1. Background

Accenture is the fourth largest IT service vendor in the world, the largest IT and BPO services pure-play, and the fastest-growing of all IT services majors that have an onshore background. In its fiscal year 2012 (FY) ended August 31, 2012, the company achieved constant currency revenue growth of 11% to $27.9bn.

Fiscal Q1 2013 revenues were up 5% at constant currency, to $7.2bn. Guidance for FY 2013 is growth in the 5% to 8% range, at constant currency.

Accenture has a global headcount of ~259,000 (as at end Q1 FY 2013), of which 167,000 (65%) in its Global Delivery Network, up from 141,000 at beginning of FY 2011. This includes an estimated ~79,000 personnel in India (30% of total headcount).

Historically, Accenture has provided testing services embedded within its vertically-aligned operating units. In the early 2000s, Accenture created a testing practice out of those loosely connected testing specialists. The practice has grown and is now known as Accenture Application Testing Services.

Accenture Application Testing Services highlights that testing has become over the years one of the most important service line of Accenture and has executive management’s attention.

NelsonHall estimates that Accenture has ~15,000 dedicated testing personnel in its Accenture Application Testing Services practice plus an additional 25,000 personnel working in testing in other practices e.g. SAP or Oracle. Those 25,000 personnel at “any given time” have different roles such as business analysts, developers, configuration consultants but carry out testing e.g. UAT or unit testing as part of their job. Accenture highlights that it has trained those 25,000 personnel through its standard MyLearning curriculum, which includes several modules on testing (from its Jump Start to specialized skills). Those 25,000 personnel are therefore trained and qualified to conduct testing.

NelsonHall estimates:

- Accenture has in total almost 40,000 personnel involved in testing. In total, testing represents ~15% of Accenture's total headcount.
- Accenture Application Testing Services accounts for 6% of total Accenture's headcount.
2. Revenue Summary

NelsonHall estimates that Accenture derived

- Approximately $3bn in software testing revenues from its personnel involved in software testing activities in calendar 2012
- Approximately $1bn in software testing revenues from Accenture Application Testing Services in calendar year 2012, up a NelsonHall estimated ~10%.

Accenture Application Testing Services provides testing services verticals aligned along Accenture’s five operating groups: Financial Services; Products, Health & Public Services (H&PS); Communication, Media & Technology (CMT); and Resources.

NelsonHall estimates the Accenture Application Testing Services revenue breakdown by operating group to be approximately:

- Financial services: 25% of revenues; ~$250m
- Products: 20%; ~$200m
- H&PS: 20%; ~$200m
- CMT: 20%; ~$200m
- Resources: 15%; ~$150m.

NelsonHall estimates that the client base of Accenture Application Testing Services is representative of the overall client base of Accenture on a worldwide basis i.e.

- Americas: ~45%; ~$450m
- EMEA: ~40%; ~$400m
- APAC: ~15%; ~$150m.

And NelsonHall estimates:

- Approximately 50% of Accenture's testing activities come from standalone testing contracts and the other half from bundled testing and ADM activities
- Approximately 60% of Accenture’s testing activities come from managed services contracts.
3. **Key Offerings**

Accenture Application Testing Services has four key offerings:

- Testing assessment
- Testing center of excellence
- Testing automation
- Performance engineering and testing.

Specific features of Accenture Application Testing Services offerings include:

- Test environment management: the service is based on open source software and makes sure clients have enough sever capacity for conducting test projects. Testing environments provided are virtual or physical
  - Additional services include configuration and release management, as well as relevant test data management
  - Services are provided in conjunction with Accenture’s Infrastructure Outsourcing Services The service is most often sold as part of TCoE/factory engagements and rarely under a standalone form

- Accenture is a corporate supporter of the TMMi Foundation, the not-for-profit organization that initiated the creation of the TMMi process improvement methodology based on TMM and CMMi. The company developed its Accenture Test Assessment Framework based on TMMi (see section IP and Tools for more information). As a result, Accenture is allowed by the TMMi Foundation to provide TMMi level assessment efforts to its clients. Also, Accenture is also going through its various testing factories/TCoEs, assessing them and aiming to certify those. See section on Delivery Capability. In addition, Accenture is conducting this same assessment for Accenture Software (~2,500 in headcount), the company’s software product unit

- Testing-in-a-cloud, available for functional and performance testing, offers a testing environment as-a-service which includes a virtual server, an operating system and the required database. It exists under two options: private cloud and public cloud. It is offered in conjunction with Accenture’s Infrastructure Outsourcing Services. Demand for this service has been strongest in the financial services and healthcare sectors.

