, largest American healthcare company, a Fortune 500 oil and gas company, many more in retail and logistics, manufacturing, and oil and gas</p>

# Market overview

- **The market continues to test and experiment with new frameworks and methodologies:** The most notable are DevOps and agile, which are now widely adopted by many of the major IT service providers. Providers are implementing sweeping training and culture redevelopment programs to adopt best practices to support innovation and delivery in the application services space.
- **Re-platforming the enterprise for digital:** Now more than ever, enterprises are looking for providers to help them rationalize and optimize their technology stack, of which business applications are a significant component. In their drive toward the Digital OneOffice, forward-thinking enterprises are engaging with providers that can build innovative solutions that can integrate and unite business applications and, in the process, break down business siloes.
- **Buyers want collaborative partners:** Given the importance of technology and business applications, enterprises are looking for collaborative partners that are invested in their success. As a result, we're seeing an increasing reliance on existing relationships to deliver on fresh engagements, including embedding automation into existing deals. The enterprise applications space is highly competitive and complex. As a result, we see a concerted move in the provider community to rethink partnership strategies. Provider ecosystems are expanding and deepening to accommodate the level of expertise and variety that modern enterprises expect.

## Major trends impacting the market

- **Talent development is key to success:** Providers are also working tirelessly to ensure they are making the most of their talent—driving training and retraining programs to help keep employees' skillsets up to speed in a changing market. Providers are bringing talent into the spotlight in their strategic roadmaps, spending on sweeping training programs to ensure they can deliver the most value from application services professionals. Providers are also building out talent-attraction programs with a raft of organizations from higher education institutions to government organizations.
- **Major investments in capability:** Many providers are shoring up capability by investing inorganically, such as the acquisition of Red Hat by IBM or the series of investments made by Cognizant to build out its digital engineering practice, including Softvision and Contino. Others are focusing on growing capability organically through sweeping talent development initiatives and localization programs.
- **Accelerators and IP:** Providers continue to build out internal accelerators and develop components for solutions that are repeatable to drive more value out of effort. Clients are looking for highly technical partners to support engagements; they advise that firms with a clear track record of developing quality accelerators are more likely to make their shortlist.



# Application optimization and modernization

## Rapidly growing market with huge enterprise investment

- Enterprises are loosening their purse strings and pursuing broader transformation strategies to re-platform their business, including application modernization and migration to cloud environments.
- Increasingly, clients are pushing for enterprises with capability in cloud as well as traditional and new-age application and digital engineering strengths.
- Clients are finding it harder to differentiate between the major IT services firms' ability to execute and innovate, particularly in application modernization.
- All of the major IT services firms are telling the market they can do everything. While the microservices and containerization space is capturing a lot of corporate mindshare, it's hard to pin as a point of differentiation because all providers say they have capability and partnerships to support modernized business applications.

## Application modernization is more about platforms than apps

- Application modernization is shifting away from point solutions to building a platform for agile and responsive development and maintenance environments. Some of the leaders in the space are building environments where clients can easily evolve business solutions without the complex redevelopment and redeployment exercises in the past.
- Due to ever-present talent shortages, providers are looking to boost productivity by rolling out internal platforms to streamline development and testing and more effectively leverage accelerators and IP across the organization.
- We're hearing more from providers about how they are evolving internal delivery capabilities to align as product areas rather than service lines to support agile practices and more readily face the changing demands of modern businesses. Cognizant building out a digital engineering business, and HCL is pushing its product business to help push this strategy.

