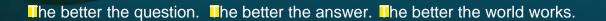


A fully digitalized and holistic solution for Internal Audit Digitalisation of IA – the new split of work between the Human and the Machine





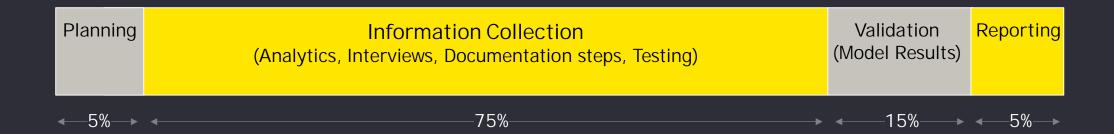


# The case for change

- Organizations are managing evolving consumer expectations, new partnerships, dynamic ecosystems, changing industry boundaries, disruptive business models and new competitive domains.
- 2 Every industry is changing and the cycles of change are moving ever faster.
- 3 Industry convergence is touching every market segment.
- From technology and climate, to geopolitics and trade, the outside landscape is changing dramatically.
- Operating models are shifting employees seek purpose-driven organizations; full time roles are being replaced by gig work; nature of work is changing due to technological advances



## What if there is no limit in access to information?



### An outside statement

### How much time will TeamMate Analytics save me?

Typically, we expect TeamMate Analytics to save an auditor 10-20 hours each month. Of course, this varies widely, depending on several factors. For example, in one location you could find that just one test using TeamMate Analytics takes 5 minutes, and eliminates 3 days of manual work. In another location, you may find that they simply can't get the data you need electronically, so there would be less scope for TeamMate Analytics to save you time.

### How to "get better in what we do today"?

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Digital Excellence:

- » Increase efficiency & effectiveness of IA delivery through:
  - » significant use of foundational analytics (descriptive)
  - » use of process automation technology (RPA)
- » Optimize operations through further process standardization.

Off- / near shore hubs and flexible workforce:

» Transition to a flexible people resource model (near shore / offshore hub, flexible workforce, freelance network)

### į

How to improve efficiency and effectiveness of existing IA work?



#### Expected outcome compared to today:

- Increased efficiency of delivery by 75% with focus on execution of audits (e.g. IA RPA to audit high-volumes of data which is fragmented in different sources)
- More effective projects delivered by at least 50% (e.g. replace substantive testing with full population testing; analyze all data points to enable identification of the root cause behind control failures)
- » Optimized and faster operations by 50% (e.g. standardization of engagement protocols for scoping, execution and follow-up; digital and easy to adopt work programs (plug-and-play); replacement of manual audit procedures or planning tasks with analytics; implementation of lean IA follow-up approach)
- Lower IA fix cost structure by 20% through consistent use of a flexible people resource model and to "free up" budget for innovations and technology investments

+75% Efficiency increase in delivery

Projects delivered more effective +50%

50% Faster
IA operations

Lowered IA fix costs

-20%



### How to "become more relevant" to our stakeholders?

#### How to "become more relevant" to our stakeholders?

Revolutionize the approach of Internal Auditing:

» Enable the function to enhance relevancy to the organization and their stakeholders

Disruptive Innovations:

- » Integrate and connect 'digital enablers' through:
  - » Establish Advanced Analytics (predictive, prescriptive)
  - » Cover risks and topics beyond traditional scope for emerging risks (digital, cyber, social media, etc.)

Enhance collaboration within the organization:

» Significantly enhance collaboration within the organization and across the LoD

#### Expected outcome compared to today:

- » Significantly increased risk coverage of audits / full risk coverage compared to today with focus on execution of audits (e.g. Predictive IA Analytics to directly focus auditors on existing red flags and issues and their impact for the future; leveraged existing data to deliver insight and value, delivering a cross business view that others cannot provide)
- Shift of audit plan and focus to address risks and topics beyond today's scope by at least 30% (e.g. baseline assurance covered by extended risk coverage to higher relevancy of IA by covering emerging risks)
- » Continuously pushed analytics results to 1<sup>st</sup> and 2<sup>nd</sup> line by 3-5 value-add analytics per year (e.g. opportunities to directly recover cash (incorrect payments, Expense recovery, VAT recovery); value-add from improved effectiveness (Working capital, better negotiated deals with suppliers); potential savings through eliminating inefficiencies (reduction in transaction processing volumes))

Which risks and topics will IA address beyond today's scope and how?





