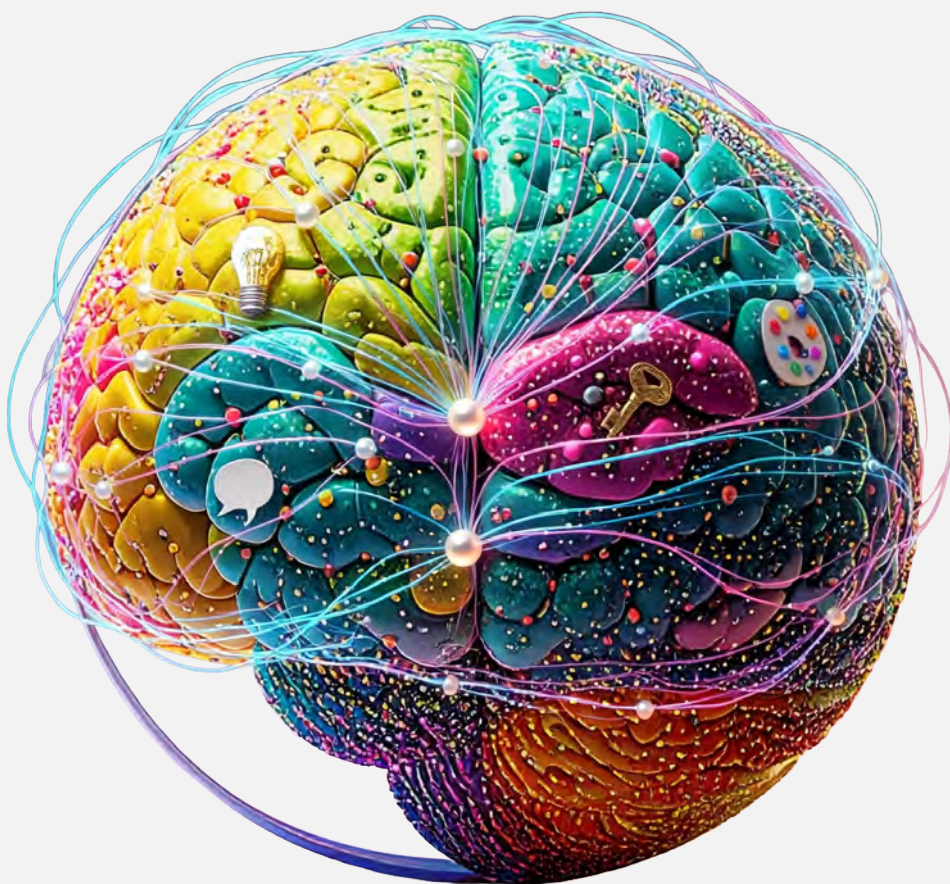




How to Leverage AI for Human-Centered Services

A guide to unlock AI transformative potential,
while preserving human values

August 2026

EXECUTIVE SUMMARY

Enterprise artificial intelligence (AI) has a blind spot: while organisations are investing heavily in AI, they're not investing proportionally in the people and work design required to make it work. The vast majority (93%) of AI spending is on data, technology and infrastructure, while only 7% addresses people-related issues, such as the redesign of services and processes, change management, and reimagining job roles, according to 2026 research by Deloitte¹.

This white paper explores how forward-thinking organisations are tackling this imbalance by embedding AI into service and user experience design in ways that enhance, rather than replace, human capability. Through practical case studies and actionable frameworks, we show how customer experience (CX) and design leaders, product managers, and department heads can unlock AI's transformative potential, while preserving human values.

This paper explains:

- How leader organisations are redesigning jobs around AI from a human-centred perspective (1).
- How Deloitte has applied AI to service design across eight real-world applications (2).
- A practical framework of "Do's and Don'ts" for AI-enhanced service design (3).
- A concrete AI implementation roadmap to get your organisation started (4).



