Innovate and Differentiate With **Modern Applications**

Stay ahead of the curve and future-proof your business applications.

Technology moves fast, and it can be challenging for even the most forward-thinking organizations to keep up. In fact, 87% of IT executives agreed they need to modernize critical applications to realize their digital transformation journey.[1]

Building modern apps to realize value requires deep expertise, broad capabilities and organizational flexibility. Guide your organization to the cutting edge — read this ebook to uncover key components of success with modern applications:

- Understand the driving forces for modern apps
- The modern application journey
- Common challenges with modern app projects
- Getting full lifecycle support for your modernization project(s)
- Real-life examples of transformative modern apps
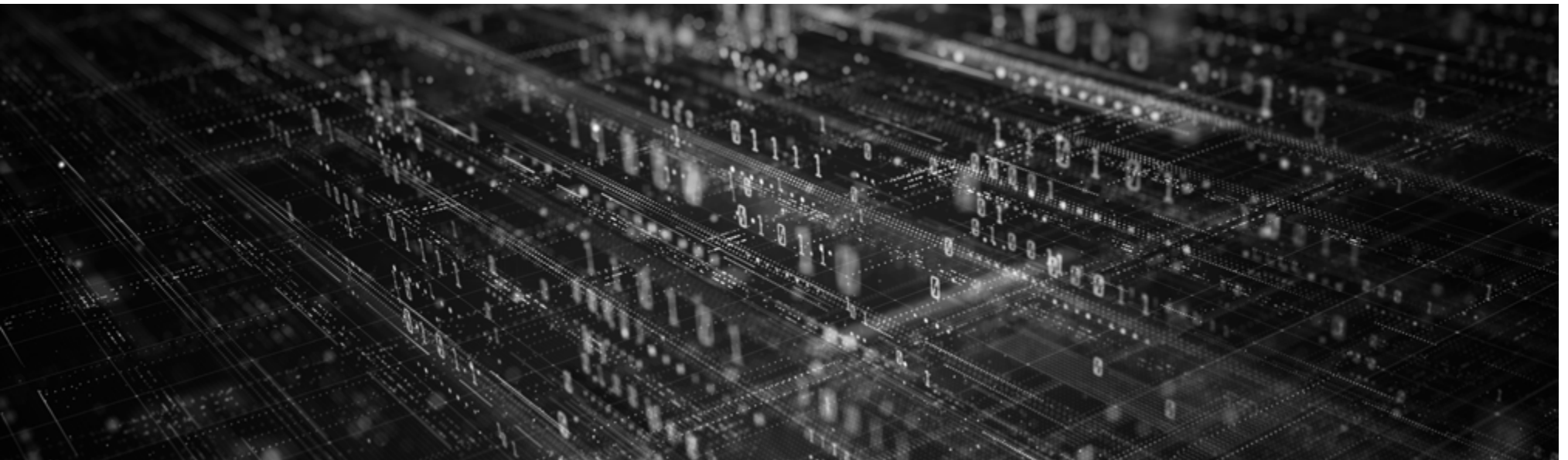- Providers that can support your organization on its unique path

Read these additional resources on the end-to-end application journey:

Top Considerations for App Modernization in 2023

Modern Applications: Full-Cycle Development at Your Fingertips

From Outdated to Transformative: Application Modernization

Key drivers for application modernization

While every business is different, the motivation for pursuing modern app initiatives is similar, even across industries. Below are several common drivers we've heard over the years.

Competitive advantage

The longer a business takes to realize value from digital transformation fueled by a modern application approach, the more likely a competitor will beat them to it. On the flip side, when organizations can outpace competitors, they can catapult themselves to the top of their market. Strategic application initiatives can help to drive innovation and competitive advantage.

