

Five Factors to Consider When Selecting an Application Performance Management (APM) Solution

Recent studies have shown that customer experience strategies will be an enterprise's primary competitive differentiator by the end of 2016. Part of pivoting to a customer experience strategy is embracing an application-driven business model. With customer experience as a critical part of a company's competitive strategy, it is important that customer-facing applications have the highest degree of performance and usability.

To ensure that customer interactions with your applications are optimal, you need an application performance management (APM) solution that can deliver deep insights into your application users as well as manage the complexities of modern application architectures.

If your team is considering an investment into an APM solution such as CA APM, New Relic, Dynatrace, or AppDynamics, you should consider the following five factors before making a purchasing decision.

1. **Can the APM solution deliver deep application performance analytics as well as insights into improving the end-user experience?** *Modern APM isn't just about application up-time. Your APM solution also needs to focus on the application's ability to meet the end users' needs as well as ensuring optimal application performance.*

Users should consider an APM solution that offers the following:

- **Breadth of visibility:** An APM solution that integrates the entire customer experience across mobile, and browser transactions.
- **Synthetic monitoring:** A synthetic transaction monitoring solution can provide end-to-end transaction response-time visibility into cloud, mobile, and web applications and can replicate every step of the end-user experience.
- **Passive end-user experience:** Use agent-less technology to understand the performance of end users when JavaScript injection is not an option due to regulations or technical issues.
- **User experience analytics:** Does the APM solution have analytics to demonstrate how users engage with specific features of the application? For mobile applications, does the APM solution provide insights into how end users engage with the application on a mobile device touch screen?

Questions to ask:

- Do you understand your end users' experience? Do you have the ability to understand their experience when they log in from a browser or a mobile app?
- What if when technical or regulatory limitations limit your monitoring options? Can you passively monitor EUE? And what do you do if there is an issue?
- Do you have the tools you need to quickly focus on improving the application to provide stellar end-user experience?

2. **Does the APM vendor support rapid root-cause analysis with the ability to filter out noise from irrelevant data?** *Can the APM platform filter out the noise from data that does not contribute to a more effective end-user experience or help to quickly pinpoint current and emerging application performance issues?*

Considerations include:

- **Intelligent alerting:** Configuring alerts and thresholds is not only time consuming but can also create noise and irrelevant data. For example, an experienced, knowledgeable executive assistant to an enterprise's CEO knows how to filter the noise of daily company operations and information and prioritize what the CEO needs to address and when. A modern APM solution needs to be able to do the same thing for the IT professional—filter out the noise and allow them to focus on what is important.
- **Problem visibility:** This is the ability to monitor application performance and transactions across the entire application environment as well as visibility into the quality of the end-user experience. Does the APM solution have the ability to unify visibility across all application touch points—from browser to mobile to mainframe?

Questions to ask:

- Are you experiencing an increase in the number of new applications and infrastructure to support them?
- Will this expansion impact your ability to handle Application Performance Management or understand your environment?
- Does the APM solution have the ability to learn and filter out irrelevant data?

3. **Does the APM vendor provide deep change analytics?** *Can the APM platform quickly identify what changed in the application and where without logs? Can the APM platform be used to connect Application Development with IT Operations to help them work together to create a higher performing application?*

- Change analytics: Does the APM solution allow you to click on any event, and instantly see what changed, when, and how? Such a feature dramatically accelerates resolution times and improves application availability.
- Change timelines: Visualizations of the order of changes provide a better understanding of the impact of a change and can aid in finding the root cause of an issue by rolling back the clock.

Questions to ask:

- How long do you spend during an outage searching for changes and wondering if you missed anything?
- Have you ever wondered, “Did my change cause that performance issue?” or “How much time does your organization spend conducting problem analysis?”
- When your developers push code to production, is there a feedback mechanism that allows them to see how their changes have impacted production?

4. **Can the APM platform support applications across the entire application environment, from mobile devices to mainframe?** *Can the APM solution support all of your applications, from mobile and browser, to the distributed environment and through to the backend, including the mainframe? Can the APM solution follow a transaction that started on a mobile device, was transferred into a distributed computing environment, and then terminated in a mainframe context?*

- Complete transaction performance: Complete the application environment, from mobile to mainframe, including the cloud and browser.
- Inclusion of microservices: Ability to understand the performance of microservices, containers, APIs, and the API management gateway.
- SSO/security environment: Ability to monitor the SSO/security environment to identify performance and outages.
- Integration with legacy environments: Ability to monitor legacy application servers and middleware solutions.

