PRESENTATION TO MACRS

ARTIFICIAL INTELLIGENCE (AI) & PRIM

PRESENTED BY

Anthony J. Falzone, Deputy Executive Director and Chief Operating Officer

December 9, 2025

About PRIM

$121.1 billion investment fund that invests public employee pension benefits.

- PRIM has a professional, experienced and focused investment staff.
- PRIM does not administer benefits.

PRIM's mission is to relieve the pension funding burden on the taxpayer.

- Self-funded agency which generates asset returns for the Massachusetts pension system.
- PRIM's Project SAVE initiative is a cost savings initiative embedded in our DNA.

PRIM is independent and governed by a nine-member Board of Trustees.

- Massachusetts State Treasurer is the Chair of the PRIM Board.
- A robust committee structure lends investment and operational expertise to the decision-making process.

PRIM Core Beliefs

We believe that any investment must be evaluated on three equally important parameters: return, risk and cost.

We don't make tactical asset allocation decisions or investment decisions based on market or economic predictions. Instead, we engineer a strategic, long-term asset allocation strategy that we hope will stand the test of a long-time horizon.

We value a basis point of cost reduction more than a basis point of return. Because we can count on cost savings every year, but nobody ever really knows what the markets will deliver.

PRIT Fund Snapshot

As of September 30, 2025

PRIT FUND FACTS

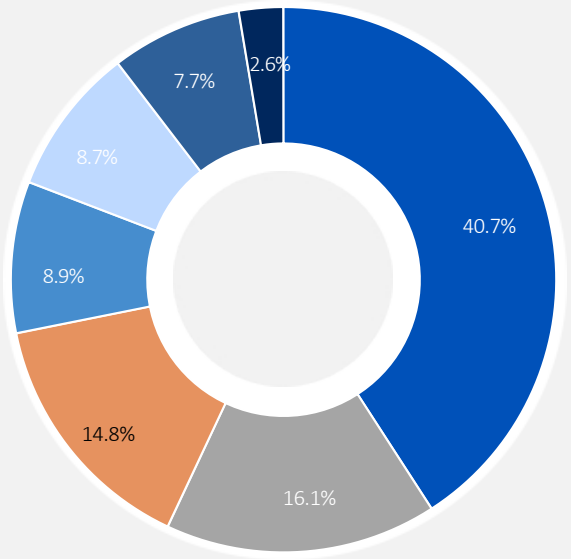
- $121.1 billion AUM
- 50 Public Markets investment managers 17
- Real Estate and Timberland investment managers
- 100+ private equity managers (400+ partnerships)
- 25 portfolio completion strategies managers

OVERSIGHT AND STAFFING

- 9 appointed and elected Board of Trustees
- 5 advisory committees, consisting of 42 industry professionals and Board of Trustees
- Staff over 60 professionals
  - 31 Masters. 17 CFAs, 6 CPAs, 3 CAIAs, 3 JDs
  - 1 FRM
  - 1 CRE
  - 14 CFA Investment Foundations Program Certificate Holders
  - 2 CFA Private Markets and Alternative Investment Certificate Holders
- Audited by KPMG, PERAC, State Auditor

ASSET ALLOCATION

(as of 9/30/2025)



TARGET RANGES

(approved 2/27/2025)

- Global Equities 31%-41%
- Core Fixed Income 12%-18%
- Private Equity 13%-19%
- Portfolio Completion Strategies 7%-13%
- Real Estate 7%-13%
- Value-Added Fixed Income 6%-12%
- Timberland 1%-7%

The Growing Relevance of Artificial Intelligence (AI)

AI has permeated various aspects of our lives.

- How we shop
- How we communicate
- How we diagnose disease
- How we drive cars

Transformative potential across various industries.

- Healthcare – Robotic surgeries, scan diagnostics, etc.
- Finance – Fraud detection, financial models, algorithmic trading, etc.
- Transportation - Autonomous vehicles, improving traffic management, drones, etc.
- Retail - Personalized recommendations, inventory management, targeted marketing, etc.
- Education - Personalized learning experiences, identifying students' strengths and weaknesses, more targeted instruction, etc.

