

EMA™ Advisory Note: An Adopter's Guide to User Experience Management – How to Pick the Right QoE Solution for You



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This EMA Advisory Note is an excerpt from a recently published EMA report entitled *'An Adopter's Guide to User Experience Management: How to Pick the Right QoE Solution for You!'* (Adopter's Guide). The Adopter's Guide is specifically designed to help you select the right Quality of Experience (QoE) solution to improve the interactive experience of your application end users based primarily on your functional and business needs, your role, and the constituency (constituencies) you are looking to serve.

This excerpt focuses on one of the leading vendors in the report, Gomez and their ExperienceFirst solution. A further comparison of the capabilities of Gomez ExperienceFirst against other vendor solutions can be found both in the full Adopter's Guide report and online at the Enterprise Management Associates (EMA) IT Management Solutions Center on User Experience Management at <http://www.enterprisemanagement.com/research/asset.php?id=1008>.

Why QoE?

There are a lot of terms circulating across the market to describe how to set up metrics for evaluating application and network services as they impact the end-user experience. No doubt the most established is Quality of Service or QoS, which has generally taken on a fairly technical, bandwidth-centric definition where it remains still valuable as a metric, but as such is far from summing up what really counts in the eyes of the end user. There are other terms like RUM or “real user monitoring” that are technical, but at least focus on a series of monitoring technologies truly targeted at the “real user” or “end user” his or herself.

But probably the most business-relevant and demanding is QoE, or “Quality of Experience,” which is not centered in technology, but in the flesh-and-blood experience of the user consuming IT services. This focus, a lot like Mean Opinion Score (MOS), was originally intended as it applied to telecommunications services. Like it or not, how IT customers “feel” about their services is in the end going to be how they're going to vote with their pocketbook or their budget approvals. And since they reside in the hearts and minds of IT service consumers, the dimensions of understanding QoE can be as complex and differentiated as one might expect once you combine human “sensibilities” with a wide range of IT services. For some users, mobility might be more important than super quick response time. Security may be a value and often is when critical records or financial transactions are at play. But the heart of the problem is most often focused around application or service response times, which now leads availability 65% to 63% based on EMA research.

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Quality of Experience is the *ultimate collaboration* because it not only requires effective dialog between a range of IT professionals and the line of business community, but because it must also actively pursue venues to understand end-user (consumer) priorities and satisfaction levels. It is through this type of “collaboration” that both IT and business executives can begin to set more meaningful priorities for service objectives, and through this dialog, as well, that IT can come to understand actual, rather than merely surmised, user preferences for service functionality and service performance. For this reason, nothing could be more important for aligning IT with business goals than effective QoE initiatives.

EMA research indicates an accelerating growth curve for QoE initiatives – one that’s not likely to abate even in tough economic times. QoE after all is both a “highly scalable” means to enhanced productivity and in many cases revenue generation and brand loyalty. It’s arguably one of the most efficient investments that IT and business planners can make.

A Few Highlights

Some of the highlights of the research are:

- 79% of the respondents viewed QoE as becoming more important to their organizations. Only 2% see it as becoming less important.
- 71% view QoE as both a business and technology concern – while 19% view it as primarily a business concern and only 11% view it as primarily a technology concern.
- 47% already claim to have integrated teams between business constituencies and IT.
- And interestingly, 45% of the business respondents (those with clearly non-IT roles) were involved in dialog with IT sufficiently to be “aware of instrumentation and unique technical environments.”
- The lead driver across all verticals was employee productivity at 23%. Business competitiveness and/or revenue generation was close though, at 20%, and brand protection and customer satisfaction garnered 14% of total votes.
- Most QoE solutions not only capture issues with the user experience, but begin to help to solve the problem of where to focus diagnostic efforts. EMA, along with many others in the industry, calls this “triage.” And supporting triage is, as expected, very important to our respondents – 77% of whom felt that triage was either “very” or “extremely” important.