01

EXPERIENCE DESIGN: WHY AI CHANGES EVERYTHING

The evolution of digital services and experience design

Digital services have evolved dramatically over the past decade. What began as digitising traditional processes has matured into designing experiences that anticipate user needs, adapt to context, and create genuine value. Today, AI is accelerating this evolution, but only for organisations that understand the fundamental shift required. The challenge isn't just technological: It's organisational.

The gap: 84% haven't redesigned work around AI

Despite the enormous potential of AI, 84% of companies have not redesigned jobs, or the nature of work itself, around AI capabilities². Most organisations are educating employees about AI, but far fewer are rearchitecting roles, workflows, and career paths to reflect AI's impact. This makes organisations vulnerable: They are deploying powerful technology into outdated work structures,

limiting the value they can extract and creating friction for both employees and customers

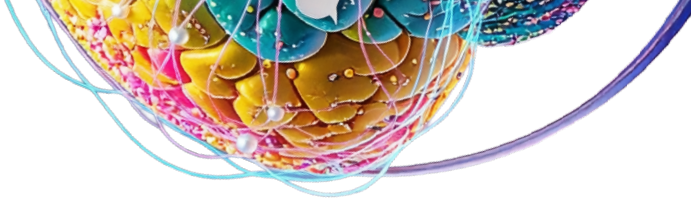
The opportunity: 34% are already transforming

Although most organisations have not redesigned jobs around AI, about one third of companies (34%) are starting to use AI to deeply transform their businesses, while 30% are redesigning key processes around AI³. These leaders understand that AI isn't just a productivity tool—it's an invitation to reimagine how services are designed, delivered, and experienced.

The difference between these leaders and the rest?

They're treating AI as a catalyst to redesign their services to be more human-centred, rather than as a replacement for human judgment.





02

HOW DELOITTE APPLIES AI TO SERVICE DESIGN: EIGHT REAL-WORLD APPLICATIONS

At Deloitte, we're not just advising on AI-driven service design, we're practicing it. Here's how we're embedding AI into our own service delivery and internal workflows and client solutions.

Internal workflows: accelerating design and creativity

1. Vibe coding and quick prototyping

AI is accelerating the ideation-to-prototype cycle without sacrificing quality or creative input. For example, by using AI-assisted design software (e.g. Figma Make, Lovable) and AI-enabled prompt editing and vibe coding⁴, designers and developers can now generate design variations, code them, test concepts, and iterate rapidly. AI handles the mechanical aspects of design production, freeing designers to focus on strategic thinking, user empathy, and creative judgment. We observe a reduction of at least 50% in the time-to-prototype, enabling greater exploration of design directions and faster validation with users.

2. Insights, ideation and rapid analysis

Experience design projects often include repetitive data gathering, iterative drafting and time-consuming data analysis, which reduces the time for critical thinking and creativity. The majority of Deloitte's design and software team members are using Headstart⁵, a secure, enterprise grade GenAI platform hosted on Deloitte Cloud Services. It rapidly synthesises project briefs, generates first draft documentation and domain summaries, and extracts key insights and needs from unstructured inputs, such as qualitative interviews. We treat Headstart outputs as a starting point for deeper strategic and design conversations, rather than as a substitute for human judgement. By automating routine tasks and accelerating iteration, Headstart improves the quality of insights, shortens