Emerging risks covered

+30%

 $\sim\!3\text{--}5$  Value-add analytics p.a. pushed to  $1^{\text{st}}/2^{\text{nd}}$  line



## Potentials to re-define the split of work between the human and the machine (1/2)

### Example for Audit Execution:

Stages & Step by Step activities	Machine	Auditor	Notes for split
Engagement Set-up and Planning/Scoping			
Conduct preliminary function, entity and industry research as well as research/background re the specific audit	Х		Research based on publicly available information, including leveraging research conducted by CBK, review prior workpapers and reports, etc.
Coordination (Other risk functions, External Auditor, decentralized IA teams, functional)		X	High-touch, cannot be done remotely
Resource identification and coordination with staffing	X		
Schedule resources (SMRs, local staffing, externals, guest auditors etc)	X	X	
Set up engagement in Audit SW	X		
Develop standard communication on engagement level (audit planning, agreed ways of working memo, announcement letter etc.)	X		
Review, adjust, approve communication on engagement level (audit planning, agreed ways of working memo, announcement letter etc.)		X	
Documentation			
Develop standardized work products on project level (document request list, standard audit programs / audit work program specific to process and industry supported by WP repository and other (external) sources [refer to Testing for details]	Х		
Understand and document business processes			
Conduct meetings with process owners	х	Х	High-touch, cannot be done remotely, however, can be more efficient with (intelligent) Speech-to-text functionality
Develop draft process documentation	X		Based on (un) structured data / templates to be filled out in interviews with process owners
Finalize with the auditee		X	High-touch, cannot be done remotely
Conduct and document walkthroughs			
Obtain existing process documentation from the client	X	X	Analytics and Process Mining enabled
Conduct meetings with client on process changes		Х	High-touch, cannot be done remotely
For new/ modified processes, understand the process	х	Х	Analytics and Process Mining enabled
Obtain supporting documentation to conduct walkthrough	Х	Х	Based on unstructured analytics – documents to be send to HIRO and the stored in EYD based on Al understanding
Document draft walkthrough results	Х		Based on (un) structured data / templates to be filled out in interviews with process owners and by (intelligent) Speech-to-text functionality
Discuss and finalize with the client		Х	High-touch, cannot be done remotely
Task spilt (incl. combined tasks)	12 out of 17	10 out of 17	

## Potentials to re-define the split of work between the human and the machine (2/2)

### Example for Audit Execution – cont'd:

Stages & Step by Step activities	Machine	Auditor	Notes for split
Execution			
Develop/update RACMs and audit programs			
Develop RACM draft	Х		Updated based on results of walkthrough
Develop preliminary audit programs	X		Based on RACM repository
Review and finalize RACM and audit programs		X	High-touch, cannot be done remotely
Testing			
Select sample	X		Rules based per test
Obtain evidence		Х	Onsite role is to electronically transfer the evidence to machine
Perform testing (Machine leveraging automation for standard test procedures / EY local team for complex test steps)	Х	Х	Based on evidence electronically transferred by onsite team to machine for automated testing per standard test procedure
Perform data analytics and consume results	X	х	Automated on it's own
Draft issue summaries	X		Based on RACM / Work Program documentation by EY local team
Review and finalize issue summaries with the client		Х	High-touch, cannot be done remotely
Reporting and Follow-up			
Prepare draft report – project level	X		"Report Generator"
Review and finalize report (including obtaining management responses, closing meeting, etc.) – project level	X	Х	High-touch, cannot be done remotely, but enabled by digital audit report
Prepare draft audit committee package – engagement level	X		
Discuss audit committee package with the client and finalize – engagement level		Х	
Engagement Administration and Wrap-up			
Knowledge Sharing among teams	X		
Development of team training materials	X	X	
Engagement Economics (monitoring budgets to actuals, etc.) – at lest in DRAFT modus for review	X		
Set-up / pre-fill QM & Archiving	X	Х	Sign-offs to be done by team members as required
Task spilt (incl. combined tasks)	13 out of 17	9 out of 17	

