

Al and IA and 4 Pillars to Form the Future

PRESENTER

Mike Varney, Immediate Past Chair NAB IIA







Our Agenda

- Vision 2035 Results/Focus
- Why is Al different and where is Al heading
- 4 Pillars The Will Form the Future
- Ideas to get into the Al game





The IIA Vision 2035 Results









Shift Current Perceptions of Internal Audit



Embrace Technology



Expand Our Scope



Connect Internal Audit with Strategy



Grow Our Talent Pipeline





The Transition to Strategic Advisor: Expanding Our Impact

Internal Audit's Role Has Transformed, Have You?

Internal audit is evolving from a compliance-focused function to a strategic advisor

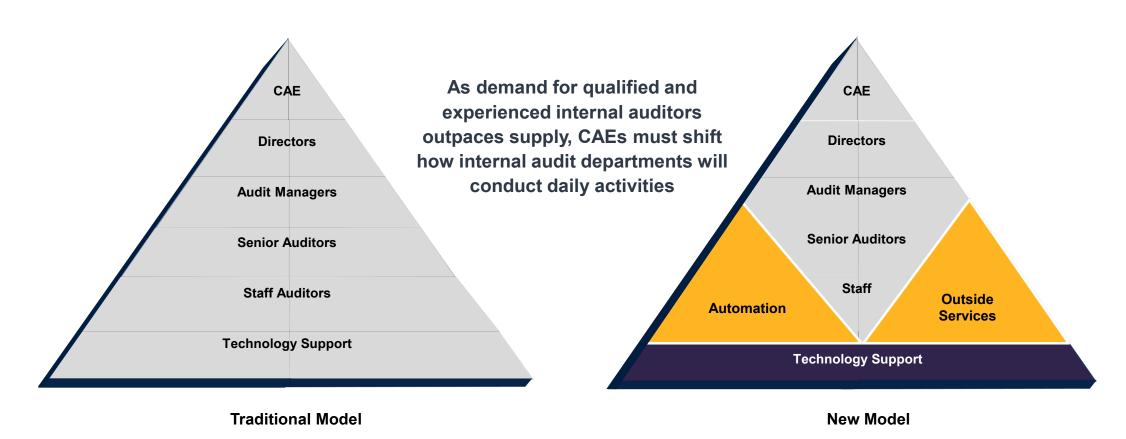
| Traditional Role | Modern Role | Future Role – Strategic Advisor |
|---------------------|------------------------|---------------------------------|
| Compliance | Operational Efficiency | Driving Innovation |
| Financial Controls | Governance | Agile and Adaptability |
| Risk Identification | Data Analytics | Real-Time Risk Monitoring |
| | Cybersecurity | Stakeholder Trust |
| | | Al and Predictive Analysis |
| | | |





Moving to a New Organizational Model

Internal Audit's Role Has Transformed, Have You?







Technology Will Continue Shaping the Evolution of Internal Audit

Mastering Technology with Continuous Learning



97%

of respondents agree new technology will increase the volumes of complex data available to analyze and assess.



96%

of respondents agree new technology will enhance an experienced internal auditor's skills to stay relevant.



93%

of respondents agree new technology will develop better insights for internal audit recommendations.



92%

of respondents agree new technology is key to helping internal audit add more value to their organization.





Why Is Al Different And Where Is Al Heading





We Hear Recurring Themes From Company Leaders Considering Al

UNCERTAINTY ABOUT AI

- I haven't really seen what AI actually does
- I'm not sure if it will generate meaningful enterprise value
- I'm not sure if it will keep my confidential information, confidential
- There are too many choices and technology is changing to fast to keep up

QUESTIONS ABOUT PRIORITY

- I've heard claims before with blockchain and big data, and those didn't help us
- I have 'must do' IT projects like security, ERP, and integrations
- We aren't in the business of implementing leading-edge technology

BUT FEELING PRESSURES TO ACT

Some senior leader is asking "why aren't we doing something"

Leaders are experimenting with uninspiring DIY results

Not materially advancing in the next 12 months feels like a risk





3 Fundamental Changes Since AICPA Report on AI

An Introduction to Artificial Intelligence and Expert Systems

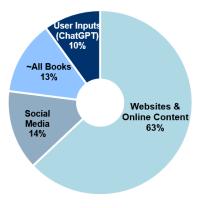




1. Computing Power Per \$



2. Artificial Neural Networks



3. Actual & Synthetic Data

AICDA .

