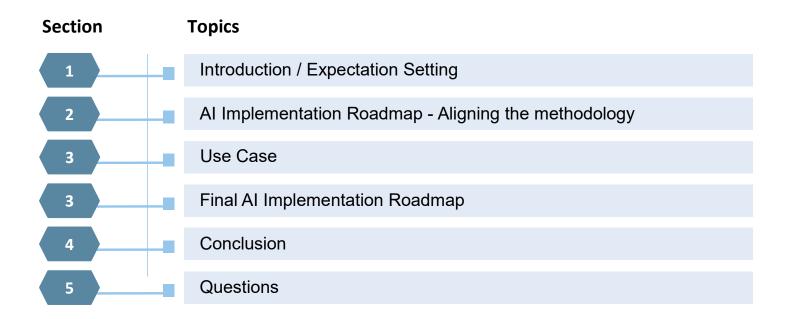
# RefineM

### **MANAGING AI PROJECTS WITH CPMAI**

Kevin Davis, Project Manager Sobha R Chittila, Program Manager

### Agenda





### Team



Kevin Davis, CSSGB, SAFe Agilist – PO/PM, a former developer who pivoted in project management.

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Sobha R Chittila, PMP, has over 20 years of experience in digital transformation, cybersecurity, and manufacturing systems. She specializes in aligning technology with business strategy to drive impactful, data-driven results.

https://www.linkedin.com/in/sobha-r-chitilla/

### **RefineM's GenAl Initiatives**

RefineM is established as a leader in the Generative AI space.

- Our 2-day Generative AI course
- Our AI POC group
- Our AI tools, Intellidoc.AI and DBQuery.AI



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### What's New at RefineM

Upcoming Free Webinar	Date
Key Questions to Implement AI in Project Management	June 26

RefineM Products	Self-Paced Online Training
Essential Gear for Project Managers RefineM.com/products/	Agile Fundamentals Self-Paced Course RefineM.com/course/agile
PMP® Exam Prep Test Simulator Examprep.RefineM.com	PM Fundamentals Self-Paced <u>Course</u> <u>Refinem.com/course/project-management-fundamentals/</u>
Agility Assessment	Agile BusReqs Self-Paced Course https://vimeo.com/ondemand/refinembusreq
PDU Bundle https://vimeo.com/ondemand/refinempdus	Backlog Grooming Self-Paced Course



### **Survey Question**

What are your expectations for this webinar? Why are you here today?



Use the chat to answer



### **Survey Question**

### How comfortable are you with AI on a scale of 1-10?



Use chat to answer



# **AI Project Implementation**

- Successfully implementing artificial intelligence involves more than just technical expertise; it requires strategic vision, cross-functional collaboration, and methodical execution.
- This presentation introduces a structured framework and recommended tools to guide project managers and organizations to successfully implement AI solutions— from defining clear business objectives to implementing governance practices that promote responsible and ethical AI deployment.







Our group focused on methodology of driving AI project adoption or implementation.

What do we, project, program and portfolio managers, need to keep in mind? And how do we stir the projects in the right direction?

Overabundance of tools: Careful evaluation to identify the most suitable options.

 $\bigcirc$ 

Clear definition of data scope.

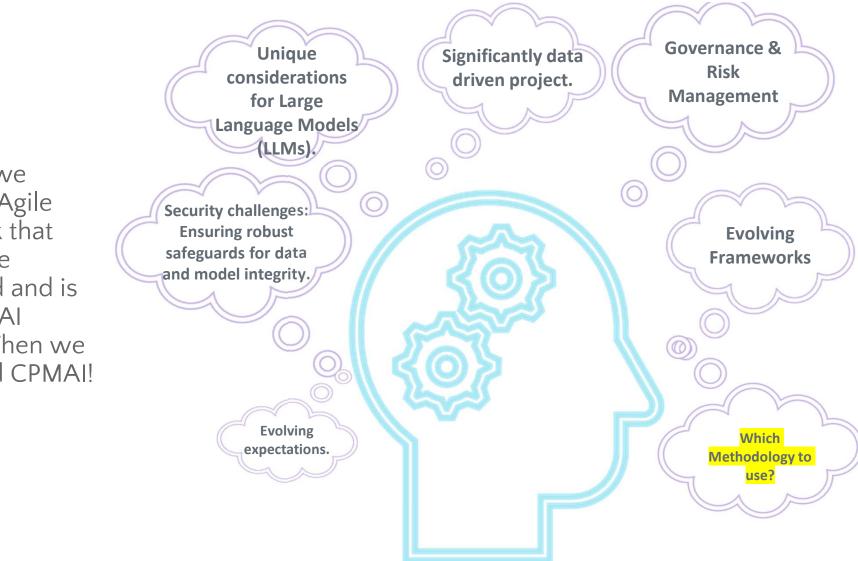
Change is inevitable: Flexibility is key in Al project execution. Ethical and Compliance