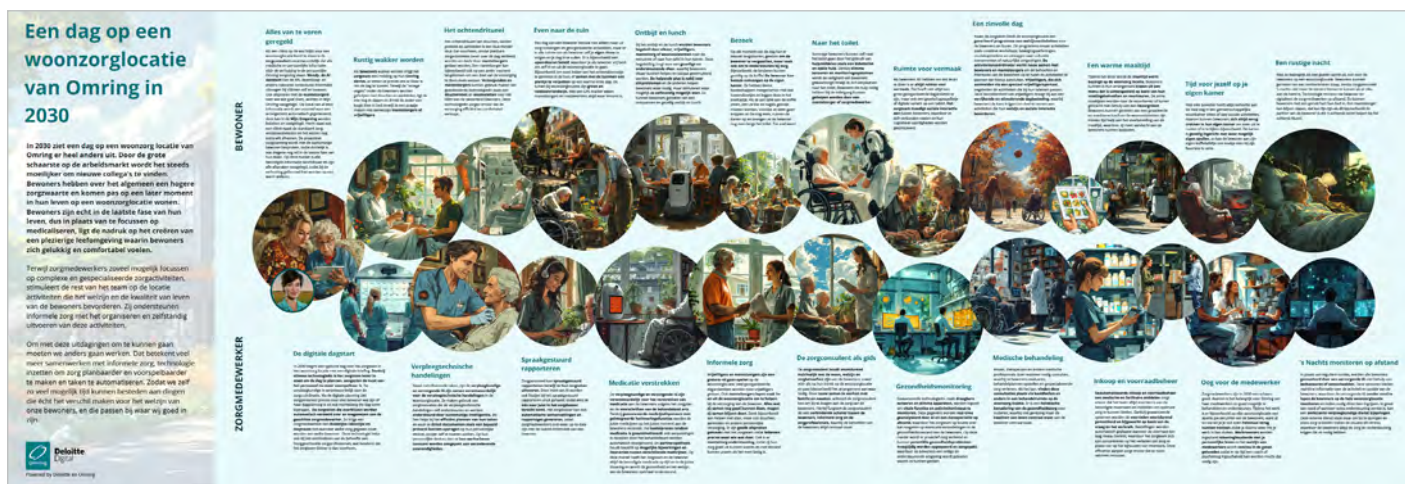
delivery cycles and frees practitioners to focus on higher value problem solving.

3. 3D graphics and animations

Before AI, creating high-quality 3D visualisations and animations for prototypes, demo videos and presentations required specialised skills and significant time investment. Now AI-assisted 3D generation and animation tools are helping us create realistic visualisations from text descriptions and 2D designs much faster and more effectively than in the past. See, for example, our recent AI animated video explaining the value of Aria, one of the Deloitte's agentic AI solutions⁶. Designers maintain creative control, using AI to handle rendering and iteration, rather than to make creative decisions. This approach enables the development of richer, more immersive prototypes and experience concepts that help stakeholders understand complex interactions and spatial relationships.

4. Envisioning and brainstorming (e.g. at elderly care organisation Omring)

During brainstorming and the development of ideas, AI tools can be used to quickly produce multiple iterations. For example, tasked by Omring to develop a compelling vision for the future of elderly care, Deloitte employed an AI application to support the creation of a future care journey from both a client perspective and an employee perspective. Working with Omring's stakeholders, Deloitte used the AI tool to rapidly iterate, accelerating the co-creation process⁷.



Digital experience design of AI-driven products: client solutions

5. Intelligent service in the public sector

People navigating complex services often face fragmented information, unclear processes, and uncertainty about where to turn. Deloitte supported the development of an AI-enabled conversational platform that helps users understand their needs and guides them towards the right information, service, or process. By handling routine information retrieval and initial routing, the platform allows professionals to focus on cases requiring judgment, empathy, and tailored support. This has contributed to fewer escalations, faster resolutions, and a better user experience.

Legal AI Assistant
Specialized in neighbor conflicts

Hello! I am your legal assistant. How can I help you?

Neighbor noise

I understand you are experiencing noise from your neighbors. To advise you properly, I need a bit more information. Could you please answer the following questions?

Vraag 1 van 6 17%

What type of noise are you experiencing?

- ☐ Music or TV
- ☐ Footsteps or stomping
- ☐ Voices or shouting
- ☐ DIY or renovation
- ☐ Other

Legal AI Assistant
Specialized in neighbor disputes

Hello! I'm your legal assistant. How can I help you?

I'm having noise issues with my neighbors

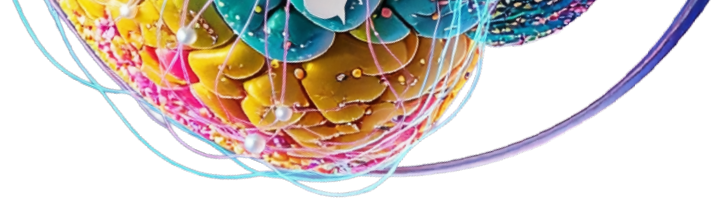
I understand you're experiencing noise from your neighbors. To advise you well, I need a bit more information. Could you please answer the following questions?

