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Leveraging Low-Code Development For Your Innovation Needs

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Executive Summary



Innovative mobile application experiences are critical to customer engagement. Digital solutions must provide differentiated customer experiences, while also enabling more collaborative and efficient ways of working internally. Thus, companies must build effective application delivery and development capabilities that enable innovation and address rising customer expectations. Customers want the ability to interact with the business across multiple touchpoints (web, mobile, digital) in a seamless and consistent manner. Mobile application development becomes a key gateway for enabling this multi-experience.

As IT and business decision-makers consider mobile application delivery, low-code development platforms bring significant benefits. Low-code platforms make development more intuitive, flexible, and effective. To respond to rapidly changing customer expectations and business needs, such as the COVID-19 pandemic, firms need to embrace speed, composability, and adaptability in their application experience design. Low-code development can help in this journey.

HCL Software commissioned Forrester Consulting to explore the emerging role of low-code development amid broader application development and delivery priorities and challenges that organizations face. Forrester conducted an online survey with 200 IT and business decision-makers across the US, the UK, and Australia to explore this topic. Through this research, we found that organizations have acknowledged the purpose of low-code development in improving their mobile experiences, but still require focus to apply low-code strategically.

KEY FINDINGS

- › **Organizations recognize the potential impact of low-code capabilities on mobile innovation priorities.** Improving mobile experiences is a significant priority for over 72% of decision-makers surveyed, and 68% of these respondents consider low-code development as key to increasing the scale and velocity of their mobile application needs.
- › **There's further potential for growth in low-code adoption.** Fifty-eight percent of respondents reported that their organizations are currently implementing or expanding their low-code development capabilities. However, this majority also acknowledges that less than 20% of their organizations' applications are developed in low-code, suggesting the organizations are in an early stage of low-code implementation.
- › **Low-code has the potential to further adoption, especially for mobile development.** An average of 52% of respondents stated their organizations plan to increase their use of low-code development over the next two to five years, leveraging its capabilities to further their mobile capabilities.

Customer-Driven Innovation Enables A Rise In Low-Code Development Approach

With application delivery and development capabilities remaining pivotal to organizations’ innovation strategy, surveyed decision-makers highlighted the importance of low-code in their organizations’ mobile application needs.

- > **Mobile innovation is a key business driver for organizations.** Seventy-eight percent of respondents indicated a priority to innovate and improve their organizations’ access to customers with 80% considering mobile touchpoints as a key enabler of innovation and customer engagement (see Figure 2). IT priorities align to these needs with 72% wanting to improve mobile experience across customer, business partner, and employee-facing applications (see Figure 1).
- > **Quickly differentiating digital offerings at scale is key to customer engagement.** According to 68% of survey respondents, a focus of innovation is to differentiate digital offerings. Also, 69% of respondents reported their organizations expect to improve the scale and speed of how they develop and improve their business applications. This ability is a key IT priority over the near-term.
- > **Organizations see low-code as a top priority.** With scale, speed, and mobile-based innovation deemed important, 68% of decision-makers considered low-code development as part of their top three IT priorities, because low-code enables increased speed and scale for developers.

68% of respondents consider low-code development one of their organizations’ top 3 IT priorities.

Figure 1

“Which of the following would you consider your IT organization’s top priorities?”



Base: 200 IT decision-makers across the US, the UK, and Australia who are responsible for their organizations’ application development strategy
 Source: A commissioned study conducted by Forrester Consulting on behalf of HCL Software, April 2021

Figure 2

“To what extent is your organization prioritizing the following business priorities over the next 12 months?”

80% of respondents reported their organizations prioritize improving customer engagement touchpoints by enabling mobile access to services,

and

76% of respondents are looking at differentiating their organizations’ digital offerings with new innovations,

yet

“Which of the following would you consider your IT organization’s top priorities?”

72% want to improve mobile experience across customer, business partner, or employee-facing applications.

43% consider enabling this differentiation through seamless multi-experience capabilities.

