The 7 capabilities and features to look for in a great APM solution

WHY APPLICATION PERFORMANCE MANAGEMENT (APM) IS CRUCIAL IN TODAY’S SOFTWARE-DEFINED BUSINESS

by John Rakowski

Today software is key to business success—from the CRM application used by your marketing and sales staff to the millions of apps running on mobile devices. Put simply, the right software strategy means that externally, applications engage and delight customers, while internally, applications enhance employee productivity. But successfully delivering applications is becoming increasingly difficult because of rising complexity.
This is because modern applications have complex architectures and utilize mobile for delivery, which brings multiple operating systems, carriers and fluctuating network conditions. Such complexities have led to an increasing number of publicly reported application problems. The result is loss of revenue, loss of customers and long-term damage to the company brand.

The means that Application Performance Management (APM) is a business necessity. APM ensures that businesses can identify and remedy potential application issues before they impact the customer. Moreover, APM works to continuously optimize software strategy, ensuring that new applications always provide business benefit.

**THE PRIMARY CAPABILITIES YOU SHOULD EXPECT FROM A GREAT APM SOLUTION**

While there are many industry descriptions of what an APM solution should cover, most can be broken down into three areas:

- **See all application interactions and activity**: The capability to visualize and monitor all applications from the end users experience through to the backend database or data store.

- **Act quickly before application issues impact the business**: The capability to allow fast response to an emerging application problem and resolve it, before impact to the business. This means automation, rapid root cause identification and collaboration features that lead to fast MTTR (Mean Time To Resolution).

- **Know how to optimize software strategy**: The capability to not only monitor but provide forward looking information, through analytics, to help optimize software strategy. This information may help optimize application development or help businesses understand how to better engage customers with applications in order to maximize revenue.

**SEVEN ESSENTIAL FEATURES IN A GREAT APM SOLUTION**

A great APM solution will include many features to help safeguard and optimize software strategy. During any evaluation or proof-of-value activity, make sure that the console and dashboards are easily accessible and usable by all who will use the solution. From a technical perspective, ensure that the solution has minimal impact or footprint on the applications you wish to monitor. In terms of the essential features, a great APM should help you to:

1. **Rapidly understand emerging issues before customer impact**: A great APM solution needs to automatically identify when application performance could affect your customers quickly. This means it should have end-user experience monitoring features like Real User Monitoring (RUM) that can be done across browsers and mobile apps plus synthetic monitoring (timed scripts) for availability monitoring.
“A great end-to-end APM solution lets you dramatically speed up MTTR (Mean Time To Resolution). This means that you should identify whether the APM solution is capable of monitoring end user experience via web or mobile, code, the underlying infrastructure through to the backend database or data store of an application.”

2. **Monitor all application transactions in business context.** A great APM solution can immediately identify and display those application transactions that are central to your business and provide value to the end user. Therefore you should investigate automatic business transaction identification features.

3. **Understand your customers in detail.** Especially with customer facing applications, your APM solution should immediately be able to provide customer interaction information. This means identifying the number and location of customers, through to understanding the relative importance of the customers, and ways to contact them. This information should be accessible through analytics features that provide easy data query, customized dashboards, and report creation capabilities.

4. **Identify and isolate the root cause of application problems.** A great end-to-end APM solution lets you dramatically speed up MTTR (Mean Time To Resolution). This means that you should identify whether the APM solution is capable of monitoring end user experience via web or mobile, code, the underlying infrastructure through to the backend database or data store of an application.

5. **Collaborate business-wide especially during customer impacting issues.** A customer impacting application issue in the software-defined business is everyone’s concern. This means that a great APM solution provides features that enable business, IT development and operations teams to collaborate in real time, via one console. Features here must make it easy to access and display relevant information in context of the audience in order to support rapid MTTR.

6. **Automatically configure business relevant alerting and remediation.** A great APM solution has a number of automation features. Firstly application baselines should be automatically calculated to ensure that abnormal application behavior can be detected and importantly, to ensure all alerts are business relevant. Secondly, look for automated remediation features that allow defined actions, via scripts, to be run in order to resolve emerging issues before impact on the business. These issues may be due to application demand and available capacity, so features such as cloud auto scaling, to automatically provide extra capacity are key in a great APM solution.

7. **Utilize its features easily.** Finally, a great APM solution will package its powerful and complex feature set into a simple, elegant solution that anyone in your organization can use. At minimum it should be easy to deploy, support both SaaS, hybrid and on premises configuration. But it must also make it easy to support variables such as data privacy regulations by industry, nation, or political-economic unions like the EU.

**RECOMMENDATION:**
Any selection process for an APM solution should address these seven features at a minimum. It’s also important that an APM solution provider that you work with demonstrates understanding of your business, plus challenges facing the industry, your customers and, your applications.