And just how important is QoE again? When asked what they’d do differently – the top choice, at 43% was – “We wished we started our QoE initiative sooner.” The second choice was to focus on “better coordination between the business and IT.” Focal interviews echoed some complementary insights into how and why QoE initiatives succeed or fail:

- “My recommendation is to get on the user’s level. You need to assume the end user’s mindset. Ask them [IT users] how they could be more productive.”
- “You need to have a good QoE plan with a business case. Clearly define your goals and objectives. Understand how you are going to use the information. Take it one step at a time. Then, you need to define how you are going to meet your goal – like reducing costs.”
- “My advice to others getting into QoE efforts is to have an on-going dialog with your business partners. Perception is really important. Don’t ignore the “soft stuff” - meetings with your end users are completely critical.”

In Summary

QoE is on the rise and for good reason. It is the ultimate barometer of whether or not an IT service is “successful” from a customer/consumer perspective. As such, it is both multi-faceted and potentially open-ended, as new application environments require new types of metrics to assess not just response time and availability, but effective navigation and interaction with the application and application-supported processes at hand.

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QoE has progressed to a level where senior business executives and managers have in many cases already become aware of and interested in technology trade-offs as they impact the business. This interest and dialog bodes well for future QoE adoption. But the newness of QoE suggests that business constituencies have not yet had sufficient time to evolve at the more administrative and functional level. Nonetheless, the most dramatic finding of the December research is the clear indication that QoE is on the rise, and should continue to be on the rise as businesses and organizations seek more effective operational and business alignment between IT technologists and the business planners whom they ultimately serve.

Further detail on products appropriate to different constituencies can be found in the EMA Solution Center on QoE at http://www.enterprisemanagement.com/IT_Mgmt_Solutions/, or simply by going to the EMA Website, www.enterprisemanagement.com, and looking for the “Solutions Centers” in the top menu.

Case Studies

QoE – Moving from Reactive to Proactive

This company builds and runs clinical trials for new medical devices used in medical procedures. The end-users are mainly internal users at hospitals and clinics around the country. These users enter data and run reports for the company’s major clinical trials. The primary application supported is called InForm by Phase Forward, a commercial program that builds and runs clinical trials.

A High Visibility Challenge

QoE became a focus for the company in 2006 when issues of uptime, availability and performance became evident in an externally-hosted application used to enter and analyze data from clinical trials. As one project manager stated, “the noise level from customer dissatisfaction finally reached the business VPs in the user community. Suddenly, IT was involved in trying to solve our QoE issues.”

“IT was getting blasted by users that the application was slow or unavailable. We couldn’t figure out why because our hosting company didn’t provide us with the needed alerts and reports to diagnose the problem.” The initial QoE efforts were borne out of a need for a tool to help respond to end user complaints and a desire by IT to be more proactive.

No single event pushed the company to undertake a QoE initiative, but rather multiple small events during peak times – such as enrolling patients into a trial or scrubbing data to submit to the FDA. “During peak periods we could have hundreds of hospitals and

thousands of users entering data during a two-week period, this was a very “high visibility” window for IT and millions of dollars were at stake.”

Before starting a QoE initiative, the approach used by IT was highly reactive. No metrics were measured, and only rudimentary understanding of QoE – for example, measuring the call closure rates to the Help Desk – was used. “We only found out about problems when users complained. We got our hands slapped a lot.” Customer calls would go into a general mailbox only after the vendor support failed to address the issue – sometime two or three days later. “People were aggravated, emotions were high, and the trail of the problem was oftentimes cold. Without root cause analysis, the same problems would occur over and over again. We didn’t know if it was a process, hardware, software or network problem. All we could do was pressure our hosting vendor.”

QoE Initiatives

In late 2006, a management team representing both the end users and IT met with the hosting vendor. Multiple initiatives to improve QoE were established for completion in two years. Budgeted in 2007, QoE became “one of IT’s highest priorities.” Initial tool selection was done via a combination of discussion with industry peers, web research and developing a requirements matrix from the business. From the initial investigation, two tools were brought in for four months of evaluation – Gomez and Keynote.

“We spent a lot of time doing our proof-of-concept. We used the POC to do exactly what we needed to do in production. So, when it came time to install the tool for real, we had the processes down. Moving Gomez into production was when the pressure was on – so it was great that we did our homework up front.”

