

ESG Brief

2018 Application Development Spending Priorities

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Abstract: As enterprise organizations evolve their digital transformation initiatives, the need for them to become more agile in application development is often a lynchpin in the viability of these efforts. ESG's research has found that, when it comes to application development initiatives and strategies, formalizing DevOps practices and developing new mobile applications were among organizations' top spending priorities for the next 12-18 months. These top initiatives are driven by an organization's overall application development output, with strong correlations between the need to formally implement DevOps practices with the size and number of applications deployed.

Overview

Organizations continue to focus on public cloud for applications and infrastructure, as well as for implementing a modern and agile application development process. Most IT organizations are looking into the impact of today's agile development model, in which application deployments are measured in minutes and hours, not days and weeks. With the new application models comes the concept of DevOps, where operational concepts such as monitoring and automation are proactively incorporated into the application development process. DevOps goes beyond simply expediting existing application development processes; rather, it adopts certain operations principles to integrate and improve the application development model, reducing duplication and additional tasks to speed application deployment.

ESG recently completed its annual IT spending intentions survey of 651 senior IT decision makers at midmarket (i.e., 100 to 999 employees) and enterprise (i.e., 1,000 or more employees) organizations across North America and Western Europe.¹ As part of that research, respondents with knowledge of or responsibility for application development processes were asked about their organization's spending priorities in terms of accommodating and supporting initiatives and strategies in this area over the next 12-18 months. As seen in Figure 1, one-quarter of respondents will devote significant funding to formalizing a DevOps practice. The implementation of a formal DevOps practice is associated with an effort to operationalize and standardize DevOps across a business. The move from isolated implementations of DevOps to a standard practice will drive the need to outline the tools, processes, roles, and responsibilities of DevOps within the whole organization.

One of the keys to DevOps is that the process is about streamlining and automating the application development process, not just simply increasing the speed of the existing process. In addition to implementing formal DevOps practices,

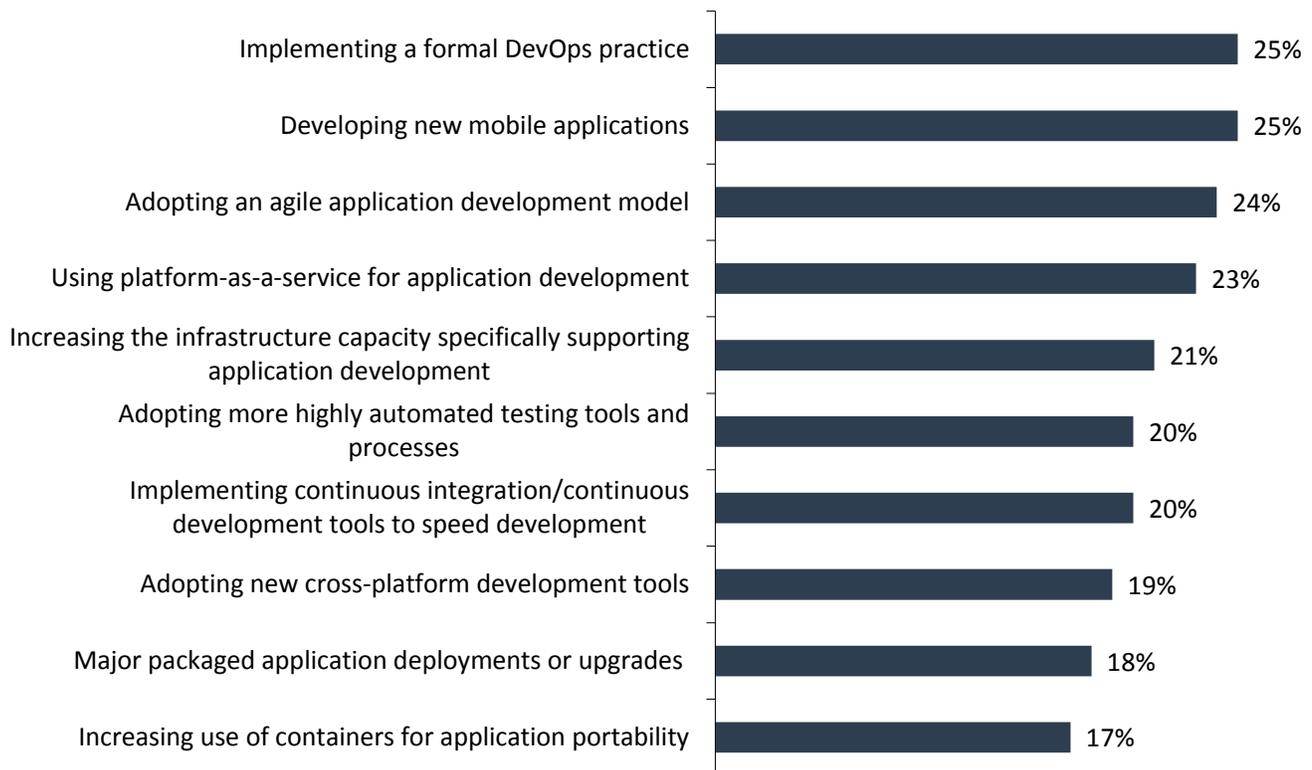
¹ Source: ESG Master Survey Results, [2018 IT Spending Intentions Survey](#), December 2017.

