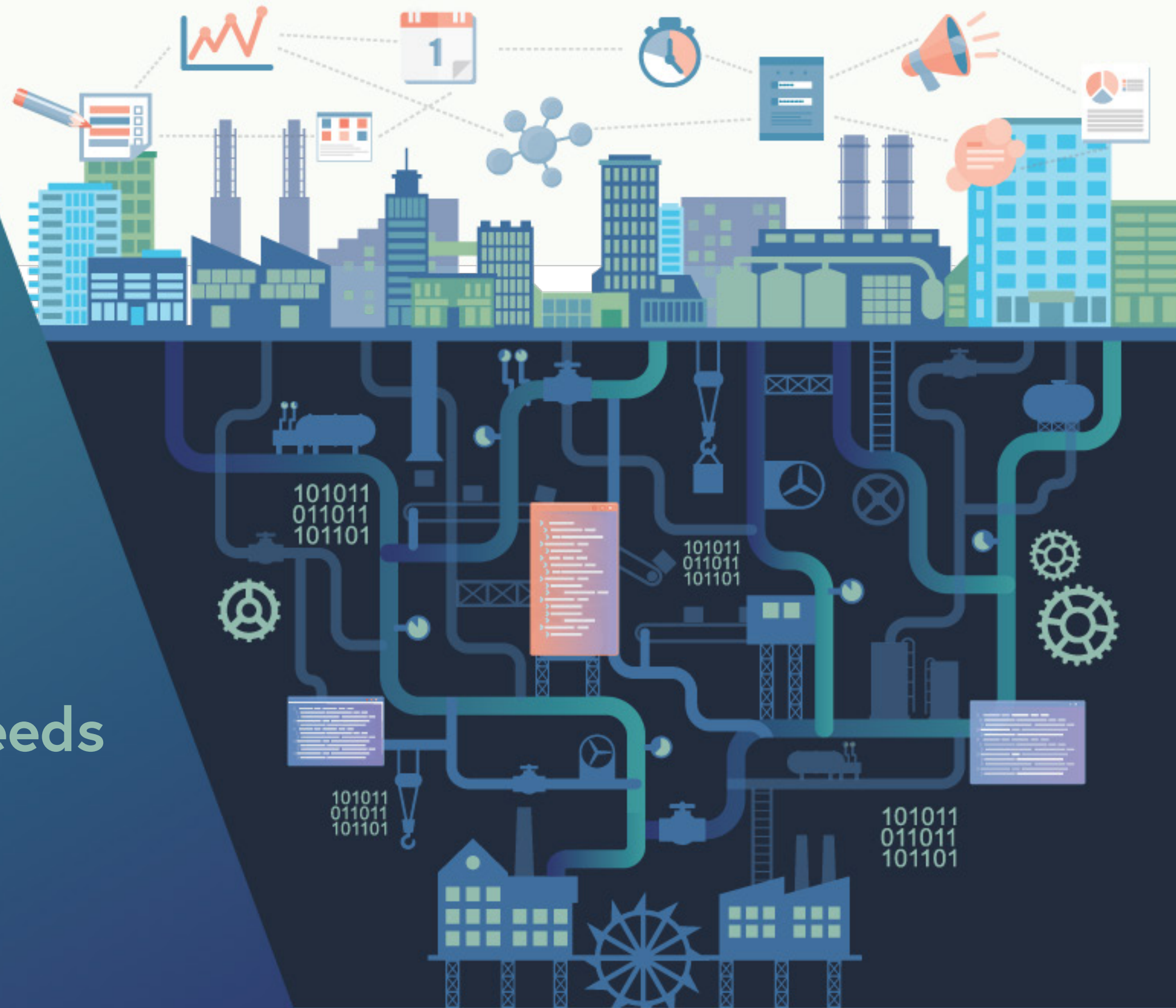


Workload Automation

How IT Can Meet
Evolving Business Needs



According to research recently conducted by Enterprise Management Associates (EMA), 75% of enterprises licensed new Workload Automation products in the last 4 years.



To remain competitive in today's economy, organizations need to leverage the best digital tools and technologies that are available. However, digital technologies and market demands are evolving rapidly, forcing organizations to continuously adopt new tools and adapt to new circumstances. As a result, organizations must also continuously shift the demands they place on IT.