Questions to ask:

- Do you need to be able to examine application transactions across mobile, browser, and mainframe within a single view?
- Can the APM solution monitor application performance within any end user environment?
- Can the APM solution support monitoring of microservices, such as APIs, SSO, and security environments?

5. **Is the APM solution able to support the current and emerging needs of the modern enterprise?** *Can the APM solution provide ‘day one’ scalability as well as meet the needs of a large, distributed enterprise? Can the APM platform enable a collaborative work process to unite all members involved in the application value chain?*

- Performance scalability: Enterprise organizations need to be able to manage dozens of different applications simultaneously while monitoring millions of application transactions, applying intelligence to highlight potential issues, and reduce noise, all without their APM solution missing a beat.
- Ensuring collaboration: Your APM solution should help you gain insights into the application consumption of the network through a streamlined, visual workflow that supports data mining by GEO, application, business unit, or team role.
- Persona-based application triage: APM is no longer just for application developers. Application developers are some of your most expensive and busiest assets. Expanding APM proficiency beyond the development team reduces the number of triage scenarios your developers need to tend to and frees up their time to innovate. Multiple individuals in the application value chain should be able to contribute to APM as well as support the performance and customer-experience mission of each one of your applications.

Questions to ask:






- Does your company have more than 100 application servers or microservices?
- Does the APM solution offer role-based views and features to support different experience levels and user types to perform application “triage”?
- Can the APM solution support a collaboration workflow to investigate performance and usability issues?

































































Conclusion and Findings

To better identify how CA APM 10 stacked up against 3 other APM solutions - AppDynamics, New Relic, and Dynatrace – Apprize360 interviewed current and former users of each of the described APM platforms. Interviews and our internal assessment focused on each of the APM solutions ability to meet each of the five APM selection factors outlined above. In our assessment, we found that CA APM met all five APM selection factors and provided capabilities to meet the modern enterprise’s needs within today’s fast-paced, agile application economy.

CA has made significant strides over the past 2 years to add deep and intelligent APM capabilities to help the modern enterprise transition in to the “application economy” effectively. While the other three APM vendors evaluated have added important capabilities, CA has mapped its APM solution to the needs of the modern enterprise. CA APM 10 is aligned with current and emerging needs of the enterprise to maintain high performing applications that are also creating and supporting a consistent, personalized customer experience that is required to build and maintain customer loyalty.

Rating Legend

| | | | | |
|--|--|---|--|---|
|  Fully Present |  High Partial Functionality (~75%) |  Partial Functionality (~50%) |  Poor Functionality (~25%) |  Feature Absent |
|--|--|---|--|---|

| Comparing CA APM to Other APM Solutions – Core Selection Factors | | | | |
|--|---|--|---|---|
| | CA APM | Dynatrace | AppDynamics | New Relic |
| End-User Customer Experience | | | | |
| ▪ Manage end-user experience, including the impact of application performance and service levels |  |  |  |  |
| ▪ Real end-user traffic and simulation of end-user experience |  |  |  |  |
| ▪ Passive end-user experience monitoring |  |  |  |  |
| Root-Cause Analysis | | | | |
| ▪ Prescriptive approach to APM |  |  |  |  |
| ▪ Reduce noise by removal of irrelevant data |  |  |  |  |
| ▪ Understand how the end user's transaction relates to the underlying application and infrastructure |  |  |  |  |
| ▪ Reduce complexities of modern monitoring |  |  |  |  |
| Deep Understanding of Change | | | | |
| ▪ Change analytics and Change timelines with contextual change visualization |  |  |  |  |
| Modern Environment: Mobile to Mainframe | | | | |
| ▪ JAVA, .net, PHP, and Node.JS |  |  |  |  |
| ▪ Docker, microservices, and API monitoring |  |  |  |  |
| ▪ Mainframe application performance monitoring |  |  |  |  |
| ▪ Application database usage monitoring |  |  |  |  |
| ▪ Network and infrastructure monitoring |  |  |  |  |
| Advanced Analytics and Reporting | | | | |
| ▪ SLA reporting |  |  |  |  |
| ▪ Differential analysis/prescriptive analytic analysis |  |  |  |  |
| ▪ Most/least problematic apps and most/least utilization |  |  |  |  |