

Modernizing Audits: DCAA's Approach to Data Analytics, AI, and Automation

THE
REDSTONE
EDGE



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DCAA

Modernizing Audit

DCAA's Approach to Data Analytics, AI, and Automation

How emerging technology is changing the tools available to auditors — while preserving professional judgment, audit quality, and data protection



Evolution — not replacement

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Why Audit Technology Is Evolving



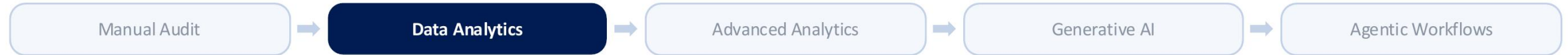
This presentation moves left to right through this continuum

As the information environment changes, the tools available to auditors must evolve with it.

Throughout this deck, each capability is marked IN USE TODAY, IN DEVELOPMENT, or CONCEPT. Please hold us to those labels.

Analytics in the Audit Process Today

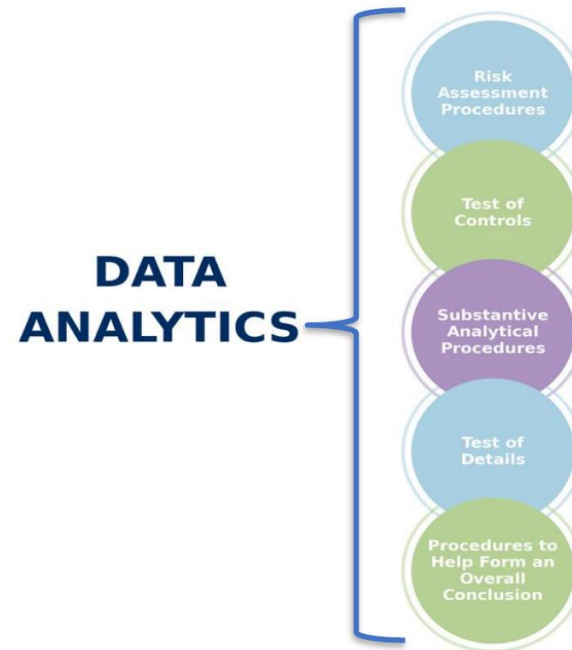
IN USE TODAY



What Guides Us?

- GAGAS
 - Sufficient and Appropriate Evidence
- DCAA Contract Audit Manual (CAM)
- Specialists: Statisticians
 - Quantitative and Statistically related Methods

How Do We Perceive DA in An Audit?



What Techniques Do We Use?

- Comparative Analysis
- Ratio Analysis
- Trend Analysis
- Data Analytical Modeling



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Analytics supplement audit procedures — they do not replace them.

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From Descriptive Analytics to Quantitative Decision Support

IN USE TODAY



Large data population



Risk Factors combined with Auditor and Audit Team Judgment



Quantitative Analysis/Data Analytics



Result Evaluation

Advanced analytics help prioritize human attention.
They do not eliminate the need for auditor judgment, and they do not produce audit conclusions.



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ICE: Evolving an Established Capability

IN DEVELOPMENT

Final Indirect Cost Rates

- 52.216-7 Allowable Cost and Payment
- Visual Basic ICE Model Created
 - Created in the early 2000s
 - Provides Uniformity and Consistency (Structured Outputs)

LESSONS LEARNED

- Old Technology can become a security risk
- Change is inevitable (Revolutionary FAR Overhaul)
- How do we get ahead of the curve?

CURRENT AND NEXT GENERATION

- Embrace Technology That is safe and commonly available (M Code – Excel)
 - Power Query ICE Model
- More Emphasis on Structured Inputs, and Data Validation (CSP)

An established capability being rebuilt on lessons learned — not a new technology replacing auditor work.



