

< 2024 >

SaaS Disruption Report (Part II): **Software Development**

Key Findings

This report summarizes the findings from an online survey conducted by ESG and [Onymos](#). The survey polled 300 application and software development, IT, and security leaders from U.S.-based midmarket and enterprise organizations to better understand their software development processes, priorities, and challenges.

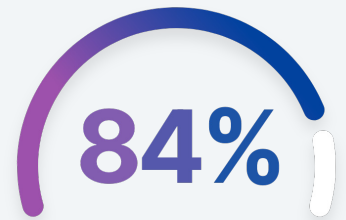
The findings underscore the need to evolve the current Software-as-a-Service (SaaS) model so that it better serves organizations in the long term.

Top Five Findings

1. The majority of technology leaders (84%) report dependence on SaaS tools with low-code/no-code capabilities
2. The interest in low-code/no-code SaaS tools is growing, with 66% of technology leaders indicating their use has increased
3. Development (22%), quality assurance (20%), and maintenance (20%) are the most arduous phases of the software development lifecycle, according to technology leaders
4. 78% of technology leaders stated that workloads for updating applications have risen in the last year
5. Less than half (48%) of technology leaders reported spending time on application innovation

Additional Insights on SaaS Security

Earlier this year, Onymos released Part I of The 2024 SaaS Disruption Report, which shared insights from technology leaders on SaaS privacy and security. To learn more about those findings, access the report [here](#).



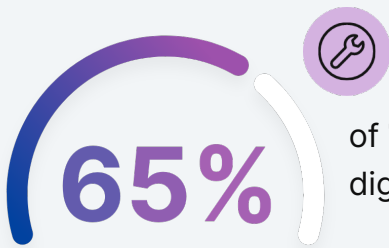
of **tech leaders** report dependence on SaaS tools with low-code/no-code capabilities

The Importance of Software Development in Driving Value for Enterprises

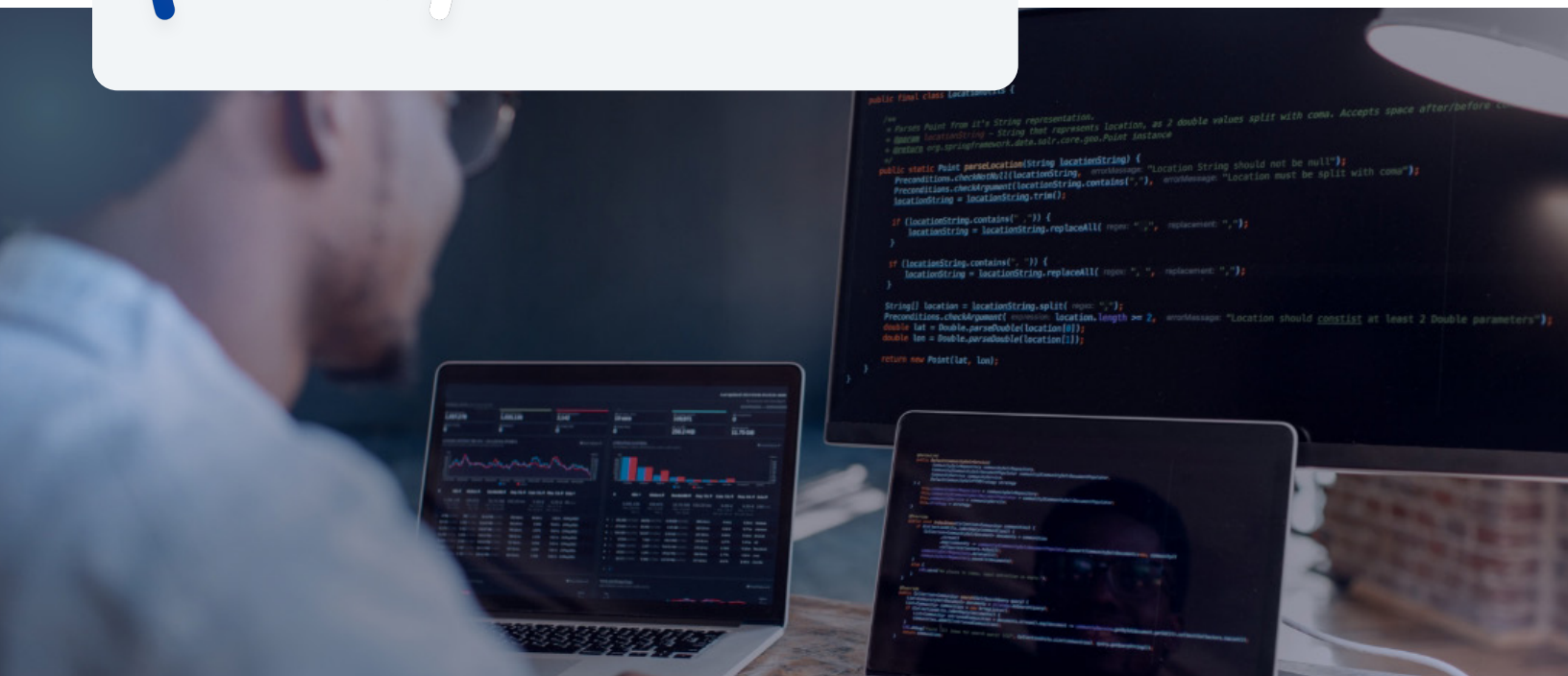
In today's technology-driven landscape, enterprises are reshaping their operations, business models, and customer experiences through innovative software and applications. These digital tools are helping to create customer value, streamline internal processes, and empower internal stakeholders across all levels and departments. **Their value is immense and technology leaders report that 65% of their efforts are business-critical.**