- Applicable to its Testing in a cloud offering, Accenture has an enterprise agreement for Rational with IBM that includes its use for commercial software testing services. Under the agreement, Accenture can use IBM ALM tools (including Rational Performance Tester) for delivering product-based services to its clients. Hosting is done by Accenture or by the client
  - The scope of the agreement has several restrictions: it does not include license for the associated Rational Virtual Testers. In addition Accenture’s personnel must represent at least 50% of the test execution team
The purpose is to have the client use the full range of IBM Rational’s testing tools, e.g. Rational Requirements Composer, Rational Tester Workbench, and Rational Performance Test Workbench.

Client adoption for this service has been somewhat limited to date.

- Mobile testing, handset device testing and mobile application testing for OEMs and mobile operators. The offering is backed by a specific asset (see section IP and Tools), Remote test, Offshore, Simulate & Automate (ROSA) for mobile application testing and handset device testing.

4. IP and Tools

Overall, Accenture Application Testing Services is developing IP and tools to automate testing design and execution. The unit is developing tools and methodologies both at the requirement and design levels; and at the execution level, as well as test case repositories.

Plan, Analyze and Design assets include:

- Accenture Test Assessment Framework (TAF): aims at determining the maturity of the client’s QA and testing organization. It is based on TMM guidelines and relies on discussions with clients and inspection of testing related artifacts to provide a maturity score
  - TAF assesses and scores delivery units on several categories including test strategy; tools; organization; test lifecycle; test automation; performance testing; configuration management; and test data management
  - TAF is “a foot in the door” service

- Accenture Requirements Engineering Suite (AcRES); has three main components: Requirements Analysis Tool (RAT), Requirements Glossary Assistant and Requirements Document Assistant.
  - RAT aims to increase the quality of the written requirements and in identifying missing requirements
    - RAT helps analyzing the requirements of a testing project by running a spellcheck-like tool for critiquing requirements and also allowing to manually tag requirements. RAT requirements and comments can be exported to IBM Rational Requisite Pro
    - RAT also has a visual functionality used for content analysis: it provides an integration diagram of the interaction of systems and users and identifies missing non-functional requirements. The visual content can be exported into Microsoft’s BPM tool Visio
  - Requirements Glossary Assistant: scans requirement documents and suggests enter new entries to in the glossary
Requirements Document Assistant: creates document structures for writing requirements. Based on a requirement wizard, it generates requirement sentences

- ADM Test Estimator, an Excel-based tool that estimates the cost and effort of a testing project, including setting up a TCoE. For project work, the tool combines top-down and bottom-up approaches for two different purposes: respectively during the plan and analyze phase when no parameters and requirements are known and subsequently when the latter are known. Accenture expects the tool to be used for all testing engagements

- The tool is used internally as much as possible to provide visibility to the client on the effort

- Risk-Based Testing-Analytic Tool, an Excel-based tool to capture and track risk scores during a time period. It helps determine whether initial risk expectations are met. The tool works on risk-based testing methodologies.

Test execution tools include:

- Accenture Automation Framework for Testing (AAFT); automates test case creation using an abstraction level, based on reusable test cases and taking a keyword-based approach. The intent of AAFT is to have testers that are not automation testing specialists automate their own test cases

- AAFT also includes a repository of test cases around a number of ISV packaged applications and around several industries. Main sectors include financial services and especially retail banking and insurance. Other sectors include communications, life sciences, and health

- Accenture intends to expand its coverage of industries over time in line with the work done by Accenture Enterprise Solutions in developing industry or horizontal templates. Accenture Application Testing Services is to develop its vertical coverage through mapping of industries and horizontalts covered by Advanced Enterprise Solution templates

- Accenture has structured its test cases under a business process testing approach, taking a comprehensive view of the business processes of a given sector and documenting them by test scenarios, test packs and test cases. The automated test cases are technology-agnostic and run on different test execution tools e.g. HP UFT/QTP

- Accenture Intelligent Testing (AIT) aims to identify productivity areas of improvement in test design and test execution activities. AIT has three main broad principles

  - Allow test designers to design and create test scenarios based on reusing existing test cases, taking a modular approach to test cases

  - Distribute work to the relevant tester with the right kind of experience and domain knowledge

  - Proactively suggest testers what next step they should be taking.

