



## Automating compliance assurance



Will the 2020's be the decade of transformations that sees automated compliance become mainstream? The exponential rise in artificial intelligence (AI) capability has the potential to innovate and disrupt traditional compliance models.

In this paper we ask the following questions to consider the potential impact of AI on what we think of as automated compliance assurance:

1. This is still a way off....right?
2. How does AI relate to compliance assurance?
3. Will this change internal auditing?
4. What can audit leaders do?

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## This is still a way off....right?

Wrong. The capability is here today.

The question is *when* not *if* our organisations will begin to use it.

- In the judiciary field, **judges** are being supported by AI to analyse cases, improve compliance with laws, remove bias and aid decision making for sentencing.
- Boeing 777 **pilots** use AI technology and typically only fly the plane for 7 minutes during a flight. Not only is this efficient, but it also reduces the risk of non-compliance with protocols, thereby enhancing

audit trails.

- **Chatbots** are run by AI where information provided is pre-determined/controlled, improving compliance in addition to capturing data and learning from interactions.

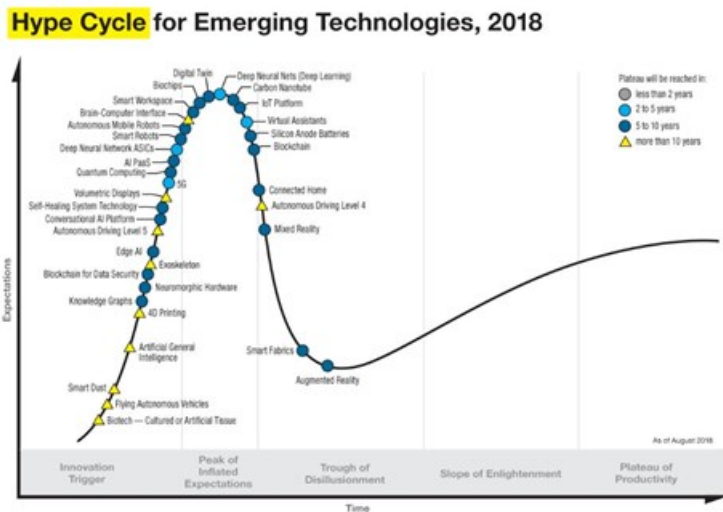
Advances in AI and machine learning enable big data to be processed, screened and analysed with accuracy in real-time; it takes cognitive computing to a level where programs go beyond analysis to draw conclusions. Data can be qualitative, categorical, narrative or quantitative and numerical.

Auditors and compliance officers cannot compete with AI.

AI is a disruptive technology. Unlike proprietary innovations that are protected, experts suggest that AI is being 'democratised' through open source, communities and cloud computing. Basically, this means it can be accessed and developed quickly at a relatively low cost.

In many industries (automotive, banking, manufacturing) compliance automation was limited to software that uses AI to simplify compliance procedures. Not anymore. AI capability is so much more.

According to Gartner's 2018 **Hype Cycle** for emerging technologies, we will see AI in its many forms within a couple of years.



Source: Gartner

## How does AI relate to compliance assurance?

AI is often considered as technology. A tool for the techie. It is more than that.

Gartner defines AI as applying advanced analysis and logic-based techniques, including machine learning, to interpret events, support and automate decisions, and take action.

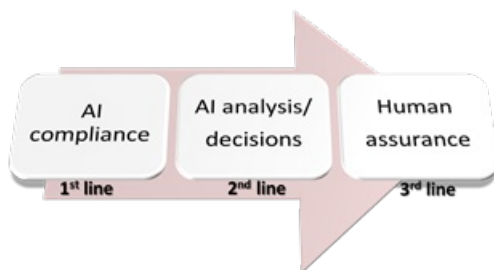
Assurance requires the interpretation and analysis of events to conclude on whether outcomes are favourable or otherwise. Compliance assurance is rule based. AI can automate this activity.

A **Digital Regulatory Reporting** project lead by the Financial Conduct Authority has already progressed beyond proof of concept in developing machine-readable reporting to reduce reliance on manual

compliance and human interpretation.

AI is often seen as a replacement for human intelligence, yet compliance is complex. There is often an element of subjective judgement. AI has the potential to augment the role of internal audit rather than replace it.

Could a future assurance framework impact the first and second lines of defence much more than internal audit?



This type of model is already used in banks to reduce fraud. AI systems monitor and score transactions, analysing and determining results thereby enabling investigators to focus only on the transactions that require human judgement.

Information security utilises automated compliance, software that scans continuously, preventing, detecting and recovering. Imagine this capability working across other processes.

