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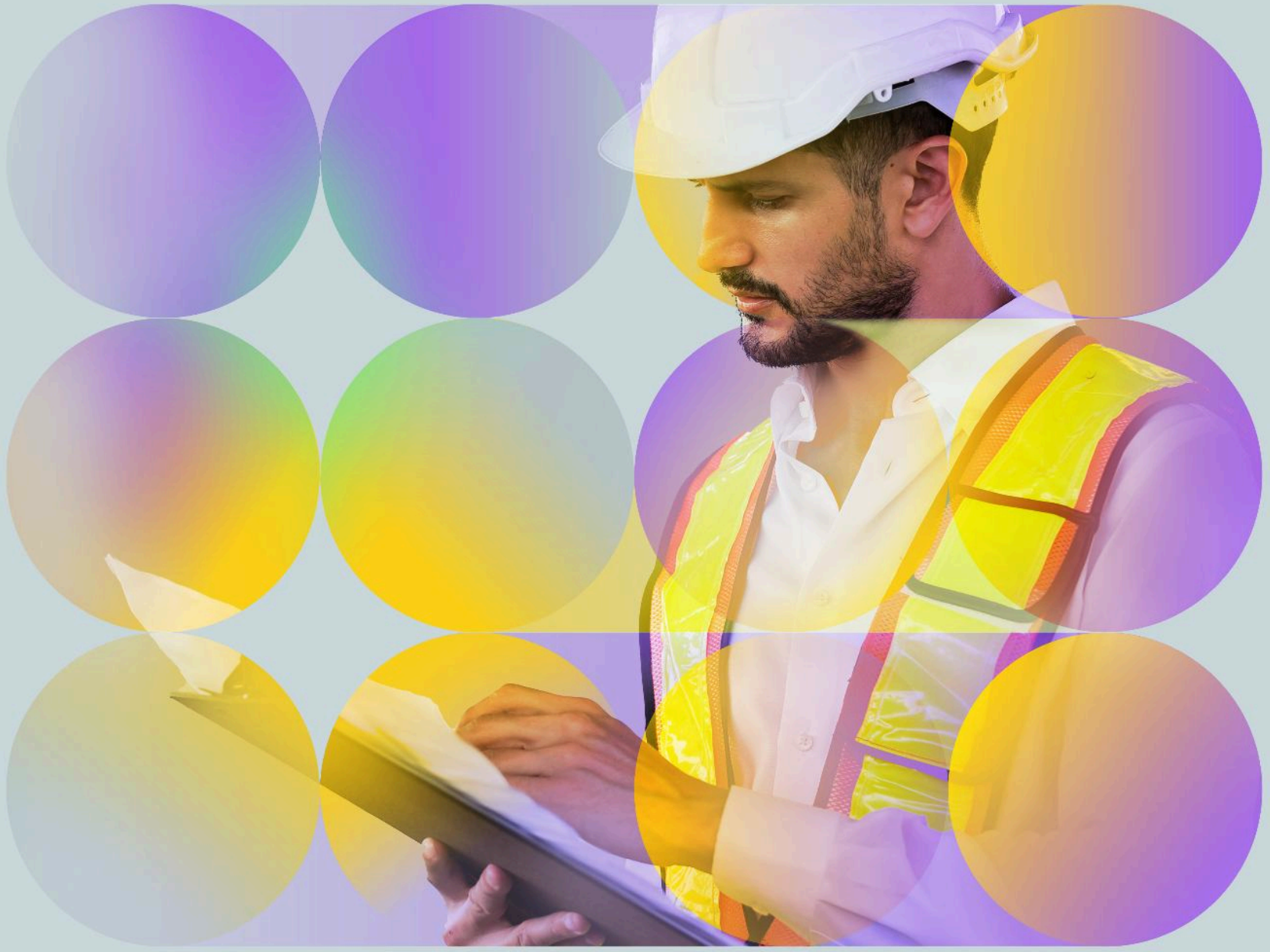
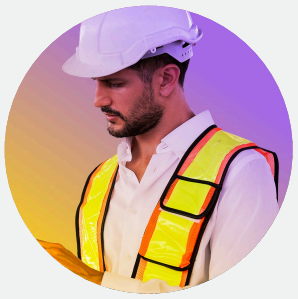


The AI-amplified future of work in public sector regulation

From real-time risk detection to decoding jargon, AI can make public sector regulatory work faster, clearer, and more effective without compromising compliance



REGULATOR | AI ON THE JOB

Today, regulator roles exist across multiple government domains and programs focused on compliance and regulation

Here's a small sampling of them:

Taxation	Food and drug safety	Patents	Licensing and permits	Consumer protection
Banking and finance	Budget and accounting	Trade and commerce	Law and justice	Environmental protection
Transportation safety				

Tasks common to most regulatory roles:	How AI and gen AI can help:
• Processing permits and licenses • Conducting inspections, audits, and investigations • Preparing reports on regulatory activities and enforcement actions • Communicating with industry stakeholders and consumers • Rationalizing and streamlining regulations	• Automate the initial review of license and permit applications, flagging incomplete submissions • Generate risk scores using historical data to prioritize high-risk cases • Automatically draft structured reports and summaries of inspections, audits, and enforcement outcomes • Generate context-aware responses and guidance based on past interactions and compliance data • Efficiently analyze regulatory data to identify inefficiencies and propose simplifications

Outcomes: freed-up capacity and time, improved efficiency, and better protection for citizens

Source: Deloitte analysis.

