

The next generation of digital experience

Creating meaningful connections in an AI-powered world



Introduction



The future of digital experience stands at a critical inflection point.

While organisations rush to harness emerging technologies, true breakthroughs emerge not from technology alone, but from the delicate orchestration of three vital elements:

1. Human understanding
2. Artificial intelligence
3. and Data-driven insights.

Leading organisations have discovered that competitive advantage lies not in deploying the latest AI models or amassing the most data, but in creating experiences that resonate on a human level while leveraging technological capabilities.

This report explores how leading organisations balance human understanding, artificial intelligence and data-driven insights to create compelling digital experiences that drive competitive advantage through deeper customer connections.

The new digital experience trinity

Human understanding as foundation

Understanding human behaviour and emotion forms the bedrock of effective digital experiences. Without this foundation, even the most sophisticated technology fails to create meaningful connections. As Microsoft's CEO Satya Nadella emphasises, "AI will remain a tool, albeit a very powerful one. The real breakthrough comes when we design it to amplify human ingenuity rather than replace it." This human-first approach transforms how we conceive, design, and deliver digital experiences.

AI as experience enabler

Artificial intelligence serves as the enabler, turning human insights into personalised, scalable experiences. Rather than replacing human elements, AI amplifies them, allowing organisations to deliver human-centric experiences at scale. The technology adapts and responds to individual needs while maintaining the authenticity that only human understanding can provide.

Data as the bridge

Data acts as the crucial bridge between human understanding and AI capabilities. Through privacy-conscious data practices and advanced analytics, organisations can translate human behaviour into actionable insights while respecting individual privacy. This creates a virtuous cycle where better data leads to deeper understanding, enabling more meaningful experiences.

Unlocking human behaviour: The science of digital experience

The path to compelling digital experiences begins with understanding how humans actually think and behave, not how we assume they do.

Nobel laureate Daniel Kahneman's research reveals that human decision-making operates through two systems: System 1 (fast, intuitive, and emotional) and System 2 (slower, analytical, and conscious). Digital interactions primarily trigger System 1 thinking, where users make split-second, sub-conscious decisions based on emotional rather than rational factors. This insight fundamentally changes how we approach digital experience design.

Turning unconscious reactions into business results

Consider how people interact with a website's homepage. Traditional thinking assumes visitors carefully evaluate options and make rational choices. In reality, users form initial impressions in milliseconds, making snap judgments about trustworthiness, relevance, and appeal before conscious thought begins. We've observed this countless times in our biometric research lab, where users decide to engage with or abandon experiences based on subtle emotional triggers - the warmth of imagery, the tone of language, the spacing of elements - all processed unconsciously through System 1 thinking.

Measuring attention and emotion to drive conversion

Modern biometric research transforms this theoretical understanding into practical insights. Our advanced testing lab acts like a sophisticated emotion detector, measuring reactions that users themselves might not recognise. Through continuous eye-tracking, we can see exactly what captures attention and, more importantly, what fails to register. A recent study with a financial services client revealed that users spent 60% less time fixating on crucial product information than they did on competitor websites. This highlighted the need for better content, designed for how users read online.



Creating experiences that reduce anxiety and build trust

Facial expression analysis provides another window into unconscious reactions. During a recent e-commerce redesign project, we tracked micro-expressions to understand emotional responses to different payment flow designs. The findings challenged conventional wisdom – users showed measurable anxiety with a streamlined single-page checkout that testing groups had rated highly. This emotional data led to a revised design that balanced efficiency with reassurance, resulting in a 23% increase in conversion rates.

Understanding stress points to improve completion rates

The integration of GSR (Galvanic Skin Response) monitoring adds depth to our understanding by measuring physiological arousal – essentially, how emotionally activated users become during different interactions. This proved particularly valuable when working with a healthcare provider to optimise their patient portal. We discovered that certain medical terminology, though technically accurate, triggered stress responses that interrupted user journeys. By adjusting the language based on emotional impact rather than just clarity, we improved both user satisfaction and task completion rates.



We are ruled by our emotions and what we say we're going to do isn't always reliable data. Understanding behaviour is essential - we need to create brain-friendly designs that align with how people think and act.

