Key Opportunities

- Deliver advanced analytics and visualization throughout the audit process
- Help business stakeholders effectively capture value of Robotic Process Automation
- Deliver value more effectively through Agile Internal Audit

Key Insights

- Focusing on insight first and let compliance follow suit
- Changing reporting from unbearable to concise and useful
- Creating far-reaching change in your organization should start small and create coaches at every opportunity
- Being in Internal Audit right now is exciting because of the possibilities for innovation and change
- Managing stakeholders is key to our success, but requires the right approach and communication
- Building a partnership and independence are not mutually exclusive

“Everyone recognizes that Internal Audit needs to change, even if they won’t say it.”
- Sandy Pundmann, Deloitte
Agile Internal Audit™
MINDSET WITH PROCESS
WHAT IS REALLY DIFFERENT?

- **Clearer outcomes** – what are you solving for? (i.e., project canvas)
- **Early and often** engagement with Internal Audit clients business partners and stakeholders
- Concise and targeted **documentation** (less words) (i.e., POV)

*Time and effort focused on the right things – integrated into the process*

OUTCOMES

- Faster project delivery cycles → realign available resources to other critical risks
- Valuable and insightful results
- Empowered/engaged → audit teams (leverage cross functional teams)
HAVE TO HAVES

• Outcome-driven mindset aligned to **efficiency, cost** savings, and **value** driven
• Decisions made with regulatory requirements, internal audit mission and their business partners in mind
• Initial agreement on “have to haves”
• Defining project’s value – balance value preservation (assurance) and value creation (advisory)
• Identify key stakeholders/business partners (audit committee, executive management, business unit leaders, field management)

WANT TO HAVES

• Variability in how you meet requirements
• Frequent and concise communications
• Issue, risk, action, insight tied to “so what”
• Iterative plans and process at every stage (planning, fieldwork, reporting)
• Initial sprint defines remaining sprints
• What is good enough to meet the needs!
DELOITTE AGILE MANIFESTO

1. OUTCOME DRIVEN | VALUE DRIVEN
2. JUST-IN-TIME | PROACTIVE APPROACH TO THE “RIGHT PROJECTS AT THE RIGHT DEPTH/FOCUS
3. ONE SIZE DOES NOT FIT ALL – CUSTOMIZED PROJECT FOCUSED ON VALUE AND RISK
4. COLLABORATIVE APPROACH – TAKE THE JOURNEY WITH OUR CLIENTS
5. MIX IT UP A LITTLE BIT, BREAK SOME EGGS – CHALLENGE “THAT’S THE WAY WE’VE ALWAYS DONE IT”
6. DECISIONING “AS YOU GO” WITH TRANSPARENCY AND ALIGNEMENT
7. CONTINUOUS COMMUNICATION WITH ALL STAKEHOLDERS
8. BE QUICK AND ITERATIVE VS. CONFINED TO A PLAN
9. IMPACT OVER THOROUGHNESS – “GOOD ENOUGH” (80/20 RULE)
# Project Canvas: (Project Title)

## About the Business
- How does the business area align with the Corporate Strategy?
- What are the business’ objectives?
- What are the risks to the business achieving its objectives?
- What is the business landscape?
- Existing business metrics?

**Guidance:**
- Interviews with Executive Accountable and key business area stakeholders to agree on the "so what"
- Business process narratives/flowcharts
- Internal management reports
- Revenue/Expenses
- Costs to Operate
- Geographical Distribution
- Prior internal/external reports

## Project Drivers
- Why is this project important to the business?
- Why is it on the audit plan? /Drivers from the risk assessment?
- What is going on within the business?
- What is the value-add (relevance) to the enterprise?
- What are we solving for?
- What questions will be answered at the end of the review?

**Guidance:**
- Understanding of the control environment
- Internal/External influences
- Qualitative and/or Quantitative
- Alignment with business strategy, goals, and objectives
- Alignment with business area risk

## Cross-Functional Impact
- Key IT systems/reports supporting and/or monitoring the business process?
- Implications of change
- Compliance considerations?
- Financial Reporting/Impact?

**Guidance:**
- Compliance elements
- Data Available/Reports Used
- Exception Reports
- Financial Impact
- Operational Impact
- Global Functional Team Involvement
- Cross Business Area Impact

## Value Proposition
- What is the value of doing an AGILE audit in this area?
- How is an AGILE audit going to bring value to the business?

## Key Stakeholders
- Who is most concerned about the value of the project?
- Cross functional ---- Who will be most impacted?
- Internal Audit Market Leader

## Metrics/KPIs
- Key metrics used by the business to measure achievement of its objectives?
- What are the measures of success for the audit?

**Guidance:**
- Executive Accountable **(SVP or higher)**
- Internal Audit Market Leader/CAE Direct Reports

## Project Scope
- What is needed to achieve the project objectives?
- What are the concludeable areas for the project?

**Guidance:**
- Prioritized concludeable areas
- Applicable business areas (sub-processes)
- Business Policies & Procedures
- Laws & Regulations
- Data/Transactions
- Timing
- Locations

## Risk & Control Log
- Business Risks & Controls
- Identify and prioritize the sprint backlog.
- Define project sprint timeframe.