As software and applications have become core to enterprises, software development has evolved into an essential function across nearly every industry—from healthcare and manufacturing to finance and legal services. Applications as diverse as remote patient monitoring systems, mobile banking platforms, and document automation tools share a common thread of supporting digital transformation and customer needs.

As enterprises increasingly focus on the development of critical and differentiating applications, they are continually evaluating and adopting tools that streamline the process and align with their goals.



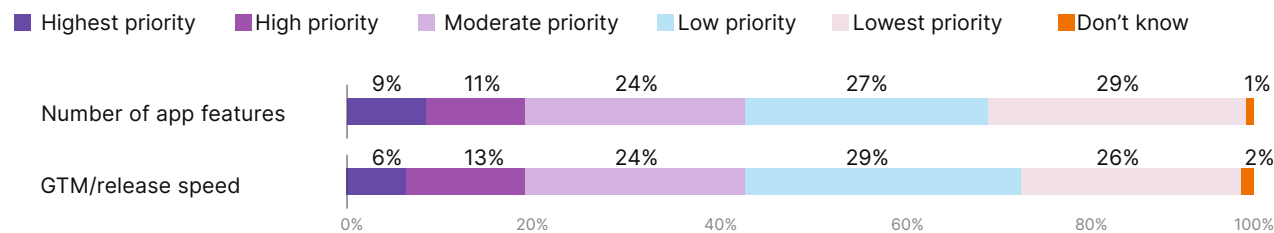
of **tech leaders** report that digital tools are business-critical



The Priorities for Software Development

The current software development landscape is defined by a need for more robust applications with increased functionality and greater speed. **Twenty percent (20%) of technology leaders identified the need to expand application features as a priority, while 19% emphasized the speed of go-to-market (GTM) or release.**