Question 6 out of 6 100%

What evidence have you collected?

- ☐ Log with dates and times
- ☐ Audio recordings
- ☒ Witnesses
- ☒ Photos or videos
- ☐ No evidence collected yet

View solutions



Thank you for this information. Based on your answers and relevant legal precedents, I have the following solutions for you:

1

Written Notice to the Neighbors

Optional



Send a formal yet friendly letter to your neighbors describing the problem.

✓ Steps to take:

- 1 Document the noise (times, frequency, type)
- 2 Write a letter with specific examples
- 3 Request a written confirmation of receipt
- 4 Set a reasonable deadline for improvement (e.g., 2 weeks)
- 5 Keep copies of all correspondence

📋 Legal basis:

Evidence of notification for any potential legal steps

2

Professional Mediation

Recommended



Engage an independent mediator to reach a solution.

3

Report to Municipality or Landlord

Optional



Contact the municipality (for noise pollution) or housing association.

4

Start Legal Proceedings

Last resort



As a last resort: initiate summary proceedings or a main action.

5

Improve Sound Insulation

Last resort



Invest in acoustic measures for your own home.

Note: These recommendations are based on general legal principles and Dutch neighbor law. For specific legal advice, it is recommended to consult a specialized attorney. The mentioned success rates are indicative and based on similar cases.

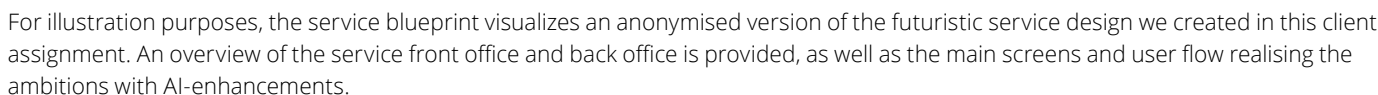
Police departments need to be able to respond to citizens' inquiries around the clock, while managing limited resources. To help address this challenge, Deloitte developed a digital human interface that employs conversational AI to handle routine inquiries, gather information, and escalate complex cases to human officers. The digital interface handles triage and information gathering, allowing human officers to focus on cases requiring judgment, investigation, and community engagement. The AI tool is now being tested and the impact on speed and workload is now being assessed.

Deloitte helped a client to redesign manual, time-consuming, and error-prone registration processes that were creating friction for users. The project team envisioned AI applications to enhance the digital services that guides users (clients, suppliers and employees) through registration, validates information in real-time, and integrates with backend systems automatically. The core principle for this redesign: AI handles data validation and process automation, while human specialists focus on complex cases and policy interpretation.

Deloitte helps organisations in taking the first step to make their AI ambitions concrete and guide teams towards valuable AI implementations. For illustration purposes, this video shows how we approach envisioning the (re)design of human experiences using AI.

Example demo:
**AI applications in
the objection process**

The pattern: in every application, AI handles data-heavy, repetitive, or time-consuming tasks, while humans focus on judgment, creativity, empathy, and complex problem-solving. This isn't AI replacing humans, it's AI amplifying human capability.



03 **LESSONS LEARNED: DO'S AND DON'TS OF AI IN EXPERIENCE DESIGN**

The DO's: how to leverage AI effectively

1. Use AI as an invitation to improve services and organisations

AI isn't just a tool for incremental optimisation: It's an opportunity to fundamentally rethink how services are designed, delivered, and experienced and how the organisations behind them operate.

Why it matters: AI accelerates the identification of options and subsequent decision-making. In doing so, AI creates space for human creativity, judgment, and understanding. The more AI summarises data for us, the more we can focus on smarter and better service design and practice, and contextualising and giving meaning.

