Market Overview: Agile Development Service Providers
by Wolfgang Benkel and Diego Lo Giudice, December 8, 2014

KEY TAKEAWAYS

Agile Is A Major Trend In Software Development And Maintenance
The need for more agility in the business technology world requires resources that increase speed, achieve greater business alignment, and result in faster time-to-market. This is driving increased use of Agile for software development and maintenance.

Vendors Prepare Their Capabilities To Support Clients
The need for speed is forcing vendors to increase investments to build and improve their Agile capabilities and meet their customers’ needs and expectations. This is the result of recognizing that companies’ Agile-trained resource bases are insufficient to fulfill business requirements.

The Vendor Landscape Is Large, So Clients Have To Ask The Right Questions
The vendor landscape includes many different types of vendors, from global application service providers to small boutique vendors and freelancers with Agile skills. Navigating the landscape is not easy, but the right vendor and a proactive client can lead to trusted relationships with high business benefits for both client and vendor.
Market Overview: Agile Development Service Providers
The Agile Capabilities Of Leading Outsourcing Services Companies Have Caught Up With Client Expectations
by Wolfgang Benkel and Diego Lo Giudice
with Chris Andrews and Michelle Mai

WHY READ THIS REPORT
As business technology moves higher on the radar screen of CIOs, the need to leverage Agile application development techniques is rising. Application development and delivery (AD&D) leaders, seeking to create systems of engagement faster and more effectively, struggle to access Agile development resources, leading to strong adoption of Agile development services. In response to market demand, vendors are aggressively refining their practices, expanding their skills, and augmenting their geographical capabilities to support the growing expectations of clients on Agile. This document provides an overview of the primary Agile services players in the market, their level of Agile scale, what they are offering, and how to work with them.

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Forrester surveyed 17 vendor and user companies, including Birlasoft, CI&T, Cognizant, EPAM, GlobalLogic, HCL, Infosys, Luxoft, Mindtree, NIIT Technologies, Persistent Systems, Tata Consultancy Services (TCS), Tech Mahindra, ThoughtWorks, Torry Harris Business Solutions, Virtusa, and Wipro.

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February 5, 2014
AGILE DEVELOPMENT IS INCREASING IN POPULARITY

Agility — which embodies time-to-market and fast-paced change — is the latest buzzword in the business world. Yet the focus on business agility is a reflection of a real, underlying technology trend — the rise of a new form of software development that emphasizes speed, iterations, greater business involvement, and faster time-to-market.

Agile methodologies (or “Agile”) incorporate development agility as a core concept, and are increasingly embraced in the business technology world. In the past few years, we have seen a rise in Agile interest among AD&D pros, who have recognized Agile as mainstream requirement. This is giving rise to a healthy and productive demand for outsourced agile resources, which are growing based on several factors:

- **Agile is now an accepted and growing development method.** Sixty-nine percent of respondents out of 560 surveyed decision-makers of our annual Forrester Forrsights Software Survey have interest, plan to implement, or have already implemented Agile for their custom development (see Figure 1). Sixty-three percent of respondents of the same survey answered similarly for packaged software development and maintenance. Of the vendors interviewed for this research, Agile development revenue is growing at 20% or more over the past three years.

- **Agile is more successful when based on trusted and long-standing relationships.** The landscape is witnessing an evolution of Agile outsourcing relationships — from risk-averse relationships often based on a T&M pricing model — into more trusted relationships with fixed output and outcome-based pricing. Vendors that were surveyed in this market overview generate on average 82% of their new projects in existing outsourcing relationships and 18% with new customers. This natural transformation of the relationship between clients and technology service providers is also evident from Forrester’s Forrsights Software Survey, Q4 2013 results.

- **Scrum and Hybrid Agile-Waterfall are in fashion.** Agile methods are the most popular and the most commonly used development methods — used by 42% of developers surveyed in our Forrsights Software Survey (see Figure 2). Hybrid Agile-Waterfall (which combines key aspects of both worlds) and Scrum lead adoption by landing respectively at 8% and 7%. Vendors also mix various Agile methods from the upstream (i.e., Scrum, Kanban) and from the downstream (i.e., XP, TDD) side of Agile. However, when we surveyed committed Agile vendors and users in our 2013 Agile survey, Scrum resulted in the most popular method, adopted at 90%.