AICPA American Institute of Certified Public Accountants

A special report developed for CPAs seeking to become familiar with artificial intelligence and expert systems technology.

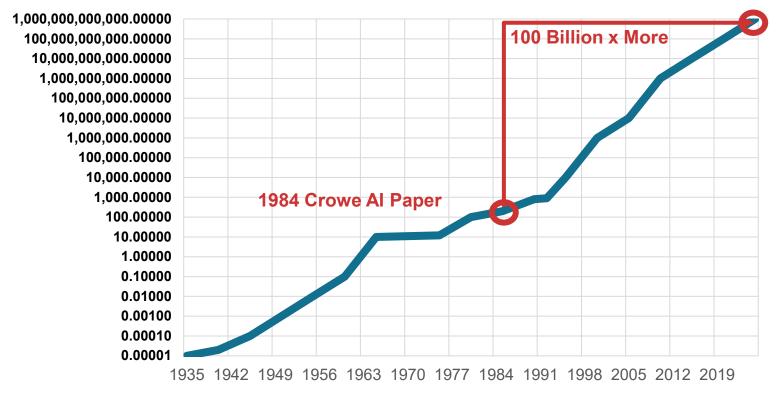




Al Surging: #1) Computing Power Has Changed The Ballgame

Price-Performance of Computation per Inflation Adjusted \$





Today

Past:

CPU = serial

Present:

GPU = parallel (Nvidia)

Future:

Quantum = many possibilities simultaneously

Source: Ray Kurzweil, Ph.D., "The Singularity Is Nearer," June 2024.





Al Surging: #2) New Algorithms For How Al Processes Information

1984: EXPERT SYSTEMS





Rigid Logic
Rule-Based, Predefined
Limited to Predefined
Brittle

Structure
Approach
Knowledge Source
Processing

2024: NEURAL NETWORKS



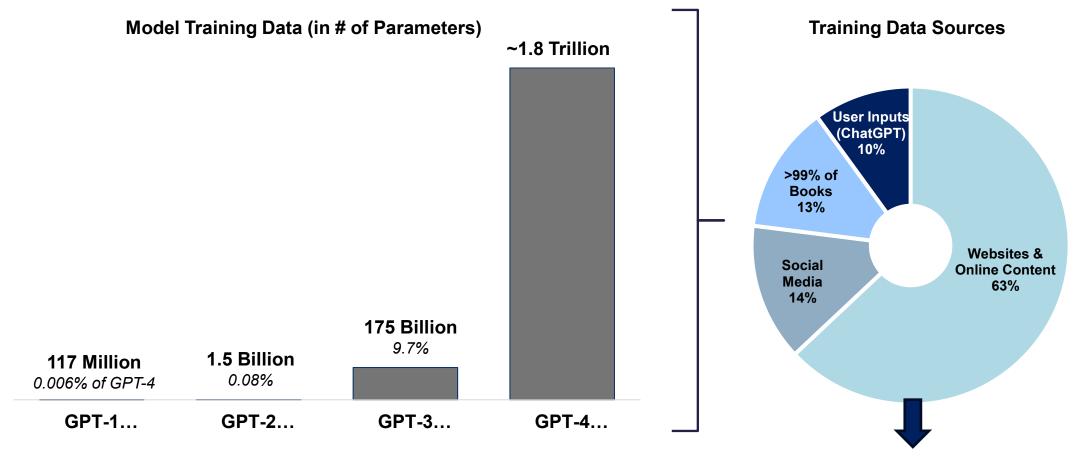


Human Brain-Like Processing
Learns Patterns From Data
Adapts & Generalizes
Flexible