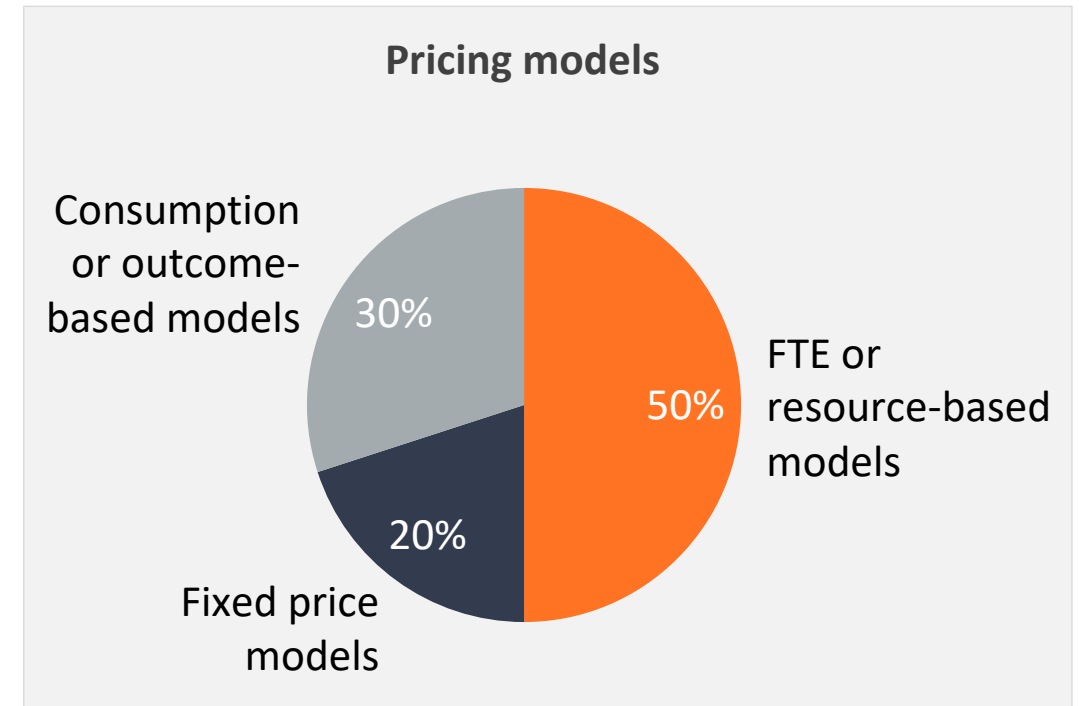
## Market dynamics: buyers look to cost and automation to balance the books

- **Cost remains at the top of buyer motivation lists:** Unsurprisingly, cost remains a key reason for ADM services, and this has not abated despite a decade of predictions about innovation, outcomes, and value-added services—customers expect initial and on-going cost savings, particularly in the C-Suite. However, the driver to modernize is juxtaposed with prioritising cost alone. Enterprises must adopt more holistic cost considerations to work as part of the need to modernise applications.
- **Automation is a major lever to support buyer ambitions:** In line with the continuing need for buyers to bring cost savings to engagements, automation is increasingly in vogue as a major cost-takeout lever. Clients advise they now expect providers to package a clear strategy for deploying automation in application development engagements, with a clear focus on iterative cost savings across engagements. The challenge is that this approach has raised overall cost expectations; buyers want more competitive price points once automation technologies are ramped up.
- **Modernization and migration to the cloud are growing drivers.** Migrating apps to the cloud remains a major driver for development work, a trend likely to increase dramatically as a result of distributed and remote workforces as part of the COVID-19 pandemic. More enterprises are looking at app modernization services as an important building block of their replatforming ambitions as they continue to invest in becoming a totally digital enterprise.

- **Agile and DevOps grow as a core business approach.** At the end of 2018, agile represented about 30% to 35% of application development resources, although in practice, this number could be higher. This proportion is growing rapidly as the majority of new projects picked up by the major IT services firms are now delivered using agile methodologies and approaches. In 2020, close to half of all application management engagements will be delivered through an agile framework. This will be closer to 70% for pure development projects.
- **Offshore delivery still makes up the bulk of delivery, but localization is becoming increasingly important:** Approximately 70% to 80% of outsourced development for agile was delivered through offshore centers, with distributed agile backed by standard DevOps platforms. However, now more than ever, clients are looking for strategic help increasing agile development, with considerable opportunities developing for consulting around hybrid approaches onshore, inhouse, and offshore. We have seen Indian vendors building more onshore localization centers, partly for digital enablement, specific tech CoEs, and customer-centricity and also for agile development “bridges,” helping to solve the ongoing tension about distributed agile by increasing the number of people onshore.
- **Application development evolves into engineering:** As applications face increasing scrutiny, they require more rigor, with vendors promoting engineering credentials to improve customer-facing apps alongside growing practice areas from leading firms focusing on digital engineering as a practice subsuming traditional application development capabilities.