Base: 200 IT decision-makers across the US, the UK, and Australia who are responsible for their organizations’ application development strategy
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Organizations Take A Strategic Approach To Low-Code Development

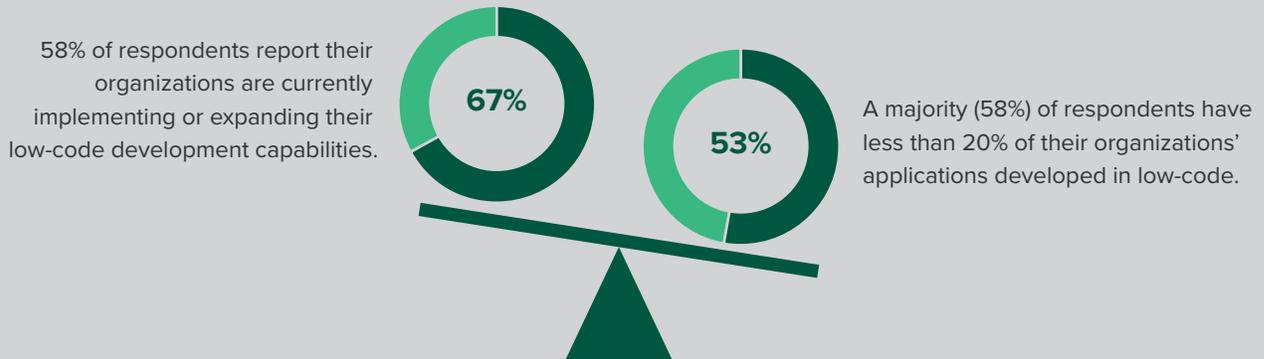
- › **Firms show the potential to further leverage low-code capabilities.** A majority (67%) of respondents reported that their firms currently rely on open-source software or third-party components in app development (see Figure 3). Fifty-three percent of respondents reported their organizations are specifically investing in low-code capabilities in the near-term to increase velocity of professional developers. Low-code development is currently being implemented or expanded by 58% of survey respondents’ organizations. A majority (58%) still have less than 20% of their organizations’ applications developed in low-code, though, showing potential for further adoption across the application portfolio.
- › **Decision-makers look to low-code to improve productivity and speed.** Eight-two percent of respondents considered improving capabilities and productivity of developers as a key driver for low-code investment, while 77% considered the speed of deployment with low-code to be a critical driver (see Figure 4). Seventy three percent of decision-makers also reported that their organizations found multi-experience management an important driver for low-code, as enabling more intuitive developer capabilities would allow developers to build application experiences across a variety of channels, such as digital, wearables, augmented reality, and more.
- › **Organizations want low-code to play a greater role in both internal and external application needs.** Currently, 13% of respondents reported their organizations developing customer-facing mobile applications with low-code capabilities. Eleven percent of respondents reported their firms using low-code for enterprise-wide applications. This highlights the equal bearing low-code development’s capabilities can have on both internal and external-facing applications, supporting the reasoning behind 53% of respondents who reported their organizations are looking to further increase their low-code development capabilities over the next two to five years.

Figure 3

Low-Code Helps Improve Development Speed

Percentage of respondents' organizations that currently rely on open-source or third-party components in app development