**Guidance:**
- Timing of Sprints
- Hierarchy of Sprint backlog based on risk and value/importance to the business and achieving the audit objectives.

## CORE Project Team
- Guidance Business:
  - Key Business Owner **(VP or higher)**
  - Finance / Operations / IT / Compliance / GeC / International (as applicable)
  - (RACI) Responsible, Influencer, Decision Maker, Need to be Informed

**Guidance Global Audit:**
- Finance / Operations / IT / Compliance
- Data Analytics
- Global Functional Team
- Business area Subject Matter Expertise
Digital Internal Audit™
We are on the cusp of “Business 4.0”

Digitization of white collar jobs via robotic and cognitive automation, and advances in data science have sparked the Business 4.0 revolution.

1st Industrial Revolution
- 1784: First mechanical weaving loom
- Introduction of mechanical production facilities with the help of water and steam power

2nd Industrial Revolution
- 1870: First assembly line
- Through introduction of mass production with the help of electrical energy

3rd Industrial Revolution
- 1969: First programmable logic control system
- Through application of electronics and IT to further automate production

4th Business 4.0
- This revolution redefines what it means to be a professional
- RPA will have commenced deployment in most large businesses by 2017
- RPA and Cognitive Automation will be ubiquitous in business by 2020
- Horizontal Machine Learning Platforms (MLPs) become ubiquitous by 2025

Within 10 Years
Dependence on Global Horizontal Category MLPs – (Possibly Regulated)
Widespread Cognitive Augmentation and Automation

1- Robotic Process Automation
Source: Industry 4.0: Challenges and Solutions for the Digital Transformation of Exponential Technologies, Deloitte AG, 2015 and Deloitte proprietary research

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### Digital Internal Audit landscape—How automation, cognitive, and advanced analytics are shaping Internal Audit

<table>
<thead>
<tr>
<th>Area</th>
<th>Technologies</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundation</strong></td>
<td>Data Integration</td>
<td>Integrated data to provide a consistent information foundation (<em>e.g.</em>, Compliance Risk and Regulatory Data Warehouse)</td>
</tr>
<tr>
<td><strong>Analytics</strong></td>
<td>Predictive Analytics</td>
<td>Software solutions using predictive models (<em>e.g.</em>, Compliance Risk Models)</td>
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<tr>
<td></td>
<td>Data Visualization</td>
<td>Software placing data in a visual context (<em>e.g.</em>, GRC Dashboards)</td>
</tr>
<tr>
<td><strong>Automation</strong></td>
<td>Robotic Process Automation</td>
<td>Rules-based systems that mimic human behavior to automate parts of repeatable processes (<em>e.g.</em>, Control Checks, Regulatory Reporting)</td>
</tr>
<tr>
<td><strong>Cognitive Intelligence</strong></td>
<td>Natural Language Generation (NLG)</td>
<td>Applications that accept structured data inputs (spreadsheet-like rows/columns), to generate seemingly unstructured narratives (<em>e.g.</em>, Flash &amp; Sales Reports, AML)</td>
</tr>
<tr>
<td></td>
<td>Natural Language Processing (NLP)</td>
<td>Applications that process unstructured data (e.g., text) and allow querying and generation of structured data (<em>e.g.</em>, P&amp;P Documentation Review)</td>
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<td>Machine Learning (ML)</td>
<td>Applications that are able to improve predictability and operation based on data they receive over time. (<em>e.g.</em>, Fraud Analysis Applications)</td>
</tr>
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<td></td>
<td>Augmented Intelligence (AI)</td>
<td>Applications able to mimic human behavior, such as visual perception, speech recognition, decision-making, and translation between languages (<em>e.g.</em>, Cognitive agents in risk adjudication)</td>
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### State of the Profession – Leaders in Advanced Analytics

#### IA Analytics Leaders Benchmarking Highlights

**Strategy & Vision**

<table>
<thead>
<tr>
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<th>6.3% average IA budget expenditure on analytics</th>
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<tbody>
<tr>
<td></td>
<td>Range: &lt;1% to 10%</td>
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</tbody>
</table>

|   | 100% have support on IA analytics from outside stakeholders – mostly from Internal Audit Team, followed by Finance |

|   | 50% have analytics tied into business success and performance metrics |

**Resources, Skills, & Competencies**

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<thead>
<tr>
<th></th>
<th>1/2 utilize A Hybrid Operating Model</th>
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<tbody>
<tr>
<td></td>
<td>An On-Shore Staffing Model</td>
</tr>
</tbody>
</table>

|   | Inconsistently distributed skillsets across ETL, Analytics, & Visualization tools |

|   | resources with average experience of over 6 years |

**Process**

|   | 100% have an Internal Audit Analytics Capability |

|   | 90% consider analytics when audit plan is developed |

|   | 80% include analytics rationale in every audit |

**Data & Technology**

|   | Proportion of audits using analytics is the most used metric |

**Inconsistently distributed skillsets across ETL, Analytics, & Visualization tools**

|   | IT support is generally viewed as adequate |

|   | Data access lead time for an audit <1 day to 3+ weeks |

|   | Data extracted by IA is the most common form of data transfer |

|   | Few consider cloud Services for data storage – database or shared network drive with restrictions |

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