S&P Global Market Intelligence Business Impact Brief

The Role of Log Analytics for Developers in the Shift-Left Era

The 451 Take

To drive innovation and business value, developers and DevOps teams must find a balance between developing new applications and maintaining existing ones. This poses a challenge for these engineers as they have accumulated many responsibilities outside of new app and feature development. As 451 Research sees in our Voice of the Enterprise (VotE) HCI, Technology and Platform Innovation survey data, around half of DevOps teams must divide their time between new development and ongoing concerns such as responding to incidents, managing monitoring tools and monitoring the user experience of microservices-based apps (see figure below).

In many organizations, some of these responsibilities also fall on developer teams, such as spending considerable time debugging applications pre- and post-production. Because more organizations have adopted a 'shift left' mindset, we can expect a wider range of responsibilities for these teams, which will further reduce their focus on net new development and may necessitate new approaches to log management and monitoring to reduce the overhead of these growing responsibilities.

Most organizations would prefer that developers spend more time developing new apps than repairing faults in existing ones. However, since it is inevitable that responsibilities like debugging and root-cause analysis (RCA) will fall on developers and DevOps engineers, their needs and workflows must be taken into account in tool selection. This involves a shift in mindset, as historically the users of logging and monitoring tools were typically not the same people who were developing the applications being monitored. To have the same tooling used by both ITOps and developers runs the risk of having learning curves, as well as gaps in required functionality, which can ultimately impact adoption.

Responsibilities of DevOps Teams



Q. Which of the following functions, if any, are handled by the DevOps team? Please select all that apply.

Base: Has DevOps team (n=226)

Source: 451 Research's Voice of the Enterprise: HCI, Technology and Platform Innovation 2020

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Business Impact

Developers are gaining more responsibilities and influence. Increasing adoption of cloud and the use of cloud-native technologies such as containers and Kubernetes have pushed more traditional IT operations earlier into the application lifecycle as organizations are taking more app-centric perspectives to architecting their environments. This movement means that developers are gaining more influence in tool choice, even if they have not historically had purchasing power within their organization. In a recent 451 Research VotE: Digital Pulse, Vendor Evaluations study, 24% of organizations said application developers were involved in or influencing vendor selection. However, decision-making around vendor choice, including log management vendors, is still predominantly made as part of monitoring tool selection by IT senior leadership and operations. This can create a disconnect between teams regarding what needs are deemed most important – those of the developer or the ITOps professional.

Tools should be accessible to those who need them. Whether for developers or ITOps, tooling needs to be accessible and easy to use for the personas that require them. According to 451 VotE Storage Transformation survey data, 37% of organizations say they've purchased monitoring and management tools in recent years only for it to turn into 'shelfware.' The reasons for some tools being discontinued include the organization lacking time to implement them and the tools being too difficult to use – both of which ranked among the top five reasons for shelving software. Given that different personas have different needs, selected tooling should cater to those needs, or risk being ignored or abandoned.

Site reliability engineers are in short supply. SREs play an important role in ensuring reliability and performing root-cause analysis, but many organizations lack SREs entirely. According to 451 VotE Cloud, Hosting and Managed Services survey data, only 15% of organizations currently have SREs as a defined job role, while 13% plan to add them in the next year. This compares with 40% of organizations that currently have DevOps engineers, and we can reasonably expect the number of organizations with developers to be even higher. With a scarcity of SREs, organizations must work to capitalize on their time as much as possible, which can include adopting processes and tooling that can be implemented earlier in the application lifecycle. This can help developers and DevOps teams minimize the number of incidents making their way into production to reduce the need for troubleshooting later on.

Looking Ahead

Logging has become democratized as log data presents value to a wide range of personas including ITOps, SREs, DevOps engineers, developers and security practitioners. Moving forward, organizations will need to understand the value that operational data like logs and metrics offers to different personas for purposes such as incident response, monitoring and debugging. However, there must also be coordination given that different personas will be leveraging similar or even identical datasets, albeit for their own needs, and will want an experience that best serves these needs.

Tool consolidation is a popular topic with enterprises as a reaction to the growing complexity of IT environments. Although cost and complexity are valid concerns that have driven some companies to scrutinize their existing and future choices in monitoring and log management tooling, the need to address such challenges must ultimately be weighed against the need to give personas across IT the tools they need to accomplish their work, including enabling developers to ship higherquality code with greater frequency. Organizations must be strategic in their approach to tool consolidation or they run the risk of limiting the access of developer and DevOps teams to tools geared toward their specific needs. For this reason, it is important for these teams to have their voices recognized when it comes to making decisions around tool selection.



<u>LogDNA</u> is a centralized log management solution that helps modern engineering teams be more productive in a DevOps-oriented world. It enables frictionless consumption and actionability of log data so developers can monitor, debug and troubleshoot their systems with ease. Start your full-featured 14-day <u>free trial</u> today and boost your team's productivity.