Liz Worsley
Principal Experience Strategist



Reducing cognitive load to enhance user satisfaction

EEG monitoring completes our measurement suite by revealing cognitive processing patterns. This helps us understand not just what users feel, but how attracted or repelled they are. For instance, when redesigning a complex insurance claims process, EEG data showed that users experienced significant aversion during form completion, as expected, but also during their initial navigation phase. This insight led to a restructured journey and copywriting that reduced abandonment rates by 34%.

Designing for emotional journeys rather than logical flows

These insights extend beyond individual interactions to shape entire customer journeys. Take the example of a retail banking app we recently optimised. Traditional user testing suggested customers wanted more features and information. However, our biometric data revealed that additional options actually increased stress levels and decision paralysis. By redesigning the experience around emotional states - confidence during transactions, reassurance during problem-solving, clarity during decision-making - we created an interface that better matched natural human behaviour patterns.

Building future-ready experiences through behavioural science

The implications of this behavioural understanding reach into every aspect of digital experience design. We now know that users don't follow linear paths but emotional trajectories. They don't make purely rational decisions but are guided by unconscious biases and emotional responses. This knowledge transforms how we approach everything from content strategy to interaction design. Rather than building experiences based on logical user flows, we create emotional journeys that align with natural human behaviour patterns.

This science-based approach to understanding human behaviour has profound implications for the future of digital experience. As we move into 2025 and beyond, the ability to read and respond to emotional states will become as crucial as traditional usability metrics. The most successful digital experiences will be brain-friendly, those that speak to both the conscious and unconscious mind, creating interactions that feel natural because they align with how humans actually think, feel, and behave.

Breaking down barriers: AI's transformation of behavioural research

The recent explosion of AI tools has unlocked advanced research methods. For

example, biometric testing or long-term diary studies.

These have always been methods that generate incredible customer insight, yet were off the table due to some common barriers to research – time-to-actionable-insights, value, and inaccessible analysis that gathers dust.

The old barriers to advanced research no longer stand. AI and integrated data will help us accelerate momentum, and to continuously live with actionable insights that will make us more creative, customer-centric, and effective.

AI-powered experience delivery: The technology evolution

The landscape of digital experience delivery has fundamentally transformed. Where we once built static, one-size-fits-all solutions, AI now enables dynamic, responsive experiences that adapt in real-time to user needs and behaviours. This evolution represents not just a technological advancement but a complete reimagining of how we create and deliver digital experiences.

Transforming content migration from months to hours

The future of content management resembles an intelligent ecosystem rather than a static repository. Our pioneering work with Mott MacDonald demonstrates this transformation. Faced with migrating over 3,000 pieces of content from legacy systems, traditional approaches would have required months of manual work. Instead, our AI-powered pipeline approached the challenge like an intelligent removal company with X-ray vision, understanding not just the content itself but its context, purpose, and relationships.

The system employs what we call an 'agentic chain of thought' approach, where multiple specialised AI models work in sequence. One model analyses document structure and metadata, while another comprehends long-form content meaning. A third model maps relationships between content pieces.

This orchestrated approach processed 1,800 content pieces daily while maintaining perfect contextual accuracy - a task that would have taken a human team months to complete with lower consistency.

Adaptive creative that delivers 10x ROI

Traditional digital advertising resembles a newspaper - once printed, it remains unchanged regardless of who sees it. Our Dynamic Creative Optimisation (DCO) system transforms this static approach into something more akin to a chameleon, adapting its appearance and message in real-time. For a major Canadian airline, we built a system that didn't just swap out images or headlines but fundamentally reimagined how creative adapts to its audience.

The system integrates real-time pricing data, customer segment information, and performance metrics to create truly personalised experiences. It automatically adjusts messaging tone, visual hierarchy, and call-to-action placement based on user behaviour patterns. Most importantly, it learns and evolves, continuously optimising creative elements based on performance data. The results speak volumes: a tenfold return on investment and significant improvements in customer engagement metrics.