- **Agile service experience is growing.** Eighty-nine percent of IT professionals from organizations that are planning to implement or have implemented Agile tell us they have between six months and six years of experience with Agile, while 11% have even more than six years of Agile experience. However, the Agile experience of the vendors interviewed for this research is higher, with 92% indicating they have more than six years of experience and
42% claiming to have even more than 10 years of experience. Forrester believes, based on multiple research sources, that truly in-depth Agile expertise in the vendor community — the kind gained from large-scale Agile across multiple enterprise teams — is still in the process of aligning with client demands.

Figure 1 The Demand For Agile In Software Development And Maintenance Is High

“What are your firm’s plans to adopt Agile or Lean for software development and maintenance?”

- Expanding/upgrading implementation: 15% (21%)
- Implemented, not expanding: 12% (12%)
- Planning to implement in the next 12 months: 8% (10%)
- Planning to implement in a year or more: 8% (9%)
- Interested but no plans: 17% (20%)
- Not interested: 25% (22%)

Base: 560 North American and European software decision-makers (20+ employees)

(“Don’t know” responses not shown)

Source: Forrester’s Forrsights Software Survey, Q4 2013
**Vendors Rush to Increase Agile Capabilities**

The challenge for many companies is that they face a resource gap when it comes to Agile. The demand for resources with Agile skills and experiences is high, and it’s a demand that they cannot successfully fill with their internal resources. Meanwhile, this gap is being filled by external partners.

Vendors have recognized this need and are therefore increasing their Agile capabilities. Some examples of vendors’ recent efforts toward this initiative include building their service portfolio covering development and delivery capabilities, investing in their tools and accelerator frameworks, and training their employees to increase their Agile capacities.
Today, we see many vendors jumping on this Agile services bandwagon, from traditional outsourcers and service providers to small niche players specialized in software development, so navigating the vendor landscape is not easy. Not all the players offering Agile services have the experience they might claim to have. Those vendors that offer Agile under a managed services contract might be ones AD&D professionals should sit down with and carefully understand if they are just “adding” Agile to their marketing messages or if they truly have the expertise to offer Agile services. In fact, a relatively small portion of vendors has mature client relationships where they have creatively adopted an Agile managed services approach.

The vendors we have interviewed for this research vary from large global players with a wide range of Agile-based revenue to those making less than $120 million in Agile services (see Figure 3).

We see different types of vendors offering Agile services, such as:

- **Large-scale technology service providers.** Besides the traditional multi-national service providers like IBM, Accenture, Capgemini, and Atos, we see the vendors like Cognizant, HCL, Infosys, TCS, and Wipro go beyond pure application development and maintenance services and become members of the large and medium size categories by Agile revenue. Most of the vendors offering application development and maintenance services in this group also provide specialized Agile services in large projects, and have been training large numbers of employees in Agile analysis, design, development, testing and deployment. They have done so through large-scale training programs and by making Agile a must-have skill on CVs of new hiring staff.

- **Midtier technology service providers.** These vendors like Tech Mahindra, Luxoft, Virtusa, NIIT Tech, Torry Harris, Birlasoft, UST Global, and Mindtree go beyond pure Agile application development and maintenance services. Some of these vendors can be characterized by a more regional focus. This category also includes companies with smaller Agile-only revenues like Ness, Syntel, Mobiquity, and TEKsystems.

- **Agile “pure players.”** These vendors have different sizes by Agile revenue but they develop only Agile projects with Agile practices — so their total revenue comes almost exclusively from Agile work (this includes vendors like CI&T and ThoughtWorks). Or they have the “majority” of their revenue coming from Agile projects, but not all of it — e.g., vendors like EPAM, GlobalLogic, and Persistent Systems (see Figure 4). However, be aware — full dependence on Agile revenue does not mean that vendors with more than just Agile revenue have weaker Agile capabilities. Some clients speak very highly of the services received by some of the largest services companies mentioned in this document.