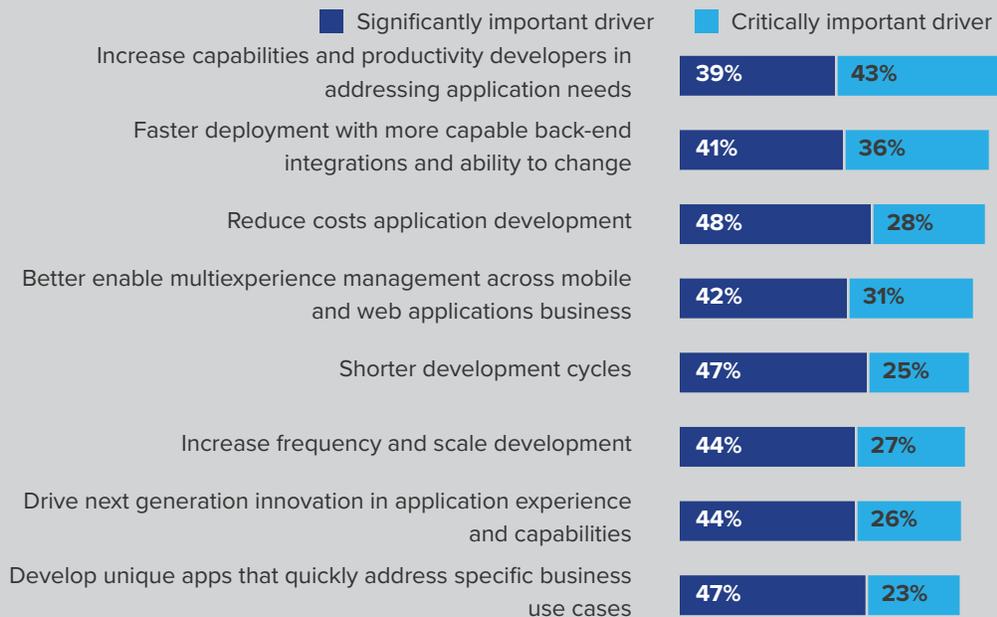
Percentage of respondents whose organizations plan to invest in low-code capabilities to increase velocity of professional developers



Base: 200 IT decision-makers across the US, the UK, and Australia who are responsible for their organizations' application development strategy
 Source: A commissioned study conducted by Forrester Consulting on behalf of HCL Software, April 2021

Figure 4

"Which of the following are your organization's drivers for low-code development?"



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 Source: A commissioned study conducted by Forrester Consulting on behalf of HCL Software, April 2021

Developer Processes Must Align To Meet Mobile Innovation Needs

- › **Low-code has helps reduce costs, but firms could be more effective in improving productivity and efficiency.** While low-code’s interest is high among organizations, current implementations need to make a greater impact in business value. Most firms have acknowledged that low-code has reduced costs and bring a positive impact to productivity. However, 40% of surveyed decision-makers saw no impact on low-code’s capabilities to help in larger strategic drivers, such as innovation and addressing unique application use cases.
- › **Organizations need to further develop agile capabilities.** Compared to maintaining speed and quick delivery (58%), organizations rely more on detailed and specific requirements document or set specifications in developing their application development capabilities (65%) (see Figure 5). In this sense, remaining flexible and agile to evolving capabilities needs to be considered.
- › **People and their skills play a crucial role in organizations’ application and development capabilities.** While low-code can help in broader capability development, 63% of respondents also recognize that people and processes internally are significantly reliant on external subject matter experts rather than developing internal expertise. A majority of (53%) respondents’ organizations segregate their development teams by functionality, while 57% still rely on subject matter experts to create and deliver capabilities.