Delivering personalisation that preserves privacy

Modern personalisation goes far beyond simple A/B testing or basic user segmentation. Our advanced multivariate testing framework enables simultaneous optimisation of multiple page elements while maintaining strict privacy standards. For a leading e-commerce platform, we implemented a system that adapts product descriptions, imagery, layout, and pricing display in real-time based on user behaviour patterns and preferences.

The system works by creating what we call 'experience matrices' - multidimensional maps of possible content combinations that adapt based on user signals. Rather than storing personal data, it works with anonymised behaviour patterns to create personalised experiences that respect user privacy.



AI serves as an enabler, not a replacement. The real breakthroughs come when we integrate it into workflows to amplify human capabilities, turning insights into personalised experiences.



Luke Cunningham
Creative Technologist



This approach delivered a 45% improvement in conversion rates while reducing bounce rates by 30%.

Building self-optimising customer journeys

The future of digital experiences lies in systems that don't just adapt content but evolve entire user journeys. We're developing an AI-powered journey orchestration system that will treat each customer interaction as a learning opportunity. This innovative approach moves beyond traditional journey mapping to create truly dynamic pathways that flex and adapt based on real-time user behaviour and needs.

At its heart, the system will employ what we call 'predictive journey mapping', using machine learning to anticipate user needs and potential pain points before they occur. By analysing patterns in user behaviour, the system will automatically adjust the complexity of information presentation, streamline or expand processes based on user confidence levels, and proactively offer support when it detects potential confusion or hesitation.

The potential impact of such systems is profound. Rather than forcing users through predetermined paths, digital experiences will organically adapt to individual user contexts and needs. For instance, a new user might receive more guidance and explanation, while a returning user sees a streamlined process that acknowledges their familiarity.

The system will continuously learn from each interaction, building an ever-more sophisticated understanding of how different users navigate and what support they need at each stage.

Scaling content production while maintaining brand consistency

One of the most exciting developments in our AI roadmap addresses the challenge of creating enough high-quality content to support true personalisation. We're developing an AI-powered content generation system that will combine brand guidelines, tone of voice requirements, and performance data to create contextually appropriate content at scale. This represents a fundamental shift in how organisations approach content creation and management.

The system will use what we call a 'brand personality matrix' – a sophisticated framework that ensures all generated content aligns with brand values and communication standards. Rather than simply generating generic content, it will understand and maintain the subtle nuances that make each brand unique. The system will learn from user engagement data to refine its output continuously, creating increasingly effective content over time.

This technology holds the potential to transform how organisations manage their content operations. Instead of choosing

between scale and quality, brands will be able to achieve both simultaneously.

The system will enable the creation of personalised content variants while ensuring every piece maintains brand consistency. This could revolutionise everything from product descriptions to email communications, social media content, and beyond.

Future-proofing through continuous learning

Perhaps most importantly, these AI-powered systems don't just execute tasks – they continuously learn and evolve. Each user interaction provides new data that refines the system's understanding and improves its performance. For instance, our DCO system now anticipates seasonal trends and automatically adjusts creative strategies based on historical performance data, while our content migration systems have learned to identify and flag potential content improvements during the migration process.

This continuous learning capability means these systems become more valuable over time, creating a compound effect that delivers increasingly better results. They represent not just a technological solution but a fundamental shift in how we approach digital experience delivery – from static, periodic updates to dynamic, continuous optimisation.

Data strategy: The privacy-personal balance

The future demands a sophisticated approach to data management that balances personalisation with privacy. Think of traditional data sharing like separate restaurants each knowing only what their own customers order. Data clean rooms transform this into a collaborative food hall where restaurants can understand dining patterns and preferences across venues without accessing individual customer details.

How data clean rooms transform business intelligence

Data clean rooms operate like secure trading posts for insights, enabling organisations to combine and analyse data from multiple sources while maintaining strict privacy controls. A retail organisation might combine their loyalty card data with media consumption patterns to understand customer lifestyles better, while financial services firms match customer segments with lifestyle indicators to predict service needs.

The real power lies in how clean rooms enable a single customer view without compromising privacy. Modern data strategy resembles a sophisticated translation service, where different data sources communicate without revealing sensitive details. Known customer data - from purchase history to service interactions - combines with partner

insights to create a holistic understanding of customer needs and preferences.