- **Ad hoc Agile consulting small players with specialized coaching skills.** Along with the list of larger-scale vendors, there are an exponential number of smaller boutiques, free-lance Agile coaches, and small-sized consulting organizations that have proliferated in various geographies.
across the globe. These, rather than taking on full outsourced projects, consult with clients and provide specialized on the job skills like Agile UX design, Agile testing, Agile continuous delivery. They often support the growing number of clients that are developing Agile projects on their own, rather than truly supporting large-scale outsourcing projects. An additional sub-category of players — hybrid across consulting/coaching and full outsourcing delivery — includes companies like Magenic, People10, agile42, Prowarness, BJSS, 3Pillar Global, and more.4

**Figure 3** Vendor Size Categories Based On Annual Agile Revenue

<table>
<thead>
<tr>
<th>Small-sized</th>
<th>Medium-sized</th>
<th>Large-sized</th>
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<tr>
<td>Birlasoft</td>
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<td>Virtusa</td>
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**Small-sized:** less than $120,000,000 in revenue (per year)

**Medium-sized:** between $120,000,000 and $340,000,000 in revenue (per year)

**Large-sized:** greater than or equal to $340,000,000 in revenue (per year)

Note: Cognizant and Torry Harris did not allow disclosure

Source: Forrester Research, Inc. Unauthorized reproduction or distribution prohibited.
Many Are Jumping On The Agile Services Bandwagon

The list below includes some of the established Agile vendors that have significant amounts of Agile resources in low-cost countries on the market. It is not meant as an exhaustive list of companies providing Agile services, but it does cover many of the low-cost, commonly “offshore” sources of resources. There are additional IT services vendors providing Agile capabilities that are not included, either because they did not respond to our research invitation, or because they did not have a prevailing offshore model.
The vendors we interviewed at the beginning of 2014 for this research invested a significant amount of money around tools, training, and platforms to support Agile and make more than 45 million USD in Agile revenue per year:

- **Birlasoft.** Birlasoft with over 1,000 Agile-trained employees and a couple of hundred Agile-certified resources is a smaller India-based IT consulting and outsourcing services provider. Birlasoft has its main Agile delivery center in India, and two smaller delivery centers with a couple hundred Agile resources located in the UK and US. Birlasoft has been executing development and testing projects using Agile methodologies since 2006.

- **Cognizant.** Cognizant, with more than 30,000 Agile-trained employees and more than 5,000 certified Scrum masters and 110 Agile coaches, is a large global India-centric application development, maintenance, and infrastructure service provider with a very large Agile resource base in India (about 60%), with the remaining resources in the US and Europe (over 50% of the remaining are in US). Cognizant has over 60% of its projects run with offshore, about 38% onshore, and 2% with nearshore resources, while infusing Agile with Lean, Six Sigma, Cobit, and CMMi. It has also geared itself in the downstream practices with Agile engineering and the DevOps space, while also having assessment frameworks and internal accelerators.

- **CI&T.** CI&T started their Agile journey in 2006 with an initial Lean focus among standard Lean and Agile services, and is based on a homegrown value measurement method called value engineering. With 1,700 people and 1,550 of them actively working in application services using Lean and Agile methodologies, it is a distributed Agile provider. CI&T currently has application development and maintenance consulting and delivery centers in Brazil and China to service mostly North America, Western Europe, and Japanese markets.

- **EPAM.** EPAM is a US-based software product development services provider. With over 8,000 Agile-trained employees and 600 certified Scrum masters, its main Agile resource base is in Central and Eastern Europe with over 7,000 resources, and several hundred in Western Europe and North America. EPAM leverages its engineering Agile training, services capabilities, and accelerators of its product development practices to expand its Agile capabilities in the IT industry.

- **GlobalLogic.** With almost 4,000 Agile trained employees globally, GlobalLogic is USA based full-life cycle product development services provider with its main resource base distributed between Eastern Europe (40%) and India (40%). All engineers and engineering management employees of GlobalLogic go through a mandatory Agile boot camp training session at the time of joining the company. GlobalLogic applies value stream mapping techniques from Lean to reduce waste from the value chain and manages maintenance projects using Kanban methods, among other Agile and Lean methods.
HCL. HCL has a total of 33 delivery centers across the globe, with over 17,500 practitioners — all trained in Agile. This array of delivery centers and resources makes it a large global India-centric application development, maintenance, and infrastructure service provider. Its main Agile base is offshore and based in India; about 15% of the remaining base is in nearshore locations, with the remaining 15% onshore. HCL leverages hybrid models, picking practices from the various Agile methods like Scrum, XP, Kanban, and Lean. HCL couples this with architecture SOA and a BPM-led approach.