Iterative

Necessity to educate

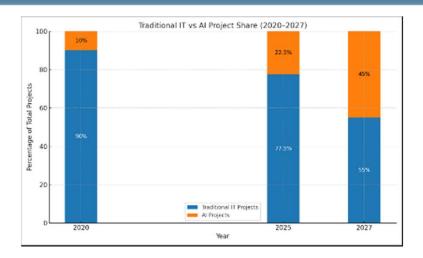
resources.

What are we missing in Agile framework that needs to be considered and is critical for AI projects? Then we discovered CPMAI!



# **Traditional vs AI Projects**

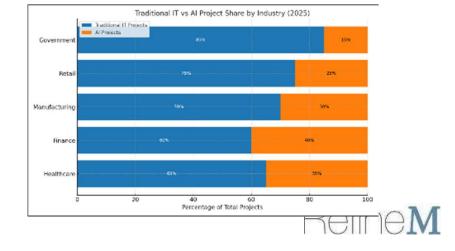
Year	Traditional IT	Al Projects	Trend
2020	-90%	-10%	Al emerging
2025	-75-80%	-20-25%	AI gaining ground
2027	-50-60%	-40-50%	AI becomes standard



Here's a breakdown of Traditional IT vs AI Project Share by Industry for 2025:

•Healthcare and Finance lead in AI adoption, with AI making up 35–40% of projects.

- •Manufacturing and Retail are catching up but still lean toward traditional IT.
- •Government remains the slowest adopter, with only ~15% AI projects.



### **CPMAI - Cognitive Project Management for AI**

CPMAI is a best-practice methodology specifically tailored for AI and cognitive technologies. It is the most comprehensive and effective methodology for managing AI projects—especially when we want projects to be agile, ethical, data-driven, and aligned with real business outcomes.

#### It combines:

- CRISP-DM (Cross- Industry Standard Process for Data Mining) for data-focused process
- Agile Project management principles
- Iterative and business aligned stages
- There is a certification for CPMAI offered by PMI.

#### **CPMAI** Phases :

- Phase I : Business Understanding Mapping the business problem to the AI solution
- Phase II: Data Understanding Getting a hold of the right data to address the problem
- Phase III: Data Preparation Getting the data ready for use in a data-centric AI project
- Phase IV: Data Modeling Producing an AI solution that addresses the business problem
- Phase V: Model Evaluation Determining whether the AI solution meets the real world and business needs

www.Remem.comModel Operationalization - Putting the AI solution to use in the real-world, and iterating to continue its performance



### Where to Start: Your Path to CPMAI Mastery with PMI

Before managing AI projects effectively, it's essential to understand how **project management principles** apply to **emerging technologies** like machine learning and generative AI. With PMI now stewarding the CPMAI framework, professionals have access to structured, recognized, and evolving resources designed to build real-world competence in AI project delivery.

CPMAI v7 Certification – Official via PMI	FREE Intro to CPMAI (3 PDUs)
Combines AI project practices with	Online self-paced course
traditional PM skills	Covers core CPMAI principles & phases
Covers all six CPMAI phases plus AI-	Good first step if you're exploring AI
specific tools (ML, NLP, Generative AI)	project management
Hosted on PMI's platform	

#### **CPMAI+ v7 (Advanced Course)**

#### **PMI Learning Library**





### **CPMAI** – Phase 1: Business Understanding

Focuses on establishing a strong foundation for any AI or ML project by deeply understanding the business context, objectives, and success criteria. The key components of Phase 1 include:

Identify Business Goals	Assess Situational Context	Define Business Success Criteria	Identify Relevant Business Stakeholders	Develop Business Use Case	Obtain Project Approval
<ul> <li>Define the high- level objectives the organization wants to achieve.</li> <li>Ensure goals are aligned with strategic priorities.</li> </ul>	<ul> <li>Evaluate the current business environment, stakeholders, and processes.</li> <li>Understand the existing systems, pain points, and areas where AI/ML can add value.</li> </ul>	<ul> <li>Establish clear, measurable KPIs to determine project success.</li> <li>Include both short-term and long-term outcomes.</li> </ul>	<ul> <li>List all key participants, including executives, domain experts, and end users.</li> <li>Clarify roles and responsibilities.</li> </ul>	<ul> <li>Create a detailed use case outlining the problem, proposed AI solution, and benefits.</li> <li>Include expected ROI and potential risks.</li> </ul>	<ul> <li>Present the business case to decision-makers.</li> <li>Secure funding and stakeholder commitment before moving forward.</li> </ul>

This phase ensures that any data or AI initiative starts with a crystal-clear understanding of the business need and intended impact, preventing wasted time and resources down the line.