## The changed approach - Audit Execution as illustrative example

Finalize and issue Plan Fieldwork report » Prepare draft audit report » Distribution of final report to the Announcement of the audit to the management » Review of analytics and pre-audit on information (incl. documentation provided) Executive summary of in-scope audit object / entity / auditees defined recipients (e.g Managing Interviews and walkthroughs > Findings Agreement of availabilities and absence with auditees Director of the auditees / audited » Adjustment of audit plan (if necessary) Analytical and substantial (sampling) audit procedures » Recommendations entity, Executive Board, CAE) » Documentation of audit procedures Action plan (if agreed) Develop work program and working areas » If required, additional presentation Conduct root cause analysis » Include management » Design resourcing model and discussion of the report >> Validate findings with auditees (e.g. process owners and management) Distribution of document / data request list response Obtain feedback through customer » Preparation of audit time schedule Develop (draft) report (incl. recommendations) » Finalize report satisfaction survey » Fieldwork Closing meeting Sather data and information Step Plan Fieldwork Derive Information Automate Conduct Review of Automate (controls) Enhance methods of Conduct fieldwork Perform interviews and Validate findings Develop (draft) report Finalize and issue report processing needs information information analytics and pretesting procedures auditing based on analytical testing with walkthroughs with support with auditees based (incl. recommendations) based on based on risks audit on based on processing with processing with on beyond today's information provided based on RPA (Robotics Visualization Visualization of RPA (Robotics Intelligent Speech-tontelligent Speech-to-IA Video Reporting #High Impact \*\*Advanced Enhanced Root **\*\*\***Advanced Analytics Digital Methods DIGITALIZED STEPS FOR EXECUTION [ TODAY!] Analyticspreof Analytics Cause Analysis Audits Process Analytics Process text Process Mining Digital Boradroom audit results (e.g. (eRCA) Automation) pre-audit Automation) Process Mining Automated / digital technology results (e.g. Spotfire/ External Anayltics, e.g. BEAM / ARC for reporting Spotfire/ Tableau) **External** IA Reporting based Digital Media Analytics Risk Culture Tableau) Anayltics, e.g. interactive Digital Media dashboards Analytics Address risks and Performing De-scoping of low risk areas and Enhance Audit of human Enhance risk coverage of Automate delivery Enhance risk Automate delivery Enhanced and target topics beyond data extraction adjustment of IA working areas effectiveness of behavior and risk audits significantly: through transcription of coverage of audits through automated oriented report based today's from ERP as a (incl. documents requirements) fieldwork based culture embedded audit meetings significantly: (draft) report creation on videos, interactive Enhance effectiveness of scope through on RPA to within classic dashboards, clickpre-requisite Provide auditors with pre-audit red De-scoping of low fieldwork based on Provide insights to for follow up efficiently process controls testing trough examples etc. flags and exceptions to directly predictive analytics to auditors based on EY risk areas transformation repetitive, and enhanced deep-dive within start of fieldwork provide auditors directly knowledge repository & loading deterministic, through better Provide auditors with red flags and high-volume tasks understanding of activities as a Reduce time spent by with audit red observations/ such as standard the real problem base for consultanton flags and exceptions information testing documentation work and exceptions based porcessing. procedures on predictive Reveal risk impact of gives them a room to add audit objects based on value to the analytics statistical modelling and documentation

machine learning

## How to show the reduced effort? - Reporting as illustrative example

Focus today:

### Complete Audit documentation

### Prepare Draft Report

Finalize & issue report

>20%

75%

- Automate delivery and reduced time for through automated audit documentation based on
  - » digital transcription of audit meetings (Voice-to-text)
  - insights and substantial content provided to auditors based on embedded knowledge repository and real time feedback on transcripted documentation
- Re-think "traditional" reporting content to build enhanced and target oriented:
  - » IIA requirements covered within IA Software documentation (e.g. "where", "when", "who" etc.)
  - » Simplify to key messages in Exec. Summary style (covered risks, major pain points identified, action to close gaps as a maximum) instead of standard details (Executive summary, detailed findings, recommendations and action plan etc.)
  - » Key messages to be challenged by "better questions" and IA communication principles:
  - 1. Will the auditee and your stakeholders understand the structure? Principle: Easy to navigate and digest
  - 2. Is your content digestible? Principle: Clear, simple messages easily understood
  - 3. Are root-causes of identified issues clearly communicated? Principle: Clearly distinct between issue, symptom and root-cause
- 4. Will the auditee and stakeholder 7. Does it stand out of the recognize themselves? Principle: Keep the reader / listener engaged
- **5**. Does it meet their needs? Principle: No surprises based on aligned topics during the audit
- 6. Have you had an independent challenge? Principle: Validate key message and structure via 4EP

(draft) report creation based on » digitalized audit documentation,

Automate delivery through automated

- » Intelligent processing of data base within Audit Software (= IA Knowledge Repository)
- » and robotics based transcription of content (e.g. RPA for automation and / or Knowledge Embedded Voice Interactive Network)
- Re-think "traditional" reporting format to build enhanced and target oriented:
  - » "communication of results" based on videos, interactive dashboards, clicktrough examples etc.
  - » "Lasting actions" based on interactive data based for auditee and Follow-up by IA

8. Can you deliver this via an oral presentation? Principle: Start with the end in mind as the basis for enhancement of presentation (e.g. IA

memorable / a picture

crowd? Principle:

paints a thousand

Impactful and

words

Video Reporting)

Reduce "prepare draft report" and focus on added value of communication:

Focus tomorrow:

Complete Audit documentation	Prepare "communication"	Finalize & communicate added value
>15%	<b>←</b> 25% →	₹ 25% →

Shift effort and focus on "communication of results" and the value-add of IA by reducing effort on "traditional" IA reporting und usage of new / advanced technology (e.g. Executive App with Dashboards, Video Reporting, Integrated Action Tracker)



## How to display split of work in relation to maturity?



### **Technology**

#### Digital foundation:

- Begin of using digital tools

#### Field digitalization:

- Partial automation of operations performed by auditors
- Audit processes that do not require judgement are handled by audit service robots

#### Intelligent automation:

- Most data processing and reconciliations performed automatically
- Auditor work based upon results of automated processes

3+ years

#### Real time audit:

- Full automation of audits using AI
- (Continuous) auditing established for baseline assurance needs

## Continuous and flexible auditing / monitoring:

 Respond to the risks and needs of the business identified on a continuous basis through Flexible Audit response methods and technology



Fieldwork audit focus:

- The fieldwork almost fully

conducted by auditors

#### Audits performed end-to-end:

**Evolving** 

- End-to-end audits with focus on highest risk areas
- Fieldwork audits partially remain due to lack of underlying digital process

## Audits enabled by data and technology:

**Established** 

- Structured scoping in of red flags with human interpretation of the results
- Issue and case management performed by humans

### Audits focused on facts:

**Advanced** 

 Auditors perform audits based of results produced by Al's processing and predictions

#### Audits based on decisions only:

Leading

- Auditors guide machine on what needs to be done
- Auditors take ultimate decision on flexible response based on pre-interpreted results of the machine



**People** 

- Technology used for spot checks



5+ years

by auditors

## A digital approach to IA will be the game changer for the IA profession



### What is covered through EY VIA?

**)** 

EY VIA key components

Outcomes

It is a suite of tools, solutions and methods to be lifted to one platform

It is for Internal Auditors (IA function) and business stakeholder (auditee)

Its modularized approach gives the flexibility to address all maturity levels of the IA function

It will equip IA with a new and disrupted IA delivery model

• Data:

We treat data as an asset.

• Risk Monitoring:
We monitor downside, upside and outside risks continuously.

• Flexible Audit Response Model (FARM): We have flexible and proactive answers to risks.

Communication:
 We innovate communication of results as the 'product' of IA.