Infosys. With over 17,000 Agile-trained employees and a couple thousand Agile-certified Scrum masters, Infosys is a large global India-centric application development, maintenance, and infrastructure service provider. Mostly offshored in India, the remaining 5,000 resources are split more or less evenly between the US and EMEA. Infosys has more than 200 advisory professionals providing Agile consulting services and executing enterprise Agile transformation engagements. While Scrum is its favorite method, more than 95% of Infosys Scrum projects use one or more XP practices to improve engineering efficiencies over Scrum. Key practices used by XP are simple design, continuous integration, pair programming, test-driven development (TDD), and refactoring. Infosys also uses Kanban, Lean, feature-driven development (FDD), and Scrumban methods. Infosys is focused on continuous delivery to enhance the engineering capabilities of Agile programs. It also has a unique distributed Agile execution platform called Infosys Virtual Scrum.

Luxoft. Luxoft is an international application development, maintenance service provider headquartered in Switzerland with roots in Central and Eastern Europe; its main Agile resource base is actually within Central and Eastern Europe with over 2,000 resources and less than 100 are based in North America. It offers cross functional team support with proxy Product Owners as well as sprint zero workshops, Scrum, XP and Kanban, the latter largely used for maintenance.

Mindtree. With a total of 13,000 employees (of which 1,500 are versed in Agile), 150 certified Scrum masters and a dozen Agile coaches, Mindtree is a small India-based global information technology and outsourcing services provider. A small number of the Agile resources are based in North America to enable an onshore-offshore model for some cases.

NIIT Tech. With over 2,000 Agile trained employees, of which about 15% are Agile-certified Scrum masters, and over 1,800 of which are actively working on Agile engagements, NIIT Tech is a smaller India-based application development services provider with its main Agile resource base in India and a small Agile resource base in the Americas and EMEA. NIIT Tech is invigorating its Agile services with continuous delivery capabilities and tracks technical debt as a key Agile metric. NIIT Tech also offers a global Agile scorecard with a mix of five key indexes that cover business value, product ownership, Agile factory, engineering practices, and organization. NIIT Tech also provides focused testing services for Agile along with automation accelerators and global Agile consulting for the full software life cycle.
**Persistent Systems.** Persistent Systems is an India-based provider of software development services and a pure Agile player with more than 3,500 Agile-trained employees and around 4% who are certified Scrum masters. Its main Agile resource base is in India with a smaller base in the Americas and EMEA. With roots in software product development for technology companies, Persistent Systems has now integrated Agile practices into application development for enterprises. It is also a Gold Scaled Agile Partner, and leverages methodologies and principles such as Scrum, XP, Kanban, Lean, and theory of constraints to optimize time-to-market. Other methodologies include test driven development, continuous integration, and release with automation to increase velocity of execution.

**TCS.** TCS has over 40,000 Agile-trained employees, 4,200 Agile-certified Scrum masters, and 50 coaches, while also serving as a large global India-centric application development, maintenance, and infrastructure services provider. It has a very large Agile resource base in India, comprising of roughly 40,000 practitioners, with around 300 professionals in nearshore delivery centers and 15% onshore resources, including 230 professionals onshore delivery centers in Germany and the US. Five percent to 20% of its resources are at clients’ on-site during steady states. As with most of the vendors, the TCS Agile GNDM practice guide encourages Agile teams to leverage a mix of practices best suited for a given context, and from various frameworks like Scrum, XP, Kanban, SAFe, FDD, TSP, DSDM, and other specialized practices.

**Tech Mahindra.** With over 9,000 Agile-trained employees, more than 1,000 of which are Scrum-certified and 50 that are Agile coaches, Tech Mahindra is a large global India-centric application development, maintenance, and infrastructure services provider. Its main Agile resource base is in India, and it has a smaller number of resources in North America and EMEA. Tech Mahindra offers Agile DevOps to promote best practices and to improve efficiencies in both development and operations. Tech Mahindra has also developed a five stage Agile DevOps capability model and has ramped up on recent service virtualization and testing technology to increase testing automation within DevOps.

**Torry Harris.** Torry Harris Business Solutions (THBS) is a niche player in SOA, APIs, cloud, mobility, big data, and digital enablement. Headquartered in New Jersey, its offshore development center is in Bangalore, India. THBS is an IT consulting and services provider with global offices. Its approach to Agile is architecture led and defined through its “Agile global delivery framework (AGDF).”