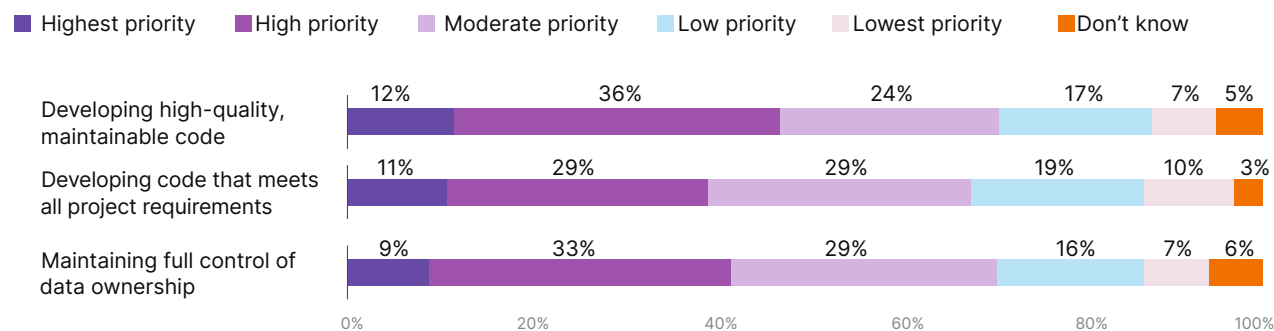
The Top Business Priorities for Technology Leaders



To bring an application to market, enterprises typically spend several months on development. **More than half (56%) of the technology leaders said it takes 1-3 months, and nearly one-third (31%) reported it takes 3-12 months to develop and deploy an application.**

Meanwhile, development teams are also dealing with various pressing technical priorities: **48% of technology leaders highlighted the need for producing high-quality, maintainable code, 42% stressed the significance of maintaining data ownership, and 40% are concentrated on fulfilling extensive project requirements.**

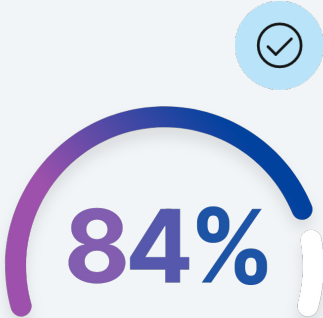
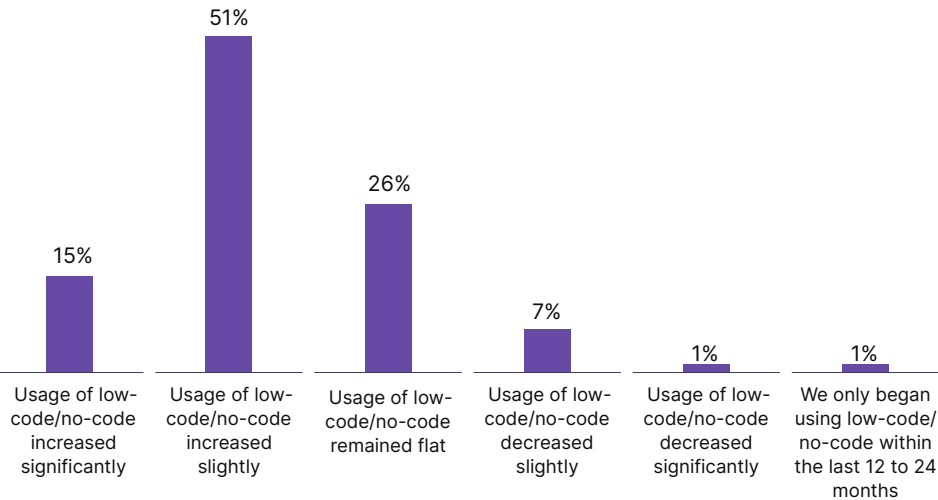
The Top Technical Priorities for Technology Leaders



This fast-paced environment has fueled a heavy reliance on low-code/no-code tools, with **84% of tech leaders reporting dependence on SaaS tools with these capabilities and another 12% using them occasionally.**

Over the past 12-24 months, **two-thirds (66%) of respondents indicated that their use of low-code and no-code SaaS solutions had increased,** illustrating a clear demand for accessible, agile development methods.