Definition and History of AI

What is AI?

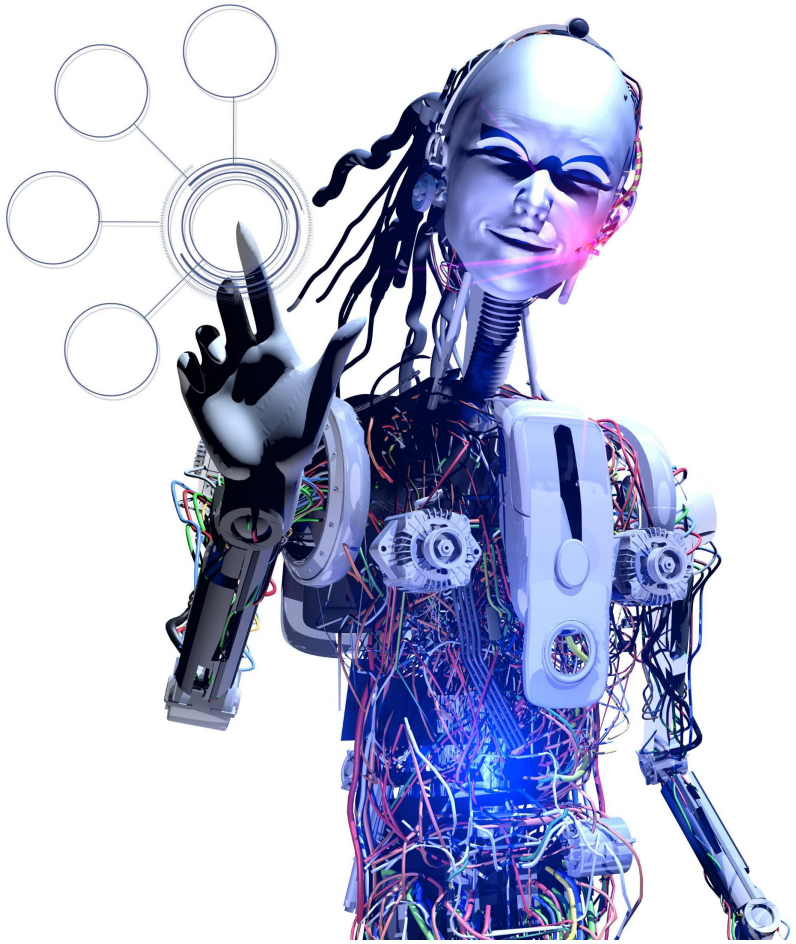
AI involves creating machines that can simulate human intelligence and perform tasks that typically require human cognition.

History of AI Development

The journey of AI began in the mid-20th century with pioneers developing the first algorithms designed to solve complex problems.

Early Algorithms

Initial development focused on creating algorithms that could mimic human problem-solving and decision-making abilities.



Key Milestones in AI Development

First Neural Networks

The 1950s marked the development of the first neural networks, laying the foundation for future AI advancements.

Machine Learning Emergence

In the 1980s, machine learning emerged as a significant branch of AI, enabling systems to learn from data.

Deep Learning Breakthroughs

Recent breakthroughs in deep learning and natural language processing have propelled AI into mainstream applications across various industries.