### **CPMAI** – Phase 2: Data Understanding

Focuses on identifying, collecting, and exploring the data used in your AI or ML project. This phase is critical for evaluating data quality, relevance, and feasibility before modeling begins. The key components of Phase 2 include:

Identify Data Sources	Collect Initial Data	Describe Data	Explore Data	Verify Data Quality	Assess Data for Al Feasibility
<ul> <li>Locate internal and external data sources relevant to the business problem.</li> <li>Confirm data access, ownership, and compliance requirements.</li> </ul>	<ul> <li>Acquire a sample dataset for preliminary analysis.</li> <li>Ensure data is collected legally and ethically.</li> </ul>	<ul> <li>Summarize key attributes (e.g., data types, ranges, volume).</li> <li>Identify categorical, numerical, time- series, or unstructured formats.</li> </ul>	<ul> <li>Perform basic exploratory data analysis (EDA).</li> <li>Identify patterns, anomalies, outliers, and missing values.</li> </ul>	<ul> <li>Assess data accuracy, completeness, consistency, and timeliness.</li> <li>Determine whether the data is sufficient to support the project goals.</li> </ul>	<ul> <li>Evaluate whether the data can support machine learning or AI techniques.</li> <li>Consider volume, velocity, variety, and veracity (the "4 Vs" of big data).</li> </ul>



### **CPMAI** – Phase 3: Data Preparation

Raw data is cleaned, transformed, and structured into a usable format for AI and machine learning modeling. This phase is often the most time-consuming and critical for project success. The key components of Phase 3 include:

Data Cleaning	Data Transformation	Feature Selection and Engineering	Data Integration	Data Formatting	Data Splitting
<ul> <li>Handle missing values, outliers, and duplicate records.</li> <li>Standardize formats (e.g., date formats, currency, units).</li> </ul>	<ul> <li>Normalize, scale, or encode data as needed for modeling.</li> <li>Convert unstructured data (e.g., text, images) into structured features.</li> </ul>	<ul> <li>Select the most relevant attributes for the model.</li> <li>Create new features based on domain knowledge or patterns in the data.</li> </ul>	<ul> <li>Merge data from multiple sources into a unified dataset.</li> <li>Resolve schema mismatches and align data definitions.</li> </ul>	<ul> <li>Prepare final dataset(s) in the format required for AI/ML tools.</li> <li>Ensure labeling is clear for supervised learning tasks.</li> </ul>	<ul> <li>Divide the dataset into training, validation, and test sets.</li> <li>Maintain consistency and randomness based on project needs.</li> </ul>





### **CPMAI** – Phase 4: Model Building

AI and machine learning models are developed, trained, and evaluated. The goal of this phase is to create one or more models that best address the business problem identified in Phase 1 using the prepared data from Phase 3. The key components of Phase 4 include:

#### Select Modeling Techniques

- Choose the appropriate AI/ML algorithms (e.g., classification, regression, clustering, NLP, computer vision).
- Consider business goals, data types, and available computational resources.

#### Generate Test Design

- Define how model performance will be evaluated (e.g., accuracy, precision, recall, F1 score).
- Select evaluation metrics and validation methods (e.g., crossvalidation, holdout sets).

#### Build Models

- Train models using the training dataset.
- Tune hyperparameters and optimize for

performance.

#### Assess Model Performance

- Evaluate models using the validation and test datasets.
- Compare multiple models and select the bestperforming one.

#### **Document Results**

- Record model assumptions, limitations, and findings.
- Communicate model behavior to non-technical stakeholders.

#### Decide on Next Steps

- Determine if the model is ready to move to deployment.
- If performance is inadequate, return to earlier phases (e.g., data prep or selection).