**ThoughtWorks.** ThoughtWorks originated many of the core principles of Agile software development and the team includes original signatories of the Agile Manifesto. ThoughtWorks, a 20-plus-year-old company, has more than 2,300 Agile-trained employees worldwide. Agile isn’t an “offering” or “bolt-on” service; rather, it is embedded in their capabilities. All 30 offices provide full life-cycle delivery, from idea to production, and the company deeply integrates experience design (XD) with continuous delivery into its software development.
Virtusa. Virtusa has more than 3,200 employees — all of whom are trained in Agile — and approximately 500 Scrum-certified masters. It is an India-based IT consulting, technology, and outsourcing service provider with 100% of its Agile resource base in India. Virtusa comes with its own Agile engagement methodology, which it uses to assess whether clients are ready to embrace their approach and decide what customizations will be necessary. The primary role that onshore drives is the product direction and architecture along with customer representative product owner. The offshore teams focus on solution building and testing.

Wipro. Wipro is a large global India-centric application development, maintenance, and infrastructure service provider with almost 40,000 Agile-trained employees. Its main offshoring center is in India, but it also has smaller delivery centers in the US (almost 5,000) and EMEA (almost 2,000). Wipro’s Agile life cycle is a combination of Scrum, XP, and Kanban. Wipro’s Agile methodology also incorporates specific Lean tenets like value stream mapping, design/dependency structure matrix, and visual controls, just to name a few.

Vendors Tailor Capabilities And Offerings To Handle Every Type Of Client

Most vendors interviewed in this research have a complete offering in place to initiate Agile projects with their clients that have varying levels of Agile maturity, experiences, and skills. They adapt their standard Agile offerings to their client’s individual situation in order to complement the client’s Agile readiness.

All vendors offer the following set of services:

Assessment frameworks. All vendors we interviewed for this research recommend running an initial assessment to know more about the client development and delivery environment. The goals are to make sure all possible impediments are known upfront. Good assessments also help establish a proper strategy and the right pace of Agile induction and training. When working with vendors for the first time, you should expect this kind of service, because it’s a good way for vendors to learn more about your company culture and for you to know from where the vendor is starting. For ongoing engagements with an established Agile partner, this becomes less mandatory. The best assessment frameworks will assess people, organization, process, and technology. AD&D professionals can use Forrester’s self-assessment framework before undertaking a large-scale Agile project to help understand your Agile readiness.

Transformation frameworks. Agile projects require a significant change in behavior from both project participants and stakeholders. Most vendors have undergone the transformation in the past three to four years and leverage this experience with their clients. Most of the medium and large-sized vendors offer transformation frameworks that bundle change management, coaching, and training. Fewer have “Product Owners” (POs) to focus on the needs of business stakeholders.
Forrester believes that this is a key role to transform since the PO role is critical to the various forms of outsourcing and guarantees value for the business on the client side. To make this shift, PMOs and PMs need to shift their mindsets away from “managing” to “facilitating”.

- **Agile coaching.** This is a service that is very popular and common among the small and single-person consulting agencies or boutiques, and was found less among the large vendors we interviewed in this research. While some of them do offer on-site coaching in the various roles as a consulting service, their goal is mainly to help AD&D professionals develop and deliver software more effectively in an outsourcing model.

- **Modern applications develop-test-deploy-maintain services.** All vendors offer an end-to-end service across the entire application delivery life cycle. Agile services are offered for new project development mostly in systems of engagement, but are also offered for large maintenance projects (see Figure 5). The trend for new project development is to “keep it all-together” with maintenance in the same cross-functional teams in a 12-18 month product road map. As part of this, testing is also transitioning from being an isolated service to one that is integrated with development. This is disrupting the testing services market as we know it.7

- **Agile methods applied upstream and downstream.** All vendors mix Agile methodologies (see Figure 6). Mixing is necessary because Agile methodologies are designed for different purposes: Scrum focuses more on the upstream of delivery life cycle and on the overall team process, while methods like XP or TDD are more focused on the engineering processes or integration, test, and deployment. It’s clear that a successful modern service delivery requires both, which is why all vendors go for a mix.8 A good number of vendors mix Kanban for its “flow focus,” which cuts across both upstream and downstream processes. Scrum, Kanban/Lean, and XP are usually the most common in the mix. Hybrid Agile and Waterfall are also becoming a common norm in large-scale enterprises, leveraging concepts like risk management, cost control, upstream planning, downstream integration prestaging, and release management.
**Figure 5** Vendors Deliver Mainly Agile Services For App Dev And Maintenance