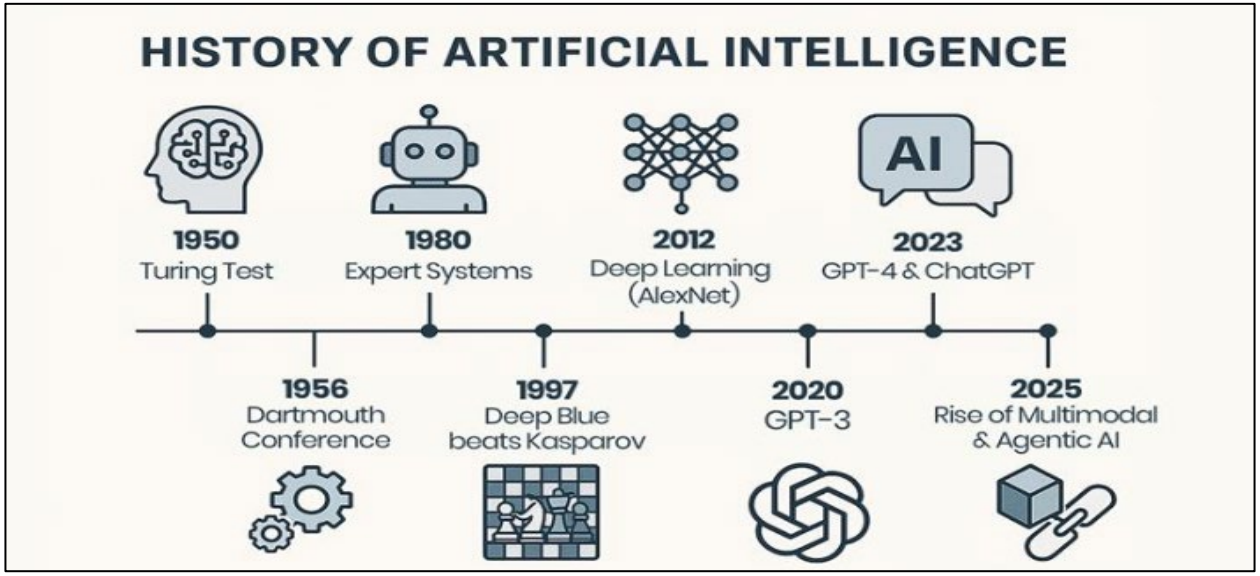
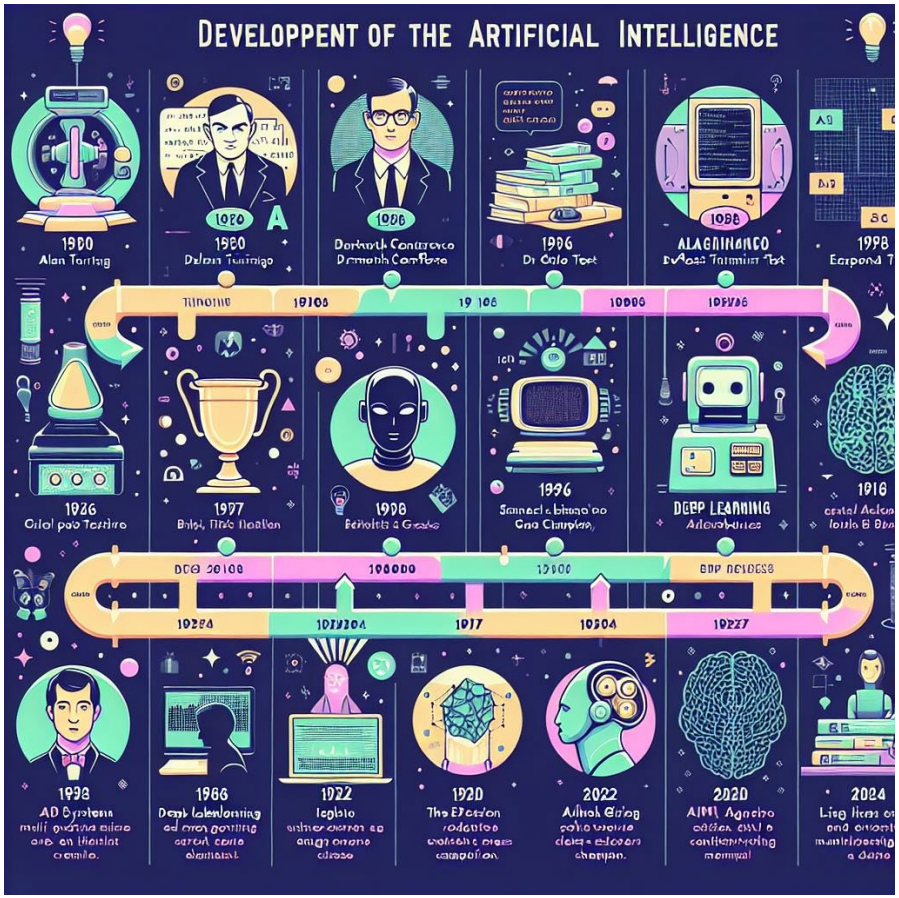
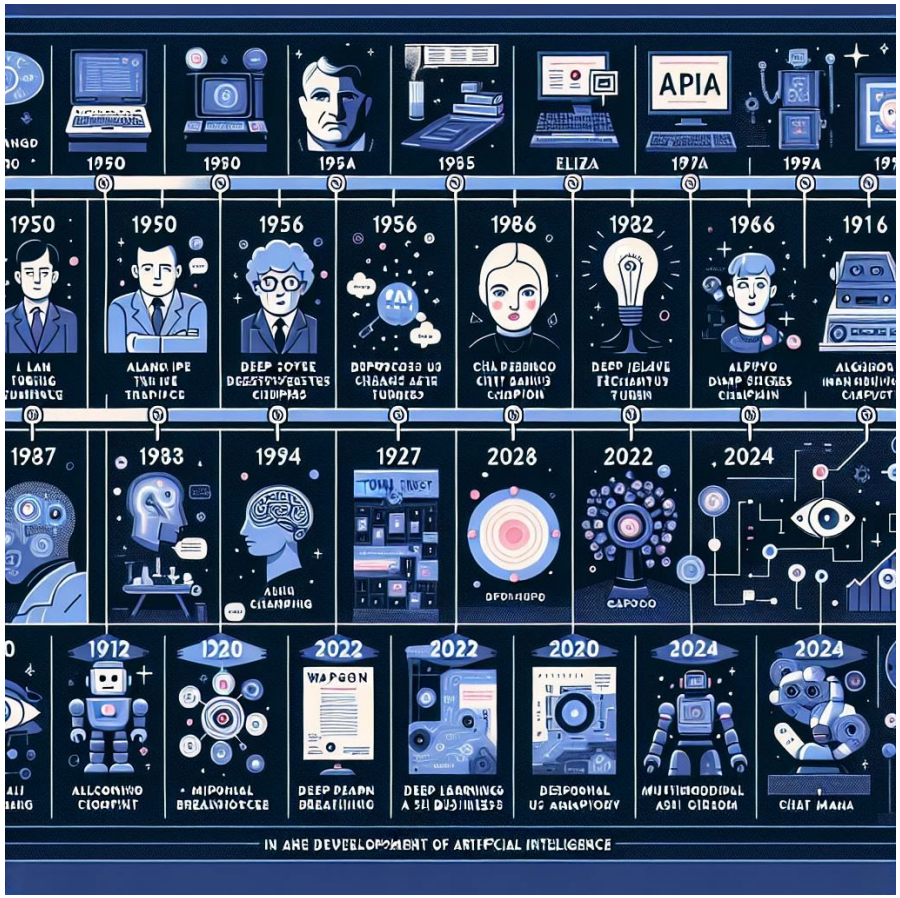