### **CPMAI** – Phase 5: Model Evaluation

This phase ensures that the AI/ML model meets business expectations and is ready for deployment. This phase focuses on validating performance from both a technical and business perspective—not just how well the model predicts, but whether it solves the real-world problem it was built for. The key components of Phase 5 include:

Evaluate Results Against Business Success Criteria	Review Evaluation Metrics	Validate With Stakeholders	Check for Ethical and Legal Compliance	Decide on Model Approval	Plan for Deployment Readiness
<ul> <li>Revisit the KPIs and success metrics defined in Phase 1.</li> <li>Confirm the model meets or exceeds business expectations.</li> </ul>	<ul> <li>Analyze model performance metrics in context (e.g., accuracy, ROC curve, confusion matrix).</li> <li>Identify trade-offs (e.g., precision vs. recall).</li> </ul>	<ul> <li>Present model outcomes in business-friendly terms.</li> <li>Gather feedback from key stakeholders, end users, and decision-makers.</li> </ul>	<ul> <li>Ensure model decisions are explainable, fair, and bias-aware.</li> <li>Review any legal or regulatory constraints (e.g., GDPR, EEOC, HIPAA).</li> </ul>	<ul> <li>Make a go/no-go decision for deployment.</li> <li>If the model is not acceptable, return to earlier phases (e.g., retrain or adjust the business case).</li> </ul>	<ul> <li>Assess technical readiness (e.g., integration with existing systems).</li> <li>Start preparing documentation for handoff to production teams.</li> </ul>





### **CPMAI** – Phase 6: Model Operationalization

This is the final phase where the AI/ML model is deployed into a real-world production environment. The focus is on ensuring the solution delivers sustained business value, is monitored effectively, and is maintained over time. The key components of Phase 6 include:

Develop Deployment Plan	Deploy the Model	Monitor Model Performance	Establish Governance and Maintenance	Enable Feedback Loops	Evaluate Business Impact
<ul> <li>Define how the model will be integrated into business operations.</li> <li>Identify infrastructure, APIs, UI/UX components, and automation pipelines.</li> </ul>	<ul> <li>Move the model from development to production.</li> <li>Ensure it's accessible to systems, users, or applications that rely on it.</li> </ul>	<ul> <li>Set up real-time or periodic performance tracking.</li> <li>Watch for drift in accuracy, changing input data patterns, or emerging biases.</li> </ul>	<ul> <li>Define policies for model versioning, access control, and re-training frequency.</li> <li>Ensure there's ownership for continued oversight.</li> </ul>	<ul> <li>Collect feedback from users and systems to improve the model.</li> <li>Use this feedback to iterate and retrain if needed.</li> </ul>	<ul> <li>Measure actual ROI and compare with initial projections.</li> <li>Determine if the model should be scaled, updated, or retired.</li> </ul>





### Why CPMAI Approach?

- **Business First Approach** Aligns AI with real-world goals
- Structured & Repeatable Process Keeps projects on track
- Data-Centric Methodology ensures AI learns from quality data
- Model Validation before Launch Prevents deployment disasters
- Scalable & Industry-Agnostic Works across industries and project sizes
- Reduces Risk of Failure Helps avoid the most common Al mistakes





# **Agile vs CPMAI for AI Projects**

Feature/Aspect	Agile	СРМАІ
Focus	Iterative software development	AI/ML-specific lifecycle management
Data-Centric Approach	Not emphasized	Core component; starts with data understanding
Handling of AI Uncertainty	Limited (assumes clear requirements)	Explicitly accommodates experimentation and model tuning
Model Lifecycle Support	Lacks post-deployment focus	Covers full AI lifecycle including retraining and monitoring
Ethical/Regulatory Awareness	Not built-in	Includes compliance, explainability, and ethical considerations
Team Structure	Cross-functional, often dev-focused	Emphasizes collaboration between data scientists, PMs, and SMEs
Project Framework Alignment	General software projects	Tailored to AI/ML/data projects



# Why CPMAI is the Best Fit for AI Projects?

Feature	CPMAI	Agile	CRISP-DM	Waterfall
Business Alignment	<b>×</b>		<b>A</b>	۸
lterative	<ul> <li>Image: A set of the set of the</li></ul>			×
Data-Focused	×	×		×
Governance/Ethics		×		۸
AI- Specific	<b>N</b>	×	×	×

CPMAI - Combines best practices from Agile and CRISP-DM\*, with added focus on AI governance, ethics, data quality, and business alignment.

\* **CRISP-DM** (Cross-Industry Standard Process for Data Mining) framework, which is heavily focused on working with data throughout the lifecycle of a project.



# **Use Case - Predicting Project Delays**

Let's walk through these phases with the help of a use case.

Problem: Project Managers often struggle with unexpected delays, even when they think everything is on track.

Goal : Use AI to predict which tasks or projects are likely to be delayed, so PMs can act early to prevent them.



### **Phase 1 - Business Understanding**

- Define clear business objectives.
- Identify whether AI is the right solution—or if something simpler might work better.
- Align on what success looks like before development begins.

Problem: Missed deadlines cost time, money, and client trust.

Objective: Predict schedule delays early using AI.