Improved work re-allocation



between the human and the machine leading optimized and faster operations

Better interpretation of results



by the human leveraging the preinterpretation done by the machine

Significant increase in risk coverage of audits



Expansion of IA delivery – the breadth and depth of risks



## Key requirements for a digital approach

### Transformation leadership is the context, but to remain leaders we must disrupt:

- Effectively managing risk is key to successful transformation.
- EY's leadership position in the internal audit space strengthens our NextWave ambition to be the global leaders in transformation consulting.
- The business landscape is in flux and IA must adapt with it.
- EY VIA will allow us to define the changes to remain the front-runners, maintain and even gain market share.

### **Technology** is the future:

- Modular, digital platform which will disrupt the classical approach by automating the end-to-end IA lifecycle and rebalancing the workload between humans and machines.
- Audit teams can now leave the slow, low-value, manual processes of the past behind them, be more dynamic and agile, broaden their horizon and deliver more comprehensive assessments and suggested remedies.

### Enhanced value, topline and bottom line:

User-friendly, disruptive technologies will reduce costs and increase margins by helping our internal audit teams
execute jobs quickly and more efficiently.



## Revolutionize your internal audit function – are you ready ??



## Full Risk Coverage with complete population testing

- EY VIA covers the entire risk universe for the whole organization with 100% transaction coverage addressing the full population.
- Provides a comprehensive view that enables audit teams to identify issues in real time.



#### Respond faster to risks

- EY VIA helps internal auditors deliver a thorough root-cause analysis and continuous risk monitoring.
- Shift from reactive to proactive, providing insights that help anticipate future risks and recommend measures that mitigate or reduce risk



## Improved efficiency and avoidance of costs

- Improves audit productivity and efficiency.
- Having a broader and clearer picture of high risk areas leads to avoidance of costs.



#### Increase of relevance

- EY VIA helps internal auditors become more relevant through real-time and deeper insights.
- More time to focus on risks and topics beyond todays scope



### End-to-end one-stop shop

- Single comprehensive tool enabling full digitalization of the IA service delivery – Strategy & IA Management, Risk Assessment, Audit Planning, Execution, Reporting & Communication.
- Mix of continuous Risk Monitoring and periodical Risk Assessment
- Provides combination of (traditional) backward looking approach, real-time and predictive analysis.



## Integrated and integrable solution

- All the modules (and related services) of the solution are integrated, providing consistency.
- The solution itself is integrable with the client's environment.



### Scalability and up-to-date

 Meet ever changing and fluctuating business usage needs with unprecedented scalability offered by EY VIA.



#### Flexible reporting

- EY VIA provides flexible, differentiating and industrialized reporting capabilities
- Timely and efficient reporting increases business value and induces trust in the internal audit function.



#### EY | Assurance | Tax | Transactions | Advisory

#### About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

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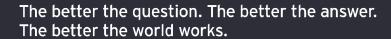
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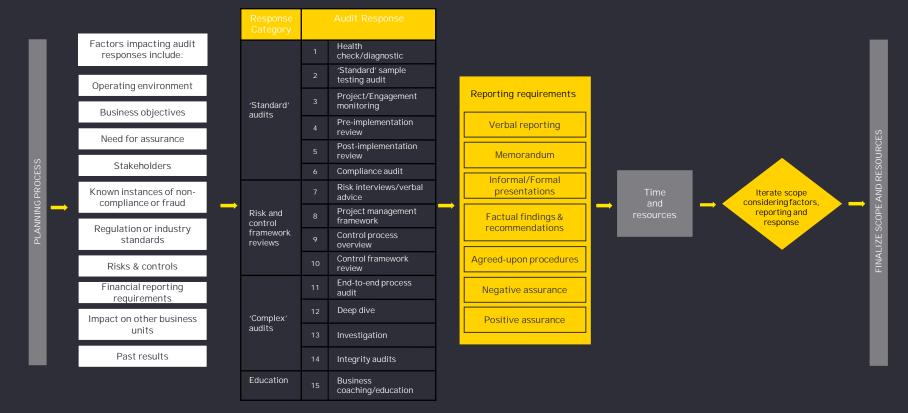
The better the question. The better the answer. The better the world works.