Image courtesy of LinkedIn: Tech, Finance & Beyond

Graphic Example: AI Timeline - CoPilot





Types of AI: Narrow Vs. General

Understanding Narrow AI

Narrow AI is specialized for specific tasks, like voice recognition or image analysis, excelling in particular areas.

General AI Concept

General AI seeks to mimic human cognitive abilities, performing any intellectual task a human can, demonstrating versatility.

Current AI Landscape

Most AI applications today are examples of Narrow AI, demonstrating effectiveness in specific domains without broader capabilities.

The Benefits and Concerns

Benefits

- Faster computing can provide real-time data processing and analytics
- Machines and technology that talk and interact with you and sound just like a person
- Reduce costs - automation of repetitive tasks, enhanced operational efficiency, and process improvement
- Significantly increases the speed and accuracy of predictions and forecasts
- Significantly reduces the cost of expertise (radiologist, analysts, speech recognition, diagnosis)

Concerns

- Security (applications, private company data, social engineering, etc.)
- Hallucinations (train the model)
- Algorithmic bias (unanticipated data manipulation)
- Moral and ethical dilemmas
- The expense to develop and maintain AI systems
- Lack of governance (data and AI usage)

The Transformative Potential of AI: Questions Remain

What can AI actually do reliably, and at a reasonable cost?