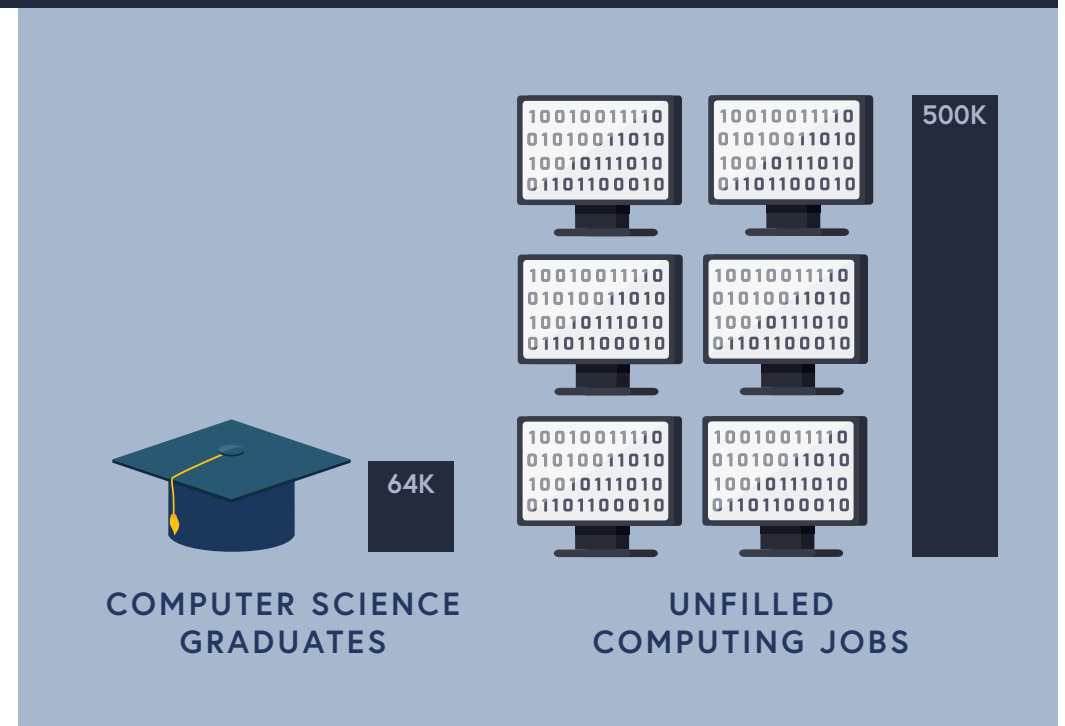
As digital technologies continue to develop, new tools, platforms, and systems are brought to market, expanding the catalog of technologies that IT must accommodate. To support these new classes of tools, additional, experienced IT professionals are needed. However, because of the persistent IT Skills Gap, IT teams are not able to locate and retain senior-level IT professionals who possess the skills needed to manage disparate tools across hybrid infrastructures.

According to figures compiled by The Conference Board, there are currently 500,000 unfilled computing jobs in the US; yet, only 64,000 computer science students graduated in the latest year of available figures.

IT teams are searching for better ways to manage their surging workloads, to work around staffing shortages, and to get ahead of the shifting needs of business.

In response to these pressures, IT teams have increased their use of automation tools that assist in managing and monitoring critical processes and workloads. The goal is that by optimizing the limited resources IT has at its disposal, IT professionals will be able to limit the tasks that they must manually manage on a regular basis. The common belief is that by leveraging automation tools, IT professionals will be able to spend more time on higher-value projects that better serve the organization.

At least, that's the goal.



*In EMA's recent market-research study, **The Shifting Role of Workload Automation**, a majority of participants reported that their need for automation and their use of automation were growing.*

"It is clear that organizations feel the need to automate and are doing so as fast as they can," EMA's President and COO, Dan Twing, explained in the study's summary.

IT Automation solutions can provide organizations with powerful capabilities that can optimize job scheduling, streamline workflows, and alert personnel before issues grow larger. Properly implemented, IT Automation can save IT time and resources, support more SLAs, and provide a scalable, adaptable framework that supports dynamic business needs.

IT teams commonly employ several types of automation, including: built-in (native) schedulers, home-grown applications, workload automation, and custom, standalone scripts. These automation solutions can help IT teams accomplish more with fewer resources, but they can also create a cumbersome IT environment stunted by automation sprawl.