organizations are looking to invest in other areas associated with DevOps, most notably agile application development, adopt more highly automated testing tools, and implement continuous integration/continuous development (CI/CD) tools to speed development. These investment areas are key to the application development optimization and automation efforts that drive DevOps practices.

Other key investment areas are related to extending the impact and reach of these newly developed applications, including ramping up mobile application development efforts, increasing infrastructure capacity supporting application development, and upgrading and deploying new applications. With DevOps supporting the increase in application development efficiencies, the corresponding output and deployment of these applications needs to both scale and also reach the increasing mobile workforce that has risen from digital transformation.

Figure 1. 2018 Application Development Spending Priorities

In which of the following areas of application development will your organization make the most significant investments over the next 12-18 months? (Percent of respondents, N=522, three responses accepted)



Source: Enterprise Strategy Group

With a fundamental shift underway in terms of how these applications are being developed as a result of digital transformation and the changing expectations of the workforce, it is not surprising to see a correlation between the number of applications an organization supports and newer approaches. Specifically, organizations with at least 500 business applications are significantly more likely than those with fewer than 100 applications deployed globally to be formalizing DevOps practices, using cloud-based development platforms, implementing CI/CD tools, or leveraging containers to increase application portability (see Table 1).

As with any new application development model or process, it often takes reaching a level of critical mass of applicability to drive adoption. The ESG research shows the clear correlation between the number of applications deployed and the prioritization of DevOps and DevOps-aligned initiatives. It is interesting to note that, as the needs of the digital business

impact enterprises more, the number of applications that need to be developed and deployed to support these new digital requirements will also grow. Thus, it would be beneficial to today’s IT organizations to invest now in the implementation of formal DevOps practices, and associated initiatives, to stay ahead of the needs of the digital business and to become an agent of change with digital transformation, as opposed to a potential hindrance in the transformation.

Table 1. 2018 Application Development Spending Priorities, by Number of Applications

In which of the following areas of <u>application development</u> will your organization make the <u>most significant</u> investments over the next 12-18 months?			
	Total number of applications deployed		
	Fewer than 100 applications (N=128)	100 to 499 applications (N=215)	500 or more applications (N=172)
Implementing a formal DevOps practice	19%	26%	30%
Using PaaS for application development	14%	26%	26%
Implementing CI/CD tools to speed development	10%	21%	24%
Increasing use of containers for application portability	12%	17%	27%

Source: Enterprise Strategy Group

The Bigger Truth

DevOps is fast becoming a top area of investment in application development for businesses, as the need to develop and deploy applications becomes paramount. To be fully supportive of digital transformation, enterprises need to formalize their DevOps practices and ensure that their applications reach the modern, mobile workforce. It is up to IT organizations to both help foster the adoption of DevOps practices and also provide the infrastructure and tools to support this new age of agile application development. Those organizations that lead in the adoption of DevOps as part of their application development priorities will be leaders in the age of digital transformation.

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