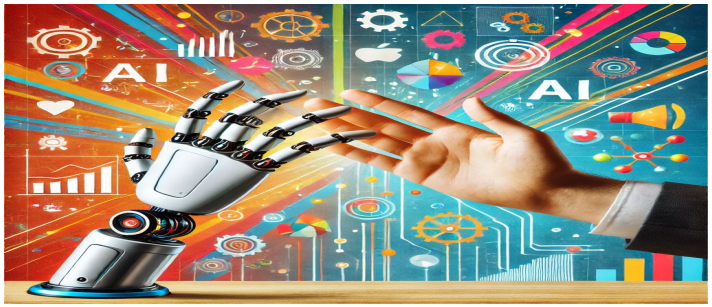
- **Reliability:** AI can perform data analysis, pattern recognition, and automation with high accuracy.
- **Cost:** The cost-effectiveness of AI varies depending on task complexity and scale.

How many of the tasks will be useful and/or additive?

- **Usefulness:** AI excels at tasks involving large datasets, predictive analytics, and process automation.
- **Additive Tasks:** The value of AI increases when it enhances or augments human capabilities, leading to new opportunities or efficiencies.

What impact will AI have on the labor force?

- **Job Displacement:** Certain jobs, particularly those involving repetitive tasks, are at risk of being automated.
- **Job Creation:** New roles in AI development, maintenance, and oversight are emerging.
- **Skill Shifts:** The labor market may shift toward roles that require more advanced technical skills or creative problem-solving.



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PRIM's AI Road Map

We believe in being thoughtful and deliberate in everything we do

- Focus on the risk and the cost that tie into our core beliefs
- With so much speculation on AI, we don't want a solution in search of a problem; we want to be innovative and open-minded
- PRIM has access to some of the world's highest-performing and most sophisticated investment managers and consultants; we have been and will continue to leverage those resources

Be Informed – What we have heard from our partners and peers

- Some have invested significant amounts of capital in developing AI models and AI assistants
- Some believe there is some AI washing going on, so companies can stay competitive and not look outdated
- Some feel the jury is still out on how effective or efficient some of the more complex AI tools will be when the dust settles
- Some worry about ethical dilemmas and security concerns
- Varying views and practices

Rimes Survey: Institutional Investors Financial Technology Forum

Key Insights

- In 27% of replies, asset managers cited AI as the area in which they would most like to see advances in technology, ahead of asset allocation workflow (21%) and private markets data management (20%).
- Respondents believe that AI will help them address a range of challenges, including data management, replacing manual processes, and removing inefficiencies.
- Currently, firms are in the early adoption phase, with AI primarily being integrated into tools such as GPT4 for prospecting and analysis (25%) and in internal memos and client comms (20%).
- Looking ahead, firms are prioritizing AI across a broad range of use cases, including reporting, portfolio management, investment operations, and data management.
- 54% of firms report data management challenges when implementing AI. Chief culprits include data quality (38%), data siloes (29%), and data management/governance (29%).

Rimes Survey: Institutional Investors Financial Technology Forum

Business Area	Use Case
Reporting	• Portfolio Management market performance write-up for client reports • Quarterly commentary generation
Portfolio management/investment operations	• Gen AI integration with trading systems to run scenario analysis • Summarizing data to provide the first pass on an investment opportunity, portfolio company, market trend, etc., to uncover unique insight and save time. • Investment risk optimization • Research optimization • Investment performance and analytics
Data management	• Reviewing data from third-party administrators for quality control • Scraping unstructured data sources to help investment teams discover information from past underwrites • Data quality testing
Marketing/client service	• Automated email prospecting • Content creation • Client service efficiency • Client relationship health monitoring
IT	• Code analysis • Developer productivity

AI Data – Where the Rubber Meets the Road

You cannot lose focus on what is at the heart of AI: underlying data

- How many companies have robust data governance plans in place?
- How many of you do?
- Do you have policies that cover data governance when onboarding new employees?
- Do you have policies that govern the use of AI tools?
- Where to save files, acceptable formats, QA, remediation, etc.?