Key Stakeholders: PMO, senior managers, clients

**Success Metrics:** 

80%+ accuracy in predicting delays 20% reduction in project timeline slippages over 6 months





### **Phase 2: Data Understanding**

- Understand what data is needed to address the business problem
- Check if the required data is available
- Identify its location and format
- Assess data for quality and completeness

#### Collect historical project data:

- Task durations vs. estimates
- Dependence and critical path info
- Resource availability and assignments
- Issues/risks logged
- Team communication logs (optional)
- Project status reports (on-track, delayed, completed)

#### Explore the data:

- Patterns of delays based on team, time of year, or task type
- Are delays linked to late resource assignments? Or scope changes?

Tool	How it helps in Data Understanding (PHASE 2)
Alation	Centralizes metadata for easy data discovery, understanding, and collaboration across teams.
Apache Atlas	Provides metadata management and data lineage tracking to ensure data integrity and compliance.
Pandas Profiling	Automates exploratory data analysis by generating detailed reports on data quality and patterns.
SQL	Enables querying and validating data in relational databases to assess quality and relevance.



### **Phase 3: Data Preparation**

- **Data cleansing:** Removing errors, duplicates, and inconsistencies in the data.
- **Data aggregation:** Combining data from multiple sources for a unified view.
- **Data augmentation:** Enhancing data with additional information to improve model performance.
- **Data labeling:** Adding meaningful tags or annotations so models can learn effectively.
- **Data normalization:** Ensuring consistency in format, scale, and distribution.
- Data transformation: Restructuring or encoding data to make it usable for AI models.

#### Prepare the data:

- Remove incomplete project records
- Normalize duration formats (e.g., days, hours)
- Label data: "Delayed" vs. "On-time"
- Convert qualitative info (e.g., risk descriptions) into features using NLP if needed

Tool	How it helps in Data Preparation (PHASE 3)	
Pecan Al	Automates data cleaning, transformation, feature engineering, and partitioning, saving time and ensuring data is ready for predictive modeling	
Tableau Prep	Provides a visual, drag-and-drop interface to clean, combine, shape, and output data from multiple sources, making the process intuitive and efficient	
Integrate.io	Streamlines ETL (Extract, Transform, Load) processes, allowing teams to efficiently move, clean, and transform data across cloud and on-premises systems (inferred from general knowledge, as direct search result is missing).	
Trifacta	Offers an intuitive, machine learning-driven interface for profiling, cleaning, and transforming large datasets, with rapid iteration and data quality monitoring	



### **Phase 4 - Model Development**

- Algorithm selection and optimization: Iterating on algorithm choice and configuration to align with business performance goals.
- Model training: Feeding data into the algorithm so it can learn patterns and relationships.
- Hyperparameter setting and adjustment: Fine-tuning algorithm settings to improve performance.
- Model validation: Testing the model on separate datasets to evaluate accuracy and prevent overfitting.
- Ensemble model development and testing: If appropriate, combining multiple models to improve overall results.

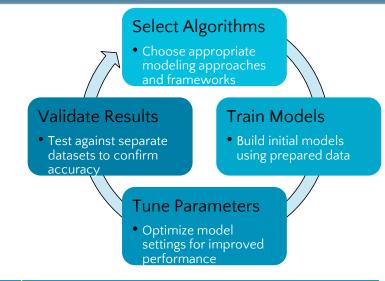
#### Use machine learning models such as:

Logistic Regression, Random Forest, XGBoost

#### Input features:

- Task estimate vs. actual
- Team workload
- Number of scope changes
- · Risk severity scores
- Target: "Will this task/project be delayed?"

Ensure model development remains aligned with business objectives through iterative refinement www.RefiheM.com



ΤοοΙ	How it helps in Model Development (PHASE 4)
TensorFlow	Provides a mature, scalable framework with extensive libraries for building, training, and deploying deep learning models, especially suited for production and large-scale applications
PyTorch	Offers a flexible, Pythonic interface with dynamic computation graphs, making it ideal for rapid prototyping, research, and debugging of neural networks
Hugging Face	Supplies a vast ecosystem of pre-trained models and tools, especially for NLP and generative AI, enabling quick integration and fine-tuning for advanced AI tasks (inferred from general knowledge).
scikit-learn	Delivers a comprehensive suite of machine learning algorithms and utilities for classical ML tasks, supporting fast experimentation and model evaluation with simple APIs (inferred from general knowledge).

# **Phase 5 - Model Evaluation**

- **Model metric evaluation:** Measuring performance using standard metrics.
- **Model precision and accuracy:** Assessing how often the model predicts correctly.
- **False positive and negative rate analysis:** Understanding the types of errors the model makes.
- KPI alignment: Ensuring the model's output supports the original business objectives.
- **Ethical and governance checks:** Reviewing for bias, fairness, explainability, and compliance.