<table>
<thead>
<tr>
<th>Vendors</th>
<th>Application development/maintenance</th>
<th>Product development/engineering</th>
<th>Testing/migration</th>
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<tbody>
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<td>Birlasoft</td>
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<td>Wipro</td>
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Note: HCL information not available

Source: Forrester Research, Inc. Unauthorized reproduction or distribution prohibited.
**Figure 6** Vendors Use A Mix Of De-Facto Standard Agile Methodologies

<table>
<thead>
<tr>
<th>Vendors</th>
<th>Agile unified process (AUP)</th>
<th>Dynamic systems development</th>
<th>Extreme programming (XP)</th>
<th>Microsoft solutions framework (RUP)</th>
<th>Kanban/Lean software development (KSD)</th>
<th>Feature-driven development (FDD)</th>
<th>Hybrid Agile-Waterfall</th>
<th>Iterative or spiral model (VSD)</th>
<th>Test driven development (TDD)</th>
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<td>Birlasoft</td>
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**Agile Drives Training And A Balanced Need For Nearshore And Offshore**

Many of the established vendors that offer Agile projects started with Agile development quite early. Over time, they built a large-scale resource base of near- and/or offshore and most also with onshore resources to meet their customers’ needs while investing in their frameworks, collaboration, and acceleration tools and resource training (see Figure 7).

Today, we see vendors increasing their Agile capabilities by:
- **Creating dedicated Agile resources.** Vendors have invested in training people, building Agile centers of excellence, developing Agile solution accelerators, and creating collaboration tools to enhance cooperative distributed teams (see Figure 8). Investment in training has become a crucial part of the transition to Agile. The main focus is on increasing the coverage of practitioners who understand and can work in Agile projects. The investments in Agile capabilities differ by size of the vendor with most of the interviewed vendors investing in their Agile capabilities between 0.5% and 1% of their annual Agile revenue.

- **Development of certifications.** Most of the vendors have internal certification processes, but also use external certifications for Agile coaches, Scrum masters, and practitioners. We don't think certification makes a difference if there is no-hands on experience. AD&D professionals shouldn't get impressed by certification numbers, but they should use them to assess whether vendors come with real experience in projects.

- **Balancing practices both near and offshore.** Regions like South America, Eastern Europe, and, of course, India are the primary locations of vendors’ Agile resources (83% of interviewed vendors’ resources are located in near- and offshore countries), but successful Agile projects need onshore resources for management and delivery of Agile projects (see Figure 9). We generally see a mix of on- and near/offshore resources in Agile projects (onshore: near/offshore 40:60 and 20:80 depending on client’s Agile maturity). This ratio can be different during the project and the outsourcing relationship (e.g., 10:90 at the beginning). In a few cases, we see 100% offshore resources — a risky model which requires high Agile maturity on both sides. While typical onshore roles include the PO (client), Scrum master (vendor), business analysts (client/vendor), and client specific SMEs, the typical offshore roles are architects/technical leads, developers, and testers.
**Figure 7** Vendors Build Their Agile Trained Resource Basis

**Categories of the number of Agile trained resources by vendor**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Category</th>
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<tbody>
<tr>
<td>Birlasoft</td>
<td>1</td>
</tr>
<tr>
<td>CI&amp;T</td>
<td>1</td>
</tr>
<tr>
<td>Cognizant</td>
<td>5</td>
</tr>
<tr>
<td>EPAM</td>
<td>3</td>
</tr>
<tr>
<td>GlobalLogic</td>
<td>2</td>
</tr>
<tr>
<td>HCL</td>
<td>4</td>
</tr>
<tr>
<td>Infosys</td>
<td>4</td>
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<tr>
<td>Luxoft</td>
<td>2</td>
</tr>
<tr>
<td>Mindtree</td>
<td>1</td>
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<tr>
<td>NIIT Tech</td>
<td>2</td>
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<tr>
<td>Persistent Systems</td>
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<td>TCS</td>
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<td>Tech Mahindra</td>
<td>3</td>
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<td>ThoughtWorks</td>
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<tr>
<td>Torry Harris</td>
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<tr>
<td>Virtusa</td>
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<tr>
<td>Wipro</td>
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**Category explanation**