## Where can AI compliance be utilised in your organisation?

Any area where a 'rule' can be created, where data is analysed: ISO, SOX, GDPR, claims, recruitment, research, complaints, equipment maintenance...how creative is your imagination?

If you include robotics into the equation could this extend the automation of compliance even further such as the dispensing of drugs? Camera drones, for example, have successfully replaced the need for physical maintenance checks on oil rigs making compliance safer and more robust by enabling more than one perspective on an identified problem.

Cost has often been a barrier to continuous monitoring as a first line activity. This is no longer the case and compliance stakeholders need to consider the impact of real-time compliance.

## What do you as auditors know about automating compliance?

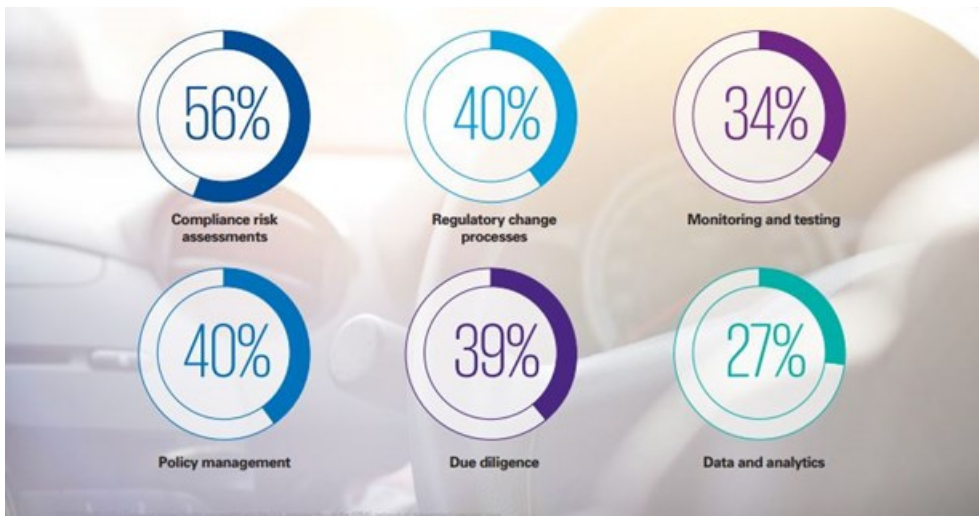
An interesting topic for team discussion – put it on the agenda.

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## Will this change internal auditing?

A 2018 KPMG survey of US companies found that over 50% were not automating compliance activities although 90% planned to improve that in the near future. Only 20% had an enterprise-wide strategy to achieve compliance automation.

The survey highlights six compliance areas that automation is focused towards.



**Source:** KPMG Compliance Automation Survey

The UK picture is not dissimilar: 40% of organisations report shortage of skills as a barrier to using technology to support compliance and only 36% use data extraction tools to assist real-time monitoring efforts according to a PwC [survey](#).

Heavily regulated industries such as banking and compliance driven processes such as manufacturing are leading the field of automated compliance: a hot topic in the [fintech](#) world.

Many of the barriers to automation have been reduced in recent years; organisations have increased digital skills, entry costs are reducing, easier accessibility and efficiency pressures are intensifying.

**As audit leaders, do we want to be disrupted or be leaders in our organisations?**

**How can we best support our governance leaders?**

**Can we afford to wait, or do we need to influence our futures?**

Automating compliance can help internal audit in four ways:

1. **Audit coverage.** Audit leaders consumed by compliance and financial control auditing can free up resource to provide assurance over strategic and operational risks. Elevating internal audit to genuine value-add activity as routine by using technology to do the basics.
2. **Audit results.** Sampling can be fraught with issues, using AI capabilities across big data removes the need for statistical samples. Automating compliance has the potential to increase the value of internal audit findings. AI takes exception reporting compliance assurance to another level.
3. **Audit talent.** Removing or reducing the weight of compliance auditing which can be repetitive and require auditors to follow set programmes, allows greater personal development, broadening the capabilities of auditors. Potentially improving attraction and retention within the profession due to higher personal fulfilment and nature of engagements.
4. **Audit relationships.** Elevation of audit coverage should enable more powerful partnerships with governance leaders, improving governance, risk management and internal control practices.

The positive disruption of greater automated compliance can lead to internal audit working collaboratively with the technology; enhancing leadership, control environments, scalability and capabilities.

It could also be disruptive by facilitating a reduction in compliance resource, commoditising assurance,

devaluing 2<sup>nd</sup> line activity and lessen control awareness as workforce tasks changes.