Al Surging: #3) The amount of training data grew tremendously



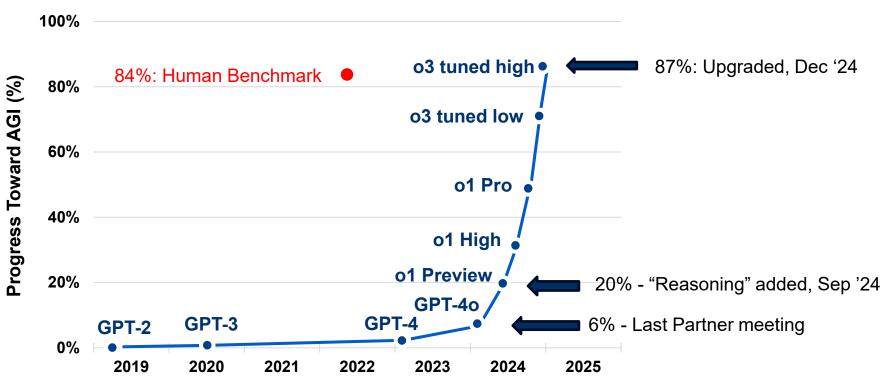
Now: Add Significant Synthetic Data





Advancements Will Not Stop And There Is No Top End



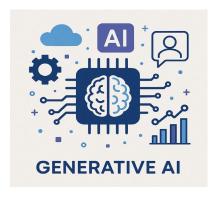


*ARC-AGI = Abstraction and Reasoning Corpus for Artificial General Intelligence





Alls Evolving To Higher States Of Capability















2023

- Large Language Model (LLM)
- Narrow application
- Question Answer
- Goldfish memory
- Human productivity

2025

- Adds memory
- Adds reasoning & prioritization
- Can use tools
- Chains together entire workflows
- Human in the Loop

~2028-30

- Stated goal of OpenAl & others
- Generalized application of AI to solve any problem as well as humans
- Scope & speed of application is immense
- "Profound" impact on professional services staffing

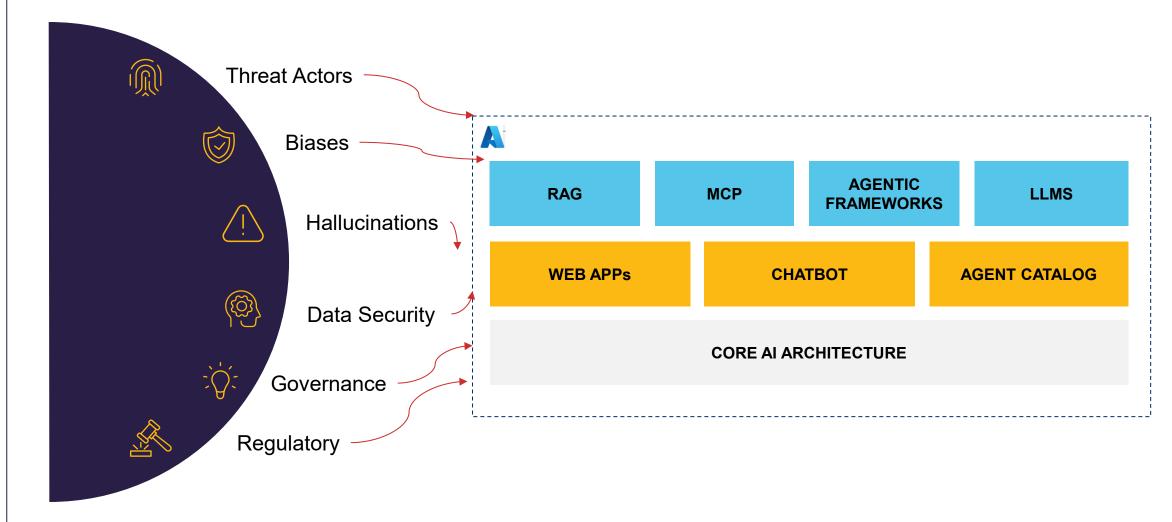
~2045

- Al that far exceeds the capability of all humans combined
- The "singularity"
- · Impacts tbd





Typical Al Security Concerns We See In The Market







The Four Pillars of Internal Audit





- Engage in open communication
- Foster strong relationships with stakeholders
- Build a focus group with internal audit representatives

Pillar 1 - Be human

Benefits

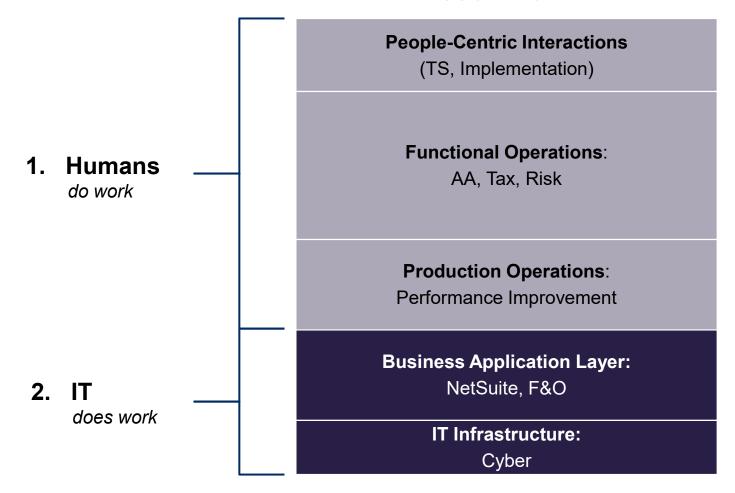
- Develop long-standing relationships
- Quickly identify areas of focus
- Demonstrate the value of internal audit
- Potential to be better, **faster**