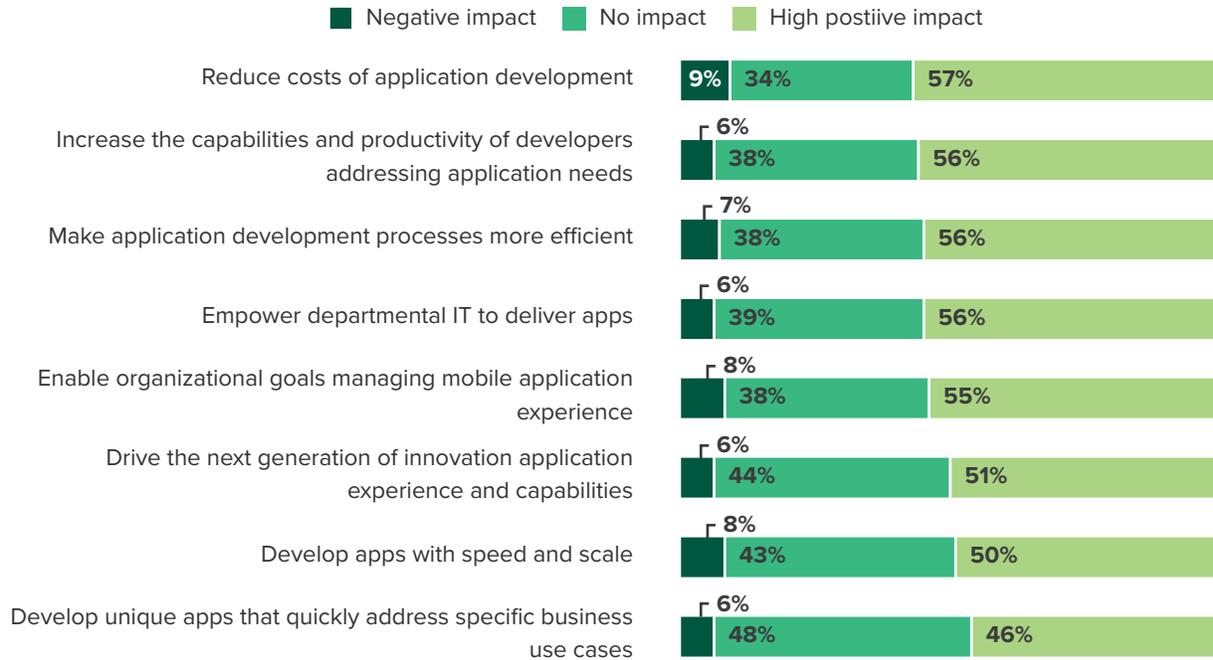
Figure 5
 “Which of the following capabilities do you currently have in your application development capabilities?”



Base: 200 IT decision-makers across the US, the UK, and Australia who are responsible for their organizations’ application development strategy
 Source: A commissioned study conducted by Forrester Consulting on behalf of HCL Software, April 2021

Figure 6

“How effective has your firm been in achieving these objectives?”



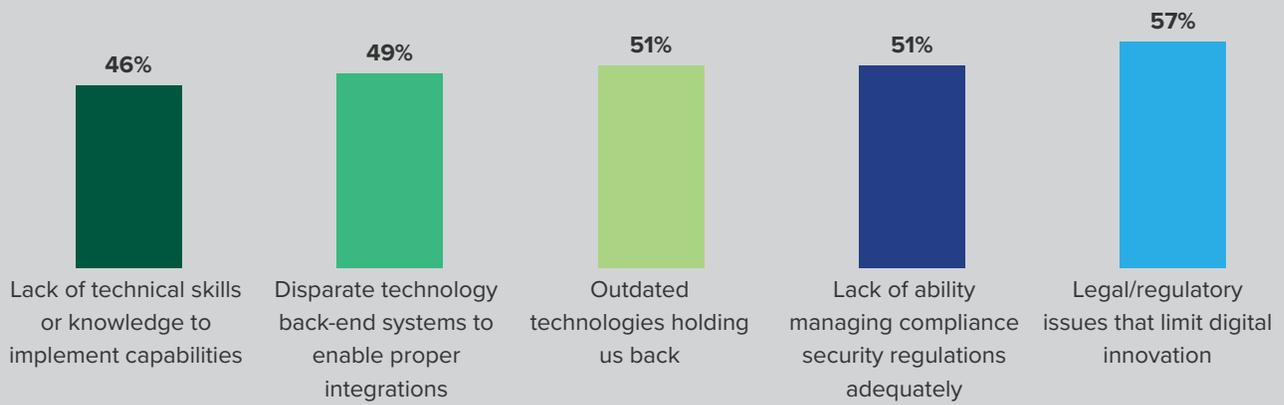
Base: 200 IT decision-makers across the US, the UK, and Australia who are responsible for their organizations' application development strategy
Source: A commissioned study conducted by Forrester Consulting on behalf of HCL Software, April 2021

Inherent Challenges In Skills And Compliance Provide Strategic Potential For Low-Code Capabilities