In practice:

- Use AI-generated insights to spark, rather than replace, strategic conversations.
- Ask: "What becomes possible for our team if we automate or enhance this task or process with AI?"
- Invest in upskilling designers, development teams, practitioners, and experience design leaders to work effectively with AI.
- Treat AI implementation as an opportunity to redesign workflows and job roles.

2. Focus on building trust through transparent reliable AI

The more autonomous AI becomes, the more experience design needs to focus on trust and reliable outcomes. Users don't just want smart systems: They want systems they can rely on, understand, and trust.

Why it matters: Automation and AI shifts human interaction and attention from routine actions and transactions to the management of exceptions and high-complexity cases. To focus their attention where it matters most, users need to fully trust the system's decisions in routine cases.

In practice:

- Design for transparency: Users should understand why an AI system made a particular recommendation or decision.
- Provide simple access to complex information: Explain AI reasoning in plain language.
- Enable validation: Give users the ability to verify outcomes and escalate when needed.
- Build in human oversight: Ensure human experts can review and override AI decisions as necessary.

The more autonomous AI becomes, the more experience design needs to focus on trust and reliable outcomes.



3. Invest in people and work design alongside technology

This is critical. Organisations are investing 93% of their AI-related spending in technology and only 7% in people⁸. Flip this ratio in your service design and digital experience improvement initiatives.

Why it matters: AI's value is only realised when people understand how to work with it, when roles are redesigned to leverage it, and when organisations employ AI to amplify, rather than supplant, human judgment.

In practice:

- Redesign roles and workflows around AI capabilities.
- Invest in training that goes beyond “how to use the tool” to “how to think with AI”.
- Create career paths that value the human skills AI can't replicate, such as judgment, creativity, empathy and strategic thinking.
- Involve frontline teams in AI design and implementation: they understand where AI adds value and where it creates friction.

4. Employ AI in a way that enhances employee engagement

People don't avoid effort by default. They invest it when it feels worthwhile. If work is reduced to low-value tasks, such as just checking AI output, it risks disengaging people because the effort no longer feels meaningful⁹.

Why it matters: AI's value will only be realised if we engage people and society effectively: this means using AI to amplify human judgment in a way that the human effort invested feels meaningful and valuable.

In practice:

- Give people end-to-end ownership of processes and outcomes where AI takes a role.
- Connect AI related tasks explicitly to business or organisation impact, goals and outcomes.
- Design workflows for 'just enough friction': leave room for human thinking, judgement and creativity.
- Use AI to remove the feeling of being too busy instead of removing all work that is challenging and meaningful.



The DON'Ts: common pitfalls to be aware of

1. Don't scale design mistakes

With AI, production is faster, making thorough and timely validation even more critical. The bottleneck has moved from production to judgment. As a result, poor quality design can spread faster than ever before.

The risk: Scaling AI can quickly magnify small design mistakes. A poorly-designed user flow, a confusing interface, or a flawed assumption about user needs could be replicated across thousands or millions of interactions.

How to address it:

- Invest in design quality and user research before scaling with AI.
- Slow down to speed up: validate rigorously and test every stage, especially before scaling.
- Create feedback loops that catch design issues early.
- Remember: Taste and an eye for quality are more crucial than ever.

2. Don't treat AI decisions as infallible

We accept that human mistakes can happen, but we're often unwilling to accept mistakes by automated systems. We have mechanisms to check and revert human errors, but we haven't yet implemented the legal and organisational measures to do the same with machines.

The risk: Over-reliance on AI without appropriate human oversight leads to liability, reduces trust, and can cause real harm to users.

How to address it:

- Design systems with human-in-the-loop decision-making for high-stakes situations.
- Create clear escalation paths when confidence in AI is low or outcomes are unexpected.
- Maintain audit trails so decisions can be reviewed and reversed, if needed.
- Be transparent about the limitations of AI with users.
- Invest in explainability so AI decisions can be understood and validated.

