

Getting Your Money's Worth

TEN BEST PRACTICES FOR INTERNET QUALITY MEASUREMENT

June 2002

Gómez™

09 6.14 1.02 5.45 2.01

INTERNET QUALITY AND BUSINESS VALUE

Maintaining an effective Internet presence is not cheap. Companies that want to do business over the Web invest millions of dollars on servers, bandwidth, load balancers, applications and security. As they become more successful and have to support more users and more online activity, they continually have to ante up for more infrastructure to maintain or improve performance.

But just how much performance is enough? How can companies determine whether they really need to spend more money on Internet infrastructure? And how can they determine whether their additional investments are really buying them additional value?

To answer these critical business questions, Internet managers need a clear understanding of what it means to measure the performance of a Web site. Web site performance is more than just the speed with which the home page shows up on a user's screen. It is the total quality of the user's experience - including transactions, navigation and downloads. It is affected by their perceptions and expectations. And it must always be assessed in the context of business value.

Performance measurement must also be actionable. Internet managers want to know where their online resources are weak so that they can invest money and effort with tactical precision where it's needed most to support real business requirements. They do not want to burn cash trying to live up to some abstract standard of performance.

As the market leader in Internet Quality Measurement, Gómez has distilled years of experience helping the world's busiest and most sophisticated sites ensure the optimum return on their investments in Web infrastructure into a set of ten best practices. These best practices form the foundation of any attempt to accurately gauge whether or not a company's Web presence is fulfilling its business requirements. These practices ensure that a company's Internet performance measurement:

- truly reflects the actual and perceived quality of the user's experience
- is rigorously focused on clear, realistic business objectives
- enables technical teams to respond appropriately and effectively

Gómez Performance Network

These essential best practices can help Internet managers sort through the competing claims of measurement service providers and software developers, with the hope that they will clarify issues currently obscured by marketing hype and propaganda. Internet Quality Measurement is too critical a business discipline to be conducted in a haphazard manner. Those haphazard practices can be replaced by best practices - with an improved bottom line as the result.

TEN BEST PRACTICES FOR INTERNET QUALITY MEASUREMENT

Internet managers have a greater choice of performance monitoring tools and services than ever. These tools and services track a wide range of performance parameters using widely varying techniques. The challenge for Internet managers is to choose the right set of metrics and to make sure that they are measured in the most effective manner.

The following best practices have been proven over time to be extremely effective in enabling Internet managers to optimize both the technical and business performance of their Internet infrastructure. They span the multiple disciplines that make e-business success possible -- including engineering, marketing and finance. By applying them, organizations can consistently optimize the value returned by their investments in Internet infrastructure and deliver a competitively superior end-user experience.

It's important to note that these best practices all assume that Internet performance is being monitored externally. Internal monitoring - that is, measurement performed inside the firewall -- is, by itself, insufficient for accurately tracking the quality of the end-user's experience. That experience is always affected by the idiosyncrasies of Internet protocols, the variability of conditions on service provider backbones and other factors that can't be effectively assessed within a closed network environment. Anyone responsible for ensuring Internet service levels must therefore implement some sort of outside-the-firewall monitoring solution to obtain accurate performance data.

Best Practice #1: Compare yourself with yourself

Raw performance statistics mean very little, because users experience sites in a very specific context. For example, if your site is screaming fast but one function performs with only moderate speed, users will perceive that function as being "slow." The same level of performance on a site that is sluggish everywhere wouldn't



Gómez Performance Network

bother users at all. But because your site performs well as a whole, the relative context of that function's performance makes it appear "slow."

All performance data must therefore be viewed and analyzed in the appropriate context. Without this context-sensitive analysis, the real impact of performance on the user experience cannot be properly ascertained.

