White Paper

Mixing Old With New

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Jennifer Thomson
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IDC OPINION

Finding new customers or customer segments, generating higher profit margins, and expanding into new markets are key business concerns. In fact, everything that helps to attract, retain, and grow the customer base will be seen as extremely beneficial. The key challenge is how to enable faster delivery of better quality business solutions that address and meet business and customer needs in an increasingly digital and mobile world.

For the CIO it is no longer just about improving IT efficiency; it is about using IT successfully to enhance business agility and innovation to provide a superior customer experience. However, a common challenge for the majority of CIOs is "how to mix and balance the old (legacy) with the new (dynamic and mobile)". IT needs to understand and support the shift of IT investment from "back-end" to "front-end" IT and support business growth, but at the same time educate the business on the need for continual investment in legacy if the legacy burden is to be reduced.

The shift to the digital world adds increased pressure on QA teams to change the way things are done and to speed things up. One of the biggest challenges for organizations is still that "testing is too slow," and the mobile business challenge only adds to this. The need to successfully deliver a greater volume of business critical projects has never been higher.

Research shows that there is no "one" magic solution to QA modernization – but there are a number of ways in which organizations are redefining the manner in which QA/testing is conducted and provided to the business.

IN THIS WHITE PAPER

This White Paper focuses on the rise of the 3rd Platform, the challenges this is creating, and the impact this is having on the current approach to QA and testing. This study addresses QA pain points, the current state of investment, and future priorities. Sponsored by Cognizant, this White Paper is based on research conducted in the winter of 2013/2014 among 225 European organizations with more than 1,000 full time employees. In addition there were a number of in-depth interviews with some of Europe's leading organizations.
SITUATION OVERVIEW

"The Legacy Dilemma"

After four years of recession and cost control, enterprises are finding that they cannot continue to cut their way to value creation; they have to turn to growth. Finding new customers or customer segments, generating higher profit margins, and expanding into new markets are key business concerns. In fact, everything that helps to attract, retain, and grow the customer base will be seen as extremely beneficial.

The key challenge is how to enable faster delivery of better quality business solutions that address business and customer needs in an increasingly digital and mobile world. As a result, many organizations are looking to opportunities offered by what IDC terms "3rd Platform" technologies — cloud, Big Data/analytics, mobile, and social business. The 3rd Platform is the next-generation compute platform characterized by a proliferation of always-connected smart mobile devices, coupled with the widespread use of social networking, and layered over a cloud-based server infrastructure supporting important new workloads such as Big Data analytics.

For the CIO it is no longer just about improving IT efficiencies; it is about using IT successfully to enhance business agility and innovation to provide superior customer experience. However, a common challenge for the majority of CIOs is "how to mix and balance the old (legacy) with the new (dynamic and mobile)," while keeping up with lean, faster, cloud-based startups that are restricted only by limits on the company credit card.

"Legacy is still plaguing us; we are not as agile as the smaller startups. So a key goal is to modernize and enable agility and speed so that we can compete with smaller more nimble Internet insurance shops." (European Insurance Group)

"The real challenge is in how to link this old world with the new. A lot of the business does not understand why IT can be slow, inflexible, and not meet company needs." (European Retail Bank)

As one IT executive rightly said, "The mainframe is Frankenstein's Monster," but CIOs must find a way to successfully mix the old with the new. This is not an easy task and as the IT executive of a European bank put it, "Mobile and digital banking are very different environments... 'dynamic and agile'... where we need to be able to react quickly and implement fast. That's very different from the legacy estate." And as another IT executive underlined, the legacy burden can lose you customers if you spend too much time worrying about the back-end rather than adequately addressing investments in new customer-facing technologies. However, as the budget holders, educating the business on the importance of investing in legacy is critical if organizations are ever to reduce the legacy burden.

"The business readily gives funding for new and innovative areas, but not for the legacy. Without the investment and the funding for the modernization of the legacy environment — which is costly — then we can't keep up. We need to fight for investment in legacy to make the necessary changes to ultimately reduce the legacy burden on the organization." (European Retail Bank)
In this increasingly digital world, it is the line-of-business managers that typically find and then demand game-changing new technologies. As one CIO stated, "The business has more time to learn about new technologies than we do — that's a fact. I have to deal with legacy IT, and they do not." (European Automotive Supplier). However, to successfully support digital transformation, IT organizations must get closer to the business, and knock down the barriers that typically separate IT from the rest of the organization. The creation of custom agile apps is becoming the hallmark of truly digital enterprises, if organizations are to keep up with the nimble Internet pure plays, then embracing more collaborative ways of working will be critical.

