Left on the sidelines?

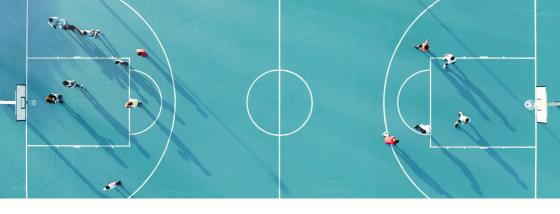
A playbook for winning in the new era of sports and entertainment



/thoughtworks

Design. Engineering. Al.

Executive summary	3		
Is your technology propelling you forward — or holding you back? Driving innovation: Building a platform for sustained business growth Building your unfair advantage: The strategic platform approach for sports and entertainment leaders Navigating the path to success	6 11 17 22		
		Seize your future and define your leadership	26
		Next steps	28
		Authors	29



Executive summary

In the world of sports and entertainment, sustained market leadership demands more than just smart acquisitions. It requires an assessment of how your core business capabilities are enabling or hindering your strategic ambitions.

Are you truly capitalizing on every fan interaction, every commercial opportunity, and every rich data point that could fuel game-changing insights? Or is your current technology landscape leaving millions in potential revenue untapped?

The new competitive arena



For many leaders, the internal view can be challenging:

- Spiraling operational costs
- Sluggish market responsiveness
- An inability to rapidly launch new products or deeply personalized fan experiences.

These are often symptoms of foundational business capabilities misaligned with strategic goals. This is a critical business impediment, directly impacting your agility, market share and ability to captivate your audience.

But what if you could transform these limitations into your competitive advantage? This is about more than just technology evolution; it's about a cultural and strategic shift. It's about empowering your product, engineering and commercial teams to work collaboratively, united by clear business objectives and equipped to innovate and execute at the speed your market demands.



Thoughtworks partners with visionary leaders in the sports and entertainment industry to make these pivotal transformations happen. For instance, over the last two years, we've collaborated with one of the world's largest sports data and technology companies to build the foundations of a hyper-scalable platform. Leveraging the power and flexibility of leading hyperscaler Amazon Web Services (AWS), we delivered these transformative foundations in just nine months. The strategic business impact?

- Accelerated time-to-market: Launching a new sport content or major product feature can now be accomplished in weeks rather than months or years.
- Protected and grown revenue: Faster time-to-market is projected to safeguard hundreds of millions of dollars of at-risk revenue and unlock hundreds of millions more in new revenue over the next three years.
- Increased profitability: By accelerating development and feature delivery, the company has achieved a 2-3% increase in profit margins.

This playbook distills critical lessons and proven strategies from the forefront of product and technology in sports and entertainment. It's designed for leaders who recognize the urgent need to drive innovation, deepen fan engagement and secure dominant, profitable growth in this rapidly evolving industry.

"Focus on the urgency of action. The game has changed. We're no longer competing on the field, but on the speed and agility of our digital foundation. Every moment we hesitate is a win for our competitors."



Is your technology propelling you forward — or holding you back?

Within the sports and entertainment industry, sports betting and gaming market value is projected to rise significantly to \$274.78 billion by 2034 at a compound annual growth rate (CAGR) of 10.8% from 2025 to 2034¹. Media consumption patterns are continuously shifting, <u>fan expectations</u> for immersive and personalized experiences are soaring and the regulatory landscape remains fluid.



Media and content services

- Sports betting editorial and previews
- Real-time commentary and feeds
- Video and audio production
- Live streaming and broadcasting

Gaming and interactive entertainment

- Game studios and publishers
- Esports
- Casino content aggregation
- · Console games
- Simulated, fantasy and virtual sports
- Slot and table games
- Instant win and virtual games
- Bingo, lottery and keno platforms
- Peer-to-peer poker networks
- Social and free-to-play gaming

Sports data and Al solutions

- Sports Data Aggregators
- · AI-Powered Odds Feeds
- Advanced Betting Analytics
- Operational analytics
- Predictive Modelling and Machine Learning for Risk
- Integrity Monitoring and Suspicious Activity Alerts
- Generative AI for Content & Insights

Core operator solutions

- Sportsbook engines
- Player account management
- iCasino backends
- Full-service turnkey solutions
- Front-end UX/UI and customization frameworks
- Regulatory compliance and integration tools