The Use of SaaS Is Increasing



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The Growing Challenges in Software Development

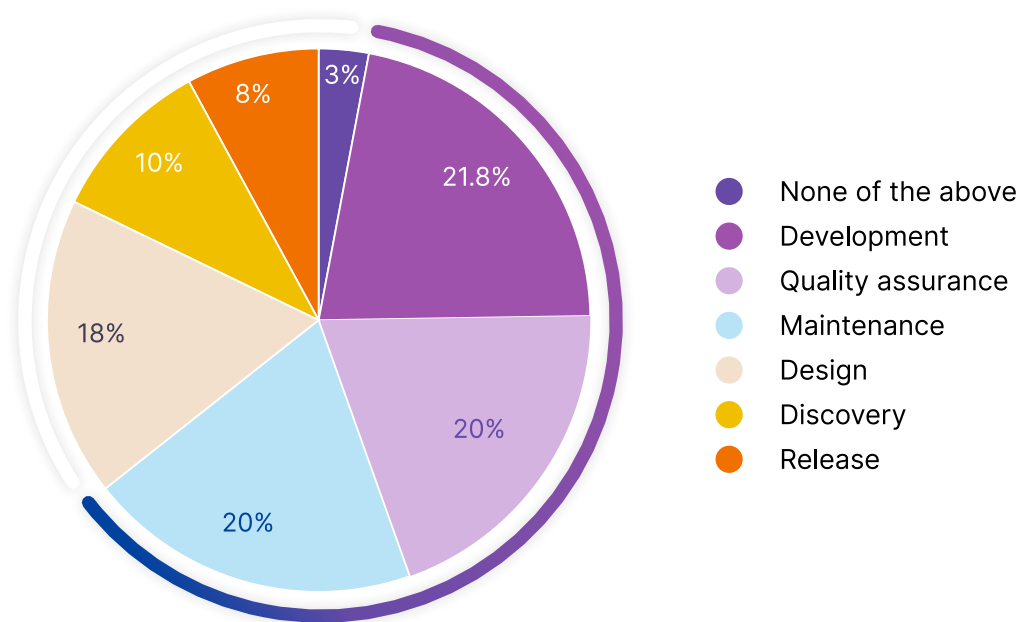
Over the past year, technology leaders have identified security, cost management, and performance as their primary business challenges. Notably, **24% of respondents cited application performance as a significant obstacle.**

The Key Challenges Facing Enterprises in Development



Technology leaders also highlighted key technical challenges within the software development lifecycle (SDLC). In particular, respondents **singled out development (22%), quality assurance (20%), and maintenance (20%) as the most arduous phases.**

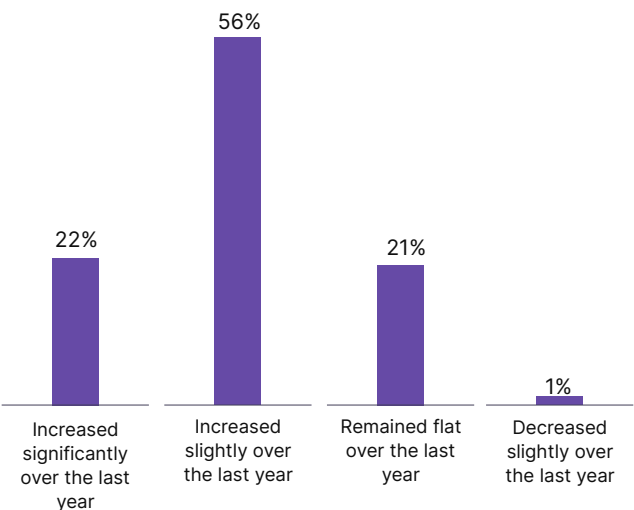
The Most Challenging Aspects of the Software Development Lifecycle



Application maintenance is increasingly challenging for many organizations and their development teams. Maintenance-related problems can not only reduce application performance but also create security vulnerabilities that threaten enterprises.