    - Examples include a defect blocking the execution of a test case: AIT will block other test cases affected by the identified defect and therefore save time on non-accurate test scripts
ITA works with HP ALM/QC currently

- Litmus Test Generation, automatically converts requirements into test cases. Input document format is Microsoft Word or Excel. The tool analyzes English-written requirements and is able to break test cases into several actions. It also highlights requirements that are ambiguous in description

- Applied Statistic Process and Hexwise Tool:
  - Applied Statistics Process uses statistical techniques to determine the combination of features and data permutations that should be tested. Its purpose is to determine the right level of test coverage and reduce testing effort
  - Hexwise is an ISV, founded by a former Accenture executive. Based on user requirements, it creates sets of test cases. It aims at increasing level of coverage of test cases while avoiding duplication among test cases

- Remote test, offshore, simulate and automate (ROSA) allows to remotely test applications running on mobile devices and mobile devices only (hosted in a U.K. datacenter and distributed globally). Testing is done remotely
  - ROSA also to simulate network conditions available in several countries
  - Accenture is expanding the capability of ROSA towards set up boxes.

5. Delivery Capability

Accenture has ~15,000 dedicated testers.

The number does not include ~25,000 personnel who are not full-time testers employed within Accenture Application Testing Services but provide testing services as part of Accenture. For instance, Accenture's SAP practice, which has ~30,000 personnel, contributes to this 25,000 non-career tester practice.

Accenture has set up a career testing path: it hires young IT professionals and after three to four years of experience will specialize them in a testing domain (functional, non-functional, test management), industry vertical domain or a technology domain. Accenture may transfer people to other units e.g. SAP for conducting a career on SAP testing. Additional technology practices e.g. SAP will hire personnel with experience in testing, whether functional or technical.

Accenture is currently assessing its TCoEs under its Accenture Test Assessment Framework to determine the maturity of its delivery organization. Most of its centers comply with level 3 of the TMMi Foundation’s maturity model. Accenture Application Testing Services’ maturity by TCoE differs to some degree, as Accenture will adapt to its clients’ specific requirements.

Accenture Application Testing Services has 30 TCoEs across the world in 18 countries. Its largest presence is in India, which represents ~71% of the headcount of Accenture’s career testers:

- Accenture has ~10,600 TCoE personnel in India, in Bangalore, Chennai, Delhi, Mumbai, Hyderabad, and Pune. Accenture Application Testing Services is also developing a presence in Kolkata
Accenture has dispersed its India Delivery TCoE to maximize its hiring capabilities, mitigate risk and provide business continuity.

The testing teams are usually co-located with other teams working for the same client, for achieving synergies, knowledge transfer, coordination across projects.

The Indian TCoEs are managed by one leadership team.

- Accenture Application Testing Services has seven centers in Manila and one in Cebu City (Philippines), with a headcount of 2,250 (up from 1,800 at 2011-end). Accenture’s presence in the Philippines is dictated by several reasons including geographical risk mitigation as well as locating personnel for the specific convenience of the clients. The Philippines centers operate similarly to India’s centers.

Accenture Application Testing Services is complementing its presence in India in the Philippines with various centers of a much smaller scale in other geographies largely for business continuity, time-zone, language or client requirement reasons. In addition, the company has a number of nearshore locations that are specialized by skills e.g. Riga.

Other nearshore and offshore centers include:

- Mexico 375 (up from 350) in Monterrey. Mexico and Argentina (below) services Spanish clients as well as U.S. clients willing to have their testing delivery in the same time zone.
- Brazil 300 in Sao Paolo, Rio de Janeiro and Recife, services local, U.S. and Portuguese clients.
- Argentina 225 in Buenos Aires.
- Slovakia 50 in Bratislava.
- A new center in Riga, Latvia (50). The center provides testing service around embedded systems and network technologies, working with Nordics clients in the high tech and telecom industries.

Onshore centers include:

- U.S., 1,100 in several locations including centers to serve federal and local governments and at client sites.
- U.K., 300 in London and Manchester.
- Italy, 250 in Naples.
- Canada, 75 in Toronto, Montreal and Ottawa.
- Spain, 75 in Madrid and Malaga. The Madrid and Malaga presence is complemented by the centers in Argentina, Mexico.
- France, 75 in Nantes, complemented by centers in Mauritius and Morocco.
- China, 75 in Guangzhou, Shanghai and Dalian. The company is also planning to recruit testing specialists during 2013 in China in Guangzhou, Shanghai and Dalian.
The company is addressing issues around security and IP protection while educating clients on preconceived ideas about China.

- The Netherlands, 50 in Almere.

6. Target Markets

Accenture Application Testing Services has a very balanced client base across sectors. Financial Services client base is its strongest vertical, though it does not represent as high of a proportion of revenues as it does for the major Indian IT services providers.

Areas of strength for Accenture Application Testing Services by sector in the U.S. and across Europe include:

- U.S: the client base is dominated by the importance of financial services firms; and by a lower extent of telecom service providers
- U.K.: telecom, banking and public services
- Germany: automotive, banking and insurance
- France: telecoms and public services
- Nordics: public services and telecom.
- Italy: telecom and banking
- Spain: Banking, public services and telecom.