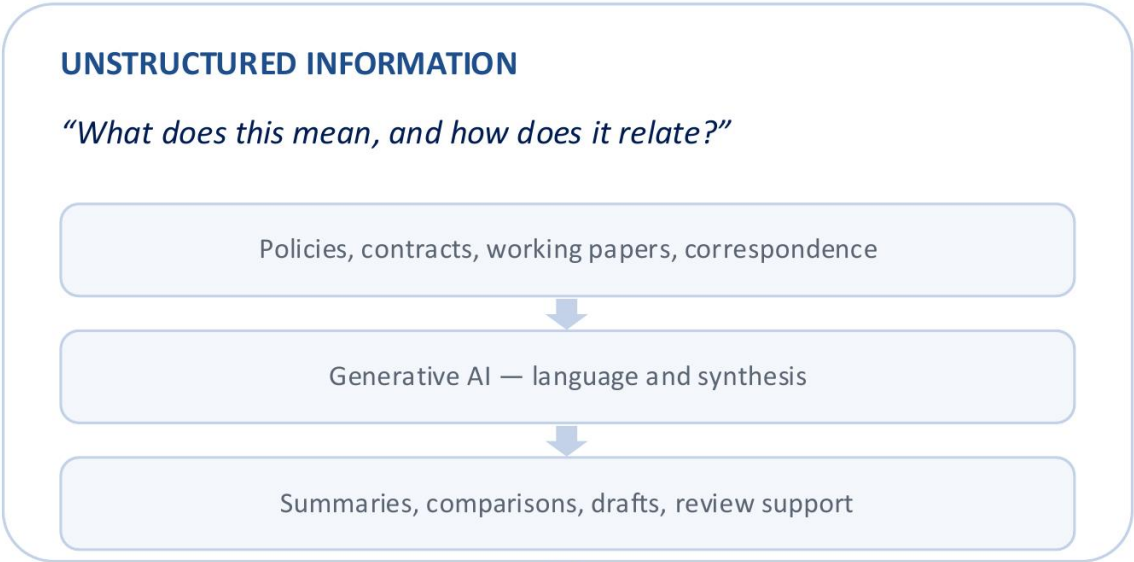
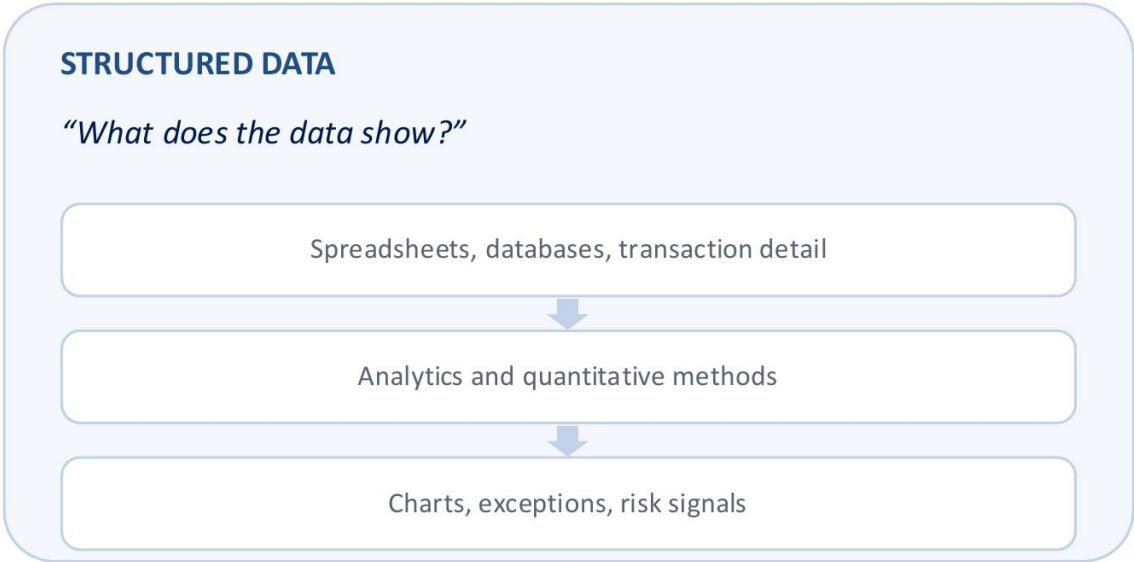
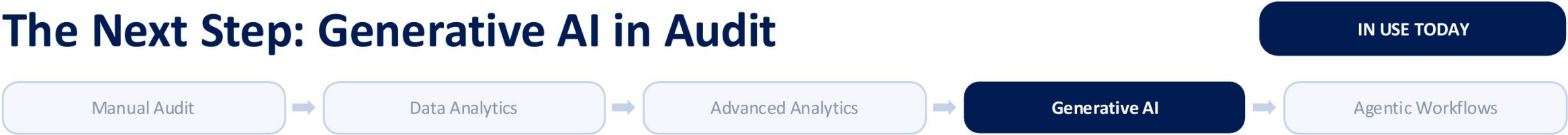
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The Next Step: Generative AI in Audit



Both paths end in the same place: the auditor remains responsible for the work and the conclusions.