Test the model using a holdout set of past projects

#### **Evaluation Metrics:**

- Accuracy, Recall (for delays), F1-score
- Get feedback from project managers:
- "Does it flag the right types of tasks?"
- "Are the alerts actionable?"

Prevents flawed models from reaching production by validating both technical and business performance

Tool	How it helps in Model Evaluation (PHASE 5)
MLflow	Automates model evaluation with comprehensive metrics, visualizations, and threshold alerts, supporting both traditional ML and LLMs for robust performance tracking
Weights & Biases	Enables experiment tracking, automated evaluation, visual comparisons, and error analysis, making it easy to benchmark models and iterate on improvements
Fairlearn	Assesses and visualizes model fairness across different groups, helping teams identify and mitigate bias to ensure responsible AI (inferred from general knowledge).
SHAP	Provides model-agnostic explanations by quantifying feature contributions, allowing teams to interpret predictions and improve model transparency (inferred from general knowledge).
	Ketinel

### **Phase 6 – Model Operationalization**

- **Model deployment and integration:** Putting the model into production and connecting it to business systems.
- **Model versioning and iteration:** Tracking model updates and retraining based on new data.
- **Monitoring and performance management:** Watching for data drift and model degradation.
- **Operational governance:** Applying controls to ensure compliance, traceability, and accountability.
- **Business value alignment:** Confirming the model continues to serve its intended purpose and deliver measurable outcomes.

Integrate into project management tools (like Jira, MS Project, or Asana)

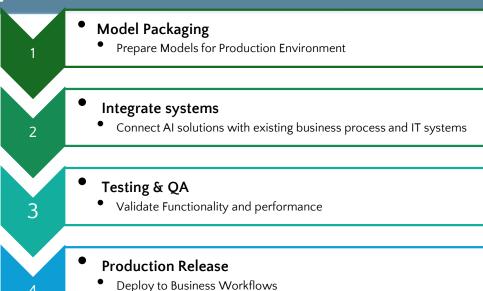
#### Create a dashboard:

- Show "risk score" for active tasks
- Alert PMs when delay likelihood crosses 70%

Set retraining schedule (e.g., quarterly)

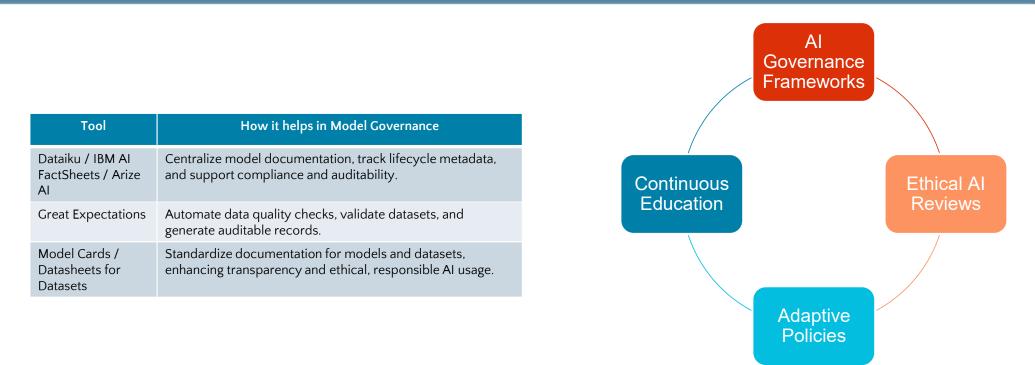
Ensures ongoing model performance, reliability and compliance in production.

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Tool	How it helps in Model Operationalization (PHASE 6)	
Docker	Ensures consistent, portable model deployments by packaging models with all dependencies.	
Kubernetes	Automates scaling, load balancing, and management of containerized model deployments for high availability.	
Seldon	Simplifies model serving on Kubernetes with support for advanced deployment patterns and API standardization.	
Prometheus	Provides real-time monitoring and alerting of model performance and system health.	
AWS SageMaker	Offers a fully managed platform for seamless deployment, scaling, and monitoring of ML models with integrated security features.	

### **Model Governance & Risk Management**



Responsible AI implementation requires proactive governance that addresses ethical, legal, and regulatory considerations throughout the AI lifecycle. By establishing clear frameworks, organizations can maximize AI's benefits while mitigating potential risks.



