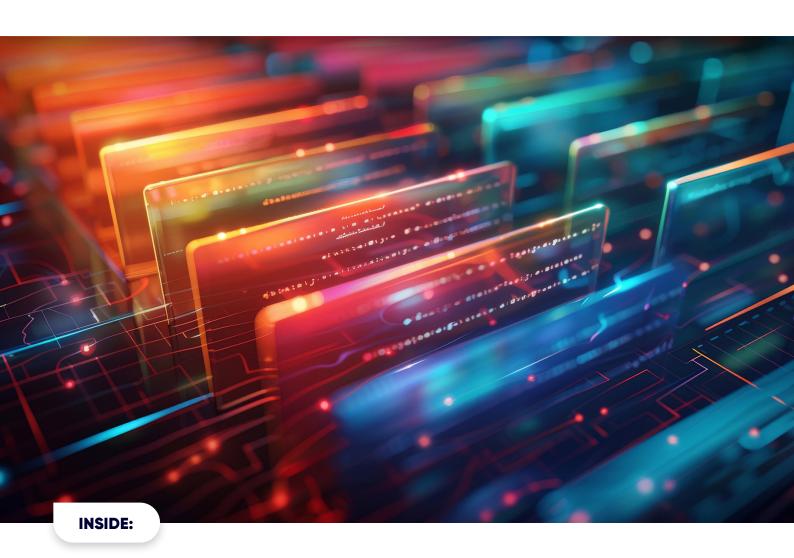


PROCESS ORCHESTRATION: THE NEXT STEP IN PROCESS EXCELLENCE **2024 INDUSTRY REPORT**

How process orchestration enhances automation



- The trends shaping the process orchestration landscape
- Transforming financial services with process orchestration
- Process orchestration success factors and challenges



What is process orchestration?

Business processes consist of individual tasks executed in a specific order. These tasks are carried out by different endpoints such as microservices and artificial intelligence (AI), as well as people and devices. The execution of the tasks by the endpoints can be placed in a logical order – this is known as process orchestration.

Process orchestration is related to process automation, but it is not the same. Automation is the result of using technology to automatically perform certain tasks without human intervention. Automating a specific task or series of tasks – via robotic process automation (RPA), for example – will not necessarily provide a view of the end-to-end process flow. Process orchestration goes beyond isolated or fragmented automation, tying together both automated and manual tasks as well as different business processes to help achieve end-to-end automation.

End-to-end process orchestration offers enhanced visibility and control over the entire workflow, enabling continuous improvement. It also ensures standardized information flows, reducing errors and fostering efficient collaboration through improved business and IT alignment across an organization.

Process orchestration is considered an emerging but important element of process excellence. "In today's fast-changing digital environment, organizations are continuously looking for methods to streamline operations, increase efficiency and remain ahead of competition," Arun U, business process management (BPM) and process automation analyst, tells *PEX Network*. Process orchestration has evolved into a significant component in this effort, allowing firms to coordinate and automate complex business processes across multiple systems, applications and platforms, he adds.

The process orchestration market has experienced significant growth recently, with data from The Business Research Company indicating a market value of more than US \$5 billion in 2024, which could exceed \$11 billion in 2028. Organizations are looking to process orchestration to address the complexity of business-critical processes, which are growing more sophisticated to maintain due to multiple phases, various endpoints, parallel workflows and exception-handling demands. As the business landscape evolves, process orchestration becomes increasingly important in meeting the difficulties and capitalizing on the opportunities afforded by digital transformation.







Trends shaping process orchestration



Covid-19 pandemic and economic climate

The pandemic and global economic shutdown led organizations to invest in their digital transformation efforts much faster than they otherwise would have. Software spending in the last five years has greatly outpaced general inflation rates, with rapid adoption of technology and automation. Today, the economic climate is causing many organizations to reconsider how efficient and effective these technology investments truly are, finding that this accelerated digital transformation led to even more silos.



Unsuccessful automation

According to McKinsey, just 55 percent of larger organizations report success with automation. Many teams have made the mistake of investing heavily in automation point solutions, instead of thinking holistically and strategically about their entire end-to-end processes. In doing so, they often find their processes broken, disconnected, difficult to measure and even more challenging to improve. Automation hurdles include increases in complexity due to legacy technology, disconnects between IT decision-makers and business leaders and a lack of continuity among processes spanning multiple systems.