Analytics tell you what the data shows.
Generative AI helps the auditor work with information that was never in a spreadsheet.

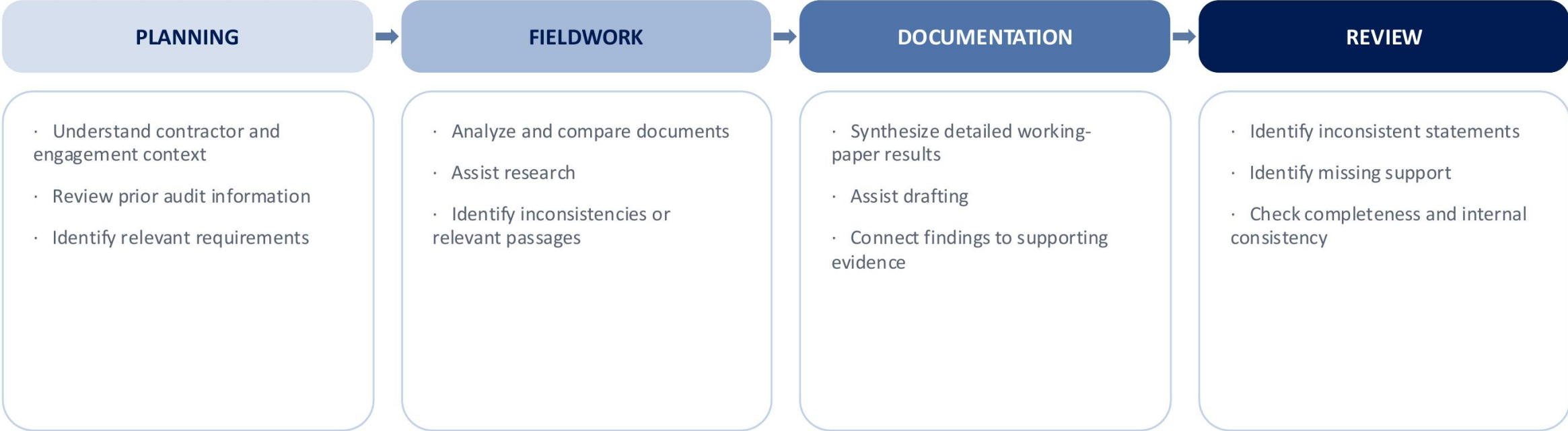


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Where GenAI Can Assist Across the Audit Lifecycle

IN USE TODAY



Human judgment and approval throughout

Assistance with the work — not authorship of the conclusions.



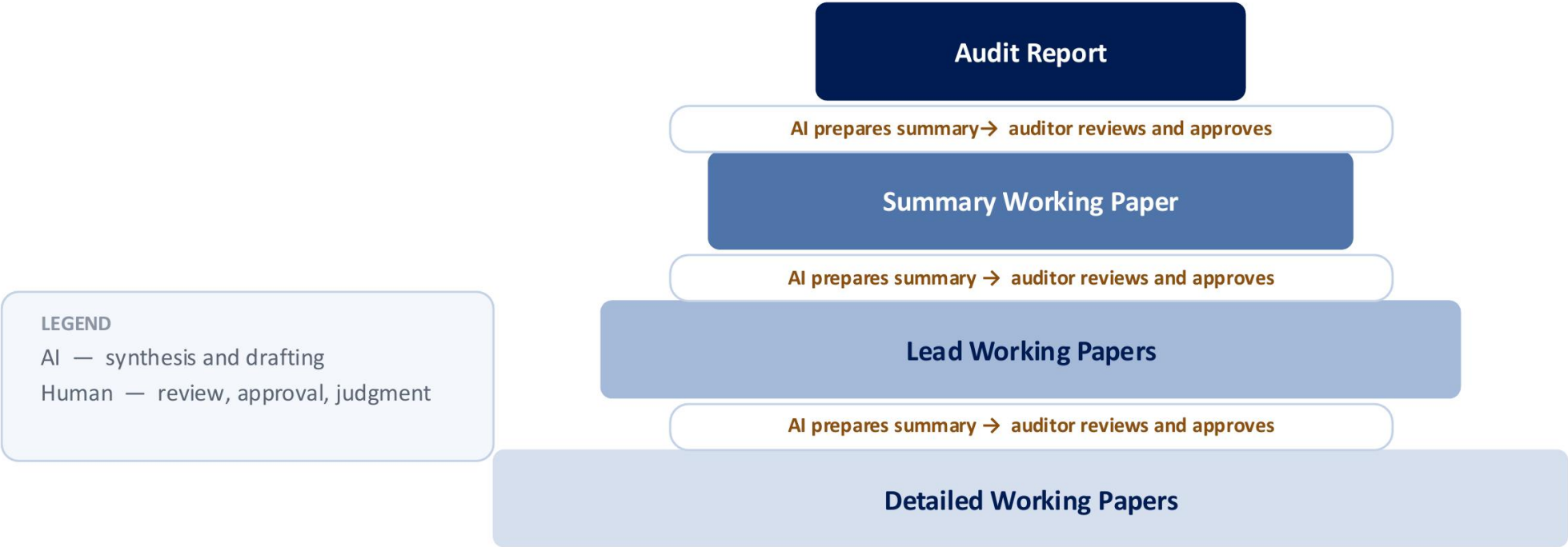
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Guardrails and training are explicit: generative AI cannot make final audit determinations.