QoE/ User Experience Management Services

QoE Services are largely responsible for establishing QoE and User Experience Management as a significant and growing force in the information technology industry. There are a lot of reasons why. First of all, since these are services, deployment and administrative issues are effectively restricted to selecting reporting requirements and testing frequencies. Once this is done, time to value is all but instant. This makes QoE Services attractive to a wide range of IT and business constituencies, and a breadth of markets as well. Our two leaders are “optimized” to support small, mid-tier and enterprise customers, as well as telecommunications service providers. This isn’t hyperbole. Their menu options enable a wide range of cost points, and in fact both support a significant number of smaller clients that depend on doing business internationally through Web-based application services.

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Because these services are largely *about* Quality of Experience or User Experience Management, they are also optimized to support both business and IT constituencies needing collaborative and consistent access to a cohesive set of data points. From a business perspective, these constituencies include e-business and e-commerce environments, as well as line-of-business environments targeted at end-user productivity and business competitiveness. Across IT they offer defined reports to support a wide range of constituencies from application development, to Q/A Test, to Operations, to service managers.

However, nothing is a panacea, and our leaders in QoE Services are best utilized in conjunction with other solutions more optimized for in-depth diagnostics that can also add granularity to triage. Traditionally, these services are focused on synthetic testing that can be carefully and consistently defined and implemented, but as such they do not fully replace the need for observed transactional management across the IT infrastructure. And finally, they are definitively Web-based and not designed for traditional client/server applications, which according to EMA research is still important to 46% of Enterprise Management Associates' respondent population. In fact, EMA has seen evidence that a balanced investment between QoE Services and QoE-related management software can not only offer superior coverage and insight, it can also reduce costs by focusing investments along optimal rather than one-size-fits-all lines.

Having said that, there is a reason why we are beginning this report with QoE Services, and that is because without the evolution of these services, industry attention and awareness to User Experience Management would be not nearly as progressed as it is today, and it would in all probability still be out of reach for many smaller and mid-tier businesses.

Gomez, ExperienceFirst (XF) – LEADER

Gomez offers an on-demand hosted model with a multi-tenant architecture and outreach to more than 40,000 testing locations globally. Data is stored in a central warehouse to enable a wide range of report choices and flexible custom report generation. Gomez also supports integrations with data mining and Online Transaction-Processing, as well as integrations with management software solutions such as IBM Tivoli, HP, and BMC. One of the more outstanding features that Gomez ExperienceFirst can provide is blanket coverage of virtualized environments, including not only servers, but virtual desktops and virtual application environments as well. From a network perspective, it supports VPNs, wireless, cellular and mobile, and Content Delivery Networks.

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Gomez ExperienceFirst is divided into the following services categories: *Reality View XF* is focused on testing applications across browsers, operating systems and remote devices for both performance and visual consistency. *Reality Check XF* provides overarching insights into application-transaction performance. *Reality Load XF* is an external load testing service designed to capture the behaviors and priorities of a company's actual user population. *Active Network XF* measures page-level and transaction-based Web application performance across global geographies. *Active Last Mile XF* measures Web application performance from Gomez's network of 40,000 last-mile measurement points. *Active Streaming XF* targets multimedia-streamed content from around the world. *Actual Experience XF* captures browser-based user experiences. *Business Pulse XF* is an executive dashboard targeted at supporting business constituencies in online operations and LOBs.

EMA especially likes Gomez for its strong lifecycle application management support, the breadth of constituencies its supports, the strength of its capabilities for virtualized environments, and its rich and proven integrations with other management solutions.

A complete look at Gomez's strengths across the QoE marketplace is as follows:

QoE/ User Experience Management Services	Gomez – LEADER
Application – Life Cycle Solutions	Gomez – LEADER
Business impact – End User Productivity	Gomez – PLAYER
Business Impact – Revenue and Brand Competitiveness	Gomez – LEADER

About EMA

Enterprise Management Associates (EMA) is a leading industry analyst and consulting firm dedicated to the IT management market. We provide IT vendors and enterprise IT professionals with objective insight into the real-world business value of technologies ranging from Virtualization to Security and Risk Management to ITSM and CMDB. Learn more about our research services, our free online IT Management Solutions Center, and our IT consulting offerings at: www.enterprisemanagement.com