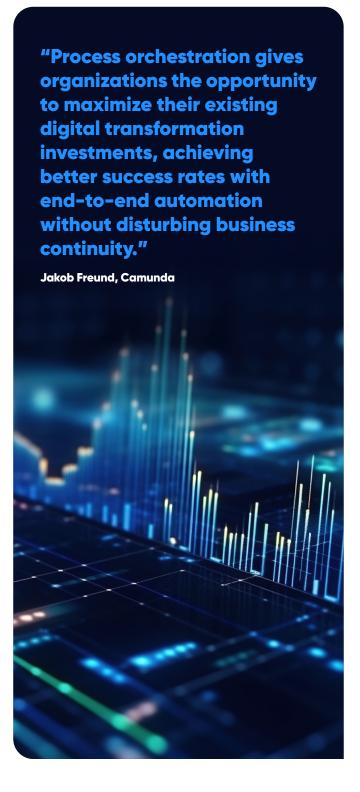
Process orchestration can help teams make the most of their existing digital transformation and automation efforts by orchestrating otherwise siloed technologies, driving measurable business outcomes from automation. During PEX Network's recent All Access: Low Code webinar series, 46 percent of viewers said that workflow automation is the key application for which they leverage or plan to leverage process orchestration solutions in their organization.



Digital transformation

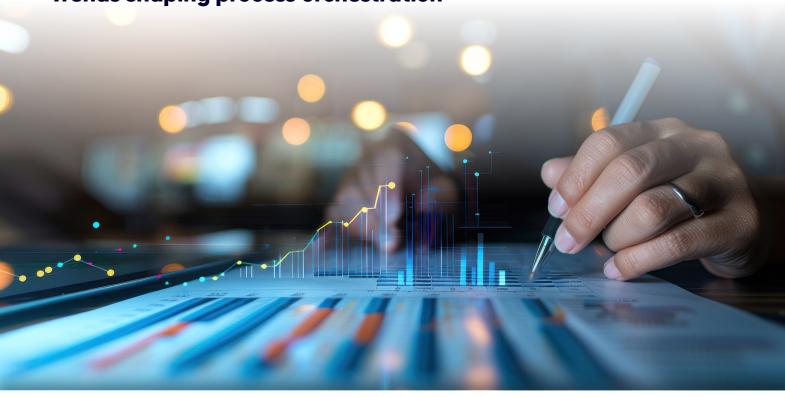
The burgeoning demand for digital transformation across sectors is propelling process orchestration needs. An integral factor of successful business operations, digitization requires incorporation of diverse technologies and processes to enhance operational efficiency and customer value. Process orchestration can serve as a key

enabler of digital transformation endeavors, supporting streamlined process automation. In recent Camunda research, 94 percent of IT decision-makers and business leaders said process orchestration plays a role in accelerating digital transformation.





Trends shaping process orchestration





API integration

An application programming interface (API) is a way for two or more programs or components to communicate with each other. APIs are increasingly used by enterprises for connectivity and integration, and are often considered building blocks that organizations can leverage to achieve true enterprise automation. By breaking down data silos, businesses are connecting process orchestration platforms with other systems for more holistic views and greater innovation.



Advancing autonomous technologies

The rapid advancement of autonomous technologies and the possibilities they offer is having a big impact on the process orchestration landscape. Intelligent automation (IA) – combining AI, RPA and BPM – is consistently gaining traction, helping organizations streamline tasks and cut costs. Generative AI has opened new opportunities for deeper, more meaningful datadriven automation to streamline processes. Meanwhile, low-code/no-code tools are making process automation accessible to a wider range of organizations without extensive coding expertise.



Compliance and risk management

Modern organizations are under increasing pressure to meet and comply with strict regulations and policies. Efficient process automation is highly valuable in adhering to such standards and frameworks, automating tasks like data validation, audit trails and report generation, as well as reducing manual errors and promoting consistent compliance. By automating and orchestrating processes, organizations can mitigate risks and improve governance, enhancing transparency and accountability in operations.



Cost and resource optimization

Successful and ordered process automation offers organizations an opportunity to optimize costs and allocate resources effectively. Businesses can free up valuable human resources by automating routine but time-consuming tasks. This allows them to focus on higher-value activities that require critical thinking and decision-making. Additionally, automation eliminates the need for redundant manual efforts.