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From Detailed Audit Work to Higher-Level Summary

CONCEPT



Every consequential audit judgment is made by the auditor, in the detailed working papers.

Each level is a synthesis of the work below it.
This is bounded synthesis of work already performed and judged — not autonomous auditing.



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What Happens to Contractor Data?

IN USE TODAY



Enterprise AI is not the same thing as consumer AI.

The environment, authorization, access controls, data handling, monitoring, and permitted use are part of the capability itself.



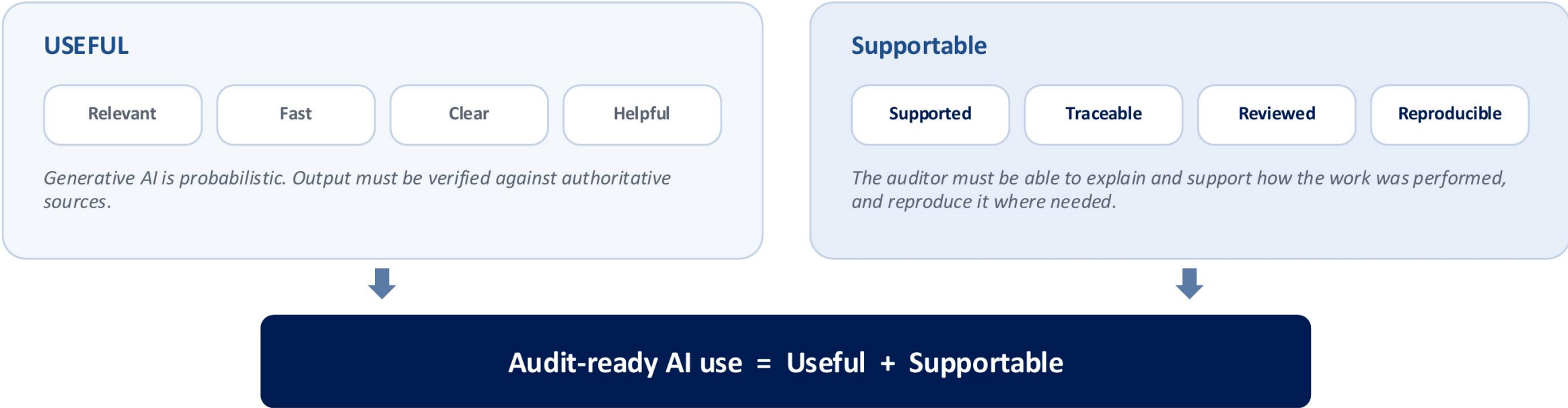
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Security and authorization requirements also affect how quickly new capability becomes available to us.

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Trust, Verification, and Audit Defensibility

IN USE TODAY



The question is not only “did the AI give me a good answer?”

It is “can I understand, support, and defend how that answer was produced?”

DOCUMENTATION OF AI USE

Governed by GAGAS 7.34 — the work must be capable of being understood by an experienced external reviewer. Inconsequential use is not separately documented. Final audit determinations rest entirely with the auditor.