If the data is the fuel that feeds the AI engine, you need to be confident in its integrity

- Data quality is paramount in trusting your results.
- Developing frameworks to support GenAI programs is a must.

  (Ethical frameworks and audit/monitoring frameworks)

AI Data – Security Challenges and Considerations

Data Privacy Concerns

- AI systems require vast amounts of data to work effectively. What data are you sharing with AI? Does the model now have access to your data for other prompts outside of your environment?

Data Breaches and Cyber Attacks

- When allowing other systems access to your data, you must review their cybersecurity strategy and program. Do some of these less mature AI software companies have robust cybersecurity postures? Do they rely on the hosting platform for security?

Bias, Discrimination, and Blind Spots

- AI systems are only as good as the data they are trained on. Is the data being used to train the model representative and complete?

Transparency and Accountability

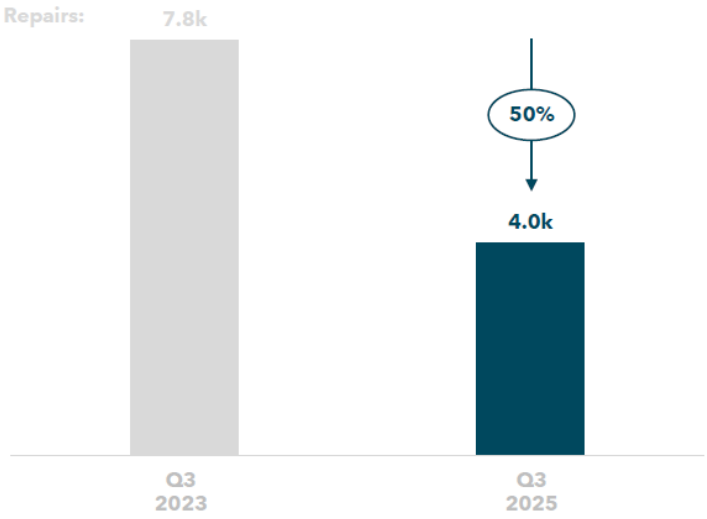
- Most of us can't afford to develop our own models, so we don't have 100% transparency into how they make decisions. This can make it challenging to identify and correct errors or biases.

Legal and Regulatory Considerations

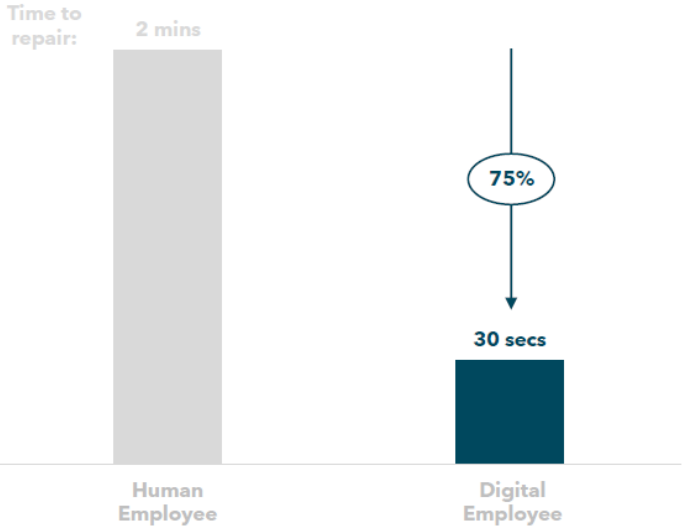
- The pace of AI development is far outpacing the development of legal and regulatory frameworks. This can create uncertainty and create challenges for ensuring security and ethical use.