Benefits of process orchestration

Highly mature organizations think beyond automating single processes toward strategic, scaled, end-to-end automation, says Jakob Freund, CEO and co-founder of Camunda. "Process orchestration gives organizations the opportunity to maximize their existing digital transformation investments, achieving better success rates with end-to-end automation without disturbing business continuity. The goal is to work existing people, systems and devices seamlessly into automations."

Process orchestration tackles several fundamental issues in organizational workflows to improve operational efficiency and overall productivity. One of the key issues it addresses is manual meltdown. By integrating with automation, orchestration addresses the workforce's collective goal to reduce time spent on manual tasks. This includes simplifying and automating repetitive operations to match the majority of employees' aspirations and goals. Mature process orchestration implementations are also more likely to deliver the intended ROI from automation efforts.

Process orchestration provides leaders with an overall perspective of workflows and key performance indicators (KPIs), allowing them to gain a thorough grasp of business operations. This enhanced perspective enables executives to make better decisions and implement new organizational strategies by providing real-time insights into operational dynamics.

Accountability is another problem that process orchestration can address. It eliminates ambiguity by appropriately assigning work to the relevant persons. This not only instills accountability in team members but also ensures that all work and communications are centralized on a single platform, promoting transparency and traceability. Furthermore, process orchestration can significantly diminish the occurrence of missed service level agreements (SLAs), thereby ensuring a consistent and timely delivery of work. This contributes to improved overall service quality and client satisfaction.

Resource capacity understanding can be enhanced through automation facilitated by orchestration by alleviating bottlenecks too, accelerating processes and optimizing resource capacity. This helps businesses operate more efficiently, improving adaptability to varying workloads and allowing better utilization of available resources.





Process orchestration in action





Transforming financial services

Process orchestration is helping to transform the financial services industry, coordinating processes across people, systems and devices to overcome complexity and increase efficiency. At Goldman Sachs, process orchestration enables centralized provisioning, modeling, deployment, execution and monitoring for any workflow throughout the firm. Likewise, NatWest implements process orchestration across a variety of business groups, automating many use cases that are core to the business. At the National Bank of Canada, process orchestration has helped to build expertise around process automation across departments and facilitated collaboration between IT, operations and business stakeholders. Through Center of Excellence practices, they've reduced time to launch new projects from weeks to days.

Niyi Ogunbiyi is a business process leader in the financial services sector and a visiting university lecturer. While

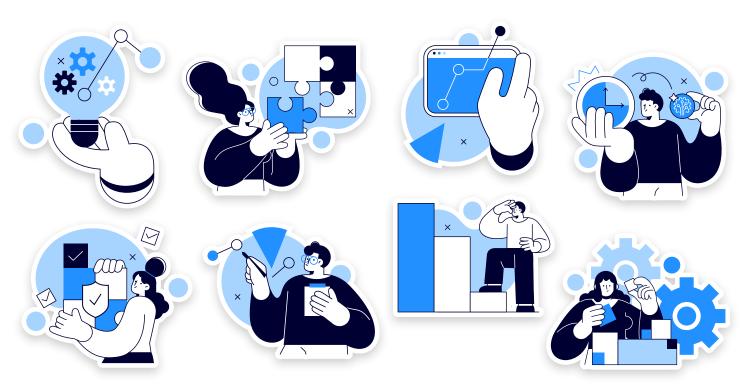
working for a large financial services firm, he saw process orchestration support the automation of multiple IT service management (ITSM) processes, he tells *PEX Network*. "An orchestration engine was required because the endpoints were very diverse. The engine was connected to the configuration management database (CMDB), which contained all the databases, servers, storage devices and other configuration management items. The orchestration allowed users to self-serve rather than depending on database administrators," he says.

Process orchestration delivered several benefits, including reduced manual handoffs, faster process execution and a decreased likelihood of errors, Ogunbiyi adds. One of the services saved an estimated 2 million CHF (Swiss Francs), as its processes could now handle increased volumes without proportional increases in resources or costs. Furthermore, the orchestration solution helped to ensure processes automatically adhered to regulations and standards, minimizing security and compliance risks, Ogunbiyi says.





Process orchestration success factors





Clear vision and objectives

The first step to process orchestration success is to define a clear vision rooted in company strategy and aligned with stakeholders. "Starting with a strong vision and team structure will lay the foundation for successful solution delivery," says Freund. "That's how it's possible to scale automation and achieve greater business value – by implementing a process mindset throughout the organization."