Technical debt

Tech debt is the accumulation of additional costs — and dwindling resources — from the continued use of an imperfect solution. Last year, 86% of organizations were impacted by tech debt.[2] For businesses still using legacy apps, those apps and their infrastructure can be a major source of tech debt between the management, lack of documentation and constraints of outdated systems. This doesn't just impact the bottom line. Organizations may be sacrificing other resources by maintaining old devices or dedicating excessive human capital to manage a poorly implemented solution.
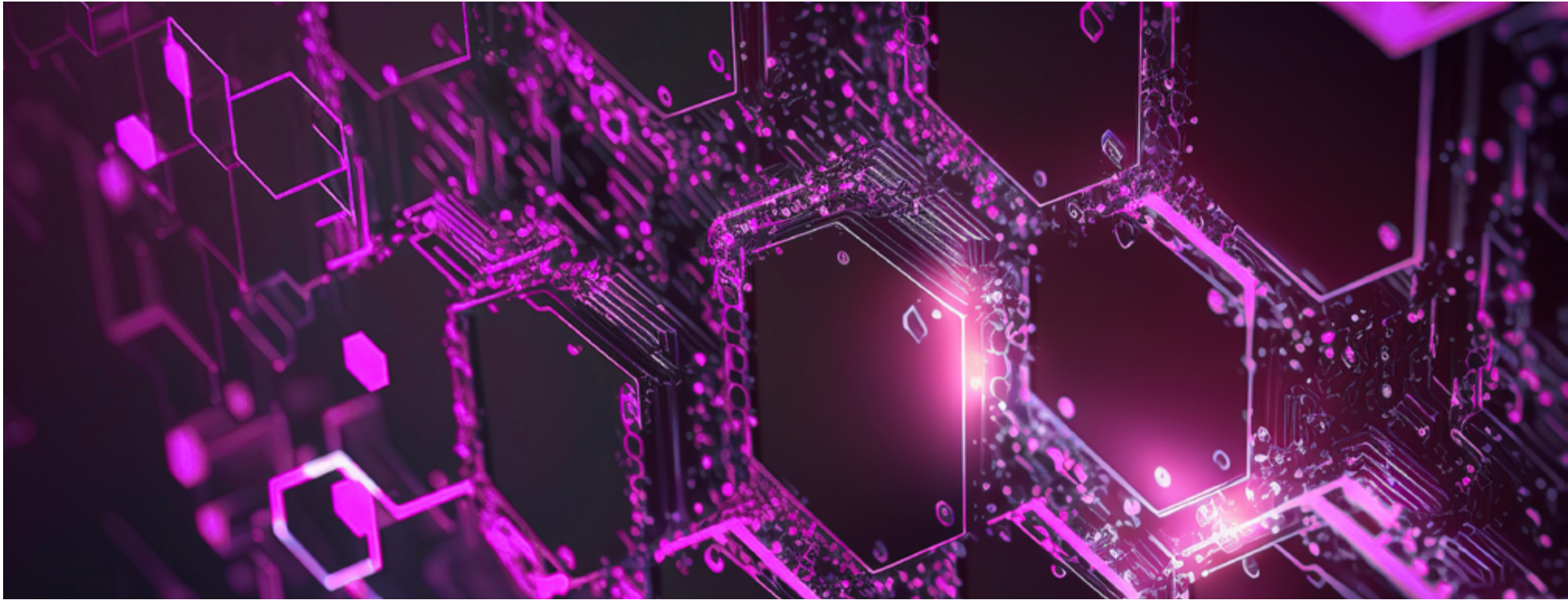
Stifled innovation

Running on older tech or not taking advantage of modern solution approaches can stifle innovation. For example, a legacy application that lacks the capability to integrate with newer, more modern tools may prevent an organization from implementing the best solution to its business problem.

Additionally, modern applications allow organizations to leverage a cloud-native platform. By leveraging this technology, organizations can scale and adapt more effectively while remaining cost-efficient. Cloud-based apps also avoid the pitfalls of aging infrastructure by shifting the management and refresh of infrastructure to the cloud provider, where economies of scale facilitate the efficient cycling of infrastructure.
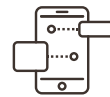
Poor user experience

Subpar user experiences — for both internal and external users — can have massive negative impacts. For internal employees, the inability to integrate seamlessly or implement necessary capabilities may mean decreased productivity. On the client side, bad User Experience (UX) can lead to a loss of your customer base or a reputation of being outdated and/or ineffective when users are forced to interact with customer service to address hiccups. For both groups, unintuitive design can undermine adoption and/or make the app more cumbersome and time-consuming to use.

Technology constraints

With the continued use of legacy applications comes the risk that the working components around them will become outdated, reach end-of-life support and become obsolete. The infrastructure the app is built on may no longer be receiving updates or support for emerging issues due to its age. The application itself may not be able to run efficiently on newer devices and/or may require specific and harder-to-get, outdated peripherals to access it. This issue compounds over time, making modernization increasingly unapproachable for internal teams.

Increased security risks

A legacy application environment, unless well managed, can drift from security best practices and can be plagued by limited visibility — adding exponential risk to the business. Newer technology and apps provide better protection against bad actors and enable faster threat response.

