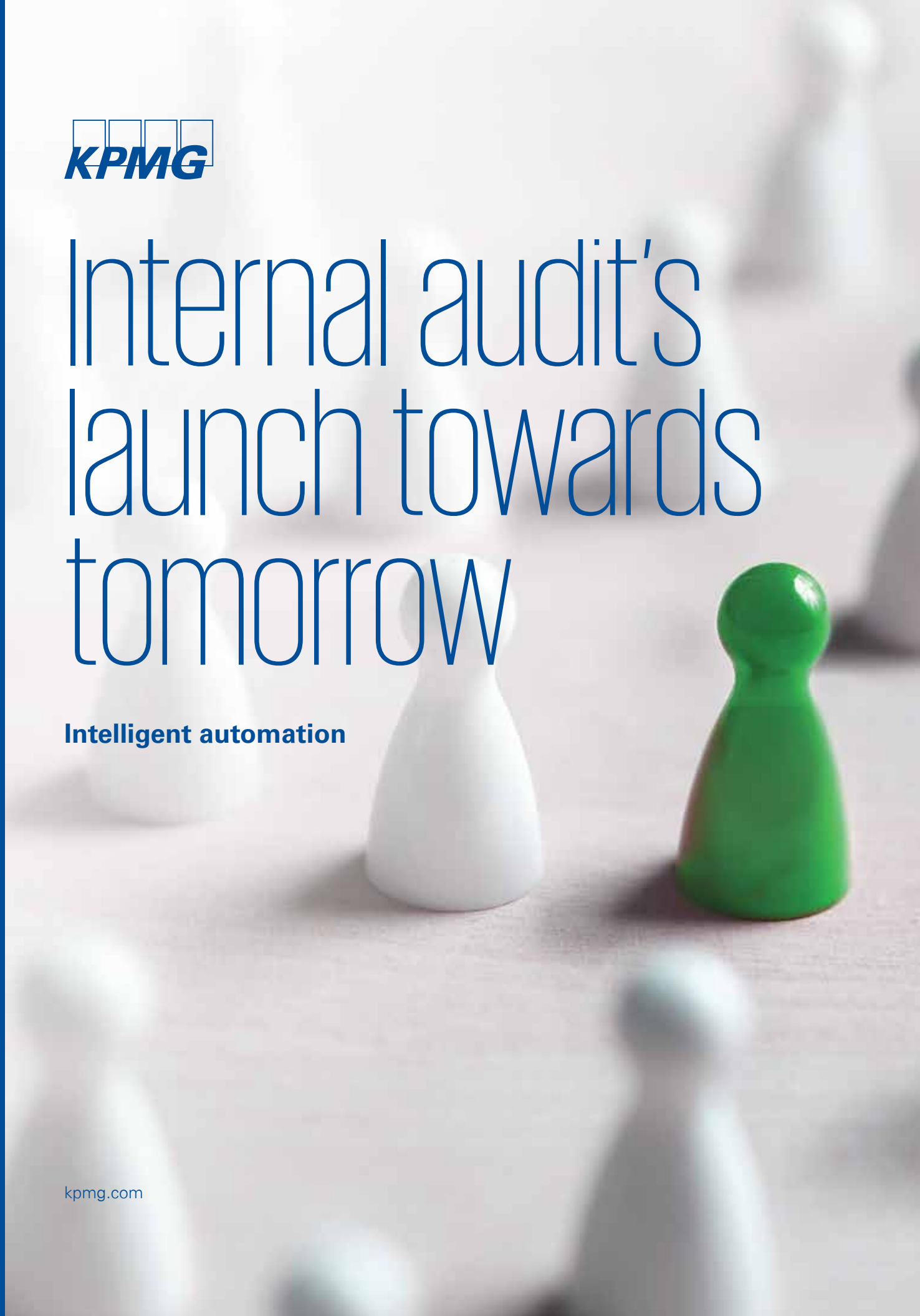

Internal audit's launch towards tomorrow

Intelligent automation

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Businesses today operate in a world of seemingly endless possibilities. Innovative technologies like artificial intelligence and predictive analytics are empowering start-ups to flip traditional business models on their heads while driving well-established organizations that want to remain relevant to become more agile, responsive, and efficient.

Intelligent automation is one of the most talked about technologies as a game changer for organizations. It combines a host of technical capabilities to empower machines to take on human tasks more efficiently, more accurately, and significantly faster than humans. Many companies today already use discrete forms of intelligent automation in their processes—for example, using chatbots to answer employee queries or using RPA to charge credit cards for orders made online. These solutions, however, are only brushing the surface of the potential that intelligent automation offers.

With the right strategy and support in place, companies can integrate intelligent automation solutions across their operations. They can use it to manage end-to-end processes more efficiently and at a lower cost, deepen their understanding of their customers, and create tailored products and services.

The role of internal audit in intelligent automation

As companies invest in and embrace new technologies, they can't forget the staples of a sustainable enterprise: good governance, appropriate risk management, strong internal controls, and internal audit function.

A forward-thinking internal audit function can help ensure the organization is deploying intelligent automation in a sound and strategic way and working with business owners to understand the possibilities; identify and respond to potential new risks; and create a robust plan for building, implementing, and monitoring the effectiveness of an intelligent automation program.

The three roles of internal audit with intelligent automation include:

- Assist with the **integrating control considerations into the governance framework** of the automation program lifecycle—as an organization establishes and implements its program.
- Help identify opportunities to **embed automation-enabled control activities within the business processes** being evaluated for automation.
- Leverage intelligent automation to **transform internal audit—increasing the efficiency and effectiveness of its own activities**.