### Audit response options:





Report type	Report description	Use considerations
Verbal reporting	Reporting provided on an 'on time, real time' basis as issues arise or when management requires the advice from Internal Audit practitioners on a specific point / topic. The latter is generally regarded as 'corridor discussions'.	<ul> <li>Use verbal reviews when management needs 'real time' feedback about key risks</li> <li>A preliminary response identifying the need for more indepth work and should be backed up by a minute, file note or internal memo.</li> <li>Quickly and efficiency assess:         <ul> <li>How management sees risk and its impact on the business.</li> <li>Controls implemented to mitigate the identified risks.</li> <li>Whether they believe controls are effective and efficient</li> </ul> </li> <li>Any verbal reporting provided should be supplemented with an internal memo. For issues arising that require follow-up, a formal audit note has to be issued and aligned with the affected party</li> <li>Input provided at Steering Committee Meetings or other Internal Audit participation which should be documented.</li> <li>Issue tracking and follow-up:         <ul> <li>For corridor discussion: agreed upon with management</li> <li>For issues arising from formal events (e.g. SteerCo): separate audit note with issue tracking</li> </ul> </li> </ul>
Internal memos/ minutes and audit notes	Documented file notes to support assertions provided to management or key outcomes of meetings and Internal Audit activities.	<ul> <li>To supplement any verbal reports provided to management.</li> <li>To document key project milestones and other observations made or information obtained during Internal Audit activities.</li> <li>Issue tracking and follow-up:         <ul> <li>For corridor discussion: agreed upon with management</li> <li>For issues arising from formal events (e.g. SteerCo): separate audit note with issue tracking</li> </ul> </li> </ul>
Informal/formal presentations	<ul> <li>Presentations facilitated by Internal Audit may be made for example in response to Steering Committee requests or education requirements.</li> <li>Presentations may take the form of workshops, forums, round table discussions and the like.</li> </ul>	

Report type	Report description	Use considerations
Factual findings & recommendations  Project reports Gap analysis Risk rated reports	<ul> <li>Reports are subjected to the following limitations:</li> <li>Extrapolation of results is not permitted</li> <li>No opinion or conclusion is permitted</li> <li>Deliverables are generally for the use of the client only</li> </ul>	<ul> <li>Most predominant form of reporting for engagements.</li> <li>Limited to a particular area/process as defined by an agreed scope.</li> <li>This type of report may be used for investigative type of engagements.</li> </ul>
Agreed-upon procedures	<ul> <li>Reports produced under agreed-upon procedures are subjected to the following limitations:</li> <li>Opinions or conclusions are not permitted</li> <li>Only the procedures listed in the engagement letter will be reported on</li> <li>Reports will be issued on an 'except for' basis, against each individual procedure or all procedures collectively.</li> </ul>	Predominantly used for management requested engagements or where third parties will receive a copy of the report.
Negative assurance	<ul> <li>Internal Audit will define the scope of work.</li> <li>A detailed assessment of the characteristics of the engagement is required to determine whether an opinion can be formed.</li> <li>Reports are issued on a 'nothing came to our attention' basis.</li> </ul>	<ul> <li>Provided in relation to voluntary publications issued by the organization where they want to provide stakeholders with a form of assurance over the content.</li> <li>Can also be provided in relation to compliance requirements (both internal and external), eBusiness, environmental management, and control environments.</li> <li>May be provided where results will be provided to third parties.</li> </ul>
Positive assurance	<ul> <li>Internal Audit will define the scope of work.</li> <li>A detailed assessment of the characteristics of the engagement is required to determine whether an opinion can be formed.</li> <li>A significant amount of substantive testing is required to be able to provide this level of assurance.</li> <li>Reports are issued with an absolute opinion over the area in scope.</li> </ul>	<ul> <li>Primarily provided in relation to financial or operational information reported to either the public or significant stakeholders.</li> <li>Required by clients in relation to regulatory or legislative compliance, eBusiness, and environmental management.</li> <li>Very rare for Internal Audit to provide positive assurance but it is an option with appropriate QA on scoping.</li> </ul>