## Market dynamics: pricing remains undifferentiated for most clients

- **Buyers struggle with pricing dynamics:** Many enterprise clients are pushing for collaboration and higher-value services from their partners, but their overall willingness to use genuine gain-share and risk-reward in many circumstances has left pricing in a hybrid state, with buyers trying to move from fixed-price and resource-based models to consumption-based models.
- **Consumption models are developing:** However, we are seeing an overall willingness from providers and buyers alike to discuss pricing and move at least to consumption-based models in some instances. However, the common feedback is that newer pricing models championed by providers are often too complex for buyers to balance benefits compared to traditional pricing structures.

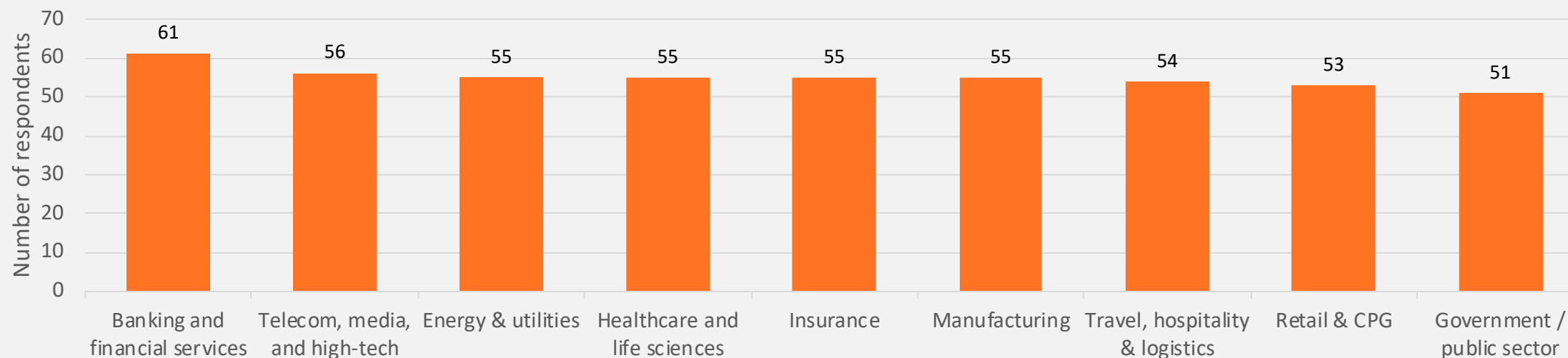




- **Flexibility of approach is key:** Buyers must move beyond traditional relationships with service providers. One of the defining characteristics of a successful agile engagement is the equal footing both partners have achieved, particularly the need for providers to push back on client demands if they compromise the value the project can deliver. For providers, this can be a challenging equilibrium to achieve alone—buyers must lead the charge and focus on building a flexible approach that fosters feedback from providers as equal partners.
- **Look for proof of delivery:** The application development market is highly competitive, and buyers will struggle to look for real differentiation in pricing and commercial models—at least from the outset. They must focus on identifying firms with the capability and innovation track record to deliver real business value. To do this, they must push potential partners to bring proof points that show how they have helped their existing clients achieve results.
- **Focus on business challenges:** The application development space more broadly, let alone agile, is a complex and fast-moving space. Enterprise leaders must enter engagements with an open mind and focus on solving a specific business challenge—allowing experienced partners to pick the best approach, framework, timeline, and delivery team to reach their goals.
- **Be open to new and innovative talent sourcing models:** To get the best results from engagements, providers are increasingly embedding non-traditional talent sourcing models, such as hackathons, crowdsourcing, and the gig-economy, which can be challenging for buyers to bake into traditional contracts. Going forward, buyers must be more flexible and open to new talent sourcing models to ensure they get best-in-breed capability for providers.