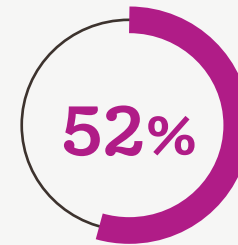### By the numbers

What are IT leaders saying about their motivations for application modernization?

60%

say operational efficiency is the top driver of app modernization.

56%
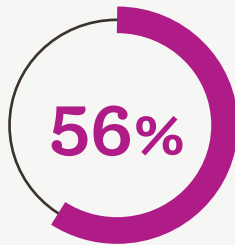
say competitive advantage and innovation are their main focus for app modernization.

52%

say that developing a security-centric app is a high priority when it comes to app modernization at their organization.[1]

The modern application journey

Often, modernization approaches can be expensive and unsuccessful at generating value, especially considering the upfront investment. With the right approach, organizations can be sure to take full advantage of the tools and technology available to them to modernize and generate a higher ROI. Here is our recommended playbook for modern applications:

What's Insight's approach?

Align: IT and business stakeholder alignment is critical to moving forward with a successful modernization initiative.

Assess: Insight teammates use a specialized process to assess the current app landscape to determine gaps and opportunities.

Plan: At this step, we help organizations prioritize their app modernization initiatives and plan how to best move forward.

Modernize: This step in the process can take different forms depending on the needs of the business and its current apps. It may be determined that an app should be retired or a migration can take place to bring a legacy app to the cloud. Alternatively, an entirely new app may be developed through a re-envisioning process.

Manage & innovate: Once an application has been modernized, organizations can partner with Insight to help support and manage their apps, as well as enable future innovation.

Discovery

Planning ahead is critical, and having the right information and goals at the start of the process makes that planning easier and more robust.

Start by deciding what business problem you are trying to solve — then determine if a modern app is the right solution to that business problem. Once the challenges have been accurately defined, the solution can be built to realize maximum impact. Additionally, success should be defined before moving forward. How will your organization know that the application solves the business problem? Appropriate success metrics that realistically define goals should be created for the project.

How does application rationalization fit into the journey?

Application rationalization is the process of assessing the existing environment — by taking inventory — to determine the best path forward. This process allows organizations to determine if legacy apps need to be retired, rehosted or consolidated, or if it's best to move forward with a separate and new solution.

Modernization

This is the bulk of the modernization journey, where the insights from the discovery phase will be put to work, tested and finally implemented.

Proof of Concept (PoC)

This step of the process allows a company to see if what it wants is feasible and if the proposed solution addresses that goal. PoC validation is critical because it allows companies to address misalignment early in the process and with minimal waste.

Pilot (Phase 0)

After an MVP has been prepared, a pilot can be conducted to determine the real-world implementation of the app solution. This is a critical part of the process that can reveal gaps or opportunities for realignment — iteration is the goal. Once adjustments are made, organizations can move forward confidently with their solution.

Minimum Viable Product (MVP)

Once clarity is achieved related to the business goals and any feasibility concerns have been addressed, by a PoC if required, an MVP may be used. This is a balance between a lower-resource investment and a high-fidelity version of the solution that can be tested before fully investing in the initiative. An MVP allows teams to determine if the solution is realistic and to solve the business problem without getting bogged down in the nuts and bolts of developing a complete production-ready solution.

Rollout (Phases 1 through N)

With the previous steps of the process validating the modernized solution, the application can be developed iteratively with the goal of reaching rollout, which constitutes full implementation and deployment of the solution.

Innovation

With modern infrastructure in place and a proven methodology in practice, organizations are free to iterate and apply the same patterns on existing applications — and devote resources to new avenues of innovation. There may be ways to innovate on top of the modern application by finding opportunities to generate more value over time.

The initial app may inspire additional modernization projects, and the organization can feel even more confident approaching them with a success under its belt. With less tech debt, there will be a surplus of resources to distribute among current or new initiatives.

Unpacking the challenges to modern applications

While pursuing modern applications is a worthy business goal, it doesn't come without roadblocks. Even forward-thinking organizations can find themselves facing obstacles they may need support to overcome. Below are common pain points when undertaking a modern apps project.

Knowledge gaps

Even if an organization has the desire and budget to move forward with a modern application journey, it may not have the right team to do it. In fact, 45% report that gaps in technology skills and knowledge inhibit innovation at their organization[3] — and this can impact modernization strategy or execution of it. You will need a consulting organization with the expertise, access to resources and previous experience to succeed.