Jobs Have Gotten Done By People Using IT Tools

1990 - 2024

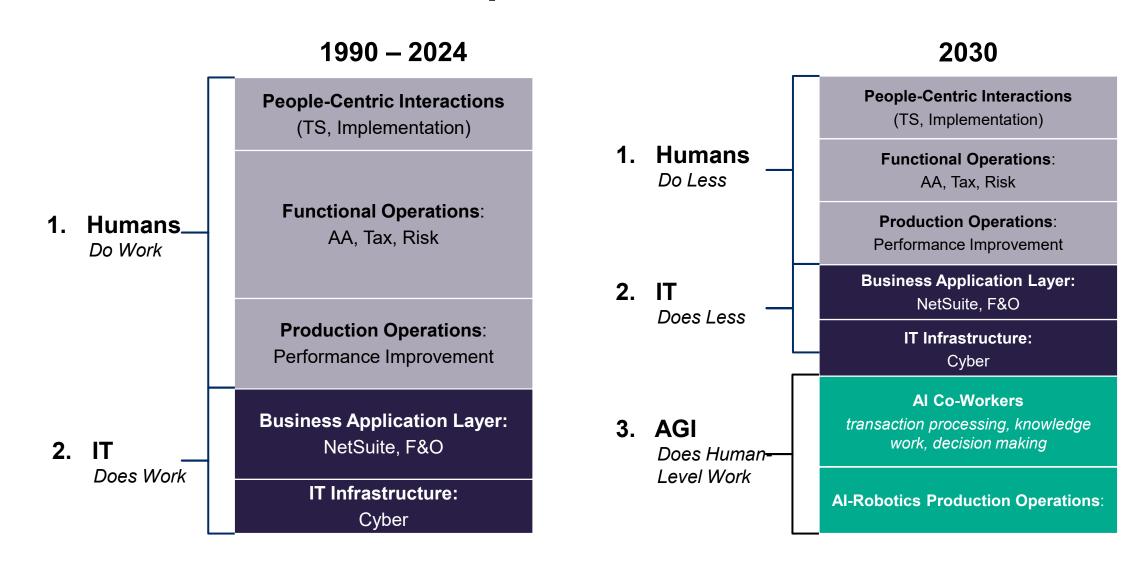


← How Jobs Got Done (Historically)





Al Co-Workers Will Replace A Lot Of Human Hours







- Reimagine the path to your **end goal**
- Embrace your role in leading with the organization's objectives in mind
- 3 Work collaboratively
- Be knowledgeable and plan forward

Pillar 2 – **Get More Strategic**

Benefits

- Faster audits with **greater insights**
- Have a full picture
- Higher morale
- More time to think strategically





- 1 Leverage data in new high integrity ways
- 2 Consider synthetic data
- 3 Develop and test your **methodology**

Benefits

- Broader and faster access
- Reimagined workforce
- Fewer errors and lower risk



Pillar 3 – Gather (and use)
Smarter Data





- 1 Use AI for continuous monitoring
- 2 Apply anonymization
- 3 Adopt data minimization
- 4 Build training and awareness

Pillar 4 – Leverage Technology

Benefits

- Improved efficiency without compromise
- Consistency & standardization
- Real time monitoring & reporting
- Adaptive and predictive auditing
- Strengthened communication





Ideas To Get Into The Al Game





From What We've Seen, Success In Al Begins At The Top And Starts Small

- Model the behavior by using Al yourself
 - Share articles on AI with executives, or summaries you ran using AI of articles
 - Publicly discuss AI with your company let them know it's something you value
- Put general-purpose Al tools in every employee's hands
 - Roll out company-wide ChatGPT or MS Copilot to get in the game
 - Have IT provide weekly active use reports
 - Spotlight success stories

- Make smart bets on high-impact, quick win Al pilots
 - Encourage your teams to ID workflows with high Al value potential
 - Run fast pilots where success provides noticeable
 (1) value, & (2) visibility in your org
- Buy or hire the expertise you don't have yet, then scale proven models
 - Partner with specialist vendors for first builds
 - Stand up a central platform team once ROI has been proven out

What Executives are Saying...