More than three-quarters (78%) of technology leaders indicated that workloads for updating applications have risen in the last year, while 52% stated that daily maintenance and application operations tasks are the predominant time consumers. This maintenance often includes activities such as addressing updates, bugs, broken code, and technical debt—which is often found when workarounds or shortcuts are taken to develop software or applications faster.

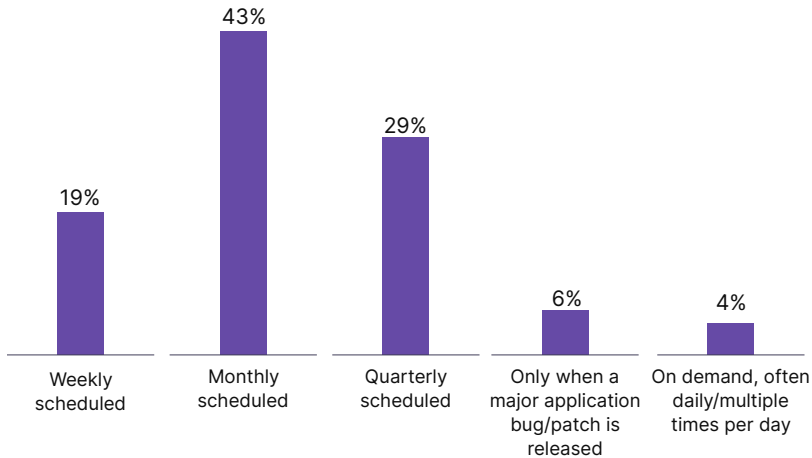
The Workloads for Updating Applications Are Growing



The frequency of updates alone significantly contributes to the maintenance challenges for most software development teams.

Technology leaders indicated that regular updates occur weekly (19%), monthly (43%), or quarterly (29%). Some report updating applications primarily when a major bug is discovered or a patch is issued (6%). In comparison, only a small group of leaders (4%) mention that their applications are updated daily or multiple times per day.

The Frequency of Application Updates Varies, But It Is Occurring Regularly



Although the update frequency can differ, previous estimates indicate that almost one-third (30%) of technology leaders observed their development teams dedicating nearly half of their time to maintenance tasks.

With only 4% of technology leaders reporting they do not use SaaS, it has become ubiquitous.

Embracing low-code and no-code SaaS tools has brought numerous advantages to enterprises by enabling the addition of new features and accelerating the development process. Despite these benefits, issues remain.

The Obstacles Faced in Software Development Impede Innovation and Business Success

The challenges enterprises face in software development are impacting their overall business performance.

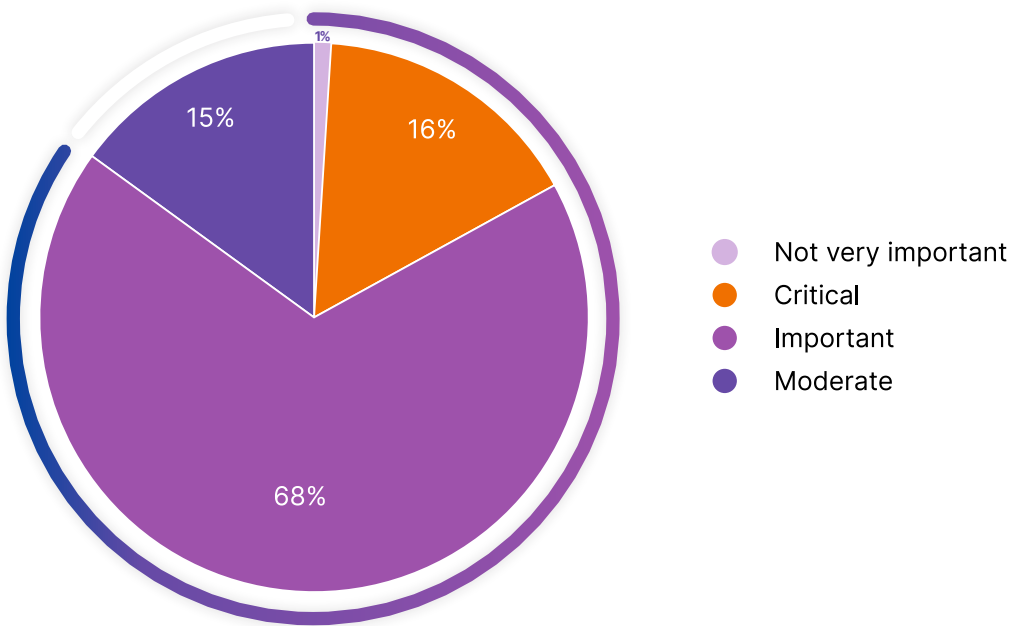
One of the most critical areas affected by these challenges is innovation. Previous research has indicated that most development leaders (68.6%) are dissatisfied with how much time their teams have for innovation.

