

The Role of AI in Digital Employee Experience (DEX)



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In today's digital landscape, the employee experience stands as a critical determinant of organizational success. In fact, our Global Digital Employee Experience (DEX) Survey 2023 found that **68% of Millennials and Gen Z are likely to move on to other companies if their employer's DEX is not up to par**. As businesses strive to optimize digital workflows and foster a culture of productivity and innovation, the role of artificial intelligence (AI) in shaping the digital experience has become increasingly prominent. The whitepaper explores today's challenges of managing the digital experience amid data proliferation and heightened user expectations, highlighting AI's pivotal role in empowering human decision-making, and enabling intelligent automation.



Managing the Digital Experience is Getting Harder, Not Easier

This era of digital nomads has high standards for how their technology works for them – and how easily it works for them. A poor DEX not only affects productivity and performance – it can also impact hiring and retention rates. The landscape of IT has become significantly more complex as businesses collect increasing amounts of data through a diverse range of tools spanning operational silos and an explosion of endpoints, driven by the escalating number of devices per user. Additionally, as user expectations of their digital experience remain high, the proliferation of SaaS apps and hybrid work models have made it difficult for IT to deliver proactive resolution and high service levels.

It's one thing to collect all that data, but it is quite another challenge to process and effectively use the data to drive both operational efficiency and employee happiness. The data coming into IT is complex and moving too fast for humans to process. Containers, microservices, and other highly dynamic environments generate large volumes of data that exceed the capacity of human processing, which has led to the rise in AI-enabled insights and automation.

However, many companies struggle to effectively implement AI solutions. High-fidelity end user experience data is crucial for strategic AI initiatives in today's competitive market. However, collecting and processing rich, AI-ready telemetry for DEX solutions remains a challenge. Also, enterprises are still learning how to measure the value and benefits AI can provide. Measuring AI success may require placing more value in qualitative performance indicators instead of traditional performance metrics.

AI Empowers Human Ingenuity

Today, seemingly every conversation between partners, peers, and vendors must include a mention of what is happening in artificial intelligence (AI) in that sector and how it's expected to change business dynamics. We certainly have a lot of hype and headlines behind AI, but AI has slid beyond the hype and into practice. The integration of AI into DEX initiatives is characterized by several emerging trends. From personalized user interfaces to intelligent virtual assistants, organizations are leveraging AI-driven solutions to tailor digital experiences to individual preferences and requirements. Moreover, predictive analytics and machine learning algorithms are revolutionizing workforce management by anticipating employee needs and proactively addressing potential issues before they escalate.

Human decision fatigue poses a significant challenge in modern workplaces, where employees are inundated with an overwhelming volume of information and tasks. AI offers a solution by augmenting human decision-making capabilities through intelligent automation and actionable insights. By offloading repetitive and low-value tasks to AI-driven algorithms, organizations can alleviate decision fatigue, allowing Digital Workplace teams to build a more proactive approach to remediating network problems, speed decision-making. When AI is fine-tuned, it can automatically take action to address issues before end users are aware of them. Moreover, AI-driven solutions free up time from Digital Workplace teams and employees, enabling more time for innovation and creativity.



AI-Ready Data for Effective Root Cause Analysis, Troubleshooting and Continuous Improvement

AI-solutions can do little to benefit the digital experience when they aren't built on the right data. That's where high fidelity and end user experience data comes in.

End user experience data is derived from end user experience monitoring (EUEM), which analyzes performance across each user's end-to-end workflow. EUEM tracks user performance data across multiple devices, networks, clouds, and applications. Essentially, EUEM enables teams to monitor the impact of application and device performance from the end user's point of view.

Machine Learning (ML), a subcategory of AI, uses algorithms to predict outcomes based on input data, and these outcomes are automatically updated as new data becomes available. ML is often used for pattern recognition, anomaly detection, and to support visualizations. Anomaly detection lies at the heart of effective troubleshooting and issue resolution in DEX. One of the key challenges for accurate anomaly detection models is data collection. Traditional monitoring systems often lack the granularity and fidelity required to pinpoint underlying issues accurately. To make the most of AI models, companies need DEX solutions that can ingest large amounts of data across devices, applications, and the network. Furthermore, effective AI/ML models require data that is centralized, complete, granular, and stable to map dependencies and build contextual models. AI-enabled DEX products that provide real-time visibility into user interactions at a granular level and that process high-fidelity data can deliver better intelligence.

DEX solutions may also use AI to correlate massive amounts of performance, organizational and human data to surface contextualized, actionable insights across every endpoint, application and transaction. Beyond troubleshooting, AI-enabled insights can help with:

- Continuous Service Improvement based on business impact
- Benchmarking an enterprise's DEX against other industry peers
- Informing swift remediation
- Improving employee productivity and engagement



Intelligent Automation

Despite the promise of automation in enhancing DEX, past initiatives have often fallen short of expectations. One of the primary reasons for these failures lies in the lack of contextual understanding and adaptability in traditional automation systems. Rigid rule-based approaches failed to accommodate the dynamic nature of employee interactions, leading to suboptimal outcomes and user dissatisfaction. Spending time opening tickets for known issues or experiencing slow response times for critical apps can lead to – in addition to user frustration – considerable bottlenecks that reduce business performance. In fact, our [DEX survey](#) found that **63% of respondents agreed that inadequate DEX leads to significant impacts on productivity.**

As technical ecosystems become increasingly more complex, IT professionals need the assistance of automation and AI to reduce the noise caused by massive influxes of data, radically reduce incident response time, and gain the complete visibility needed to ensure top-of-the-line IT service.