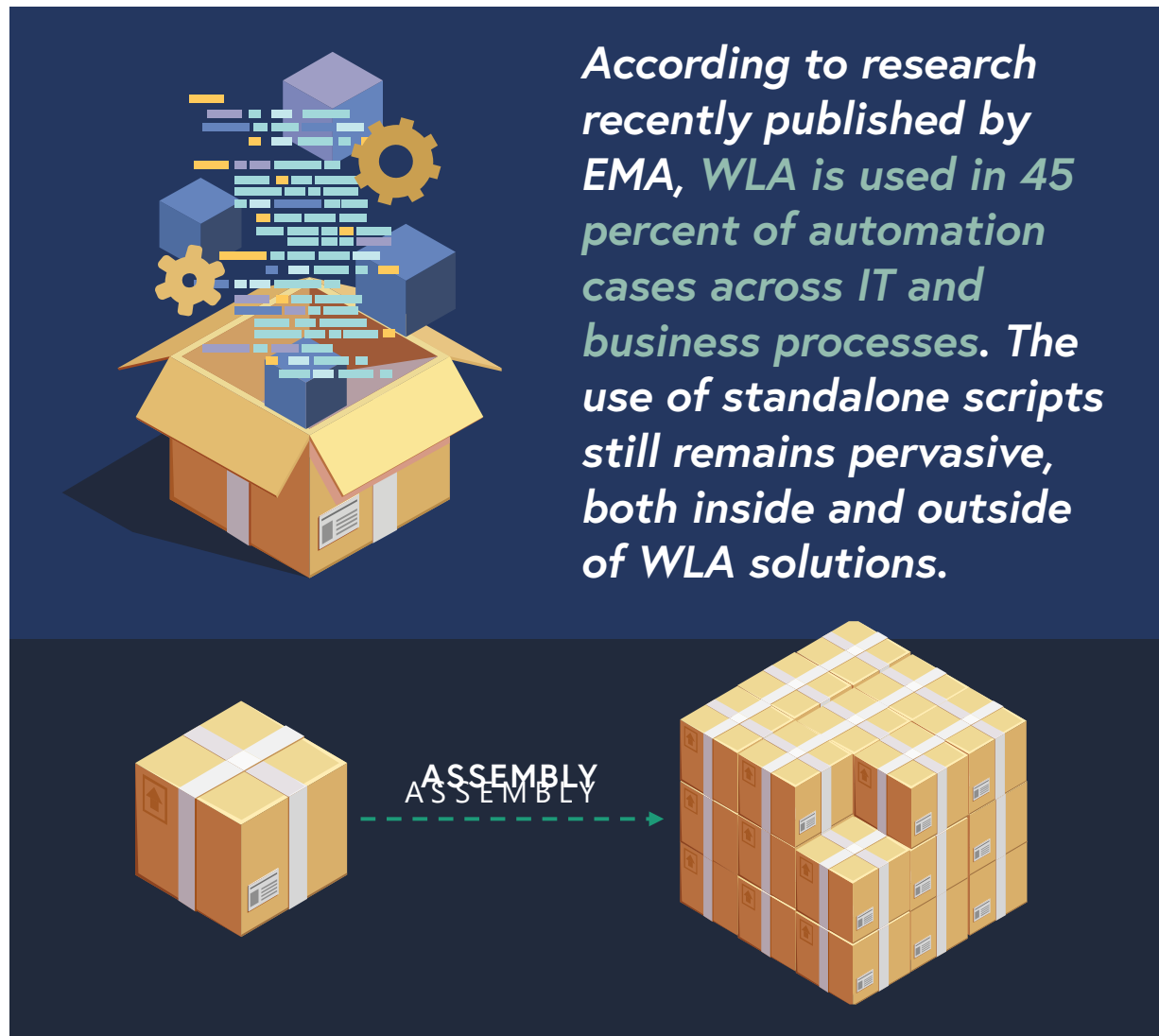
Automation sprawl is the result of automation strategies (or the result of having no strategy) that favor a piecemeal application of solutions. This is called the Elemental Approach to IT Automation. The Elemental Approach is defined by the ad hoc use of automation solutions, with IT addressing problems by implementing a multitude of automation tools and custom scripts.

The Elemental Approach to IT Automation results in complex, fragmented environments because it relies on a variety of automation solutions. It creates silos of technology and silos of automation that make it difficult to share information and to manage dependencies across the organization. Overall, cumbersome IT environments clogged by automation sprawl do not enable agility and quick response times.



In the same study, 56% of respondents reported having "too many scheduling and automation tools in place."

40% of those using multiple Workload Automation tools do so because different business teams require different scheduling tools to achieve team objectives and because, since 2013, IT projects initiated by business teams have been responsible for a growing share of IT complexity.



The Architectural, Layered Approach to IT Automation is the counterpoint to the Elemental Approach. Whereas the Elemental Approach favors a separate automation solution for each technology, platform, and process, the Architectural, Layered Approach reduces the overall number of automation tools, managing workloads across multiple environments and systems, across the enterprise.

IT teams that adopt an Architectural, Layered Approach will most commonly use Workload Automation (WLA) because, compared to other forms of automation, WLA can foster a more holistic automation strategy that provides greater degrees of scalability. WLA solutions allow IT professionals to integrate workflows from disparate digital tools and platforms, helping to simplify and optimize IT environments.