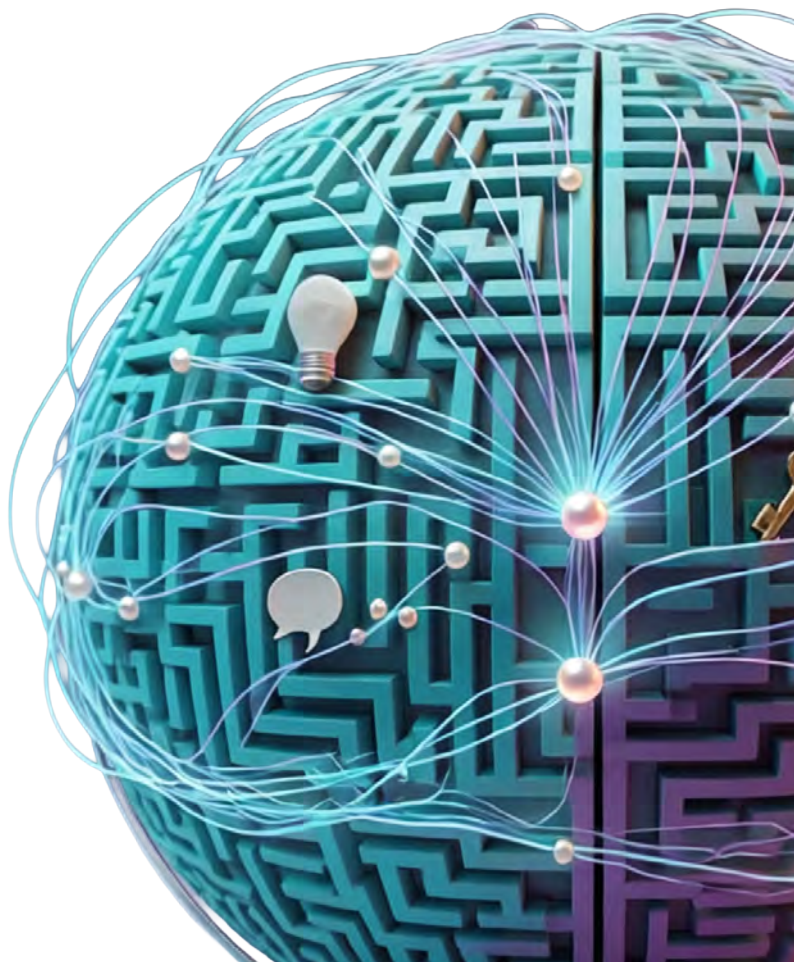
3. Don't forget the human element in "human-centred AI"

A commitment to "human-centred" systems will be meaningless, if it's not backed by a genuine commitment to human needs, values, and dignity.

The risk: AI systems that optimise for efficiency may compromise the user experience. There is also a danger of automating away meaningful human interaction, or creating new forms of friction or exclusion.

How to address it:

- Keep user research and empathy at the centre of AI service and user experience design.
- Ensure there's room for human interaction, empathy, compassion, and involvement in problem-solving, where it matters most.
- Test with real users, including those with diverse needs and contexts.
- Regularly ask: "Does this AI enhancement actually improve the human experience, or just the metrics?"
- Focus on balancing productive effort and meaningful work for humans; don't limit people's roles to just checking AI output (see item in previous section '4. Employ AI in a way that enhances employee engagement').



04 YOUR IMPLEMENTATION ROADMAP: FROM INSIGHT TO ACTION

The insights in this white paper are only valuable if you act on them. But before identifying practical steps you can take, we would like to share a learning to help you scale the use of AI in your organisation.

Successful implementation of AI requires both short-term and long-term efforts. Start with low-risk projects that demonstrate value quickly and generate minimal resistance, backed by a driven owner within the organisation and a sponsor at the board level.

At the same time, it is important to simultaneously build a solid foundation for scalable change. This foundation encompasses strategy, technology, people, and processes. Often a Center of Expertise or Excellence supports in building and scaling expertise on AI implementations. In this way, short-term successes build confidence, while the larger projects lay the groundwork for sustainable and scalable transformation.

Here's a concrete roadmap to get started:

AI-enhanced service design: the 12-month roadmap.