Bandwidth

Additionally, an organization can have several skilled individuals for their modernization project but still lack the headcount necessary to carry it out on a realistic timeline. The IT side of organizations might be focused on other initiatives or on maintaining current systems, making it difficult to dedicate members of the team to the project.

Timelines and budgets

One of the more challenging aspects of IT initiatives can be budgeting and project management. Allocating budget to modernization projects needs to be prioritized. Lack of funding or underfunding these projects can mean failure right from the start. Additionally, it can be easy for projects to get off track and end up costing more time and money than originally planned. Good project management can keep things on track. For companies with less experience modernizing their technology, this can be even harder to plan for.

Lack of UX expertise

When developing a positive UX, having access to research and testing is paramount. When organizations have insufficient UX information to build the app, it will negatively impact usability and efficiency. Having access to dedicated UX experts can be crucial to success, and not all companies have dedicated staff on hand for the task.

Inability to leverage other apps or data

If an organization is running on legacy technology and old systems, it can be even more challenging to address modernization needs. Without sufficient access or visibility into data assets, performance characteristics of applications or efficiencies of newer technology, it can feel like there is a lot more ground to cover to get to a modern end state. In these cases, it is critical to make sure that application and data dependencies are defined so that an impact analysis can be performed when planning your modernization strategy.

Your partner for strategic modernization

Whether starting from scratch or looking to overhaul legacy applications, organizations can leverage end-to-end support from Insight. At any stage of the process, our experts can step in and reignite a project or sustain momentum:
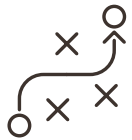
Strategic advisory

For organizations that want help developing strategy around their IT initiatives driving toward business goals, our advisors can provide both tech and industry-specific guidance.

Low/no-code solutions

Not all solutions have to mean deep-code development. With our wide range of partners, we can offer low- or no-code solutions to clients that they can confidently take over themselves or adjust along the way.

UX

Crucial to the development of new apps is providing a fresh UX, but not all organizations have the expertise or capacity to do this internally. We have experts in UX design and research with experience across industries.

Hybrid distributed apps

For applications that can run anywhere and remain connected to the bigger picture, hybrid distributed apps can close the gap.

SnapStart

With our proprietary solution SnapStart, our experts can map the current landscape of tech and IT assets on an expedited timeline so organizations can make better data-driven decisions sooner.

Training (Agile, Scrum, OCM and more)

Whether an organization needs a better understanding of iterative development processes, OCM or onboarding to new technology, Insight can provide that support.

Intelligent apps

Organizations looking to take their modern applications to the next level can leverage intelligent apps to implement Artificial Intelligence (AI) and Machine Learning (ML). With the most cutting-edge technology, businesses can gain more insights, make client-conscious decisions and adjust their strategy along the way.

From their perspective: Modern application client stories

Creating Competitive Edge With an Industry-Leading Automated Tire Management System

For this manufacturer, tire-related downtime of its commercial fleet meant less time generating business and increased chances for accidents. Looking to solve both of these issues at once, the company tapped Insight for a solution to monitoring the tires of a sprawling fleet.

The solution combined a seamless front-end experience and an engine for analyzing data in real time to monitor and alert on tread depth. With this new industry-leading tire management system to conduct real-time analysis at scale, the company reduced downtime by nearly 50% and prioritized vehicle safety across its 7,500+ fleet. *Read more about this transformational story here.*

Global Payments Delivers Wins With Cashless Gaming App

When Global Payments realized the casino industry had failed to meet customer expectations around self-service and mobile-first technology, it recognized an opportunity to partner with Insight.

The solution was a simple, secure and easy-to-use mobile app for cashless transactions on the casino floor. Across the country, patrons can now continue playing casino games without having to leave their preferred station for more cash. *Read more about this transformational story here.*

Steward Health Care Transforms Care Through Digital Innovation

As a health system organization, Steward had its sights set on improving patient care and unlocking efficiencies across its large staff. Hospital discharges are a delicate balance of not releasing a patient before they can safely leave medical care and not incurring unnecessary charges and limiting hospital space.