However, WLA tools that rely only on custom scripts cannot deliver the automation capabilities necessary for implementing the Architectural Approach. This is why many organizations do not achieve the strategic goals that automation was supposed to help them realize. Custom script writing is complex and error-prone, time-consuming, and resource-intensive. It involves research, design, testing, and debugging, all of which is left up to senior-level IT professionals dealing with surging workloads and a persistent IT Skills Gap.

WLA solutions that provide Low-Code/No-Code capabilities are a popular alternative to script-reliant WLA solutions. Low-Code WLA solutions provide prebuilt drag-and-drop actions, functions, and integrations, allowing IT professionals to seamlessly assemble workflows that manage dependencies and job steps from a multitude of other platforms, systems, and technologies.

IT must be prepared to accommodate and drive the shifting technological needs of business. This means building a scalable, flexible automation environment that is capable of seamlessly coordinating disparate digital tools, scripts, platforms, and applications. By implementing a Low-Code WLA solution that supports the goals of the Architectural Approach to IT Automation, IT can integrate incongruent technologies and drive powerful, flexible automation capabilities across the organization.

In a recent CEO survey conducted by Gartner, the word "digital" was used an additional 11% of the time as compared to the previous year, indicating that these "bullish sentiment indicators toward digital business [are] backed up by CEOs' continuing to invest in IT."

Digital technology is becoming ubiquitous within organizations. It has become essential to the daily processes that organizations rely on and critical to the value propositions organizations offer to consumers. As a result, CEOs and line-of-business (LOB) leaders are placing more demands on IT, requesting that IT provide more services and support more digital tools and technologies. This increases the strain of an already strained IT.

As IT's importance grows, so too does IT's role within the organization. For example, the biggest consumers of I&O services are now LOB leaders, an important change from past years when application developers were IT's biggest customers. This shift in who IT is primarily serving necessitates a shift in focus.

A 2018 I&O survey conducted by Gartner reveals that 69% of I&O leaders have line-of-business leaders as their largest consumers of I&O services, followed by application development leaders.

IT must move closer to LOB leaders in order to address these new business demands. This includes working with LOB leaders to bring digital capabilities to market. IT is essential to the digital products and services that organizations provide and should therefore take a more proactive role in the development and delivery of products and services. IT must become a part of the organization's value stream, taking an outside-in approach that focuses on market forces and economic demands.

Traditional automation strategies like the Elemental Approach were developed to meet static needs by supporting specific infrastructure. Such a strategy does not easily integrate new technologies, leading to inefficiencies that are impossible to scale. This hampers IT's efforts to meet the dynamic needs of the organization.




By comparison, an Architectural Approach to IT Automation allows IT to easily and seamlessly integrate workflows and coordinate a variety of disparate tools, enabling IT to respond quickly and efficiently to changing business needs.

An Architectural Approach to IT Automation relies on Low-Code WLA solutions that can provide hundreds of drag-and-drop functions that are ready to be built into workflows, as well as out-of-the-box integrations that allow users to easily coordinate a catalog of digital tools within a single pane of glass. These capabilities allow IT to greatly reduce the time spent designing, coding, and testing custom scripts, while providing a scalable automation architecture that helps IT manage and monitor digital technologies across the organization.



Advanced WLA solutions also help IT harness the power of the API economy. APIs have become essential for developers who need to incorporate features and capabilities from different digital tools. With an API-empowered WLA solution, IT can quickly turn APIs into powerful, reusable job steps that can be incorporated into end-to-end workflows, without having to code. This allows IT to quickly integrate virtually any digital tool because an advanced WLA solution can support multiple API styles including RESTful Services, SOAP, Stored Procedures, .NET Assemblies, and more.

The digital economy is rapidly evolving and becoming more interconnected as new systems and applications are continuously introduced. In order for organizations to get ahead of competition, they must be able to quickly respond to emerging digital trends and to integrate with new digital tools as they're released. Having an API-empowered WLA solution is an essential part of these efforts because it gives IT the tools it needs to integrate and leverage virtually any digital tool.



By 2022, 65% of midsize enterprises will be executing an API strategy, a recent Gartner study found.



According to a recent survey conducted by Gartner, 64% of CIOs will increase investment in public cloud computing, 63% in IT infrastructure automation tools, and 63% in cloud management and governance tools. CIOs also reported a belief that AI "will have a significant impact on their business."