From foundation and alignment to embedded practice — with human capability at the centre

(0 - 12 MONTHS)

01 FOUNDATION & ALIGNMENT		0-3 MONTHS
	MONTH 1: Assess & align	- Audit current service design practices and identify where AI could add value - Map your AI spend: what share goes to technology versus people and work design? - Identify 2-3 high-impact service areas where AI could enhance human capability - Align leadership on AI as a tool for human-centred transformation, not just efficiency
	MONTH 2: Build capability & awareness	- Launch an AI literacy programme for designers, product managers and service leaders - Create cross-functional teams across design, product, operations, compliance and HR - Identify quick wins: where can you pilot AI-enhanced service design with low risk?
	MONTH 3: Launch pilot projects	- Select 1-2 pilot projects that demonstrate AI's potential while managing risk - Focus on data-heavy or repetitive tasks, freeing people for higher-value work - Establish clear success metrics: user satisfaction, efficiency gains, quality improvements - Document learnings and build internal case studies
02 SCALE & REFINE		3-6 MONTHS
	Months 4-5: Expand & learn	- Scale successful pilots to broader user populations - Gather user feedback and iterate on AI-enhanced service designs - Begin redesigning roles and workflows around AI capabilities - Share learnings across the organisation - create internal communities of practice
	MONTH 6: Invest in people & culture	- Launch role redesign: what new skills do teams need, and which roles are evolving? - Develop career paths that value the human skills AI cannot replicate - Create feedback mechanisms so frontline teams can shape AI implementation - Celebrate early wins and build momentum for broader transformation
03 EMBED & EVOLVE		6-12 MONTHS
	MONTHS 7-9: Systematic integration	- Integrate AI-enhanced service design into standard design and product development - Establish governance frameworks that ensure quality, trust and human oversight - Build partnerships with vendors and technology providers who share your values - Develop internal expertise; reduce external resources
	MONTHS 10-12: Measure impact & plan ahead	- Measure the full impact: user satisfaction, business outcomes, employee experience - Assess progress on the 93% / 7% spending ratio - are you investing more in people? - Identify the next wave of AI applications and service areas to transform - Plan for continuous evolution as AI capabilities advance

START SMALL, THINK BIG.

Your first AI-enhanced service doesn't need to be perfect. It needs to teach you how to work with AI in ways that enhance human capability. Use early projects to build organisational muscle for larger transformations.

CONCLUSION: AI THAT ALWAYS WORKS FOR, AND WITH, HUMANS

We are still shy in the way we are embedding and embracing AI in product and service design. We accept that human mistakes can happen, but we're hesitant about mistakes by automated systems. We have mechanisms to check and revert human errors, but we're not yet willing to enable that with machines.

It's time to be bolder.

Effective human-machine interaction depends on intentional design. It requires:

- Orientating machines towards repetitive, data-heavy, and time-consuming tasks so humans can focus on judgment, creativity, and empathy.
- Ensuring there's room for human interaction, empathy, compassion, and involvement in problem-solving where it matters most.
- Building trust through transparency and reliable outcomes so users and employees can confidently work with AI.
- Investing in people and work design alongside technology—not as an afterthought, but as the foundation.

The organisations that will lead in the next decade aren't those that deploy the most advanced AI. The leaders will be those that deploy AI in service of human-centred values, that redesign work around AI's capabilities, and that invest in the people who make it all work.

Leading organisations will foster the learning, experimentation and, above all, the scaling of AI required to create services that makes people's lives easier, and more enjoyable and meaningful. They will look beyond efficiency improvements and redesign work to reduce repetitive tasks and create a workplace where humans add value to other humans.

Begin by asking yourself the following questions:

01. Where in your current services could AI handle data-heavy or repetitive tasks, freeing your teams to focus on judgment and creativity?
02. What would it look like to flip your AI spending ratio—investing more in people and work design alongside technology?
03. How would your organisation need to change to truly embrace AI as a tool for human-centred service transformation?
04. What's your first pilot project, and what will you learn from it?



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