Examples of large scale clients include:

- A large telecom service provider: services provided include managed testing services. It currently involves ~800 FTEs in testing
  - Services provided include further automation of the delivery and productivity increases, based on Accenture Intelligence Testing (see IP and Tools for more information); QA services; and offshoring in India
- A large bank: coverage includes 300 applications across different lines of the client. The contract involves ~1,100 testing FTEs
  - Services provided include creating shared services centers across the lines of business of the client, for testing automation, performance testing and test environments
  - Automation level for regression testing has increased to ~95%, from 30%
- A large bank. The contract involves ~600 testing FTEs. Services provided include automation of regression testing of applications running of mainframes, AS/400, or programmed in J2EE or based on PEGA
  - Tools used include HP QTP, HP QC, HP BPT, Hexawise and CA LISA
  - Automation level reached 82%
A large pharmaceutical firm: coverage includes 166 applications. The contract involves ~365 testing FTEs, of whom 85% offshore. Services provided include systems testing, systems integration testing, performance testing, test automation, validation & verification, test tool management and UAT support.

7. Strategy

Accenture is driving several key efforts.

One of its immediate priorities is to drive further adoption of managed testing services contracts by its clients, away from T&M and staff augmentation work. NelsonHall estimates that currently multi-year managed testing services contracts account for ~60% of its application testing revenues. Accenture continues to push toward this trend, as the company estimates it is both beneficial to clients and to Accenture Application Testing Services.

To accompany its growth in managed testing services, Accenture is further increasing the scope of its delivery network, pushing, as in the previous years, offshore nearshore. NelsonHall estimates 92% of the headcount of Accenture Application Testing Services is currently located in nearshore and offshore locations.

Offshore is playing a central role: headcount in combined India and Philippines is up 12% (NelsonHall estimate), while overall headcount is up 5% (NelsonHall estimate). Accenture Application Testing Services is developing its presence in the Philippines relatively rapidly (up a NelsonHall estimated ~25% in the past 12 months) and already ~17% of offshore headcount (including China). Anecdotally, Accenture is the one major testing service vendors that has the most diversified offshore presence.

Accenture Application Testing Services’ strategy is to further enhance its IP and tools, focusing on industry-specific test repositories, test execution tools, and test design and QA accelerators. One of the specificities of Accenture is focus on bringing automation and accelerators early in the SDLC.

8. Strengths and Challenges

8.1 Strengths

- Accenture’s global delivery network is mature. It has a high offshore ratio in India. The company is nevertheless building the Philippines as an alternative to India. Philippines already represent ~21% of the headcount of Accenture Application Testing Services in India
  - Presence onshore accounts for ~13% of Accenture Application Testing Services FTEs and is probably at the right level, in terms of headcount
- Examples of large engagement providing references and proving the practice’s ability to handle complex contracts. Accenture’s largest engagements amount to up to ~$150m over five years, as estimated by
NelsonHall. Accenture Application Testing Services is therefore qualified for the largest contracts

- IP and tools strategy and breadth of accelerators is comprehensive. One of its main benefits is to expand from test execution purely to include test design.

8.2 Challenges

- Maintaining the level of quality of delivery personnel and of domain knowledge. Like other software testing companies in high-growth model, Accenture faces the challenge of adding each year 1,000 personnel on a net basis in its payroll (and a NelsonHall estimated 3,000 personnel on a gross basis). Training personnel and then specializing them is one of the main challenges.

- Service offering is not as comprehensive as competitors. Examples of offerings existing in service portfolios of other software testing vendors include:
  - IT infrastructure testing consulting, methodology and execution services, other than non-functional.
  - Data-related testing.

9. Outlook

Accenture has put the relevant ingredients in its service portfolio, delivery model, and accelerators and IP strategy. This means that the company is aligned with market demand.

Its sales engine is working well as proven by the fact that 50% of revenues come from standalone testing engagements, as opposed to testing services being bundled with a larger set of services.

NelsonHall believes that the most successful vendors in software testing with an onshore background are those have mastered the game of selling standalone testing contracts. Selling standalone testing contracts is a rather complex sale as it is relatively technical. NelsonHall is finding that testing vendors that are not selling standalone testing services are not growing as fast as the market. This is largely because standalone testing spending is growing three times as the market, while spending of testing embedded with development, systems integration or application management is growing by 2 to 5% each year.

Accenture additionally is the only IT services vendor with an onshore background achieving double-digit growth in its application outsourcing unit (as estimated by NelsonHall). Accenture also tends to beat competitors and the market in terms of systems integration. This is also driving internally demand for testing services.

In short, largely to its software testing relevance and to the overall dynamics of Accenture, Accenture Application Testing Services is well positioned to beat the market.