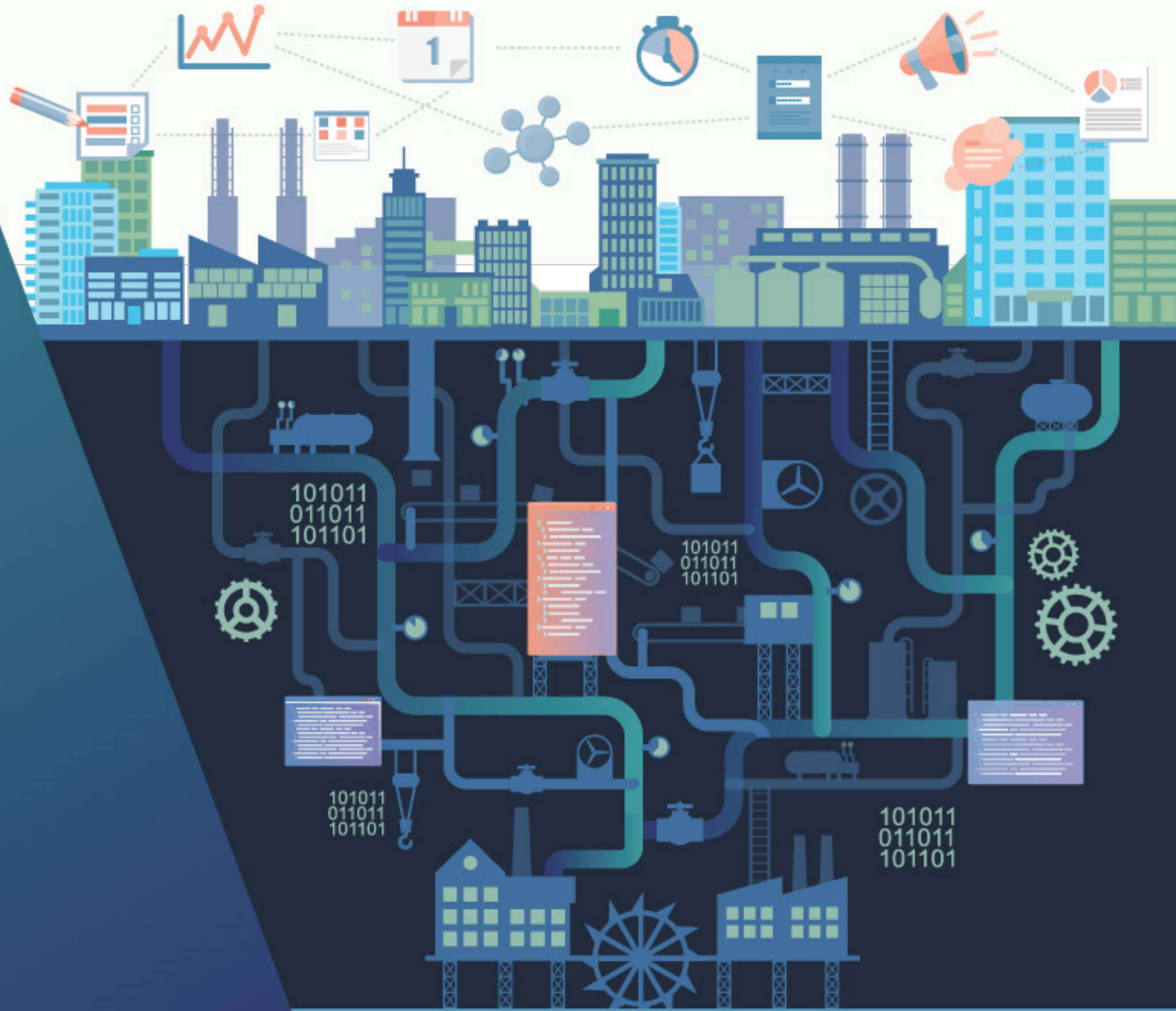
Organizations are increasing their investments in public cloud computing, IT Automation, and artificial intelligence (AI). Leveraging the best new digital tools available is how organizations stay ahead of competition, and this trend is unlikely to slow in the coming decades.

Evolutions in digital technologies will continue to impact business models, best practices, and consumer demands. To stay atop of these rapid developments, IT needs to focus on the external drivers of business needs: market and regulatory forces. By focusing on these external drives, IT will be better positioned to create value for the organization. This value must include flexible, scalable automation strategies that are capable of quickly responding to transitory market demands and regulatory changes by accommodating new technologies.

IT can survive the IT Skills Gap. IT can automate without relying on scripts and can integrate virtually any digital tool on the market. With a powerful Workload Automation solution to monitor and manage infrastructure and applications, IT can achieve just about anything.

Are you ready to get ahead of business demands?





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