The company sought an intelligent platform that could streamline the monitoring of patients and their stays that could easily be integrated into staff workflows. The solution was a modern app that closed care gaps and unlocked operational efficiency by reducing the length of stays by 1.5 days. *Read more about this transformational story here.*
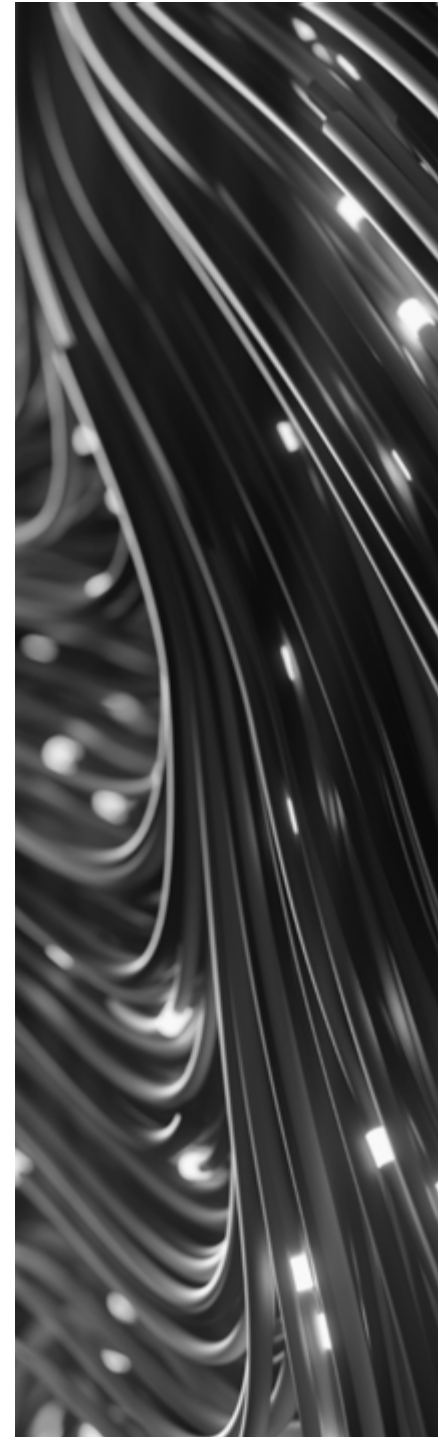
Strength in partnerships

Insight acts as a single point of execution across world-class partners with a wide scope of offerings and expertise. With this approach, organizations benefit from all the hardware, software and consultation they need in one place.

Microsoft

Microsoft's wide product line gives organizations access to cloud, collaboration and security capabilities all in one place. Azure® cloud is an especially good fit for data and AI applications and can integrate with Microsoft's other services. Microsoft Sentinel™ provides in-house security for workloads as well.

intel

Intel's Xeon® Scalable processors deliver consistent performance with compatible virtualization infrastructure to allow organizations to deploy new applications quickly and get fast response times. A strong cloud infrastructure starts with a foundation of optimized processors — with Intel, businesses can confidently run the most demanding applications from AI to high-performance compute.

Google Cloud

With Google, organizations gain access to experience, resiliency and security. Google's products are well equipped to solve the business challenges that need to be addressed. Google Cloud is exceptional for data, AI and ML workloads, and provides flexibility to customers.

HashiCorp

To streamline and automate workflows or processes, HashiCorp is a great option. As experts in digital transformation and cloud adoption strategy, HashiCorp can be an asset for modern application projects. Additionally, HashiCorp Vault™ for secret management is essential for Zero Trust security.

aws

AWS® Cloud is a great choice, especially for app modernization due to its excellence in migrating to the cloud and cloud optimization. The model gives customers control over cloud costs and a simplified management platform that allows for streamlined scalability.

databricks

Databricks can be a great tie-in for modern applications that will be leveraging data, AI and ML. The platform is a great fit for multicloud environments and has integrations across major data platforms.

Modernize and transform your *apps*.

No matter your industry, you can benefit from full application lifecycle strategy and development support at your fingertips.