Digital commerce and customer enablement

- Payment gateways and wallets
- Identity verification and KYC
- Fraud detection and risk scoring
- Safer gambling tools and limits
- Affiliate tracking and campaign tools
- CRM, personalization and retention engines
- Geolocation and compliance services

Trading and risk operations

- Managed trading solutions
- Market pricing engines
- · Bet builder frameworks
- Exchange marketplaces
- Risk exposure and liability management
- In-play automation and controls

Consider this: Do you possess a truly unified view of your fans, enabling deep engagement, or does fragmented data prevent you from gathering crucial insights? How rapidly can your organization conceive, develop and launch a new gaming or betting product or a personalized fan experience for a major global sporting event? Are we talking weeks, months or even years?

For many established players in this industry, an honest answer reveals a stark reality. Inflexible foundational systems or existing technology structures often the result of shorter-term decisions for growth and acquisitions can severely hamper the ability to:

- Innovate at market speed: Being consistently first-to-market with differentiated features and compelling new offerings.
- Deliver seamless, unified customer journeys: Intuitive and consistent fan experiences across all touchpoints — mobile, web and retail.
- Achieve true, scalable personalization: Tailor content, offers and interactions to individual preferences in real time, making each fan feel uniquely valued.
- Transform data into an Al-powered asset: Your operations generate a goldmine of event, transactional and behavioral data. Is it clean, accessible, and actively fuelling machine learning models for smarter risk management? Are you using it to power Generative Al to create unique content for millions of users? Or is this vast potential still locked away in silos?



Inflexible foundations: The true cost to your strategic ambitions

When technology platforms don't keep pace with business demands, the impact isn't just measured in spiraling maintenance and management costs. The cost of delays can be existential. Beyond immediate expenses, consider:

- Diminished fan engagement and loyalty: Are you creating the kind of immersive, interactive and personalized experiences that build deep loyalty? Or are fans and bettors gravitating towards more dynamic and responsive competitors?
- Suboptimal commercial operations: How much potential revenue is eroded by inefficiencies, delays or inaccuracies in your trading platforms, feed management or content delivery systems?
- Delayed market expansion and diversification: Does launching a new sport content, expanding to a new region or product category take 18 months or more, forcing you to watch from the sidelines as nimble competitors capture early-mover advantages? The cost of such delays can easily run into tens of millions annually.

The risk isn't merely falling behind; it's the potential erosion of market relevance. However, for leaders who recognize this critical inflection point, the opportunity to redefine their competitive position and unlock new value is immense.

Strategic evolution: More than an upgrade, it's a business imperative

To capitalize on emerging opportunities and build competitive advantage, it's vital to understand that technology transformation isn't just about reducing the costs associated with outdated systems. It's about creating scalable, revenuegenerating platforms to support a broader business strategy.

That means thinking bigger than just infrastructure upgrades and focusing on the most effective ways for a new technology platform to enable:

- New revenue streams powered by data-driven fan engagement, reimagined gaming and betting experiences and dynamic content monetization.
- Next-generation fan experiences, with effortless scalability, intelligent omnichannel delivery and real-time personalization at every touchpoint fostering loyalty and boosting customer lifetime value.
- Operational agility, using Al-driven decision-making and automation to accelerate time-to-market and respond quickly to market changes and new opportunities.

The path forward demands a holistic, business-first approach, fostering deep collaboration between product, engineering and commercial teams. It requires a clear, shared vision of how these evolved capabilities will unlock strategic objectives and create sustainable competitive advantage. In the following sections, we'll unpack how our partnership with a leading global sports data and technology company turned these imperatives into tangible, transformative results in just nine months.



Driving innovation: Building a platform for sustained business growth

The challenge: Ambition constrained by ingrained complexity

A global leader in sports data and technology recognized that relentless product innovation was crucial to its future success. However, the technological complexity from years of rapid growth and acquisitions had become a major bottleneck, constraining its ambitions.

- Innovation paralysis: Long review cycles and manual processes impeded innovation; even minor changes were difficult to implement at speed.
- Organizational silos: Product, engineering and commercial teams often operated in distinct worlds, leading to misaligned priorities, duplicated efforts and delays in bringing new value to market.
- Revenue and opportunity at risk: Existing operational
 practices delayed the launch of new revenue-generating
 products. They also put substantial existing revenue streams
 in jeopardy due to emerging competitive threats and an
 inability to adapt swiftly to changing market dynamics.