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What DCAA Will Not Do



Will not place contractor proprietary data into non-approved tools

Including commercial large language models and public consumer AI services.



Will not reach consequential audit conclusions without human validation

A generative AI output is never the audit determination.



Will not delegate professional judgment to a model

Allowability, evidentiary sufficiency, sample adequacy, and audit conclusions remain auditor determinations.



Will not treat acceptance of an output as review

Oversight is demonstrated by the work performed before an output is accepted.

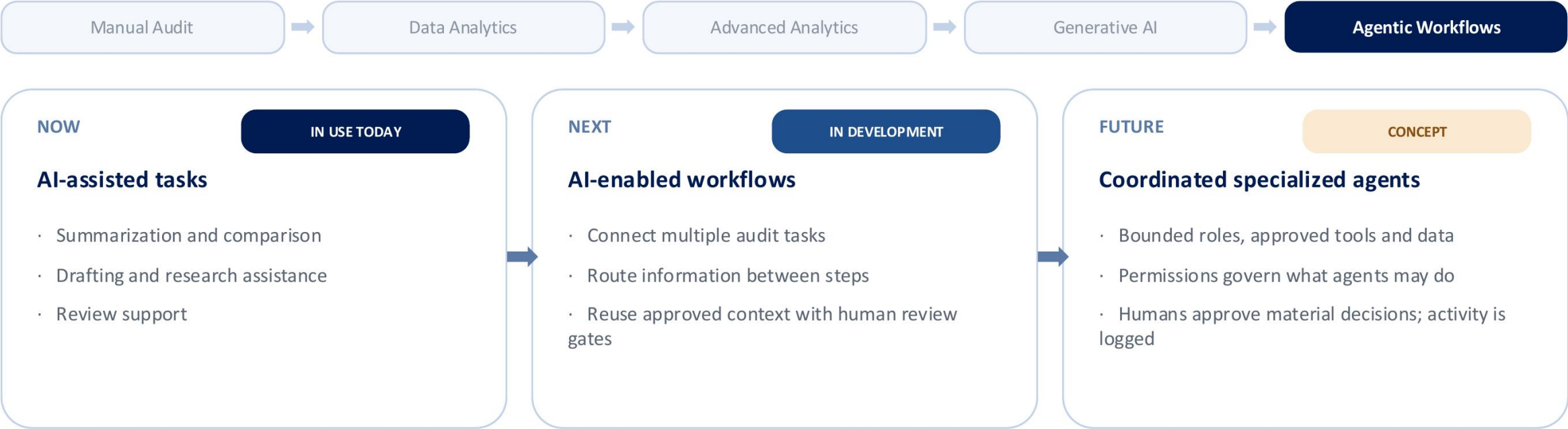
These are not aspirations. They are the operating rules the workforce is trained and governed against.



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What Is on the Horizon



The objective is not unrestricted autonomous auditing.
It is bounded automation of appropriate portions of the audit process.

What This Means for You

Historically, the practical scope of data requests was shaped in part by what could realistically be analyzed. That constraint is easing.

Potentially more granular data requests

Full-population, transaction-level analysis is increasingly practical. The trend is toward more granular information — not necessarily more requests.

There may be a trade in your favor

Working full populations can reduce reliance on extrapolating sample results, and can narrow testing where the data supports it. A possibility, not a promise.

Beyond that, it is early

Formats, timing, and standardization are not settled. We would rather tell you that than describe a future state we cannot yet commit to.

What does not change: the evidence standard, the exit conference, and your opportunity to respond.



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Questions & Discussion

What would you most like to understand about how DCAA may use analytics or AI in future audits?

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Manual Audit

Data Analytics

Advanced Analytics

Generative AI

Agentic Workflows



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Approved Environment and Tool Authorization

What determines whether a tool may be used

- Authorization of the hosting environment
- Classification and sensitivity of the information involved
- Identity, access control, and need-to-know
- Acceptable-use and training requirements

What this means in practice

- Capability arrives when the environment is authorized, not when a model is released
- Approval is capability-specific, not vendor-wide
- Agency data is not used to train commercial models

Tool approval and information classification together determine what may be processed.



Documentation of AI Use

The governing standard

- GAGAS 7.34 — documentation sufficient for an experienced reviewer to understand the work performed
- This is an existing professional requirement, not a new AI-specific rule

How it applies

- Work affecting the audit must be capable of being understood and supported
- Inconsequential use of generative AI is not separately documented
- Final audit determinations rest entirely with the auditor

The test is whether the work can be understood and defended — not which tool touched it.