82% of CEOs have deployed or intend to deploy generative Al in 2025 - World Economic Forum

92% of companies plan to boost Al investment between 2025-2028 – McKinsey & Company

74% of early Al adopters already report positive ROI - Forbes





Use Cases For Good Application Of Al Should Span 4 Pillars Of Evaluation

Pillar

What CEOs Should Probe For



Technical Feasibility

Can we solve this with today's tools?

- 7
- Does this use case rely on off-the-shelf models or require net new build?
- Can we prototype this in < 60 days with our existing tools? Can it scale?</p>
- Is this doable with existing AI; no science project, no new infrastructure?



People & Process Readiness

Will this change how people actually work?

- >
- Will our teams or customers trust or reject Al-generated output?

Is this embedded into daily workflows (e.g., CRM, ERP, comms)?

Have we considered any legal, regulatory or ethical implications?



Data Readiness

Is the data good enough to get started?

- Do we have access to the right data, structured or not?
- Can we avoid a 12-month cleanup effort by narrowing scope?



Business Impact

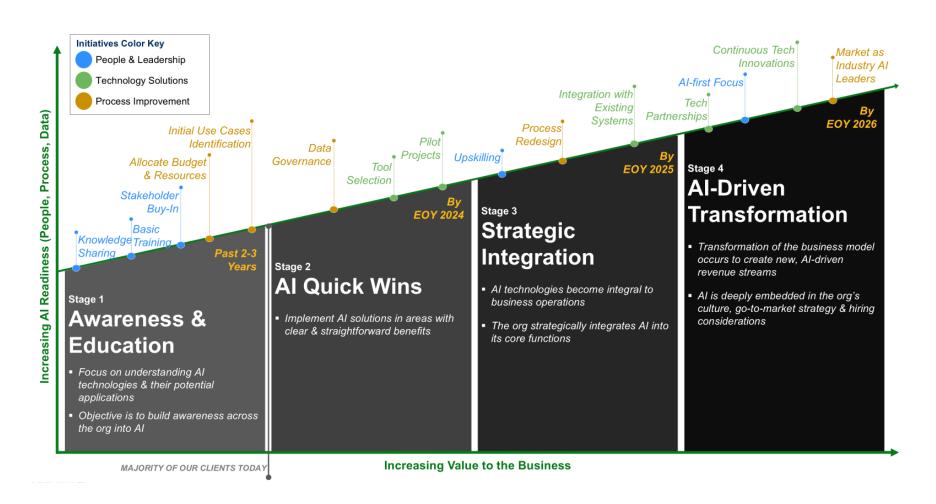
Will this move the needle on a strategic KPI?

- •
- If this works, does it affect revenue, margin, or cost of service?
 - Is the impact measurable in 90-days?





The Full Al Journey For Transformation Is Reached In Multiple Steps







Successful Al Deployment Depends On Thoughtful Change Management

| Kotter's Change Framework | | Kotter's Standard Pitfalls | |
|-----------------------------------|--|--|--|
| Implement & | Step 8 Incorporate into Cul | x Not creating new social norms / values consistent with changes x Promoting people into leadership who don't personify approach | |
| Sustain Change | Step 7 Never Let Up | x Declaring victory too soon (e.g. with first improvement) x Allowing resistors to convince "troops" that war has been won | |
| | Step 6 Generate Short-Term Wi | x Leaving short-term successes up to chance x Failing to score successes early enough | |
| Engage & Enable Whole Organiza | the contract of the contract o | x Failing to remove barriers / resistance to the effort | |
| | Step 4 Communicate The Vision For Bo | x Under-communicating the vision x Behaving in ways counter to the vision | |
| | Step 3 Develop A Change Vision | x Poor tie between new behaviors & corporate success x Leadership development plans inconsistent with new approach | |
| Create Climate For Change | Step 2 Create The Guiding Coalition | x Relegating team leadership to 'wrong' leader x Limited prior experience in teamwork at the top | |
| | Step 1 Establish A Sense of Urgency | x Underestimating difficulty of driving people from comfort zones x Becoming paralyzed by risks | |