Critical knowledge bottlenecks: All crucial business logic
was siloed in the minds of a few subject matter experts
(SMEs). These key individuals were essential during product
launches, creating a huge operational risk and preventing
them from focusing on higher-value strategic work.

Recognizing this urgent need for a fundamental shift, the company partnered with Thoughtworks. The goal was audacious: to create a cutting-edge, differentiated, scalable and modernized platform foundation while simultaneously transforming its internal teams into world-class, digitally native engineering and product champions.

The Thoughtworks solution: Strategic acceleration and business transformation

We understood that a prolonged, multi-year approach was not a viable option given the pace of the market. The company's existing systems, containing two decades of accumulated business value, needed to remain stable and performant during any transition. Our 'Build, Operate, Transition' strategy provided the blueprint for rapid yet secure evolution:

1.

Dedicated innovation and build engine:

To build the platform and the capability to run it, we formed integrated teams from the start. This blended group of Thoughtworks and client experts began co-creating the new data-centric foundations on a resilient and scalable AWS cloud infrastructure. This approach, not limited by the constraints of the existing environment, accelerated the delivery of foundational capabilities from a potential multi-year timeline to just **nine months**.

2.

Safeguarding current revenue and operations:

Simultaneously, the company's in-house teams continued to operate and maintain existing revenue-generating systems, ensuring complete business continuity and mitigating operational risk.

3.

Capability infusion and seamless transition:

This was far more than an outsourced build, we embedded modern product development and engineering practices within the company's teams. This involved:

- Removing silos for strategic alignment: We facilitated deep, ongoing collaboration between product management, engineering, commercial teams and key leadership stakeholders. This ensured everyone was laser-focused on delivering strategic business value. Instead of teams working on isolated features, efforts were mapped to core business capabilities. This holistic view immediately highlighted overlaps, identified critical gaps and unlocked synergies, dramatically reducing wasted effort and accelerating progress.
- Building sustainable, in-house expertise: We intentionally created an environment that supported a structured approach to transfer knowledge, tools, and modern product development and engineering practices. This fostered autonomous, high-performing client teams fully equipped to own, operate and continuously evolve the new platform and its capabilities.

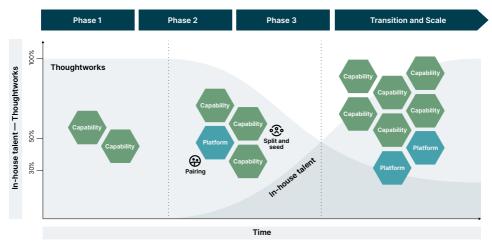
4.

Transforming knowledge stocks into knowledge flows:

To solve the indispensable SME problem, we designed and facilitated a series of intensive workshops, both in-person and virtually. The goal was to systematically extract, document and share critical information, such as domain knowledge and business logic, that was trapped in people's minds. By creating a transparent, accessible and well-documented 'knowledge flow' throughout the organization, we achieved three vital outcomes:

- The SMEs were freed. They could finally step away from day-to-day firefighting and focus on more strategic, forward-looking initiatives that better utilized their deep expertise.
- The teams were empowered. With clear and reliable documentation, the broader product and engineering teams could move faster, make decisions with confidence and operate without being dependent on a handful of individuals.
- With the knowledge documented, we were able to automate many of the routine and critical processes, such as deployments and market extensions, to further safeguard existing revenue streams.

This transformation didn't just involve implementing new technology; it forged a new, deeply ingrained culture of innovation, collaboration and continuous improvement, ensuring the strategic benefits were profound and sustainable.



Build capabilities as you replatform

The outcomes: A new trajectory of growth, agility and profitability

The company now has a highly scalable, agile and future-ready platform, empowering it to tackle future challenges and aggressively seize emerging market opportunities.

- Faster time-to-market: Launching a new sport or major product feature can now be accomplished in weeks rather than months or years. Lead time for new features has reduced by over 70% and deployment frequency has increased by 87%.
- Revenue protection and growth: Accelerated time-to-market is projected to safeguard hundreds of millions of dollars of at-risk revenue and unlock hundreds of millions more in new revenue over the next three years.
- Greater profitability: By accelerating development and feature delivery, the company has achieved a 2-3% increase in profit margins.