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Intelligent automation solutions most relevant to enhancing the work of internal audit range across a spectrum from basic process automation ("act like an auditor") to enhanced automation ("learn like an auditor") to intelligent automation ("think like an auditor"). As internal audit functions mature in their use of automation, they will become better positioned to harness value for their organization.

The spectrum of technologies range from basic automation to intelligent automation

ACT like an Auditor

RULES

Basic process automation

- Macro-based applets
- Screen-level and OCR data collection
- Workflow automation
- Process mapping
- Self-executing

LEARN

Enhanced automation

- Built-in knowledge repository
- Learning capabilities
- Ability to work with unstructured data
- Pattern recognition
- Reading source data manuals
- Natural language processing

REASON

Cognitive automation

- Artificial intelligence
- Natural language recognition and processing
- Self-learning (sometimes self-optimizing)
- Processing of super data sets
- Predictive analytics/ hypothesis generation
- Evidence-based learning

THINK like an Auditor

Achieving real value

A KPMG team recently developed an automated solution to quickly and accurately review all users across the 100-plus in-scope applications at a client, flagging potential exceptions for further investigation. The solution significantly reduced manual effort while improving the accuracy and consistency of the testing performed. It wasn't just about doing audit work more efficiently, but about doing audit work better.

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How can intelligent automation help internal audit?

Today

— Identify anomalies or inconsistencies in electronic data transactions

— Review an entire population, not just a sample, in significantly less time

— Flag exceptions to preestablished rules

— Reduce manual workload and potential for human error

— Create capacity for internal auditors

— Monitor new technology risks and controls

Tomorrow

— Knowledge kits that represent the core domain knowledge translated and packed into a learned model and delivered by autonomous agents

— Autonomous agents that continuously monitor defined controls and flag issues for follow-up by internal audit or the business

— Classify and predict issues well ahead of time, enabled by continuously learning models

— Monitor emerging risk clusters in the risk universe not traditionally considered by internal audit

— Intelligent audit assistants that can ingest a variety of structured and unstructured data and offer insights

— Built-in bias detection in data, provenance, and explainability of model decisions to ensure insights can be trusted

Not a simple task, but worth it

Implementing and leveraging intelligent automation within the internal audit function is not a straightforward task. To get the results they desire, internal audit leaders need to take time to do the work required to support any intelligent automation systems. Data can be a major roadblock, not to mention the need to architect and train models appropriately. Additionally, internal audit is consistently being told to do more with less or do more with the same. Business cases for investment dollars continue to be scrutinized.

By appropriately leveraging intelligent automation, including AI capabilities, internal audit can improve operational efficiencies, reduce errors, and respond to industry changes and requirements in a more agile manner.

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Case study

Risk and controls issues analytics

Client challenge
Internal Audit want to better understand its issues in aggregate, as a portfolio, for management purposes. The reporting system currently in place provide limited visualization and focused on statistics.

Solution
Using the power of Natural Language Processing (NLP), the solution can assess issues identified and detect, classify, and predict patterns in Governance, Risk Management, and Compliance (GRC).

Benefits

— Fast processing of unstructured data

— Advanced deep learning technologies

— Machine learning classifiers for understanding what category issues fall into

— Big data technology integration to allow processing of very large volume of issue notes in a matter of hours

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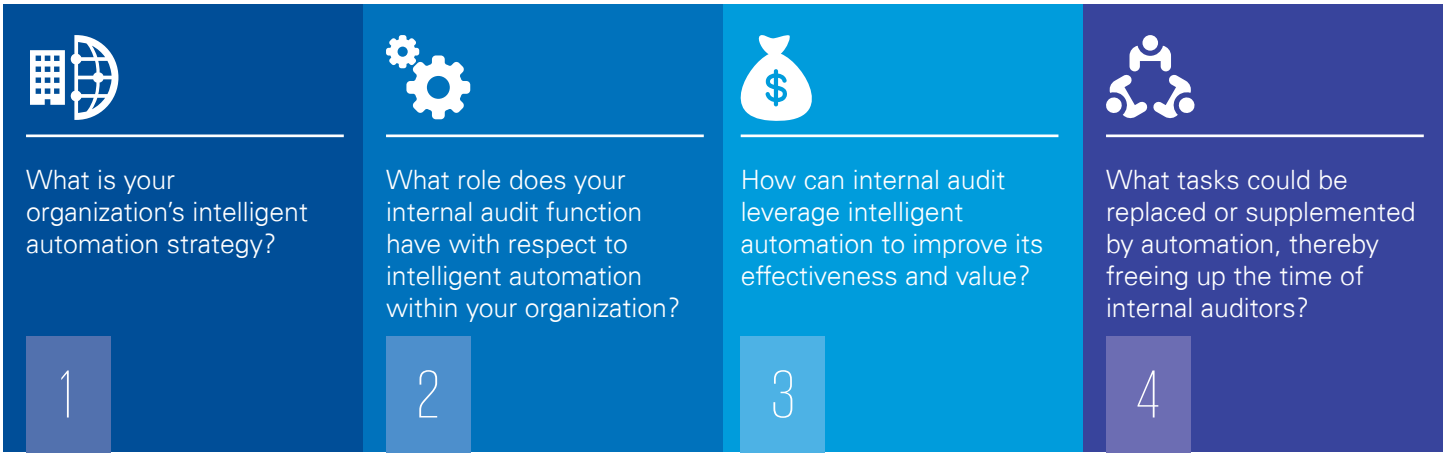
Asking the right questions to accelerate your journey



Find out more

For more information on how to use intelligent automation in internal audit, visit KPMG's intelligent automation and internal audit web page.

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