"Our aim is to work more closely with the business — in the past we were very isolated from the business. The idea is to build trust with the business, so that the business trusts us to provide better quality solutions. If people within IT know how to talk to the business, then this builds trust." (Reinsurance Group)

Many European organizations are only just starting to get to grips with this change and truly evaluate the impact and the changes required. The ideal world is to be able to deliver quality solutions across the whole spectrum: legacy and digital.

**QA Challenges in the Shift to a Digital World**

So how are current challenges impacting QA and development teams? IDC finds a number of critical challenges facing QA teams as they strive to successfully support transformation from old to new.

**Testing is too slow**

The most commonly cited challenge is "Testing is too slow." Regardless of the impact from 3rd platform technologies, this has been the top QA challenge for over three years. The shift to the digital world adds increased pressure on QA teams to change the way things are done and to speed things up. The need to successfully deliver a greater volume of business-critical projects has never been higher. Why? Because software has become the foundation of business growth. Business users want fast access to better quality, less cumbersome enterprise "apps," while consumers expect access to innovative new apps that enhance their overall experience. These apps need to work well first time, in a secure, always-on fashion across multiple devices, platforms, and operating systems.

However, developing and delivering software releases and new customer-facing apps on time is a growing challenge, particularly for those contending with this complex web of modern technology combined with legacy systems and resources. Multiple test teams, manual testing, duplicate processes, the set up of test data across multiple environments, corrupt data, missing data, and the high cost of building test environments are just some of the continuing challenges that organizations must deal with. IDC research suggests that fewer than 60% of business-critical change projects are delivered on time and on budget — leaving substantial room for improvement.

"Shift Left" and Test Automation

In a bid to deliver better quality solutions faster, QA and development organizations focus on moving quality measures earlier in the software development lifecycle (SDLC), or "shifting left" in industry terminology. We find that the Shift Left principle resonates with over 60% of European organizations. Done right, "shifting left" in application development offers a faster return on
investment by allowing IT to test assumptions and catch errors earlier in the SDLC, cutting the time between releases (faster time to market) and improving software quality.

As organizations "shift left," software test and development moves closer together (also driven in part by the adoption of agile testing practices), and automation becomes even more important, thus bringing a further challenge to QA teams. We find that an overall lack of test case automation is among the top three challenges QA teams face today. Test managers we spoke with also underlined that for those with complex legacy estates, automation is sometimes difficult to turn into reality as tools, reliable test data, environments, and the people with required skill sets simply do not exist.

Resource and Skill Constraints

In addition to the challenges of automation, organizations are faced with resource and skill constraints. A number of organizations told IDC that a major challenge lies not only in finding the resources to do the testing on legacy, but in re-skilling existing employees. For many, legacy technologies are obsolete, and the people with the knowledge have retired, but there is still the need to test the systems. As one test manager told us, "If we can't get off the legacy fast enough, and for us this is at least a ten year journey, then we will have to call people back from retirement."

Furthermore, organizations are challenged in re-skilling and retraining existing employees. As one test manager explained "Structured testing methodologies are slowly disappearing. The shift to this new agile and dynamic world has a big impact on personality and behavior types; in the past testers were more methodical in approach, but in the agile world they need to be able to accept change readily."

The Cost of Testing

Another more persistent challenge relates to the cost of testing in its current setup. We find that at over a third of organizations testing continues to be seen as an additional cost to projects. In these cases the way that QA is set up does not allow for the right importance given to the right projects, and with a lack of importance there is a struggle to get the right skills positioned or even acquired within the organization. Therefore, a key goal remains the ability to provide testing as a service back into the business. This requires centralization and restructuring of current QA/test practices and processes, and the shift to a shared/managed services approach.

The bottom line for many European organizations is the ability to find new ways to tackle existing and ongoing challenges that allow them to get closer to the business, support business innovation, and help drive better customer experience.

"It is all about testing for the right reasons and testing the right aspects and not just testing for the sake of it." (European Utility)

The key question for many lies in understanding and managing the risk, cost, and quality balance implied in software design and development decisions and then applying the right QA methodologies to ensure the desired "business" outcomes.
Current State of QA Investment

Research provides credible data points for IDC to believe that organizations are positively reacting to the challenges currently at play. We see increased onus on agile development and testing practices, better leverage of test centers of excellence, an increasing focus on test data management, and continuous evolution in test delivery models.