- › **Regulatory compliance and technology capabilities are key concerns for digital innovation.** While low-code's impact and strategic relevance has room for growth, organizations also must keep broader business challenges in mind. Fifty-seven percent of respondents cited that legal and regulatory issues limit their firms' current mobile innovation development, while 51% of respondents believed that outdated technologies and the lack of integrations also contribute to the lack of scale and speed in mobile app development (see Figure 7).
- › **Firms prioritize digital experiences but need to be aware of low-code's role.** IoT, smart devices, and digital experience management are key priorities of IT decision-makers (see Figure 8). Fifty-four percent of respondents said their firms want to invest in IoT and smart device capabilities in the next three to six months. Forty-one percent consider digital experience management a near-term need to address seamless experience across channels. Recognizing and articulating the role low-code capabilities in these areas can enable these emerging technologies and capabilities.

Figure 7

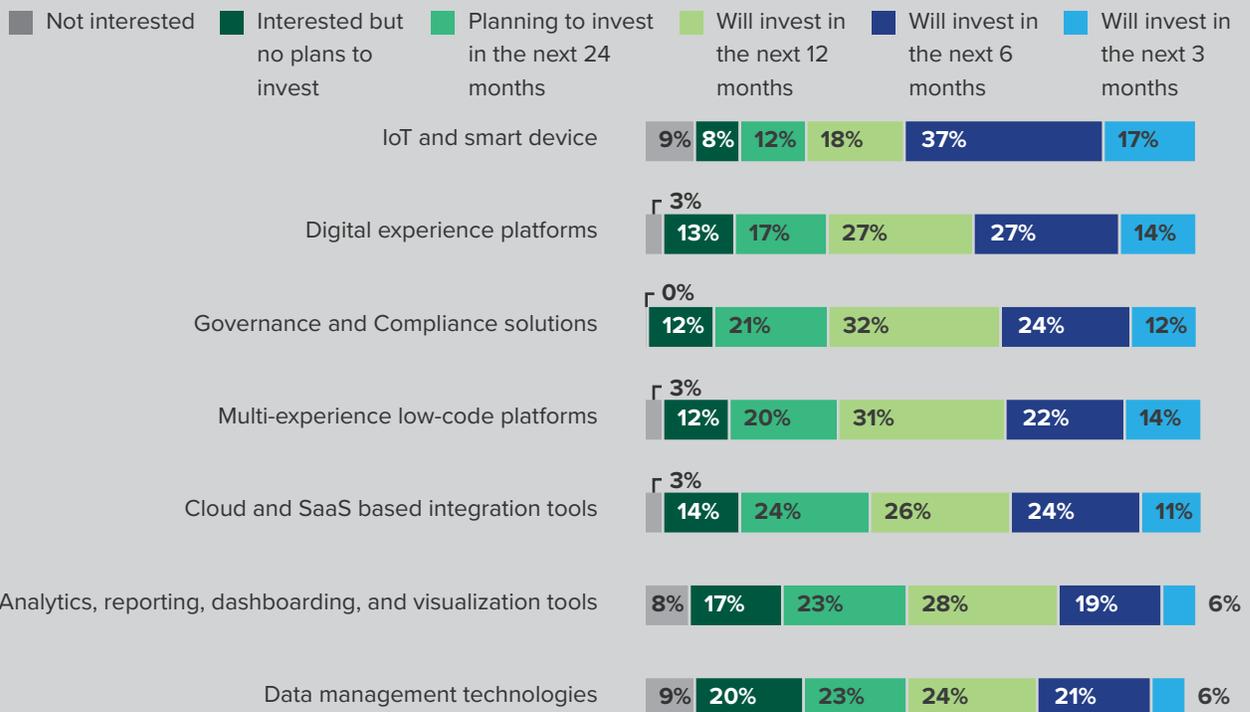
“What are your current challenges in enabling scale and speed in mobile application development?”



Base: 200 IT decision-makers across the US, the UK, and Australia who are responsible for their organizations' application development strategy
 Source: A commissioned study conducted by Forrester Consulting on behalf of HCL Software, April 2021

Figure 8

“Where do you expect to prioritize your technology investments to address multi-experience needs?”