In this latest research, **84% consider optimizing application development capabilities to be of primary importance. In contrast, less than half (48%) of technology leaders indicated they spend time on application innovation.**



This disparity between innovation and optimization points to potential downstream implications around enterprises’ ability to innovate and stay competitive.

Innovation Is Important in Software Development



Technology leaders anticipate these development challenges will have a negative impact if they remain unaddressed, resulting in: **higher operational costs (53%), increased security risks (45%), compliance and regulatory concerns (38%), reduced profitability (32%), and missed revenue opportunities (28%).**

The Critical Consequences of Unaddressed Challenges



The Call to Transform SaaS: How to Pave the Way for Efficiency, Innovation, and Value in Software Development

Software development has played a crucial role in delivering value to enterprises in recent years, especially as the emphasis on developing applications that provide a competitive advantage grows. This has made SaaS tools indispensable.

While SaaS tools provide significant advantages, including automation, cost savings, resource efficiency, and faster timelines, their use has not fully diminished the burdens enterprises face. Significant development time is still necessary to launch applications, and teams find themselves burdened with ongoing maintenance and updates and security concerns, which limits their opportunity to drive long-term innovation.

Additionally, Part I of our SaaS Disruption Report, released earlier this year, found that over 90% of tech leaders believe retaining ownership and control over their data is crucial, and 78% are concerned with SaaS security threats. This highlights a conflict between the benefits of SaaS adoption and the critical need for data sovereignty and robust security measures.

The current SaaS model must fundamentally change to help enterprises meet the increasing demand for innovative applications. The environment necessitates a new and improved SaaS model that accelerates development, offers more customization and flexibility, and reduces the inherent drawbacks of SaaS, such as security and maintenance.

Furthermore, the SaaS model must advance to allow development teams to focus on strategic, future-oriented projects that provide greater value and opportunities for both customers and the business. This evolution may include standardizing access to, and ownership of, the source code for SaaS tools. Such access would allow enterprises to have greater control and customization as if they built them themselves. It would also permit enterprises to modify and scale their applications independently from SaaS providers, who often limit customization and require enterprises to wait for updates or fixes.

SaaS benefits are indisputable. With its next advancement, the benefits of SaaS will grow exponentially as the model evolves to consider enterprises' short-, mid-, and long-term needs.



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About Onymos

Onymos is the developer of solutions transforming Software-as-a-Service (SaaS) for software and application development. Its suite of more than 20 foundational software components enables enterprises to build innovative and differentiated web, mobile, and Internet of Things (IoT) applications with unmatched speed, quality, value, and security. Onymos is trusted by top brands, including Albertsons, CVS, Walmart, and VapoTherm. For more information, visit onymos.com, and join the conversation on LinkedIn and X (Twitter).

