

# 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, Knoa Software Experience and Performance Manager (EPM). A further comparison of the capabilities of Knoa EPM 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/](http://www.enterprisemanagement.com/IT_Mgmt_Solutions/), or simply by going to the EMA Website, [www.enterprisemanagement.com](http://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.”

## **Business Impact: End-User Productivity**

End-User Productivity is the number one driver for QoE and User Experience Management, garnering 23% of respondent votes from Q4 EMA research, ahead of business competitiveness and revenue (20%). There’s good reason for this. Virtually all businesses, including e-business and e-commerce, depend on end-user productivity. This is true whether the end users are internal – for business competitiveness – or external, when a failure in end-user productivity can result in revenue loss and brand disloyalty.

On the other hand, detailed end-user productivity metrics tend to require very focused solution designs. Beyond responsiveness, availability and basic infrastructure and application performance, getting in-depth insights into actual user behaviors is far less broadly addressed by the QoE marketplace. Moreover, EMA has set the bar very high in this area for leaders and innovators, requiring an explicit, rather than implied, separation between “application performance” and “user performance,” and/or unique capabilities for interacting with end users to help them resolve performance issues through help desk personnel. In Q4 EMA research, for instance, the “ability to determine if the problem was caused/impacted by end-user behavior” ranked number one in business priorities for triage.

## **Knoa Software Experience and Performance Manager (EPM) – LEADER**

Knoa has set a very high standard when it comes to looking at end-user productivity metrics for corporate business applications with a growing uptake in call centers and shared service centers where there Knoa has shown very demonstrable ROI. These include Web and non-Web, Web 2.0, and SOA applications – primarily in support of business processes, such as SAP, or collaboration, such as Outlook and Sharepoint. In addition to these, Knoa has templates for Oracle e-business Suite, J.D. Edwards, PeopleSoft, and Oracle Siebel CRM. It should be stressed that Knoa’s focus is not externally-facing e-business applications, but those specifically in use to optimize productivity across the enterprise. Knoa EPM is targeted at LOB and business professionals, application developers and Q/A, people performance professionals, trainers, process and compliance managers, as well as applications managers within Operations. Although it does provide some basic triage at the transaction level, it is designed to complement infrastructure monitoring capabilities for network and systems managers.

Knoa’s agent-based design point, with its Universal Client Agent (UCA), reflects this business model. UCA contains a “library of sensors” that collect information from a wide range of sources, including network and system performance statistics, but focusing on other sources, such as Win32 APIs, OS methods, and COM and IE Web interfaces, optimized to be able to document and separate what Knoa describes as “received experience” (how the application performs) from “achieved experience” (how the end user performs).

The granularity with which Knoa can examine these two separate areas is distinctively rich compared to all the other vendors examined in this report. Knoa captures transaction time in terms of response and, separately, in terms of navigation. It can capture infrastructure and application errors from the desktop perspective, as well as coding errors, such as “can’t connect to server,” or “method not allowed.” Knoa is very granular in how it looks at user proficiency in context with these other details, and not only captures where and how errors occur, but also the number of steps required to complete a business process. Knoa can even capture compliant versus non-compliant user behaviors (e.g., is the end user using the application correctly?).

In April, 2009, Knoa will be releasing a new end-user product, Knoa Application Usage Manager (AUM), which will provide comprehensive utilization analysis of all applications running within the end-user’s desktop. AUM can run singly or concurrently with EPM, which is designed for in-depth monitoring of individual applications. In contrast, AUM provides broad-based awareness of all applications on an end-user desktop in terms of how long each is open, how much is it actively used by the end-user, and how the end-user transitions from one application to another.

Knoa’s ambition to become the “sole-source provider of end-user experience and performance metrics for all the stakeholders in the organization” seems to be well-grounded in reality. And with AUM, Knoa will be able to support more effective asset and resource planning, including chargeback and demand management. EMA especially likes Knoa’s granularity in separating and documenting end-user behaviors from the “received” performance of the application over the infrastructure, and its well-thought-out reports targeted specifically at collaborative decision making when critical new business applications, or application updates, are rolled out to new user constituencies. The benefits in cost reduction, business performance and reduced risk should be self evident.

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## 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](http://www.enterprisemanagement.com)

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