AI-AMPLIFIED REGULATOR | EVOLUTION WITH AI

In the future, here's how work could evolve with the arc of change AI technology is creating

Over time, regulators move from simply using AI to improve efficiency on basic data extraction tasks to more sophisticated activities that extend the capabilities of the human worker, while also freeing up capacity.

	AI/gen AI capability	Some examples of tasks where AI and gen AI can support regulators
Automate	Automate routine, repetitive administrative tasks to free up capacity	• Auto-generate lists of inspection targets based on specific criteria • Detect fraud
Augment	Supplement available tools and resources to increase productivity	• Make regulations more accessible to the public via chatbots • Simulate policy and regulatory scenarios
Extend	Execute and expand activities humans are unable to perform at scale	• Screen AI-generated public comments to detect biases and misinformation • Track compliance rates
Create	Generate new content, analyses, and ideas using Gen AI	• Develop initial drafts of regulations • Code adaptive regulatory tools

This evolution provides insight into what technical and human-centric skill sets a regulator should consider building ...

AI and tech skills

- Prompt engineering
- AI agent supervision
- AI-collaborative working
- Data integration
- Horizon scanning
- Risk simulation tools

Human-centric skills

- Decision-making
- Strategic thinking
- Stakeholder management
- Communication
- Risk management

... and what role they play in interacting with AI

AI Consumers They use AI tools in daily work to boost productivity, make data-driven decisions, and streamline tasks—all without needing deep technical expertise.	**AI Builders** These technical experts design, develop, and maintain robust AI solutions that meet organizational needs.	**AI Pathfinders** They focus on strategic implications and opportunities, fostering an AI-enabled culture by identifying new applications instead of relying on deep technical skills.
Expert: Certain members of each group have higher levels of expertise and proficiency.		
AI Ambassadors Proficient in using AI tools, they promote AI adoption within their teams, provide guidance and training, and bridge the gap between technical groups and end users.	**AI Architects** They design and manage complex AI projects, considering enterprisewide impacts and the integration of various systems.	**AI Visionaries** They set the enterprise and external strategic direction for AI initiatives, leading the organization toward innovative AI adoption.

With AI changing the nature of work, what might the regulator role look like if it were reframed?

The regulator as an innovation partner

The regulator of the future will likely play an active role in fostering innovation. By collaborating with accelerators and establishing sandboxes where new technologies and products can be safely tested, **regulators could serve as partners to industry players.**

Sandbox approaches are intended to help regulators better understand new technologies and determine appropriate rules and regulations for emerging products, services, and business products. Regulatory sandboxes can help innovators reduce time to market, attract investor funding, and build better consumer safeguards.

The forward-looking regulator

With the advancements in AI, the regulator role can evolve to become more proactive. **The forward-looking regulator** of the future is expected to have a constant pulse on what the future could bring in terms of new trends, technologies, and threats.

Thanks to risk-monitoring AI technologies, enhanced market sensing, scenario planning, and strategic foresight capabilities, these professionals can interpret disparate data sets, uncover trends, and take preemptive steps to mitigate issues. For example, rather than waiting for violations and issuing penalties or remediations, regulators could proactively inspect filings to catch issues early.

Putting all the pieces together, what might an AI-amplified regulator look like in action?

Faster permits processing

Ken, a permits officer for a city government, smiles as he looks at his computer screen. His queue of permit applications has never looked this organized. Thanks to an AI agent, the applications have been pre-screened for completeness, eligibility, and supporting documents and then sorted into clear categories. The AI agent has even drafted customized emails to be sent back for incomplete applications, including links to resources like FAQs, video tutorials, and a chatbot to help applicants address errors and missing information and resubmit. With Ken's approval, the emails are sent.

Ken then turns to the complete applications—each accompanied by an AI-generated recommendation. As he finalizes his reviews, the system captures and learns from instances where his decision differed from the AI recommendation.

Here's where some of this is starting to make an impact today

Danish Business Authority using AI to identify fraud

The Danish Business Authority, which aims to create predictable and responsible business conditions in Denmark, is experimenting with AI to detect fraud and highlight material errors in financial statements. The agency is using machine learning to conduct a comprehensive analysis of more than 230,000 financial statement filings it receives each year. According to chief advisor Niels-Peter Rønmos of Erhvervsstyrelsen (the Danish Business Authority), with time and further experimentation, a significant improvement in regulatory efficiency may be achieved. The Danish regulator aims to be able to identify financial statement fraud and tax fraud more accurately and rapidly.

Source: Matthew Gracie, William D. Eggers, Sam Walsh, Scott Streiner, and Pankaj Kishnani, "AI can turbocharge government regulatory operations," *Deloitte Insights*, Nov. 16, 2023.

New York City uses AI for building inspections

Building inspectors in New York City have used an AI tool to assign risk scores to every building. The tool automatically lists buildings in order of priority, including incorporating lower-risk buildings with mandatory annual inspections, like schools. While the department started out by considering about six risk factors, the New York City fire department's latest iteration tracks over 7,500 data points from 17 city agency data streams. The AI learns from each new fire and reassesses risk in real time. This information feeds a real-time dashboard of fire risk, which fire station leaders can use for operational planning.

Similar algorithms could predict high-risk situations in nearly any regulatory domain, from workplace hazards to environmental spills.

Source: Brian Heaton, "New York City fights fire with data," *Government Technology*, June 2015.

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