Alongside these quantifiable benefits, the company has also realized other strategically important outcomes:

- Operating costs became strategic investments:
 With the vast majority of in-house teams' time focused on capitalizable work, the company has shifted spend towards long-term asset creation boosting financial resilience, enhancing predictability and aligning investment with future growth.
- A revitalized innovation culture and empowered teams:
 The faster pace of development has accelerated a cultural shift towards a more innovative and dynamic environment that can improve employee morale and attract top talent.
 The company's technology and product teams are also now equipped with cutting-edge practices and tools, and a collaborative mindset to drive continuous innovation.



Building your unfair advantage:

The strategic platform approach

The dynamic nature of the sports betting and gaming landscape requires leaders to embrace a strategic approach to their business and technology architecture. This involves architecting and nurturing a dynamic, interconnected ecosystem of capabilities that fuels innovation, efficiency and value creation across your entire enterprise.



To thrive in this ecosystem, your <u>internal platform must be</u> architected for agility and speed.

Consider it on three interconnected levels:



Developer-focused infrastructure platforms

Improving technical quality, time to market and mitigating risk through a common, validated approach to security and compliance.



Business capability platforms

Accelerates new product development by providing a set of APIs that capture existing business capabilities.



Platform business models

Creates value by facilitating interactions among consumers, peers and service providers, all benefiting from a 'flywheel' effect as the platform scales.



The foundation — your core infrastructure platform

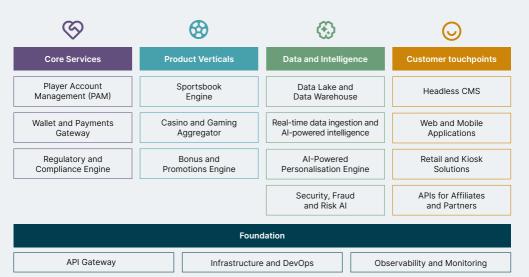
This is the bedrock of your future agility and scalability. Leveraging the power and elasticity of leading cloud capabilities provides the agility, resilience, security and scalability to handle vast data volumes, real-time processing and potentially unpredictable peak loads (essential during major sports tournaments). This foundational layer accelerates time-to-market for new products and features and turns critical aspects like security, compliance and data governance into prebuilt, out-of-the-box defaults.

2.

The enablement layer — your business capability platform

This is where your unique business logic, processes and intellectual property are codified into reusable, modular services and application programming interfaces (APIs). Imagine 'self-serve market creation,' 'dynamic risk calculation,' 'unified fan profile management', 'automated odds generation', 'generative AI content engine' or 'intelligent content delivery.' These well-defined capabilities can be quickly discovered, combined and reconfigured by various teams to create new products, services and experiences with unprecedented speed and efficiency. Your business capability platform provides the essential, pre-built building blocks.

Anatomy of a modern betting and gaming platform



This is where you have a self-serve 'bonus engine' that lets your marketing team launch a new free bet campaign for the champions league in minutes, not weeks. It could be a 'self-serve market creation' tool that empowers your teams to offer innovative new markets on the fly or it could be a 'unified fan profile' that knows if a customer is a slots player who also places a weekly football accumulator. Combining that with the insights from the fan engagement with propositions such as 'player markets', you can create truly personalized experiences that drive loyalty and lifetime value.

3.

The engagement ecosystem — your platform business model

This is where you unlock exponential value and network effects by facilitating and monetizing interactions between diverse participants — fans, bettors, partners, content creators, affiliates and even third-party service providers. Think of a vibrant marketplace for fan-created content, integrated social gaming and betting features that amplify engagement, or sophisticated affiliate programs that expand your reach all orchestrated and powered by your underlying platforms. This creates a powerful 'flywheel' effect, where growth in one area fuels expansion and value creation in others.

Delivering sustained strategic business value

 Architect for decentralization, agility, and evolution, not just scale: While your platform must undoubtedly handle significant growth in users, data and transactions, its true strategic power lies in its inherent ability to sense, adapt, evolve and respond rapidly to new opportunities. Start by identifying and solving immediate, high-value business problems with focused solutions. Then, strategically modularize these solutions, transforming them into reusable assets that can be leveraged and scaled across the organization. Instead of attempting to build everything in anticipation (the 'Field of Dreams' approach), focus on building what's critically needed now, proving its value conclusively, and then evolve it as a trusted, battle-tested asset for broader use. This ensures every platform component delivers tangible ROI from day one and contributes to a continuously improving ecosystem.