²⁸

¹ Eight Step Change Management: Kotter, John P. and Cohen, Dan S. The Heart of Change, Harvard Business School Press

² See the Execution Premium, Kaplan and Norton. Strategies fail in execution, not their formulation





Ideas to "Get in the Game" on Al

examples

5 3 2 **Use Cases Gain Momentum Capabilities Goal Alignment Education** Showcase successes Target stakeholders and Align with top Evaluate your Look for both broad and and don't let up employees about AI and management's top organization's current deep opportunities to its potential impact on priorities technologies, personnel uncover quick wins capabilities, and data your business Ideas: Ideas: Ideas: Ideas: Ideas: Get basic tools Align with an Encourage bottom- up 90 minute "lunch and Align with strategy deployed – Copilot, interested & top-down expansion learn" documents and leader/department ChatGPT, Teams metrics that matter Put safeguards in Team members Premium, etc. Address a problem place showing usage of Look for attention Get "Al Champions" that matters citizen tools grabbing performance excited and engaged





Extract information from complex PDFs & maintain data in a side-by-side workbench (*Level 2 Code, Quick Win*)

1. Input Highly Complex PDF Form

2. Al Maps Data Into a Side-By-Side Editable Table

3. Correct in Real-Time & Export to File



Creates a side-by-side working bench which allows the reviewer to see the source and extracted data together, and make changes directly into the table as needed



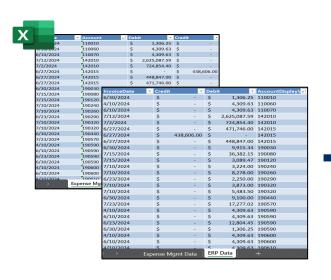


Use Al to help you reconcile data between tables (Level 1 DIY Example – MS CoPilot for Finance)

1. Compile Data Tables in Excel

2. Map Columns before Data Reconciliation

3. View the Reconciliation Report



pilot for Finance (Preview)

Reconcile data
Edit columns

Expense Mgmt Data

Expense Mgmt

A 155 Doc Date

C \$C Debit

D \$C Credit

ERP

A 155 Account UsplayValue

C \$C Debit

D \$C Gredit

ERP

A 155 Account UsplayValue

ERP

A 156 Account UsplayValue

ERP A 156 Account UsplayValue

ERP A 156 Account UsplayValue

ERP A 156 Account UsplayValue

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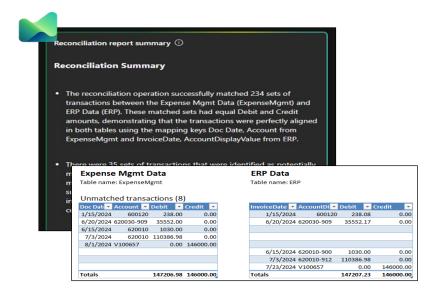
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Quickly perform data reconciliation with Copilot for Finance in Excel



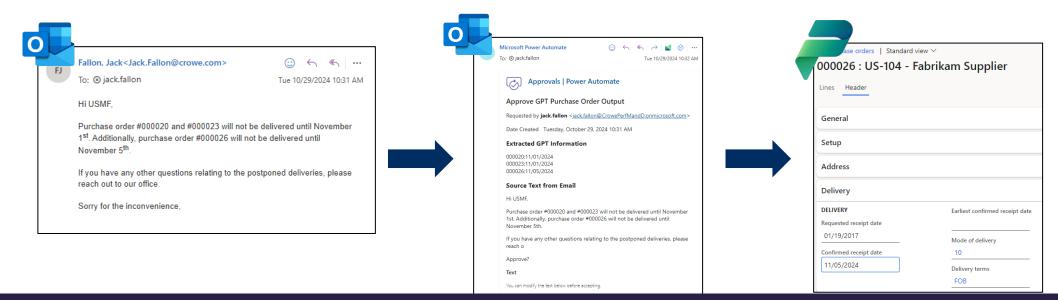


Use AI To Update Your ERP With An Unstructured Email (Level 2 Low-Code, Quick Win – Power Automate)

1. Email received from Vendor

2. Approve GPT Output

3. ERP Updated



Build automation workflows to enhance your business processes, all within Power Automate





Thank You



Mike Varney