- **Develop an empowered culture:** One of the biggest challenges for providers in the agile space is building an equal partnership with their clients and, by extension, developing a culture that enables their talent to push back on requirements and help shape an approach that delivers the most value. However, in this research, it's the organizations that have achieved this that are the most successful in the space and have the highest levels of client satisfaction.
- **Develop innovative pricing models:** Buyers are looking for commercial structures that help them minimize risk and balance costs against rewards more evenly. Smart providers will look to this demand and innovate accordingly by developing pricing models that help their clients recognize the value and investments their providers are pumping into engagements.
- **Move beyond technology narratives:** Technology is, of course, a vital building block of the agile software development market, but technologists and IT teams are no longer the only stakeholders in engagements. Providers must shift the narrative beyond technology and spell out how different capabilities and services will help executives reach particular business goals.
- **Assess talent capability objectively:** Providers must develop frameworks for assessing the total value talent provides to client engagements. This includes the technical skillsets alongside the growing demand for developers with a clear understanding of business environments, priorities, and demands, as well as personality traits, including the capacity to push back on clients and speak up in engagements to ensure the approach taken delivers the required results. As an extension, providers must also build toolsets and training to help talent meet the changing requirements of the role.

Industry Breakdown of the Voice of the Customer Survey



Source: HFS Research, VOC Survey 2020 495 Enterprise Buyers

- **Survey:** HFS surveyed 495 enterprise buyers in Global 2000 (or equivalent) organizations with \$1Bn+ revenue as part of its 2020 VOC survey.
- **References:** HFS conducted in-depth interviews with over 40 buy side executives with experience of agile services. This was a combination of customer references and from the HFS network.

# About the authors



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Ollie O'Donoghue is Research Director, IT Services. With many years of experience in the IT services industry—as both a practitioner and a research analyst—Ollie understands the impact IT services have in the modern business environment.

Before joining HFS, Ollie was the Head of Research and was an Industry Analyst for an ITSM Practice. He provided IT service and support organisations with the resources to deliver greater business value. There he developed a comprehensive research portfolio for the industry. He has researched and presented on a multitude of topics including automation, innovative support models, and real-time analytics. In 2017, Ollie was named second on a list of IT and ITSM experts to watch.



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Jamie Snowdon has primary responsibility for overseeing the development of HFS' Quarterly Market Index, in addition to managing and developing the firm's data-centric products and services. He works across the HFS analyst teams to define evolving services markets and create market size estimates and forecasts.

He also manages HFS' quantitative survey and benchmark data. Jamie has over twenty years experience in the IT and Business Services industry. In that time he has worked in a variety of roles including sales, marketing, consulting, and as an industry analyst. Jamie's analyst career has largely been spent conducting data analysis including market size/forecast models, quantitative/qualitative survey analysis and competitive analysis.



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Martin Gabriel is a Senior Research Analyst at HFS Research, tracking global outsourcing deals in IT/BPO/Engineering services and supporting different practice leads in secondary research, data analysis and research writings.

Martin has over 5 years of research, analytics, and market intelligence experience in TCS and Xchanging. In his TCS role, he worked on point-of-sale and consumer panel data and on analytical projects, providing business insights to clients. He was responsible for analyzing retailers and consumer behaviour for various FMCG/CPG products to address diverse business issues and provide actionable recommendations for the future growth for clients. He performed extensive category reviews, brand management and trend analysis based on point of sale and homes scan data along with information from secondary sources. At Xchanging, he was part of the market intelligence team that supports Xchanging's vertical heads, strategy team and sales and marketing team.



# Defining future business operations

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