Best Practice #2: Keeping up with the Joneses

Once a company has established a consistent and appropriate performance level across its own site, it can look outward to understand how that performance level compares to other companies in its industry and/or market segment. The ability to perform these comparisons obviously depends on getting access to accurate performance data from multiple competitors. For a complete and worthwhile comparison, this data should address all aspects of competitors' site performance -- including transaction times and other advanced functionality.

Best Practice #3: Are you unique?

Performance requirements are to some extent inversely proportional to the uniqueness of site features and content. That's because people will wait longer for something that they can't get anywhere else than they will for something they can. So there are certain types of content and services that don't really have to perform to an extremely high standard to be successful.

This doesn't mean that the performance of unique and/or powerfully branded sites should be allowed to degrade below acceptable levels. It simply means that undue investments in performance improvements for such content and services can be wasteful and may unnecessarily eat into profits.

On the other hand, competitively superior performance may be an absolute must for sites that operate in a highly competitive market space -- such as search engines or commodity shopping sites. Internet managers therefore need to understand to what extent changes in performance will actually have an impact on whether or not users frequent their sites.

Best Practice #4: Watch the clock - and the calendar

Performance numbers must also be understood in the context of time. A company with lots of international customers has to maintain consistent performance 24 hours a day to support users in every time zone. A

Gómez Performance Network

financial services site that doesn't offer off-hours trading, on the other hand, will have to focus on what happens between 8:00 AM and 5:00 PM. Many sites also experience other periods of peak activity where performance and provisioning become critical issues -- for example, at the end of the month or during seasonal activity. Performance statistics that are simply "averaged out" for the day, week or month don't help companies address these critical crunch-time issues, leaving them exposed to the potential for dissatisfied customers and lost sales.

Best Practice #5: Avoid complacency

Time affects performance measurement in another way. Users' expectations, it has been shown, are constantly evolving. What was good enough for them six months ago may not be good enough for them today. This may be because they've had experience with other sites that perform superbly, or because they have upgraded to a faster Internet connection, or because they've come to depend on your site and just want it to work faster. Regardless of the underlying reasons, however, Internet managers must continue to adjust their performance benchmarks to reflect the changing perception of Internet users.

Best Practice #6: Location, location

Contrary to popular belief, the Internet does not eliminate the boundaries of space and time. In fact, geography -- in both conventional and network terms -- is a key factor in Internet performance. So companies whose customers are all using corporate T-1 access to Tier 1 ISPs shouldn't spend much time measuring page loads for dial-up users in rural areas. Conversely, sites that are frequented by home users across the country shouldn't judge their performance solely on statistics gathered from Tier 1 backbones. Every Internet manager needs to assess performance in the context of users' actual access characteristics.

Best Practice #7: Prioritizing pressure points

Certain site content and functions are more important than others. The performance of a function that 90% of site visitors use and that directly affects whether or not they will complete a transaction is obviously more important than the performance of a function that only 5% of visitors use and that isn't typically part of a revenue-generating navigational flow. Unfortunately, many Web monitoring services fail to distinguish critical, high-value functions from tangential ones -- leaving Internet managers to pore through a mass of statistics in search of the data that's most relevant to their business. This undifferentiated statistical data tends to be counter-productive and does not help pinpoint opportunities for high-ROI infrastructure and/or navigational improvements.

Gómez Performance Network

Best Practice #8: Deep impact

Unless the impact of Internet performance on the business as a whole is well understood, performance measurement will remain a purely technical exercise and will never be sufficiently linked to real, quantifiable bottom-line objectives. Some aspects of business impact are rather obvious -- such as lost sales and revenue. Other implications may be more subtle. For example, if users can't find the answers they need online, they're more likely to pick up the phone and place a call. That will have a direct impact on call center activity and customer service costs. Brand identity and channel relationships may also be affected by sub-standard performance. A thorough understanding of these potential consequences is essential for viewing performance in a true business context and thereby determining which investments in performance enhancement can be cost-justified and which ones can't.