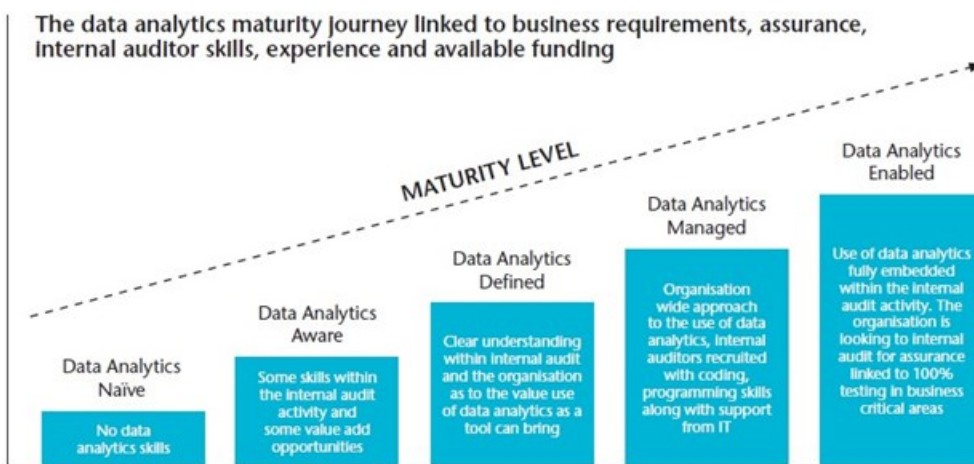
## What can audit leaders do?

A common mistake is to think of AI and automation as a limited tool for basic transactions.

Automated compliance using AI is the next generation of data analytics at a time when some audit functions may not even using the basic functionality of Excel.

Automating compliance and data analytics are part of the same technology journey. The Institute's [research](#) into analytics identified case studies where its use had been transformational.

### What is your internal audit department's maturity level?



Audit leaders need to assess what this means for them and their organisation. Current data analytics maturity may be an enabler, or it may prove to be irrelevant; why learn to ride a bike when you can use a Segway?

Some areas you may wish to think about are:

- Assurance maps at a strategic level are becoming commonplace. Should these be extended into key risk areas to understand critical/resource intensive compliance points? Creating a shared understanding of the control environment with stakeholders may help influencers and decision makers to transition to automation with confidence.
- Accountability for AI may not have been considered at board level. It is not an automatic fit with the head of IT. Diverse budgets and accountabilities can lead to pockets of compliance automation rather than an intentional approach. Audit leaders have a holistic view of the organisation and may be best placed to act as an advisor on the development of a strategy for automation to maximise investment.
- Influencers may not be those with accountability. They may actively avoid it if they are disruptors of the status quo. Be aware of the AI influencers within your organisation, they may not talk about compliance, but the technology is the same. Be on the front foot, input into control design, counsel on risk and protect the organisation.
- Audit and risk leaders often have the broadest understanding of the organisation. It is natural to think about critical risk compliance as a priority, and it may be right but another priority lens is to consider

critical points of human interaction or expertise. Freeing up compliance responsibilities and automating controls, augmenting the process with AI, has the potential to add real value to the organisation. This may be the leverage required to enable funding and progress the concept.

- Collaboration is essential to implement and maximise the benefits of automated compliance. Audit leaders have relationships with all the key stakeholders and are well placed to facilitate workshops and advise on projects. Perhaps a first step could be an open meeting to identify areas of concern and opportunities for automation? Where might the priorities be?
- Consider how assurance might evolve in your sector. Implementing software to automate compliance is rapid compared to the time it takes to adapt behaviours, change cultures, attract talent, upskill auditors or develop a reputation. How long do you have to prepare? Do you have the skills to audit the algorithms that AI uses? Audit leaders, depending on the current scope of the function, may need to think about how well placed they are to deliver strategic audits once resource is freed up. Does the department have the skills and reputation required for the transition to operate at this level?

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## Closing Thoughts

In a dynamic, changing environment, internal audits that only look at historical data may not be delivering the value that organisations require. Automating compliance as a comprehensive strategy rather than in isolated pockets could transform this by providing real-time assurance.

Enabling the profession to transition away from compliance and control assurance towards more operational and strategic assurance has been discussed for many years. Technology is handing us the opportunity to make it possible. With the other hand it is also striking out at years of tradition and embedded skills that risk obsolescence.

Compliance is a continuous process. Is it time to let the bots do the detail?

***AI is a core, transformative way by which we're rethinking how we're doing everything***

*Sundar Pichai, Google CEO*

IBM/Chartis – [Guide to AI in risk and compliance](#)

KPMG – [Innovating compliance through automation](#)

PwC – [Moving at the Speed of Innovation](#), State of IA Profession 2018