# **Final AI Implementation Roadmap**

#### Model Governance & Risk Management

- AI Governance Framework
  - Ethical AI Reviews
  - Adaptive policies
  - Continuous Education

#### Model Evaluation & Operationalization - Phase 5 & 6

- Evaluate, BI, Technical Accuracy and Risks
- Model Packaging
- Integration
- Testing & QA
- Production Release

#### Model Development - Phase 4

- Select Algorithms
- Train Models
- Tune Parameters
- Validate Results

#### Business Understanding - Phase 1

- What are the goals and objectives
- What are the KPI's
- Assemble Team

#### Data Understanding & Preparation – Phase 2 & 3

- Data Collection
- Data Preparation
- Data Transformation

# **Risks of AI Implementation**

Risk Category	Simple Explanation
Unfair Decisions	Al can make biased or unfair choices, sometimes discriminating against certain groups of people.
Hard to Understand	It's often difficult to know how or why AI makes its decisions, making it hard to trust or fix mistakes.
Bad or Not Enough Data	If the data used is wrong, messy, or missing, AI won't work well and can give bad results.
Privacy Problems	Al might use or leak personal information, causing privacy issues or breaking laws.
Security Risks	Hackers can attack AI systems or trick them, leading to stolen data or wrong outputs.
Spreading False Info	Al can create fake news, deepfakes, or other misleading content that confuses or deceives people.
Relying Too Much on Al	Depending too much on AI or using it in the wrong way can lead to mistakes or even dangerous situations.
Rules and Oversight Gaps	There might not be enough rules or supervision to make sure AI is used safely and responsibly.
Cost and Money Issues	Al projects can be expensive and may not always deliver the promised benefits, wasting time and money.
System Failures	Al can break down, make unexpected mistakes, or act in ways that don't match what people want or expect.



# Conclusions

### Key Takeaways

The methodology itself is tool-agnostic and emphasizes following best practices and structured steps rather than mandating specific technologies.

The most effective approach is to select the tool(s) that best fit your team's workflow and project needs for each phase. It is common and recommended to use only one or two tools per phase, focusing on those that maximize productivity, integration, and maintainability

#### **Best Practices**

- Conduct a data readiness assessment before modeling begins
- Involve stakeholders continuously, including domain experts and end users.
- Use small pilot deployments to validate model before scaling
- Track performance metrics aligned to business KPIs, not just technical ones
- Implement feedback loops for model training and updates
- Ensure data privacy, security, and regulatory compliance are maintained
- Adopt an AI-specific methodology to manage complexity effectively.

**Don't treat AI projects like traditional software projects** – they require a mindset shift towards uncertainty, experimentation, and data-driven iteration.

# **QUESTIONS?**

### NK Shrivastava, MBA, ICP-ACC, ACP, CSP, SPC4, PMP, RMP

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y @justrightpm



NK Shrivastava CEO/Enterprise Agile Coach

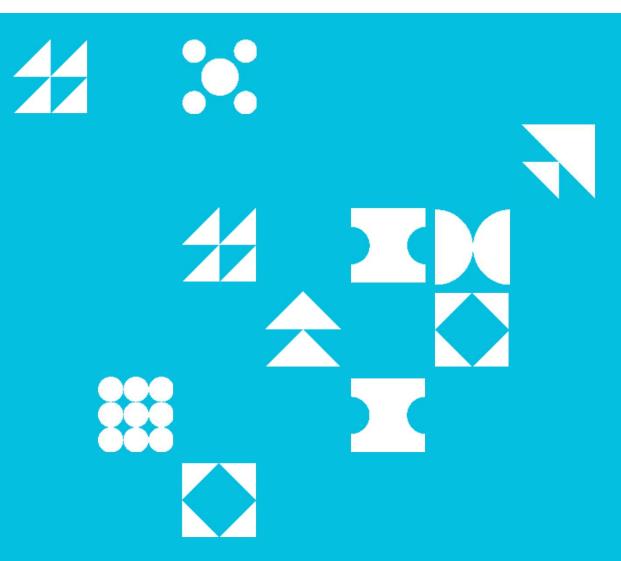


Let's continue the convo! Connect with me via LinkedIn.

Contact me if you would like me to deliver this or a similar session for your team, organization or community.