Measurable impact and future potential

Organisations implementing these sophisticated data strategies see dramatic improvements in their customer engagement metrics. Marketing campaigns become three times more effective as they draw on richer customer understanding. Customer retention rates improve significantly as organisations anticipate and meet needs more effectively. Perhaps most importantly, customer lifetime value increases as experiences become more relevant and engaging.

The next evolution of data strategy promises even more exciting possibilities. Real-time experience orchestration will enable instant adaptation based on comprehensive customer understanding. Imagine a customer browsing your website



while the experience automatically adjusts based on their recent purchases from partner retailers, media consumption patterns, and current context - all without compromising privacy.

Cross-industry collaboration through clean rooms opens new frontiers. Financial services firms utilising open banking insights to offer more relevant services to customers. Retailers combining customer behaviour patterns to create better shopping experiences. All this happens while maintaining strict privacy standards - data never leaves its original environment, and analysis occurs on anonymised, aggregated data only.



Data clean rooms transform how we understand customers. By connecting consented data thoughtfully, we can create holistic customer views that enable personalised experiences.

Maria Thorpe
Head of Data Science



The road ahead: 2025 and beyond

Adaptive intelligence

Future digital experiences will behave like living organisms, evolving based on continuous learning from user interactions. These systems will combine emotional intelligence with real-time environmental adaptation, creating experiences that feel natural and responsive. The key lies not in the technology itself, but in how it amplifies human connection and understanding.

Sustainable innovation

Environmental consciousness has become a core component of digital experience design. Organisations now automatically optimise for environmental impact, balancing the drive for personalisation with energy efficiency. This sustainable approach extends beyond carbon footprint to consider the entire lifecycle of digital experiences.

Human-AI collaboration

The most successful organisations master the art of combining human creativity with AI scalability. They understand that emotional intelligence and data analytics aren't opposing forces but complementary capabilities. By blending the personal touch with automated delivery, they create experiences that scale efficiently while maintaining authentic human connections.

Conclusion

The future of digital experience lies not in technology alone, but in the harmonious combination of human understanding, AI capabilities, and responsible data usage. Success in 2025 and beyond belongs to organisations that master this trinity, creating experiences that feel deeply personal while remaining scalable and sustainable.

The winners will be those who understand that the future isn't about choosing between human and machine, but about creating synergies between them. They'll build experiences that don't just meet functional needs but create emotional connections, drive business results, and build lasting relationships – all while respecting privacy and fostering trust.

In this future, the most compelling digital experiences won't be those with the most advanced technology or the largest data sets, but those that most effectively combine these elements to create meaningful human connections. The technology becomes invisible, leaving only the feeling of being understood and valued as an individual.

If you have found this report helpful and would like to speak with 26 DX about advancing your organisation's digital experience, please reach out to us for a chat:

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About 26 DX

One of the UK's leading digital experience agencies, we use intelligence and imagination to help brands grow in a digital-first world. We create outstanding digital experiences by connecting brands with their customers via market-leading technology, delivering powerful results.

Your team extended

We form the digital powerhouse of MSQ Group, a global marketing network of 1,850 practitioners. Our scale provides both the agility to move quickly and the depth to deliver consistently, supported by access to expertise across all marketing disciplines. We excel at building long-term partnerships with ambitious brands, providing support and expertise that evolves alongside your business needs.

Reach further, faster

Through combined expertise, we bring together specialist strategic consultancy and project delivery across every stage of digital experience transformation. From initial discovery through to deployment, our expert teams apply both technical excellence and creative thinking to leverage internal client expertise to deliver highly effective web solutions. We understand that successful digital projects require both strategic vision and practical execution, ensuring delivery is always aligned to your goals.

Creating better

Our central ethos focuses on combining creative technology with deep human understanding. We specialise in end-to-end website experience design, development and transformation, all underpinned by behavioural science and advanced research methods. Through efficient and flexible delivery models, we ensure continuous evolution of both platforms and content, leveraging the latest technology while maintaining focus on human-centred design principles.

To find out more about 26 DX and how we can help transform your organisation please visit 26-dx.com