Agile Development and Testing

As stated before, the creation of custom agile apps becomes the hallmark of the digital enterprise, and in a culture where the business increasingly leads IT investment decisions related to front-end customer-facing services, IT must enable and encourage the business to take a more hands-on role in development and testing. In this context we see a ramp up in the adoption of agile development and testing. Close to 50% of large organizations have adopted agile development and testing practices and plan to use agile on future projects. A further 40% of organizations plan to adopt agile development and testing practices in the next 12 months (See Figure 1).

FIGURE 1

Agile Development and Test Adoption: Europe

Q. Has your organization adopted agile dev/test practices in your software organization?

- Yes, 46%
- No, but planning adoption in the next 12 months, 42%
- No and no plans, 13%

Agile Momentum Builds

- 72% practicing Agile for more than 12 months
- 36% practising Agile for 24 months or more
- On average organizations use agile on 10%-24% of projects

The motivations to adopt agile development and test practices are many and varied, but the top three drivers of adoption are: to accelerate time to market; in response to changing business priorities; and for IT and business alignment. It is clear that organizations have solid ambitions to positively impact project success rates and drive quality solutions to market faster.

We also find that both continuous integration and continuous deployment practices are now fully adopted at one fifth of organizations using agile and partially adopted by more than 50%. The adoption of continuous integration and deployment shows the "speed to maturity" of agile, and the advanced state of certain organizations in reaching an end goal where development and operations work seamlessly together (DevOps). Such capabilities provide the business agility that organizations such as Facebook, Groupon, Google and Twitter rely on to deploy changes to their products daily (in extreme cases hourly) to continually improve customer experience.
**Test Center of Excellence**

For the most part, QA/testing has progressed from being seen as an "unnecessary evil" to delivering "business value," with testing increasingly seen as an essential competency. This is reflected in the escalation in the number of test centers of excellence (TCoE) that have been implemented, and underlines the maturity and progress in ensuring quality business process execution. The number of organizations with a TCoE in place is substantial (64%), with a further 30% planning to develop a TCoE in the next 12 months (Figure 2).

**FIGURE 2**

*Use of a Test Center of Excellence*

*Q. Has your organization set up a TCoE or does it have plans to start one?*

![Bar chart showing the use of TCoEs](image)

Source: IDC, 2014

We spoke with a number of organizations that have either a fully operational TCoE or that are leveraging a third-party TCoE; in both cases a number of critical benefits are being seen. One of the key benefits is flexibility, and the ability to ramp up and down as required across multiple lines of business. In addition organizations are able to provide a value injection in terms of time, cost and quality that can be passed on to the business. As one QA executive stated:

"We were able to transform and innovate the current way of working, through more automation, better tools and a more innovative process, that allows us to focus on reusing, capturing and sharing knowledge — at the right cost."
**Test Data Management**

As we all know too well, business moves fast and this means that software development and QA teams need to move even faster. We find that with the increased adoption and maturity in agile development and testing practices, an increasing number of organizations are recognizing the need for continuous testing. This shift to a more flexible and dynamic development process requires rapid access to the appropriate test data. However, IDC finds that many development, testing and quality assurance (QA) teams struggle to create and maintain the required test data. We asked organizations about the challenges to test data management, and they cited the following as the top three:

1. Time consuming (manual test efforts) – linked to data collection from back-end systems
2. Data sensitivity/privacy
3. Data volatility

All too often, generating, tracking and refreshing test data becomes a bottleneck due to corrupt or missing data, or lack of coordination in the extraction and creation of data, thus causing unnecessary delays and adding costs. In the move to support the delivery of faster, better quality business solutions, organizations must address test data management. We find that organizations are gradually implementing enterprisewide strategies that address certain activities such as test data creation, test data archiving, test data masking, and test data assessment (see Figure 3). Research also indicates that a quarter of European organizations are planning to implement a test data management solution to create/slice/subset data to be provisioned in test environments.

