

## Real-time Insights - Artificial Intelligence for Project Management Office Services

Searching for expert systems to tame the unstructured matrix that drives innovation, productivity and change in all organizations

All projects aim for change  
“but not all projects succeed,  
and truly transform”

Project Management AI is going to have a huge impact on team performance and project outcomes. Teams taking advantage of AI will be moving at light speed compared to those that don't, and that's something to be excited about.

Projects by definition are “temporary endeavours to create a unique outcome”.

They are generally volatile, ill structured and engineering orientated. **What if this were not the case?**

### Observations

- Nearly all organizational transformation is through projects
- Projects are a high mix of complex processes, encompassing many resources and activities
- Managers are faced with high stress and frustration
- Metrics and indicators for project performance fail to consider complexity
- A considerable number of projects fail to deliver

### Why Artificial Intelligence

The objective of using Artificial intelligence (AI) is to:

- Offloading truly routine tasks to increase value
- Improved data and document accuracy
- Improving assessment to identify risks
- Facilitating communication to improve accuracy, with better team management and collaboration
- Co-ordinating tasks to improve accuracy
- Focus on organizational change, and improve learning capabilities
- Better portfolio investment and outcomes

Achieved by

- Better use of historical data, employing metadata to detect problems
- Engaged and focused managers and engineers
- Smooth scaleup processes
- Prioritization, re-planning and prediction
- Improved stakeholder satisfaction and analytics
- Innovative learning processes



# IMPOSSIBLE

## What is AI already capable of?

### The things AI can already do...

#### Either now or in near term

- Daily stand-up meetings, comparing progress against the plan(s)
- Review proposals for upcoming projects, with feedback for resource estimates, risks, etc.
- Manage project reports, documentation, governance processes, etc.
- Planning exercises, either HIGH LEVEL or with input from the team
- Scheduling and other administrative work PMs tend to do to ensure project progress
- Vendor Management, from RFPs through daily progress reviews, and integration of deliverables
- Reviewing, reprioritizing and managing project tasks and associated communication based on changing business priorities and overall efficiencies
- Develop a better understanding of performance.
- Predictive analysis, budget, scope, schedule, risks, etc.
- Better use of data input by project teams and improving the blanks left behind by directive and learning feedback.
- Prioritization, Re-planning and Prediction

### The challenges

#### Either now or in near term

- Complexity of social and environmental impacts
- Array of disciplines, skills involved
- Projects and temporary engines to create a unique result
- Size of datasets and historical information required to fully integrate AI in to it
- AI can best achieve technical project management, but is less able to address
  - Strategic and business management required to analyze, judge and prepare business decisions. Can help in a support capacity but accuracy is dependent on underlying models and data
  - Leadership including the interpersonal competencies such as guiding, leading and motivating. AI can only facilitate this through data but cannot assess the emotional or social dynamics into account.
- Cost and energy of implementation, is it simple RPA or are we considering a deep integration?
- Impact of system maturity on outcomes and evolutions



AI alone cannot guarantee success but can be a distinctive game changer and accelerator of productivity and success rates!

## Project Management is the engine of the organization for transformation and change

"Leadership not management, by focusing on stakeholder engagement"

### The AI Employee Experience

- Removing routine tasks enhances strategic focus
- Targets project success by big picture thinking
- Enhances team engagement through social skills such as emotional intelligence, empathy story telling and communication
- Driving organizational change becomes the priority
- Takes advantage of ability to achieve further results and target continuous improvement
- Inspires and promotes conceptual thinking, idea generation and innovation
- Reduces high stress and frustration
- Reduces turnover through proactive identification of possible attrition
- Identifies beyond boundaries to find real value and positive change

### Where can AI be applied?

- Automation of repetitive, low-value tasks
  - Documentation, scope management
  - Planning, scheduling and resource smoothing
  - Budget, costs and resource estimation
  - Reporting and communications
- Predictive analytics
  - Project performance and outcome analysis
  - Cognitive-supporting decision-making
  - Performance analysis
  - Project objectivity and vigilance
- Resource Matching
  - Predict best resource assignment
  - Correct task time estimates
  - Reduction of bias, promotion of diversity
  - Detect attrition and retention patterns
- Risk detection and anomalies
  - Security and fraud
  - Interdependencies and external changes impact outcomes
- PMO
  - Organizational design and change
  - Portfolio, investment, program optimization
  - Methods, practices and tools
  - Support and assistance for knowledge



# The evolution of Project Management

“AI to perform the day-to-day activities, develop key performance understanding allowing humans to uncover insights, perform more complex tasks, make recommendations, and better decisions”

## Time Sequence

### Phase 1: Integration and Automation

- Focus on streamlining and automating repeatable tasks through workflow integration. i.e.
  - Budgets, resources, updates
  - Auto scheduling via logic, rules or learning
  - Exception based intervention, delays, defects, etc
- Minimizes effort while standardizing quality
- Reduce costs

### Phase 2: Chatbot Assistants

- Manage knowledge through human-computer interaction based on text or speech recognition
- Take over menial tasks such as scheduling, basic planning, progress checks, reminders, alerts, etc
- Provide basic level insights and analytics

### Phase 3: Machine Learning Predictive Analytics

- Steer projects based on defined parameters, reactions to risks, for best possible outcomes
- Convert mind maps into a semantic network to drive tasks and work sequencing
- Integrate lessons learned from previous projects, to suggest multiple possible schedules based on context and dependencies

- Fill in the data gaps to encourage better practice
- Adapt and re-baseline project plans in near-real time based on historical data and current progress
- Alert to possible risks and opportunities through near real-time data analysis.
- Schedule and reschedule BAU production depending on matrix weights and priorities, automatically smoothing project to project production in the optimum way possible
- Manage resources based on skills and capabilities rather than role to best achieve project goals

### Phase 4: Autonomous Project Management

- Self sustaining autonomous project driver, only requiring human intervention of reserved and/or exception matters
- Analysis of both the technical process and the master project environment and stakeholders
- Sentimental analysis to review communications and understand stakeholder satisfaction and commitment at any point of time.
- Support for information flow to budget and portfolios for autonomous investment decisions with human oversight.
- Deliver real time advice not just analytics on data

# AI won't replace Project Managers but it will address focus towards holistic project management rather than task orientation!

Machines are becoming more agile and able to adapt in real time without being programmed for the task in advance.

## Outcomes

- Improved productivity in less time
- Remove the management to focus on leadership
- Stranger recognition and identification
- Better decision making and time to decision
- Real-time understanding of activity
- Ultimately, an AI system will save you time while improving outcomes for your projects and team

## Employee Engagement

- Cultivate stakeholder influence
- Embrace rapid adaptability
- Adopt holistic thinking



Program

Design

Create

Embed

### We uncomplicate AI

We help leaders identify their AI opportunities and we bring them to life.

- ~ Change governance
- ~ Current state analysis
- ~ Future state design
- ~ Transition planning

### We assess and develop

We consider the business problem, and build awareness.

- ~ New services
- ~ Existing services
- ~ Automation
- ~ Predictive analytics

### We deploy tactically

We develop proof(s) of concept, and systems that bring ideas to life.

- ~ Understand
- ~ Diverge - sketch - decide
- ~ Prototype
- ~ Validate

### We create lasting value

Embed new working methods, and develop better analytics.

- ~ Operational transition
- ~ Center of Excellence
- ~ Long term viability
- ~ Knowledge & education

## How can FirstAlign help?

To learn more, or view our other publications, visit [www.firstalign.com/index-publications.html](http://www.firstalign.com/index-publications.html)

www.firstalign.com ~ +1 (646) 233-2555 ~ info@firstalign.com