Well-defined objectives of what you want to achieve with process orchestration are essential, agrees Debashis Sarkar, managing partner at Proliferator Advisory & Consulting and *PEX Network* Advisory Board member. "This could include improving efficiency, reducing costs or enhancing the customer experience."

Teams need to take a step back and think strategically, define success and create the structures required to deliver and improve upon their process orchestration efforts, adds Freund.



Process discovery and mapping

The next step is to identify, define and map out all current business processes. This involves unraveling the activities, inputs and dependencies that connect all the stakeholders in the workflow. "Process mapping gives a detailed view of the current state of operations that allows organizations to identify operational hang-ups, inefficiencies and areas that can be automated, allowing for decisions based on the gained information," says Arun U. For example, a healthcare provider could map out and analyze the patient admission process to identify the points where automation could push out the administrative tasks and reduce cycle times.

Process orchestration isn't just about automation – it's about optimizing processes, Sarkar adds. "Before automating, identify areas for improvement and streamline your workflows for maximum efficiency."



Seamless integration

Seamless integration between different IT systems and software tools is another crucial element of successful process orchestration, allowing smooth data flow and process execution. "Difficulty in integrating disparate systems, especially legacy systems, can hinder data flow and process efficiency," says Ogunbiyi.

Organizations should focus on integrating existing software systems like CRM and ERP with other relevant





Trends shaping process orchestration

systems, says Arun U. "For example, an e-commerce company could integrate its order management system with its inventory management to put processes like order processing on autopilot."



Scalability and change management

As a business grows, process orchestration needs to evolve. Organizations must be able to scale their orchestration efforts in line with future requirements and increased loads. "Scaling process orchestration to accommodate growth without performance degradation requires careful planning and resource allocation," says Ogunbiyi.

What's more, implementing process orchestration can significantly impact how people work. Having a robust change management plan is important to ensure user adoption and minimize resistance. "Resistance from employees, especially those accustomed to legacy processes, can impede the adoption of new automated workflows," Ogunbiyi adds.



Security, governance and compliance

While process orchestration enhances compliance postures, it often involves handling large amounts of data. Establishing clear data governance policies to make sure data accuracy, security and compliance of orchestration efforts themselves is paramount, says Sarkar. However, ensuring that all data and automated processes comply



with legal and regulatory standards can be challenging, especially across borders, adds Ogunbiyi.



User adoption and training

To be successful in process orchestration implementation, all stakeholders should be educated and trained on various aspects of the concept. "Extensive training and change management programs should be in place to ensure that employees comprehensively understand the purpose of the new systems and have enough motivation to enhance their work processes," says Arun U. Involving all stakeholders from the planning phase ensures the solution meets the actual needs of the business and aids in smoother adoption, adds Ogunbiyi.



Continuous improvement and optimization

Continuously monitoring process orchestration efforts to identify areas for improvement and track progress towards goals becomes essential, says Sarker, with ongoing evaluation and refinement of processes helping to maximize efficiency and effectiveness. "Use data and metrics to demonstrate the value of your orchestration initiatives," he adds.

Continuous refinement and optimizing should be integrated into the business process orchestration, agrees Arun U. "Organizations mustn't deprive themselves of regular workflow assessment. Instead, they should identify improvement areas and use Lean and Six Sigma principles to deliver expected efficiency and effectiveness."



Workflow automation tool selection

Choosing the right workflow automation tools that are compatible with business process integration is another key factor in the effective performance of business process orchestration. "Organizations should take into account the technical components like ease of use and scalability along with ability of integrations and complex workflows," says Arun U. To be efficient, the automation tools must have specific functionalities including registration of new tasks, notification systems and reporting capabilities.





Conclusion

A transformative shift in process orchestration is anticipated in 2024 and beyond. As processes get more complex with more people, systems and devices entering the picture, process orchestration becomes even more imperative to progress beyond point solutions and towards holistic automation.

Powered by evolving AI and smart automation, predictive analytics will help to foresee the needs of processes before they arise. Meanwhile, real-time adaptive orchestration will become the norm, adjusting workflows based on evolving conditions, with the integration of hyper-automation, AI and low-code development further propelling end-to-end automation.

Process orchestration will increasingly help IT and business stakeholders align on common goals, allowing automated processes to be orchestrated seamlessly among process endpoints. This will herald an era of agile orchestration that supports the accelerated pace of digital innovation, process excellence and operational efficiency.



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