**FIGURE 3**

Test Data Management Activities

*Q. For each of the following activities, do you have an enterprisewide strategy in place?*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test data archiving/retrieval</td>
<td>32%</td>
<td>56%</td>
</tr>
<tr>
<td>Test data creation</td>
<td>28%</td>
<td>60%</td>
</tr>
<tr>
<td>Test data assessment and diagnostics</td>
<td>24%</td>
<td>60%</td>
</tr>
<tr>
<td>Test data masking</td>
<td>20%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Source: IDC 2014
Test Delivery Models in Use

One thing is certain, the 3rd Platform changes many of the game rules to doing business and lowers barriers to entry across most markets. More and more enterprises will need to adopt tactics normally associated with startups (e.g., continuous integration, deployment / DevOps, behavior driven testing) in order to handle the need to support ever-changing digital fields such as mobile application development, web analytics, and social media. There is no one defined or right approach to QA transformation and modernization, but many organizations realize that they cannot make this transition alone and are opting to work with external service providers with specialized skills and resources.

While there is a range of test delivery models available and of interest across Europe, research finds that organizations have been somewhat short-sighted in the adoption of external services; preferring to utilize staff augmentation services - driven by urgent tactical requirements. Although this approach is valid and helps meet project deadlines, it does not help to identify and manage risk as early as possible in the process and thereby achieve necessary and desired business outcomes. But attitudes to acquiring external services evolve. Research underlines a huge shift in focus from tactical to strategic QA, with managed testing services using a shared or dedicated TCoE, QA transformation, consulting and strategy services, and outsourced testing services, the preferred approach to acquiring testing services moving forwards (see Figure 4).
Benefits sought and gained from external testing services have moved from tactical short-term wins (cost reduction) to addressing business transformation, as organizations realize that alone they cannot adequately support the growing number of business demands. In fact, IDC finds that the top benefit to leveraging third-party services is all about improving business/customer satisfaction — providing the lines of business with more confidence in software QA testing. The following were identified as key benefits to leveraging third party testing services:
- Enhanced customer satisfaction
- Reduced risk of project failure
- Increased quality of the software developed
- Cycle time reduction
- Development of custom industry-specific testing solutions

The approach to acquiring testing services, matches the transition that we are seeing in the preferred method of payment, from predominantly a mix of time and materials and fixed fees, to a focus on outcome-based contracts (see Figure 5).

A number of organizations told us that the key goal in the next 12 months was to completely shift away from a time and materials approach to acquiring testing services. One of the key motivations is simply because this is an expensive way to do testing – i.e., the onus is on buying bodies – but more importantly it is because these organizations want to get more strategic business value out of the contracts. There is consensus that the current setup neither allows the third-party provider to take ownership, nor does the provider have enough skin in the game, hence little value add and innovation is seen. The shift to a managed services approach (shared or dedicated TCoE) demands a rethink of payment models.

FIGURE 5

Preferred Method of Payment

Q. Which methods of payment is your organization currently using (or which are preferred) for buying testing services? And, which ONE method of payment does your organization intend to use more in the next 24 months?

Source: IDC 2014
When looking at the type of external testing services in use and in demand (current and future investment plans), we begin to see the clear impact and influence of third platform technologies. We asked organizations to indicate the external QA services they planned to acquire in the next 24 months, the results can be seen in Figure 6.

**FIGURE 6**

*External Testing Service Adoption and Planned Investment*

Q. Please select the External QA services your organization uses or would consider using in the next 24 months.

Source: IDC 2014
Research clearly underlines the growing onus on test data management and organizations’ willingness to invest in external tools and services that can aid in the creation of quality test data that supports faster rollout of new business/customer applications or services. We also note the increased interest in the use of agile working practices, as agile development and testing becomes synonymous with digital transformation. The transition to agile practices is not without significant challenges, and an increasing number of organizations are opting to work with external services providers with specialized agile consulting and quality engineering skills.

IDC also finds that the mobile revolution is becoming a very real challenge and the demands on IT and QA are ramping up quickly, and we find that mobile application testing is one of the biggest unresolved challenges that organizations face. This mobile revolution is not about employees and partners being able to read email on mobile phones, this is the opportunity to extend business processes ever closer to the point of transaction. Can customer data be uploaded and loaded in real time? Can transactions or data from a doctor’s examination be loaded directly into a clinical system? Can customers and prospects be presented with promotional offers to drive incremental transactions as they walk through a store? Many organizations simply lack the know-how, resources, appropriate tools, and processes to effectively test and certify mobile applications, pushing increased demand for external services.

