

DevOps: the vision of reality

Bridging the gap with Agile project management

About this research

We interviewed 601 development and IT professionals using a 15-minute online survey.

Profile of respondents

- Position: 401 professional developers and 200 IT professionals recruited from a panel of IT B2B employees
- Size of business: 32 percent SORG (10–99 employees), 31 percent MORG (100–999), and 37 percent LORG (1,000+)
- Age range: 24 to 65

Key topic areas

- Primary development methodology used in organization and most recent project.
- Time frame for Agile project management adoption (among those using Agile)
- Perceptions/beliefs about Agile development



DevOps in practice, method, and philosophy

In practice, DevOps emphasizes the collaboration between development teams, IT operations, and quality assurance (QA). As a set of methods and larger philosophical outlook, it represents the goal of true end-to-end coordination across the application development, deployment, and management lifecycle.

To what extent are such methods employed today? Our research indicates that many organizations are aware of DevOps and have adopted informal Agile solutions and practices in its spirit; however, most are not yet in the DevOps implementation phase. Interest and plans exist, but DevOps as a reality remains in the future, perhaps awaiting the emergence of new Agile tools and technologies to support the vision.

DevOps awareness correlates with the use of Agile methods

The origins of DevOps awareness and interest seem clear. It strongly correlates with an organization's adoption of Agile project management methods. More than 50 percent of Agile respondents surveyed were aware of specific DevOps principles. By comparison, only 20 percent of Waterfall respondents were aware of specific principles, with most only superficially aware of the term DevOps.

Among Agile organizations, longer tenure with Agile is associated with higher DevOps awareness. Given the philosophical emphasis of such organizations on collaborative work and high-quality customer experiences, this isn't so surprising. Collaboration with IT ops is a natural evolution of such a philosophy.

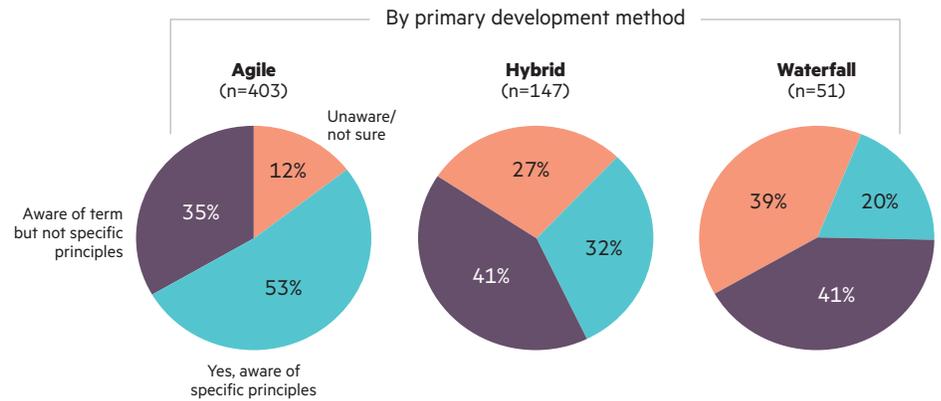


Figure 1. Level of DevOps awareness by method

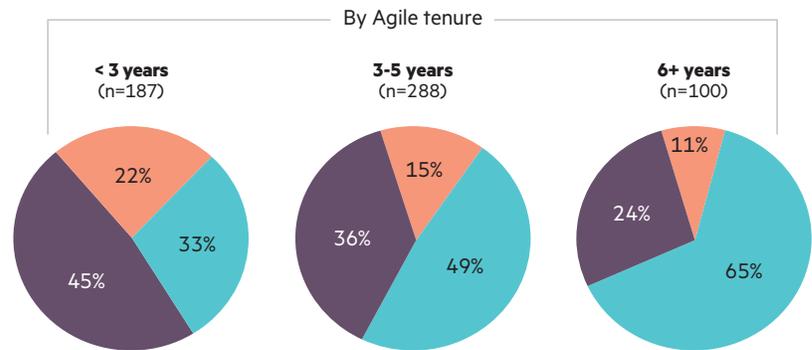


Figure 2. Level of DevOps awareness by Agile tenure

What else motivates an interest in DevOps?

Adoption of Agile project management methods is clearly linked to an interest in DevOps principles. But what other factors are driving interest today?

We found specific IT infrastructure trends that are also underlying drivers of interest.

These include the use of cloud infrastructure providers, data center automation tools, and configuration management tools.

This suggests that improvement in and greater adoption of Agile tools may accelerate interest in DevOps.