Best Practice #9: Look before you leap

Most companies don't test the performance of new Web site features from an external point-of-view until they're in production. They may do some load/regression testing while piloting those features, but full-fledged outside-the-firewall Internet performance measurement doesn't take place at that early stage. This is often a mistake, since features that look fine in a test bed environment break down when exposed to the vagaries of the Internet. That's why it's a good idea to incorporate comprehensive external performance monitoring into the testing phase of site upgrades.

Best Practice #10: Lingua franca

The various Internet measurement tools and services available today tend to focus on specific aspects of performance. Some are oriented more towards IT managers and their technical concerns. Others are more focused on business and market issues. As a result, companies can easily wind up using multiple sources that speak multiple performance "languages" to their respective constituencies.

This can be a big mistake. Often, such a fragmented approach to Internet performance measurement creates communications problems and political tensions between the groups using each tool. One group says its report shows that performance is inadequate. The other group says everything is fine for now. Without consensus, problems can't be quickly and effectively resolved.

Gómez Performance Network

That's why it's better to use a single, integrated solution that can address both the technical and business aspects of Internet performance. By giving all e-business stakeholders a common language for discussing performance and its impact, an integrated solution accelerates appropriate action -- which is the whole reason for measuring performance in the first place.

THE VALUE OF EXPERTISE

The preceding ten best practices by their very nature imply an eleventh, more general principle: the importance of tapping into a source of broad, field-proven Internet measurement expertise. Most companies are not in the business of measuring Internet performance. They're in the business of providing financial services or making cars or selling hamburgers. But to succeed at those businesses, they have to use the Internet effectively. That's why they need to implement best-practice Internet measurement. And it's always easier to implement best practices when you have the help of someone who has done it before.

It's also important to note that, when it comes to Internet measurement, one size does not fit all. A consumer goods company that executes many small transactions throughout the day will need a different set of reports and will craft a different service-level benchmark than an industrial B2B site that's doing a few big-ticket deals with a small number of known customers. A media company that wants to see if the content distribution network it's using is really worth the money will have its own unique measurement needs. So Internet managers who want to implement Internet measurement best practices in the way that's most appropriate for their individual companies would be well advised to develop a relationship with the experts who developed those best practices in the first place.

That's why Gómez is such an attractive partner for companies seeking to maximize the business impact of their investments in Internet infrastructure. Gómez uniquely understands all the metrics and practices that enable companies to deliver a quality online experience with the utmost focus and cost-effectiveness. Gómez's superior quantitative analysis, experience-driven insights, practical reporting and outstanding consultative support have consistently enabled clients to achieve Internet excellence while maintaining rigorous financial discipline. Just as importantly, Gómez allows Internet managers to accomplish all this in the shortest possible timeframe - without putting undue strain on their own limited Internet management teams.

It's never been more important to get the most out of every dollar invested in the Internet than it is today. And there's never been a better time to make Gómez part of that resource optimization strategy than right now.



Gómez Performance Network

ABOUT GÓMEZ AND GÓMEZ PERFORMANCE NETWORK

Gómez provides leading companies committed to the Internet with competitive intelligence, benchmarking and expertise that enable effective business prioritization and alignment. Only Gómez integrates actionable research and applied analytics with performance measurement services to provide a comprehensive view of the entire customer experience.

Gómez Internet Quality Measurement (IQM) is an in-depth analytical cycle focused on improving the quality of the customer experience of Internet-based services. This methodology comprises specific, complementary services essential in maximizing online customer experience.

Gómez Performance Network (GPN) gathers data from over 50 locations across a dozen Internet service provider backbones. GPN thus enables Gómez to develop the rich performance data necessary for effective benchmarking and alerts.

Founded in 1997, Gómez is headquartered in Waltham, MA. Customers include Wells Fargo, Fidelity, Thrifty, Doubleclick and hundreds of other leading companies dedicated to optimizing their online customers' experience. More information on Gómez and its services is available at www.gomez.com.