Base: 200 IT decision-makers across the US, the UK, and Australia who are responsible for their organizations' application development strategy
 Source: A commissioned study conducted by Forrester Consulting on behalf of HCL Software, April 2021

Key Recommendations

As organizations grapple with new and ever-changing customer demands, enabling their digital solutions to remain agile, evolved, and innovative is more critical now than ever before. Organizations have acknowledged that low-code capabilities enable their developers to remain quick and adaptive to changing business needs. To truly leverage low-code development, organizations need to consider the following strategic priorities:



Embrace custom development. Forrester research indicates that the pendulum is swinging from generic commercial off-the-shelf (COTS) solutions to bespoke apps using cloud services and low-code. IT leaders must understand how low-code can tactically play a part in fast and differentiated application development.



Develop faster. Organizations must address speed in their application development capabilities and at scale across many applications. For low-code to truly be leveraged effectively, it must be applied as a first-class development option.



Play the long game by measuring low-code's platform impact on strategic challenges. Many firms will be tempted to consider low-code as a temporary quick fix for short-term challenges. Instead, low-code capabilities are key to scaled development productivity. These points should be explicitly measured and consciously improved.

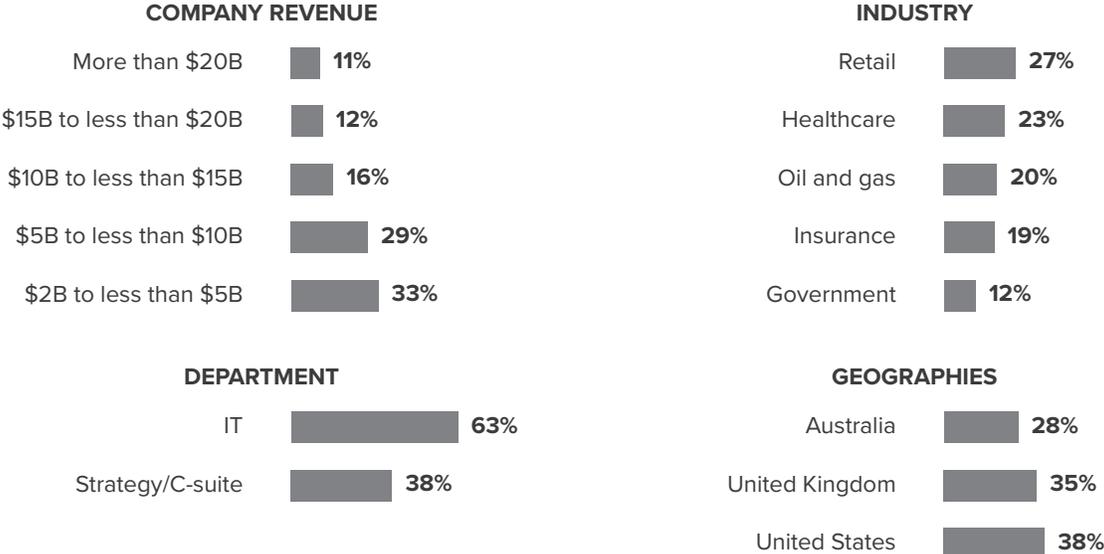


Use low-code as an avenue to develop a larger innovation culture. Low-code capabilities enable shorter development cycles and lower risk experiments for innovation efforts. Both IT and business teams should work together to align and pursue tech-driven innovation, facilitating innovation-driven capabilities, such as rapid-prototyping, emerging technology adoption in mobile application development.

Appendix A: Methodology

In this study, Forrester interviewed 200 IT decision-makers across the US, the UK, and Australia. Survey participants included decision-makers in application development and delivery teams. The study was completed in April 2021.

Appendix B: Demographics/Data



Base: 200 IT decision-makers across the US, the UK, and Australia who are responsible for their organizations' application development strategy
Note: Percentages may not total 100 because of rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of HCL Software, April 2021