Additionally we see increased demand for cloud model testing. Many organizations are still in the "design and build" stage of the cloud migration cycle or are in the preceding "assessment" stage, and this is pushing demand for proper testing services for cloud solutions.

**FUTURE QA FOCUS AREAS**

From research it is clear that European organizations must balance market uncertainty with the need to position for growth, at the same time as addressing business challenges around 3rd Platform technologies. At an operational level this puts pressure on organizations to further restructure, modernize, and transform QA practices and processes. Ongoing research and in-depth discussions with a number of QA executives provides the following insight into key focus areas moving forwards:

1. **Get closer to the business** – through the introduction of new approaches to testing:

   The business expects faster reaction from IT and QA, and typically has a lack of appreciation of the complexity and burdens that legacy creates. There is therefore an ongoing focus on implementing and applying new approaches to testing that can ensure higher levels of business satisfaction. As one executive stated:

   "The business expects fast reactions from us — they have no appreciation of the complexity, so therefore it's not just about automation in testing, but about applying more of a contextual driven testing approach and realizing the benefits quickly from that."

   (European Retail Bank)

For many organizations it is no longer about just having good test cases, but about the ability to leverage the right people that have business process focus and not just an application level view of functionality. In other words, testing is not just about the numbers (the number of test cases completed, number of defects found, etc.) but about moving to a situation where there are fewer test cases and testing is carried out at a higher business process level. One executive was
convinced that adoption of such models would allow them to build up people's skill sets, help with attrition, knowledge management, and fundamentally bring people with business knowledge into testing.

The increased focus on "shifting left" and adoption of agile already sees the business more involved up front. Applying Agile principles and methodologies is increasingly popular, as IT strives to enable and encourage the business to take a more hands on role in development and testing. Benefits can be very rewarding when it is done right:

"The relationship between IT and the business has improved enormously due to Agile."

"De-risking delivery by getting the end users involved in the process and getting them to see the systems earlier – it's a no brainer."

"Pushing business involvement allows delivery of more fit-for-purpose solutions."

The future is about a situation where there are no boundaries between the business and IT. IT will no longer have a "change" role; there will be cross functional teams of people that sit across both the business and IT with no clearly defined IT or business role. But to implement such change requires strong project management and leadership, as a number of QA executives underlined, "Agile is a people problem, when people understand it – it works – if they don't it fails"

2. Address mobility

There is increasing onus on enterprise application mobility strategies to ensure that business users and clients have instant access to all relevant business applications as and when required, at the right level of quality. Brand image can be seriously dented with even the smallest of errors on a client mobile application, but can be equally dented if there is no mobile application available. In many cases – particularly with the introduction of new technologies (migration to cloud, integration/adoptions of mobile strategies) – QA has not been brought up to speed in the business reinvention journey and therefore can be seen as the bottleneck.

It is important for organizations to ensure that the business/top management understands the role of QA in the application lifecycle. Mobility needs to be truly integrated into application testing priorities and mobile application testing needs to be a fully integrated component of the QA function to ensure that the enterprise mobile strategy takes testing into account from the start. User experience, functionality, and performance testing are critical focus areas.

3. Test tool modernization

Many organizations that we speak to are engaged in major test tool modernization efforts. For many, maintaining hefty legacy estates has taken a lot of attention and focus, resulting in little or no investment on much needed new tools. Typically, there was no time to take a step back from running projects (maintain and upgrade). However, to support current business challenges and the shift to 3rd Platform technologies, organizations must take stock of what tools are required to adequately run the business.

4. Cloud

As organizations increasingly shift to as-a-service modes of delivery (SaaS, IaaS, PaaS) the requirement increases for the right test services for cloud solutions. QA executives told us that they
are buying more off-the-shelf cloud products, and there is therefore a direct need for integration and implementation testing. But a more important focus moving forwards is business functionality testing based on client requirements.

5. **Centralization and restructuring of QA/Testing** – move to shared services:

A key goal at a number of organizations remains the ability to provide testing as a service back into the business. This requires centralization (bringing together of testing under one roof) and restructuring of current QA/test practices and processes to create best practices that can be applied across all business divisions. More often than not, organizations seek external help in this transition, and research confirms increased investment intentions for the creation of shared TCoE. The transition from a decentralized to centralized QA model is a paradigm shift for any organization, and spearheading quality transformation requires commitment from the executive team and structural support to identify, assess, and drive innovative process quality improvements. One executive told us:

"You should invest in educating people to bring them round to the world of the service-based contract. You have to explain the rationale. Ultimately this is a PR exercise, but it needs to be done." (European Utility)

The implementation of a TCoE is becoming a preferred solution, as it allows flexible resourcing and adaptability, and allows a redefinition of how testing services are conducted and provided to the business.