Audit Selection

Where this stands

- We are exploring how AI might help inform what we audit
- The work is early and there are no concrete plans at this time
- Nothing described today changes current selection practice

What would have to be true first

- Governed, traceable data and documented methodology
- Human decision authority over what is audited
- The ability to explain and defend how a determination was reached

Risk indicators inform where auditors look. They are not audit conclusions.



Why Invest as the Audit Population Narrows

The environment

- Recent statutory changes narrow portions of the traditional audit population
- Customers increasingly have direct access to cost data
- Demand is earned on the value and speed of the product

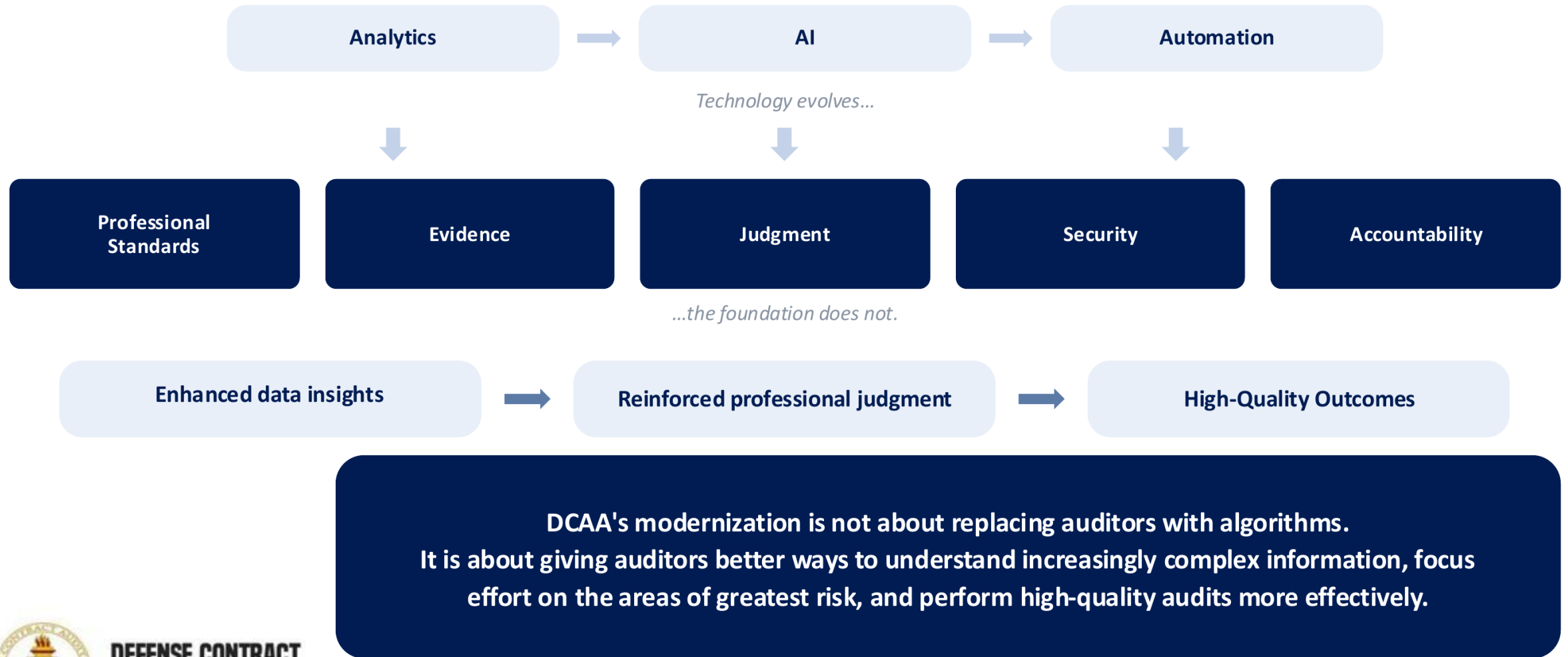
The response

- Deeper analysis over broader manual coverage
- Faster cycle times and earlier risk identification
- Analysis that is useful to the acquisition decision, not just to the audit file

Modernization is how the audit product stays relevant, not an end in itself.



What Does Not Change — and Where DCAA Is Heading



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