- Demolish the walls: Forge a unified front across product, engineering and commercial teams: Many sports and entertainment companies possess deep engineering talent and strong commercial acumen but may lack a truly mature, seamlessly integrated <u>product organization</u> that bridges these worlds. This disconnect is often the single biggest impediment to sustained innovation and execution.
 - Shared objectives, shared victories, shared accountability:
 True organizational alignment emerges when everyone,
 from the executive suite to individual delivery teams, deeply
 understands the overarching business objectives and
 clearly sees how their specific work directly contributes to
 these strategic goals.
 - Cross-functional powerhouses driving value: Structure your organization around domain-aligned, end-to-end value delivery streams with all necessary skills and decision-making authority (product, design, engineering and data) embedded within these empowered teams.
 - From command-and-control to trust and dynamic collaboration: Foster a deeply ingrained culture of open communication, psychological safety, shared learning, rapid experimentation and data-driven decision-making.
 Time spent learning, iterating and even 'failing fast' on small experiments is as valuable, if not more so, than time spent building in isolation based on unvalidated assumptions.



Navigating the path to success

Embarking on a significant business and technology transformation journey requires exceptional foresight, commitment and decisive leadership. Based on our extensive experience guiding industry leaders through these high-stakes evolutions, here's how to navigate the path to success and avoid common pitfalls:

Avoiding common transformation traps: Essential leadership insights

- Recognize that transformation is intentional, not incidental: Architecting a cutting-edge technology platform doesn't automatically translate into enhanced organizational agility, a customer-centric culture or superior product innovation. Proactive, persistent and visible leadership of the change management process, starting from the very top, is non-negotiable.
- Prioritize ruthlessly for early, impactful wins: Avoid the temptation to tackle too many initiatives simultaneously. Identify and focus on a few critical initiatives that promise rapid, visible and strategically significant value. What's the one area where an early, decisive win could unlock substantial revenue, solve a major customer pain point or demonstrably improve operational efficiency to build crucial momentum, belief and buy-in across the organization?

- Optimize for end-to-end value flow, not just siloed efficiency: Shift the focus from optimizing individual departmental outputs to maximizing the speed and efficiency with which strategic value flows through the entire system from initial idea to ultimate customer impact. This invariably requires breaking down traditional departmental silos and empowering genuinely crossfunctional, outcome-oriented teams.
- Demand data, drive experimentation and embrace learning: Base strategic decisions on robust data and verifiable insights whenever possible. Where critical data is scarce or ambiguous, foster a culture of rapid, low-cost experimentation and continuous learning in short, iterative cycles. What small, reversible experiments can you conduct to quickly validate critical assumptions and de-risk larger investments?
- Embrace and celebrate incremental progress towards audacious goals: Focus on achieving and communicating a series of interim milestones. Consistently deliver small, tangible slices of value to build demonstrable momentum, maintain stakeholder confidence and provide ongoing validation of the strategic direction.
- Commit to continuous evolution as a core competency:
 Significant technological evolution isn't a one-time project
 with a defined endpoint; it's an ongoing, dynamic capability
 that must be woven into the fabric of your organization.
 Foster a culture that constantly seeks feedback, embraces
 change and relentlessly pursues improvement.



Change the environment to step towards innovation:

Telling teams to innovate while keeping structures and processes the same is bound to fail or at best, create a new legacy. Give teams a new remit, a safe place for new processes and ways of working to emerge, and learn and adapt to refine this before scaling. Innovation comes from the ability to accelerate, so teams need to be freed from organizational barriers that are slowing them down.



Spotting the signs that you need to act now

If any of the following scenarios resonate deeply within your organization, the time for decisive, strategic action is here:

- Your competitors are winning with advanced Al: You see rivals using agentic AI for personalized fan experiences, computer vision for instant in-game betting, generative AI for conversational fan experiences and streamlining customer support, while your teams are still stuck solving foundational data problems.
- Innovation gridlock and slowing pace: Development, product launch and strategic change cycles are visibly lengthening, not shrinking. Your teams spend more time discussing why things can't be done than creatively exploring how they can.
- Persistent market misses and lost opportunities: Operational complexities or technological hurdles are consistently preventing you from effectively meeting emerging fan needs, capitalizing on new betting and gaming innovations, or rapidly expanding into promising new regions or launching new product categories.