"The implementation of a TCoE has contributed to our business agility and competitiveness, by having a standardized and automated model that allows fast delivery of better quality business solutions." (European Telecommunication Provider)

6. **Improving working relationships with suppliers**

As organizations shift from time and materials contracts to fully fledged managed services contracts, this changes how organizations are managing and engaging with suppliers. One executive told us that "there is an implicit need to become better at leveraging innovation and continuous improvement, and in creating improvements through activities and knowledge sharing." Some organizations are pushing for a deeper involvement of their own internal staff within projects run by offshore partners, stating that "this is for control, governance, but fundamentally to allow more business knowledge to get fed into the projects."

For those that are further down the path to fully managed TCoE, then there is a clear focus on creating a true partnership with the external supplier. Typically the supplier is being asked to bring demonstrable value add and present a solid 12 month road map that allows quicker time to market. As one QA manager underlined, "it is not just about putting in a test factory – you need to imagine this as the first building block to building a house, once the foundations are in then there will be continual focus on model maturity."

**CONCLUSION**

Organizations today must be able to manage business and customer change faster than the competition; this is made more challenging through the rapid adoption of mobile and cloud technologies. This requires that the IT/QA organization is able to provide the right business
solutions, at the right cost, the right quality and at the right level of risk to the organization, as and when desired. There is no one solution to QA modernization – but there are a number of ways in which organizations are redefining the manner in which QA/testing is conducted and provided to the business.

IDC has the following takeaways for IT professionals evaluating QA modernization:

- **Evaluate business goals.** Before deciding on the right operating model to apply you should evaluate your own corporate culture and what is the best fit model for your organizational needs. Critically appraise the current set up and review how the set up of a test center of excellence (internal/external), managed test services or testing in a cloud environment (TaaS) can provide critical incremental efficiency and quality improvements. Consider conducting a QA assessment/formulating a QA roadmap together with an independent third party.

- **Work on pushing business assurance, not just quality assurance.** Today's world is more than ever about proving business value for money. Organizations should work on demonstrating the business value of QA or putting the cost of not testing into monetary terms, so as to justify the proportional spend on QA.

- **Formulize QA.** Our research certainly suggests that QA's status within European organizations has moved forwards – but there are still times when testing is treated as an afterthought and conducted on an ad-hoc or post-hoc basis (at project end) as and when needed. Formulized QA processes are critical in attaining efficiency and productivity gains – particularly as we enter the mobile and digital era.

- **Support Front-end investments.** Understand and support the shift of IT investment from the "Back End" to "Front End" IT and support business growth. But at the same time educate the business on the need for continual investment in legacy if the legacy burden is to be reduced.

- **Regain control.** Manage complexity and changing business priorities with "responsive and continuous IT," embrace more agile ways of working that involve the business. Ask yourself the questions: Am I talking to the business? Is IT aligned to the business? Am I talking the same language as the business?

But in the shift to newer approaches to testing (agile, knowledge driven/contextual testing) make sure that you understand what's required to implement agile successfully: stakeholders (user experience design, development, project management, line of business, quality assurance/engineering), skill sets, tools, and talent.

- **Act smarter.** Act smarter in the use of tools, models and processes, and place the onus on tool and process standardization and consolidation.

- **Must-have vendor attributes:** Organizations with which IDC speaks place increasing onus on the following vendor attributes:
  - High service quality/outstanding customer experience
  - High level of responsiveness/collaborative attitude
  - Innovative pricing models
  - Quality engineering skills and capabilities
  - Depth of industry expertise and experience
  - Brings innovation to your business
Essentially, organizations are looking for and selecting vendors that go the extra mile in terms of guidance, feedback, and responsiveness. The onus is on high customer satisfaction ratings, as well as the willingness and capability of the vendor not only to churn out data required to meet SLAs, but to offer concrete recommendations for improvement and bring innovation (proactively) to the business.

About IDC

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IDC U.K.

Chiswick Tower
389 Chiswick High Road
London W4 4AE, United Kingdom
44.208.987.7100
Twitter: @IDC
idc-insights-community.com
www.idc.com

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