<table>
<thead>
<tr>
<th>Category</th>
<th>Category explanation</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>less than 2,000</td>
</tr>
<tr>
<td>2</td>
<td>between 2,000 and 5,000</td>
</tr>
<tr>
<td>3</td>
<td>between 5,000 and 10,000</td>
</tr>
<tr>
<td>4</td>
<td>between 10,000 and 30,000</td>
</tr>
<tr>
<td>5</td>
<td>more than 30,000</td>
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</tbody>
</table>

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### Figure 8 The Annual Investments In Agile Capabilities Differ By The Size Of The Vendor

<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>GlobalLogic</td>
<td>Birlasoft</td>
<td>EPAM</td>
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<tr>
<td>NIIT Tech</td>
<td>CI&amp;T</td>
<td>HCL</td>
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**Low:** less than $500,000 in investment (per year)
**Medium:** between $500,000 and $1,000,000 in investment (per year)
**High:** greater than or equal to $1,000,000 in investment (per year)

*Note: Cognizant did not allow disclosure and Thoughtworks information not available

*Forrester estimate

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**Vendors Are Adapting Pricing Models And Metrics**

Most vendors now have preferred pricing and metrics models for pricing and reporting of Agile projects, reflecting the level of trust and transparency of outsourcing relationships. With regards to pricing and metrics, we see the following trends:

- **T&M is still the dominant pricing model.** Most vendors support more than one pricing model for Agile projects, and the model can change during the relationship. All vendors we interviewed for this research have T&M pricing models in place, which is the dominant model for Agile projects. But we see that many vendors are working with fixed pricing to support more the “budget planning” aspects in Agile projects. A few vendors are now open to emerging pricing models in Agile projects, like output-based pricing with predefined scope, qualities,
and size (e.g., price per story point) and outcome-based pricing with outcomes like revenue, cost reductions, or special business values (e.g., gain sharing, profit sharing). But all of these emerging models require a high level of trust and maturity in the outsourcing relationship.

- **Agile metrics are becoming more standardized.** Velocity is the most common metric vendors focus on — reminiscent of traditional productivity metrics of the old development world. But measuring “velocity” can be misleading when used as a reference industry benchmark. Instead, it can be beneficial when in full outsourcing mode for AD&D professionals to ask about the vendor’s “standard” reference velocity with a given “named” team — and measure against that. Agile-smart vendors will offer this option. In addition, vendors with high levels of outsourcing services experience offer comprehensive dashboards of metrics, while those more mature in Agile extend metrics into the business value category. The more mature vendors propose metrics like cycle time and customer satisfaction. AD&D professionals can’t manage what they don’t measure; some vendors scored really low in our analysis. Watch out for Agile metrics that matter.

### What It Means

**Agile is a Trend with Increasing Adoption**

Agile enjoys strong hype in software development and maintenance services, as well beyond the application area. Shortage of resources, skills, and experiences and the strong focus to grow the business increase AD&D client needs for external Agile capabilities and services. We are seeing several signs that Agile services will continue to grow:

1. **The catalog of Agile services is rich in the upstream and now growing also in downstream.** Agile is penetrating all areas of software development, but it will also revolutionize infrastructure services, which have traditionally been focused on deployment, monitoring, and management of applications. DevOps, which enables Agility and automation end-to-end in the delivery life cycle, is increasing the Agile services catalog of vendors by enhancing the current Agile development services. We expect to see much more Agile testing and engineering services as well.

2. **Agile is top in the clients’ BT agenda, and vendors are preparing to meet their needs.** Many clients have defined Agile as their standard methodology for development and maintenance of software. They’re doing this to achieve the necessary agility in development of new innovative solutions to win, serve, and retain their customers. Vendors, in turn, see this as a major growth area for their business and are investing in the capabilities. The interaction between supply and demand will propel this market forward.

3. **Agile will change the testing services market for ever.** The radical change to testing within Agile projects has dramatic implications for the testing marketplace. Agile testing will force vendors to transition their staff to be more software-technology savvy, more
architectural and design driven, and less market SME focused. Vendors have started this journey with an army of remote manual testers and will press the pedal as client organizations become more driven by business-technology agendas.