- Erosion of competitive edge and market position:
 You have a persistent feeling that your organization is
 increasingly playing catch-up, reacting to competitors
 rather than confidently setting the pace and defining the
 future of the market.
- Reactive firefighting consuming strategic capacity:
 Your best, brightest minds and significant operational
 resources are increasingly consumed with 'keeping the
 lights on,' addressing urgent operational issues or managing
 technical debt, rather than proactively building the future
 and driving strategic growth.
- Critical bottlenecks stifling overall growth and agility:
 A few key legacy systems, entrenched processes or organizational silos are consistently acting as chokepoints, holding back the flow of value and innovation throughout the organization.
- The unmistakable message in the numbers: Key performance indicators such as revenue, market share, customer acquisition cost, operational cost ratios or fan satisfaction scores are trending in the wrong direction. Can you honestly and confidently assert that your current operational trajectory and technological capabilities will enable you to achieve your critical 3-5 year strategic and financial goals?





Seize your future and define your leadership

The world of sports and entertainment moves incredibly fast, and leaders have a clear choice to make. By freeing your organization from past technological constraints and fostering a deeply collaborative culture focused on clear business objectives, your enterprise can move far beyond incremental improvements.

Five imperatives for effective strategic action

1. Acknowledge the urgency

The pace of market entry, Al innovation, and fan expectation is accelerating. Delay in strategically evolving your foundational technological capabilities is no longer just costly; it's a strategic risk to your future relevance, competitiveness and profitability.

2. Champion technology evolution as a core business strategy

This is fundamental to providing next-generation fan experiences. Additionally, a modern technology strategy must have a clear, business-focused data and Al strategy at its core to achieve sustainable and profitable growth.

3. Unite your teams

Product, engineering, commercial and other relevant business units must operate as a deeply integrated, unified force, with shared accountability for discovering, delivering and optimizing strategic business outcomes.

4. Ship a better bet, faster

Ensure absolute clarity, shared understanding and rigorous measurement of the business value to be delivered by every significant initiative. Prioritize 'thin slice' delivery by rapidly delivering small, valuable, and measurable increments. This will help demonstrate ROI quickly, learn iteratively and build crucial organizational momentum.

5. Recognize that an evolved technology platform is a powerful catalyst, not a solution to all problems

True, sustainable transformation requires profound shifts in culture, operating models, talent development and leadership mindset. Prepare to lead your organization through this comprehensive, and often challenging, journey of change.



Next steps

Is your organization ready to shift from a defensive posture to a winning offensive strategy? Are you ready to unlock the kind of transformative business results we detail in our client success stories? This includes achieving multi-million-dollar new revenue streams, significantly enhanced profitability, and fostering a revitalized culture of innovation and market leadership.

Thoughtworks has a global track record of guiding industry leaders in sports, entertainment and numerous other sectors through complex, high-stakes business and technology transformation journeys. We don't just build advanced technology solutions: we partner with you to build more agile, resilient, innovative and ultimately, more valuable businesses, ready to thrive and dominate in fiercely competitive and rapidly evolving markets.

Contact our sports and entertainment transformation experts today for a confidential, no-obligation strategy session. Or visit thoughtworks.com to explore further insights, client successes and thought leadership.

Authors



Vishnu Nair
Principal Product Manager, Thoughtworks
vishnu.nair@thoughtworks.com
Connect on Linkedin



Mark Copeland
Delivery Principal, Thoughtworks
mcopeland@thoughtworks.com
Connect on Linkedin



Parvinder Kalra
EU Client Director — Media,
Publishing and Sports, Thoughtworks

parvinder.kalra@thoughtworks.com
Connect on Linkedin



Andrew Harmel-Law
Technical Principal, Thoughtworks
aharmel.law@thoughtworks.com
Connect on Linkedin

We are a global technology consultancy that delivers extraordinary impact by blending design, engineering and Al expertise.

For over 30 years, our culture of innovation and technological excellence has helped clients strengthen their enterprise systems, scale with agility and create seamless digital experiences.

We're dedicated to solving our clients' most critical challenges, combining AI and human ingenuity to turn their ambitious ideas into reality.

thoughtworks.com