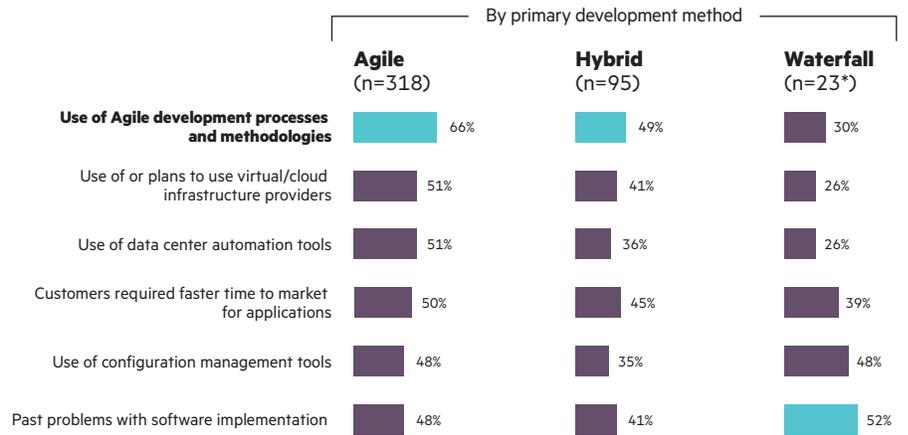


Figure 3. Factors in decision to research/implement DevOps among those who have implemented or are trying to implement

Most organizations are exploring DevOps versus implementing it

Only 12 percent of those aware of DevOps have widely implemented its principles. Even if you look only at Agile firms, DevOps implementation levels reach only 15 percent. The majority of organizations aware of

DevOps have either taken no action, or are still researching Agile project management software.

There are, however, high levels of interest for acting in the short term. When asking nonimplementers whether they plan to adopt Agile development principles in the future, more than 50 percent expect to undertake some plans within the next two years.

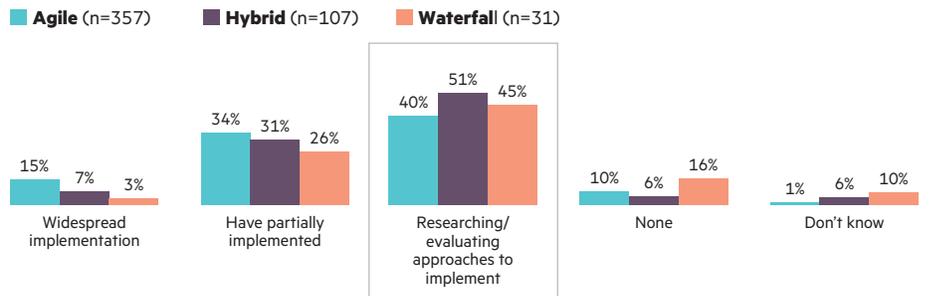


Figure 4. Implementation of DevOps by primary development method, among those aware of DevOps

DevOps implementation today is more about processes than tools

What we found is that today, most adoption and planning are limited to basic collaboration processes, as opposed to taking on new tools, processes, and metrics.

We asked “implementing” respondents to tell us exactly what they have implemented so far.

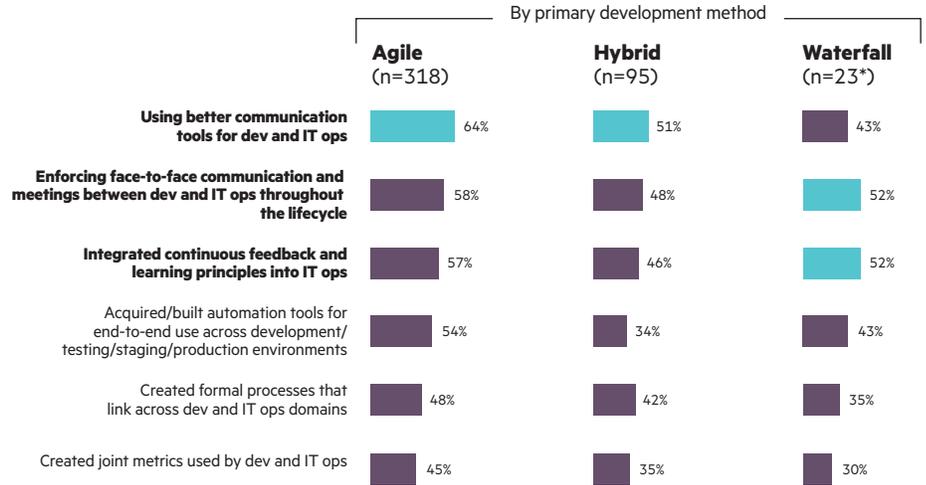


Figure 5. Specific DevOps principles and approaches implemented or planning to implement in 12 months—among those who have implemented or trying to implement DevOps

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