BNY Case Study #1: Payment Repairs

Client collaboration eliminates 50% of repairs



AI enables 75% faster payment repairs



Source: BNY data collected via the MTP dashboard and Eliza through AI HUB

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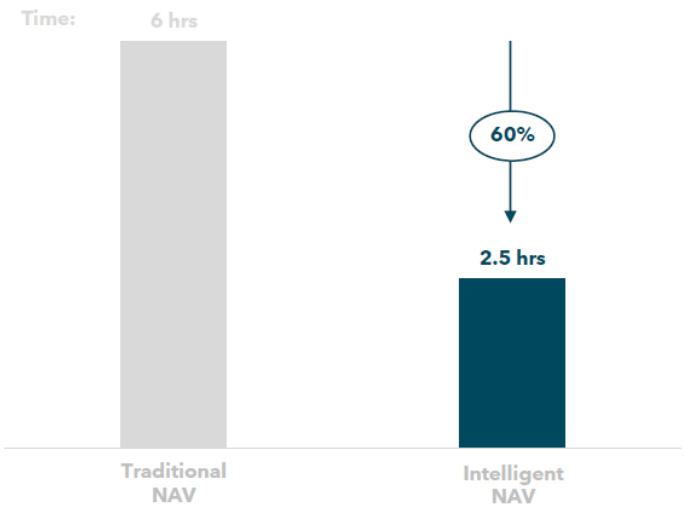
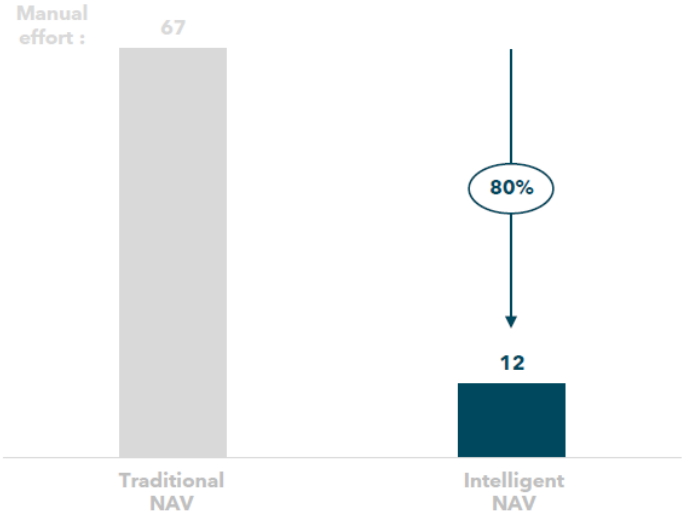
BNY Case Study #2: Intelligent NAV Controls

NAV processing time reduced by 60%



Re-engineering, supported by AI enables 80% less manual effort



Source: Derived from BNY NAV accounting processing mapping analysis

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PRIM's Strategic Plan - Moving Forward

What we have done:

- We have finalized an "AI Use Policy" and "AI Governance Framework".
- We have completed a pilot program using Microsoft's CoPilot tool as part of O365.
- We have rolled out Microsoft's CoPilot to all employees, providing targeted training.
- We have added another tool to the Asset Allocation toolbox, Aiperion, an AI risk and optimization tool.
- We have held internal workshops and strategy sessions to go over various use cases.

Where will we go from here?

- We will continue to be curious and talk with peers and partners as the AI marketplace evolves.
- We will continue to evaluate the market for AI tools that would add value to PRIM.
- We will continue to fine-tune our approach, hold workshops, all while being mindful of costs.

PRIM's Strategic Plan - Moving Forward Cont.

Off-the-shelf products that are configurable have advantages

- These products provide support before, during, and after implementation.
- These products include structured maintenance and help with savings on hardware.
- These products have more defined use case analysis to identify areas of efficiency.
- These products offer the ability to keep costs manageable and known.

QUESTIONS?

Biography

Anthony Falzone, Deputy Executive Director and Chief Operating Officer

Anthony Falzone serves as Deputy Executive Director and Chief Operating Officer with responsibility for and oversight of PRIM's finance, operations, reporting, compliance, human resources, and technology functions. During his time at PRIM, he has held various senior management roles, including Chief Technology Officer and Director of Private Investment Accounting. Anthony has over 25 years of finance, technology, and investment operations experience, specializing in technology management, information delivery, and project management. Prior to joining PRIM in 2006, he held positions as an Assistant Vice President at Mellon Bank (BNY Mellon) and a senior associate at Investors Bank & Trust (State Street), servicing both private wealth and institutional clients. Anthony holds the Investment Foundations™ Certificate awarded by the CFA Institute. He earned both his Business Administration degree and Computer Information Systems degree from Bentley University.

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