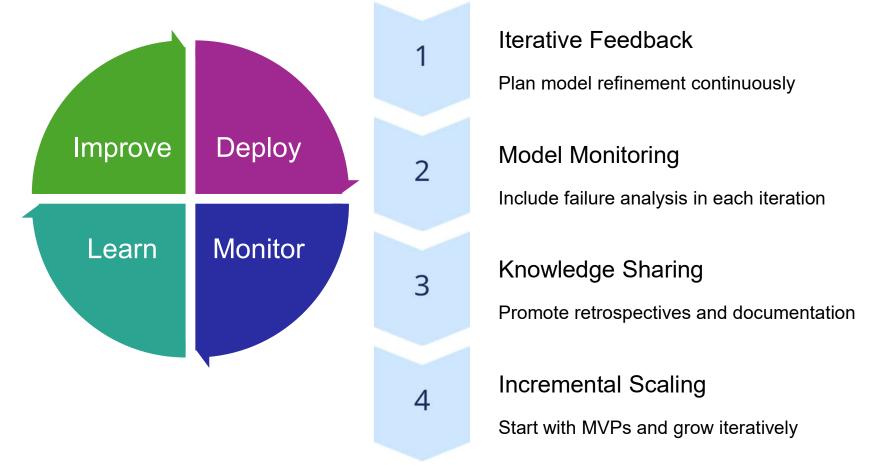
# THANK YOU

NK SHRIVASTAVA CEO/ENTERPRISE AGILE COACH, REFINEM <u>NKS@REFINEM.COM</u> – 417-763-6762



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# Continuous Learning & Improvement



# Limitations of Agile in AI Projects

	Limitations	Description
1	Unpredictable Requirements	AI needs exploration and iteration; Agile expects well-defined user stories.
2	Data Dependency	Success hinges on quality data, which may not be available in time- bound sprints.
3	Inaccurate Time Estimations	Model training and tuning are hard to predict, disrupting sprint planning.
4	Non-Incremental Progress	Small iterations may not yield functional AI outputs, conflicting with Agile goals.
5	Lack of Lifecycle Coverage	Agile ignores post-deployment needs like monitoring, retraining, and drift management.
6	Ethical and Compliance Challenges	Agile doesn't provide specific guidance on addressing these compliance and fairness issues in early stages.

# Business Understanding – Phase 1 Goal: Find where AI can help

Talk to stakeholders to understand their pain points and day-to-day challenges

Look for repetitive tasks, bottlenecks, or areas needing better decisionmaking

Align potential AI ideas with business goals and priorities

Shortlist opportunities where AI can make a real difference

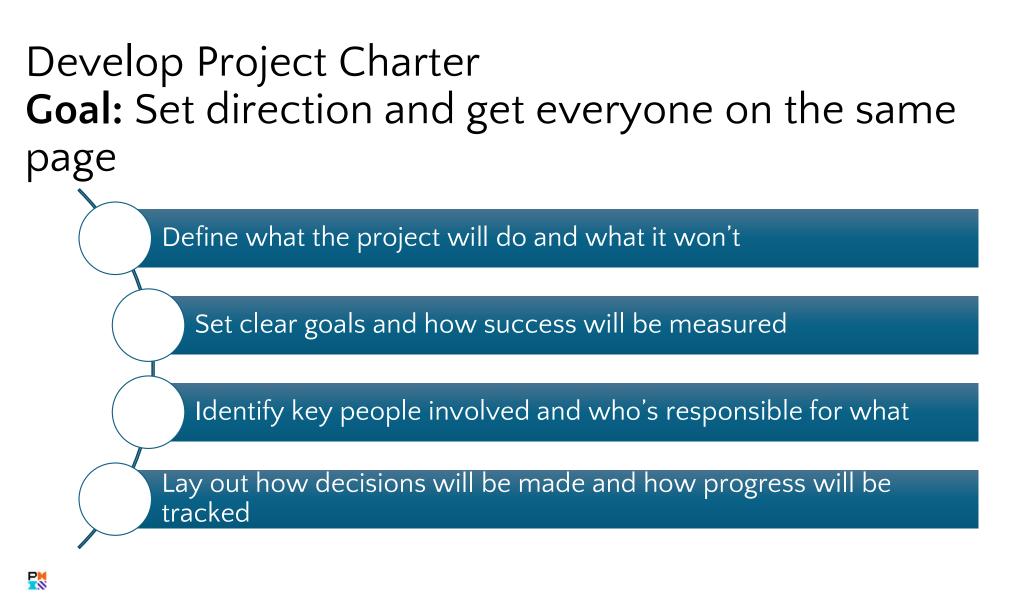
# Create AI Backlog **Goal:** Prioritize what's worth doing

Review each idea based on its business impact and how hard it would be to build

Factor in things like data availability, tech effort, and needed resources

Rank and organize use cases into a working backlog

Use the list to guide which AI projects to explore first



### Complete Feasibility Analysis **Goal:** Make sure the project is doable and worth it

Check if the tech needed is available and if the data is good enough

Estimate potential ROI: What will it save or improve?

Look at risks—technical, organizational, or compliance-related

Assess whether the team and company are ready to take it on