



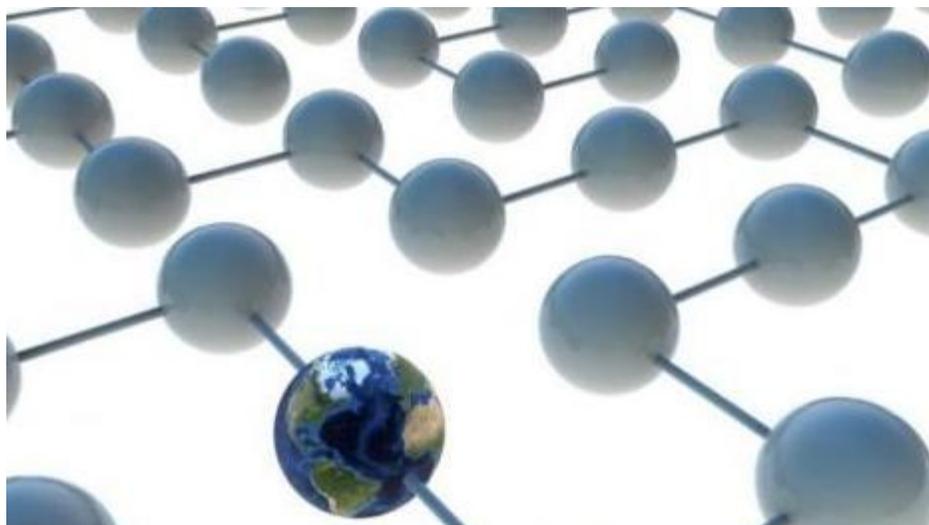
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Application Performance Monitoring Checklist for Your CIO By Charles Rich

There is real potential to reduce costs by performing application development and testing using Infrastructure as a Service



CIOs are under extraordinary pressure from their boards to better manage competitive pressures, accomplish sustainable cost reduction, and meet regulatory compliance standards. While they often look to their Information Technology (IT) organizations to deliver on these requirements, IT itself isn't always sure just how it will get this done. But, there are approaches to effectively responding to this set of challenges - Application Performance Monitoring (APM) is one of these. IT can utilize APM to proactively resolve application performance situations before there is significant business impact and more effectively balance their diminishing resource allocations. Below are a few things to consider when choosing your Application Performance Monitoring (APM) solution in order to address these requirements.



Competitive Pressures

Competition often boils down to taking your competitor's customers away. How does this happen? It occurs when the supplier, be it a Capital Markets firm on Wall Street, an eCommerce seller or even an insurance provider fails to deliver a positive experience to their customers. Poor

performance during the order process can often lead to order abandonment and eventually customer erosion. It often happens at the worst possible time - during major market fluctuations which can weaken customer confidence.

Many enterprises use APM solutions to detect problems in performance and deliver a satisfactory experience to their customers before they fall prey to these issues. These APM solutions must be able to cover your applications when unexpected and often overwhelming event storms occur as market demand oscillates wildly. In order to keep the ship on course during the storm, you need to consider two important things: identify issues that could prevent systems from handling rapid changes in order volume before they cascade into larger issues and as a result reduce both the number and duration of outages. Utilizing an APM solution that includes low-latency analytics as its core is essential in accomplishing this. Making this even more challenging is the issue of Big Data from events. As monitoring sends more and more data to our tools, IT, while data rich, is unsure what the data means and thus unable to act effectively. If you don't master the exploitation of Big Data, your competitors will. Enterprises that can do this have a tremendous advantage over their competitors as they are in a position to process orders faster, avoid order abandonment and keep customer satisfaction high. They will better understand their customer's behavior. A solution that does this must be able to handle an ever increasing load of events, make sense of them and take action to ensure good performance.

Requirement for Sustainable Cost Reduction

Enterprising firms often address this growing need by utilizing the cloud. However, in order to realize these savings the cloud providers they utilize must match their pricing to the same Moore's Law that describes how price moves in indirect proportion to hardware and software performance improvements.

There is real potential to reduce costs by performing application development and testing using cloud infrastructure as a service (IaaS). Firms whose internally built applications are a key component of their competitive advantage will continuously roll out new releases in order to maintain their competitive position and remain compliant with regulation. One of the costliest components in this process is testing, which is an ongoing expense given various configurations of hardware, software versions, and patches. It is too expensive to test them all. As a result, the cost savings gets passed to production and when the applications fail and they will, support is called in to patch things together.

May CIOs address the issue of sustainable cost reduction by implementing location strategies such as offshoring and outsourcing. They do this to reduce the cost of staff, facilities and utilities. As many businesses contemplate such strategies, it's important to note that these approaches often come with their own set of problems and costs that can outweigh the original benefit. The IT workers located offshore do not always have the same level of training and support as the in-house ones do. This can lead to errors, poor performance and as a result increased cost - the exact opposite of the goal. However, by implementing technology that avoids eye-on-screen monitoring, you can improve the effectiveness of the offshore teams. There's no longer a need for operators to stare at consoles, wait for an error, take ownership and then take action. APM solutions must do more than merely collect events about Java, .NET, middleware

and mainframes. They need to analyze their events and through automation handle as many problems as possible, thus, utilizing the remote staff as efficiently as possible.

The second approach to cost reduction is to scale back the number of tools required for APM. Instead of having a separate APM tool for each application with their own explanation of root cause - funnel their events into a single APM analytical engine for a consistent explanation across all applications on all tiers. Eventually, this can evolve to reduce the number of tools, and scale down overall costs.

The third approach is to avoid false positives at all costs. Reacting to a non-existent problem is all too common and very costly. Be sure that your monitoring technology alerts on trends in behavior, adjusting to what is normal for your enterprise over time and only alerts on real problems and not spikes.

Addressing Regulatory Challenges

An essential component in addressing regulatory challenges is in providing vital insight into compliance. An APM solution must be able to provide automated deep-dive discovery of application performance on all tiers: web and legacy. This monitoring of application components and dependencies must be done in real-time in order to comply with regulations that require discrepancy reporting for each transaction. For example the Dodd-Frank act mandates that all price, volume and transactions for corporate bonds must be reported to the National Association of Securities Dealers (NASD) within 15 minutes. What does that mean for an APM solution? It means the solution must scale to the highest levels in order to both monitor the ongoing transactions, and be able to detect and report a problem within the time allotted. Fifteen minutes is a very small time window for an APM solution to monitor, analyze and act before the trade is reported.

Technology is rapidly changing and organizations need to be ready to quickly evolve. It is time for the next generation of APM. This generation must be faster, smarter and not be specific to a single technology silo. It must do more than just collect events - it must understand what they mean. Only by stepping up to the challenges described here can APM effectively respond to the objectives today's IT organizations are being asked to deliver by their CIOs.