4. **Pricing models and contracts are still the biggest roadblock to the broader Agile services market.** The future of Agile services involves more flexibility and risk in sharing with vendors outsourcing contracts and pricing models. Outcome-based pricing is the ideal model to align client and vendors to the same business goals. Flexible contracts with dynamically adjustable goals and clear responsibilities support Agile projects and helps to implement agility into the outsourcing relationships.

**SUPPLEMENTAL MATERIAL**

**Methodology**

Forrester’s Forrsights Software Survey, Q4 2013, was fielded to 2,074 IT executives and technology decision-makers located in Canada, France, Germany, the UK, and the US from SMB and enterprise companies with two or more employees. This survey is part of Forester’s Forrsights for Business Technology and was fielded during October 2013 and November 2013. ResearchNow fielded this survey online on behalf of Forester. Survey respondent incentives include points redeemable for gift certificates. We have provided exact sample sizes in this report on a question-by-question basis.

Forrester’s Business Technographics Global Developer Survey, 2014, was fielded to 1,716 business and technology decision-makers located in Australia, Brazil, Canada, China, France, Germany, India, New Zealand, the UK, and the US from companies with 2 or more employees.

**Companies Interviewed For This Report**

- Birlasoft
- CI&T
- Cognizant
- EPAM
- GlobalLogic
- HCL
- Infosys
- Luxoft
- Mindtree
- NIIT Tech
- Persistent Systems
- TCS
- Tech Mahindra
- ThoughtWorks
- Torry Harris
- Virtusa
- Wipro
ENDNOTES

1 Forrester has conducted research in a separate report that describes best practices for incorporating Agile in outsourcing relationships, including setting pricing models, defining service scope, and identifying metrics for service levels and improvements. For more information, see the May 8, 2014, “Developing Modern Applications With Agile Outsourcing: Part Two” report.

2 With the same Scrum adopters also using waterfall (54%) and iterative (59%), we can see that organizations are adopting what we call at Forrester Water-scrum-fall. For more information, see the February 5, 2014, “How Can You Scale Your Agile Adoption” report.

3 Forrester fielded its November 2011 Global Agile Software Application Development Online Survey to 205 IT professionals at organizations that are implementing or have implemented Agile. For more information on Forrester’s findings, see the April 30, 2012, “Survey Results: How Agile Is Your Organization?” report.

4 Forrester believes that the success of your outsourcing strategy is greatly influenced by the choices you make regarding what software development and delivery tools you will use to support your journey, what collaboration and communication capabilities teams will use, and the team's physical work space and office layout. For more consulting company names, see the September 4, 2012, “Rightsource Your Agile-Lean Ecosystem” report.

5 Successful outsourcing Agile development, either fully or partially, involves redefining roles and responsibilities, change management processes, metrics, and SLAs, service descriptions and other contractual elements. For more information on how to frame your outsourcing strategy for business success, see the April 10, 2014, “Developing Modern Applications With Agile Outsourcing: Part One” report.

6 Forrester’s Modern Application Delivery Assessment Model is designed to help application development pros plot their path to improving their application delivery capability in order to better win, serve, and retain customers. For more information to help you understand your business’ journey to modern application delivery, see the August 4, 2014, “Overcoming Barriers To Modern Application Delivery” report.

7 Forrester believes that adopting a more adaptive testing approach without compromising team performance is the future for success in the face of disruption in the testing services market. For more information, see the January 15, 2013, “Consistent Performance In Agile Teams Must Include Testing” report.

8 To scale Agile, application development leaders must apply (and reapply) modern management techniques to spread discipline in their teams. For more information on your business’ scalability of application development processes, see the February 5, 2014, “How Can You Scale Your Agile Adoption?” report.

9 Forrester has conducted research in a separate report that describes best practices for incorporating Agile in outsourcing relationships, including setting pricing models, defining service scope, and identifying metrics for service levels and improvements. For more information, see the May 8, 2014, “Developing Modern Applications With Agile Outsourcing: Part Two” report.

10 Agile metrics that matter should focus on business value, quality, progress, and efficiency. For more information on how your business can best optimize the use of these metrics, see the September 9, 2013, “Agile Metrics That Matter” report.
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