Intelligent Automation, or AI-driven automation, holds immense potential in streamlining routine tasks, optimizing resource allocation, and fostering proactive resolution and continuous improvement strategies. From mimicking expert decision-making to orchestrating cross-functional workflows for complete resolution, digital workplace teams can leverage AI to drive efficiency, agility, and innovation across the employee experience.

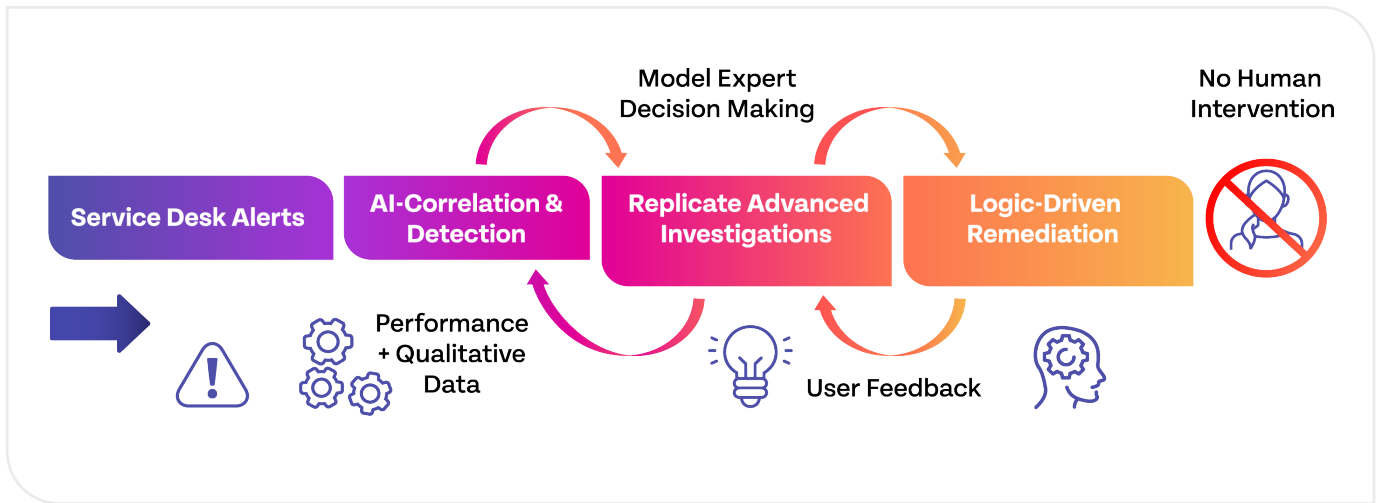


The Emergence of Qualitative Feedback for AI-enabled DEX

Effective response to user feedback is paramount in driving positive DEX outcomes. Traditional feedback mechanisms often suffer from inefficiencies, with critical insights getting lost in the noise of irrelevant data. Sentiment analysis and natural language processing (NLP) techniques enable organizations to correlate and streamline user feedback processes, identifying actionable insights and delivering optimal resolutions that align with user expectations.

Enterprises looking to increase the use of AI in the digital workplace may consider utilizing qualitative performance indicators. User feedback can provide invaluable insights into user experiences, perceptions, and pain points, which quantitative metrics alone may overlook.

By capturing qualitative data, organizations can gain a deeper understanding of how AI solutions are perceived, utilized in real-world scenarios and to what extent organizations have benefitted. Ultimately, integrating qualitative feedback and analysis fosters a more holistic approach to assessing the efficacy and impact of DEX solutions.



AI-Enabled Digital Experience Management with Riverbed Aternity

Riverbed® Aternity is the only DEX solution that offers AI-driven insights and intelligent automation on the user experience for the digital enterprise at every device, app and click. Aternity enables digital workplace teams to improve quality of service by:

- Proactively detecting and resolving issues on every enterprise app – not just web and mobile, but thick client and SaaS – by correlating actual user experience to device and app performance and user sentiment.
- Intelligently automating key aspects of the Service Desk. This includes logic-driven troubleshooting, investigations and remediations that fix an issue before a ticket is raised – and without human intervention.
- Intelligently integrating with ITSM vendors like ServiceNow. Unresolved issues can be opened, escalated, and routed with the right priority and context for swift resolution.
- Integrating user feedback across its remediation workflows to deploy optimal fixes based on user impact.
- Pinpointing opportunities to improve the digital experience that you deliver by using AI-enabled insights to benchmark against the market relative to your specific targets.

As organizations navigate the complexities of the digital age, the role of AI in shaping the digital employee experience emerges as a cornerstone of success. By embracing AI-driven solutions, organizations can unlock new opportunities to enhance employee engagement, streamline workflows, and drive operational excellence. From addressing decision fatigue to streamlining user feedback and enabling proactive issue resolution, AI offers a transformative toolkit for organizations seeking to cultivate a culture of productivity, innovation, and employee satisfaction in the digital era.

Learn more about Riverbed Aternity for DEX at riverbed.com/products/end-user-experience-monitoring/.



Riverbed – Empower the Experience

Riverbed is the only company with the collective richness of telemetry from network to app to end user that illuminates and then accelerates every interaction so that users get the flawless digital experience they expect across the entire digital ecosystem. Riverbed provides two industry-leading solutions: the Riverbed Unified Observability portfolio, which integrates data, insights, and actions across IT to enable customers to deliver seamless digital experiences; and Riverbed Acceleration, which offers fast, agile, and secure acceleration of any application over any network to users, whether they are mobile, remote, or on-premises. Together with our thousands of partners, and market-leading customers across the world, we empower every click, every digital experience. Learn more at riverbed.com.