Contact us today to get started.
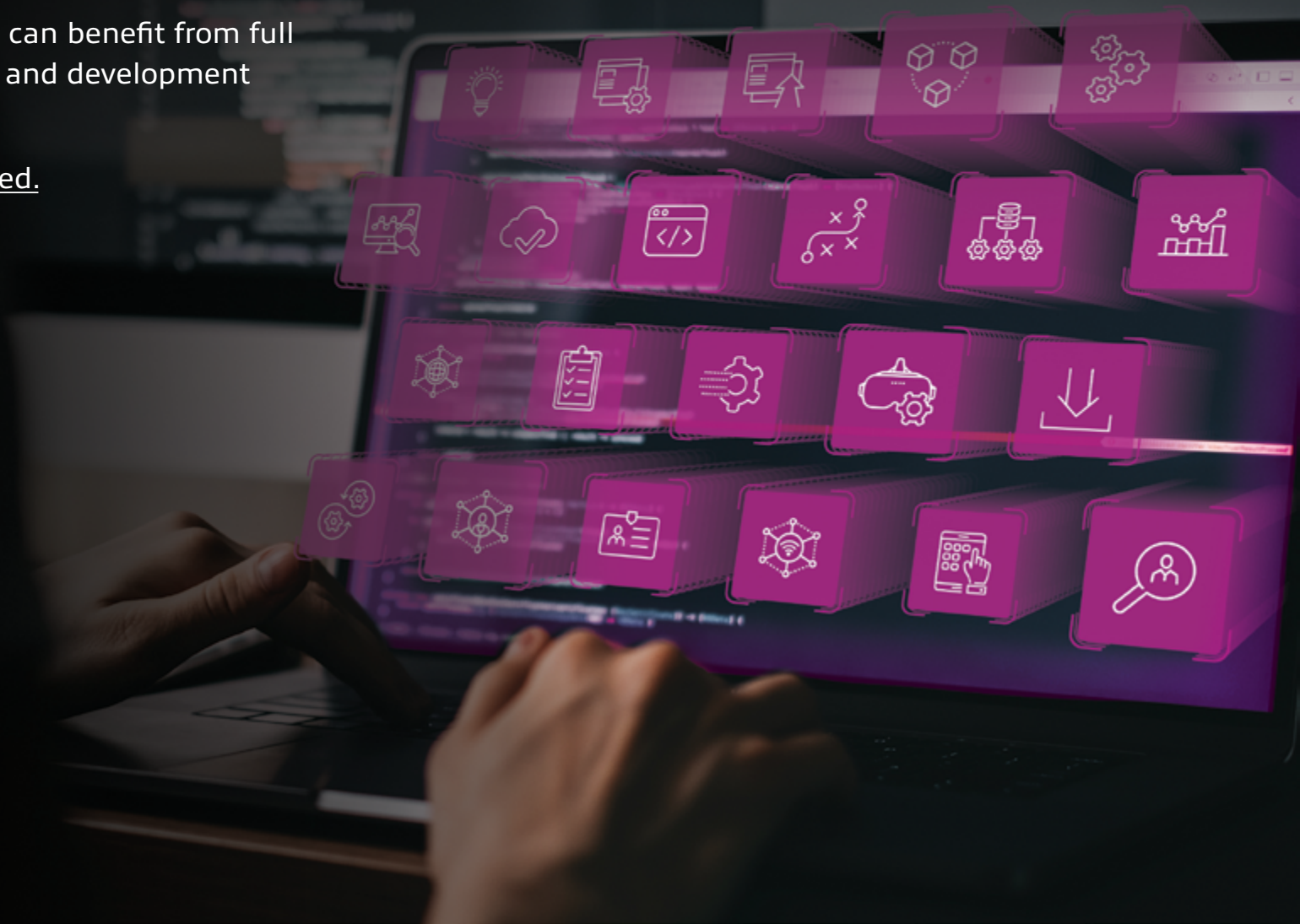
About Insight

Insight Enterprises Inc. is a Fortune 500, industry-recognized Solutions Integrator helping organizations accelerate their digital journey. Insight Intelligent Technology Solutions™ inspire clients to be ambitious about business transformation as they modernize workplaces, applications and cloud infrastructure; and establish new ways to work smarter through the intelligent edge, data analytics, artificial intelligence and cybersecurity. Based in 19 countries, our 11,500 teammates serve clients globally, building meaningful connections based on values of hunger, heart and harmony. We deliver global scale and localized expertise to architect, implement, manage and secure IT today while transforming for tomorrow. Discover more at insight.com and solutions.insight.com.

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solutions.insight.com | insight.com

Sources:
[1] MarketPulse Research by Foundry Research Services. (February 2023). The Path to Digital Transformation: Where Leaders Stand in 2023. Slide 9. Commissioned by Insight.
[2] MarketPulse Research by Foundry Research Services. (February 2023). The Path to Digital Transformation: Where Leaders Stand in 2023. Slide 8. Commissioned by Insight.
[3] MarketPulse Research by Foundry Research Services. (February 2023). The Path to Digital Transformation: Where Leaders Stand in 2023. Slide 14. Commissioned by Insight.