

PROJECT MANAGEMENT SYMPOSIUM

April 18-19, 2024

PROJECT MANAGEMENT CENTER FOR EXCELLENCE

University of Maryland Project Management Symposium



When Projects Manage Themselves: Artificial Intelligence-Powered Project Management

Bill Brantley

President & Chief Learning Officer, Brantley Advanced Social Science Applications (BAS2A)



This session will be recorded.

Project Management Symposium

When Projects Manage Themselves: Artificial Intelligence-Powered Project Management

Dr. Bill Brantley



Computers are like a bicycle for the mind.

Steve Jobs



You



Please complete this analogy: If computers are like bicycles for the mind, what is AI?



ChatGPT

If computers are like bicycles for the mind, then AI is like an autopilot system for those bicycles, guiding and enhancing the journey of thought and discovery.

0070







Top 10 Free Al Project Managem

Efficiency

Zoe Ashbridge

What is the best way to use artificial intelligence (AI) in project management?

March 17, 2024





Bottom-Line, Up-Front

Projects, Products, Programs, and Portfolios are devoted to maximizing the success of value streams.

Value Streams can quickly become complex and difficult to manage.

Al can handle the information flows, coordination, and value optimization – "Point Solutions."

The Project Manager provides wisdom through "mental time travel" – "System Solutions."

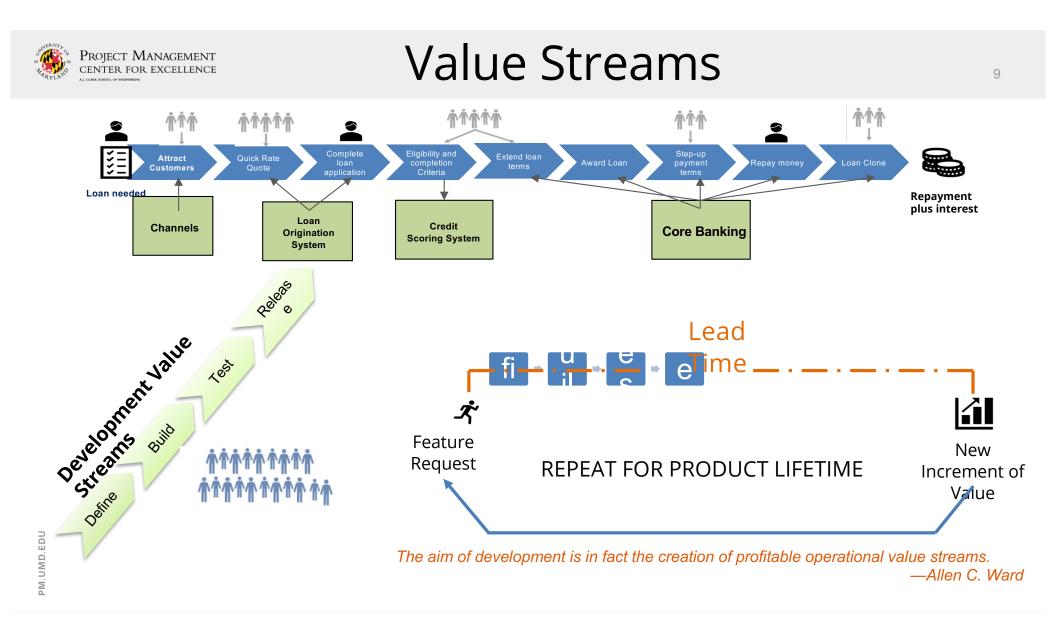


Value Streams are how value is created and delivered.

Project Management Body of Knowledge (7th Edition)

2.1 Creating Value – "Organizations create value for stakeholders."

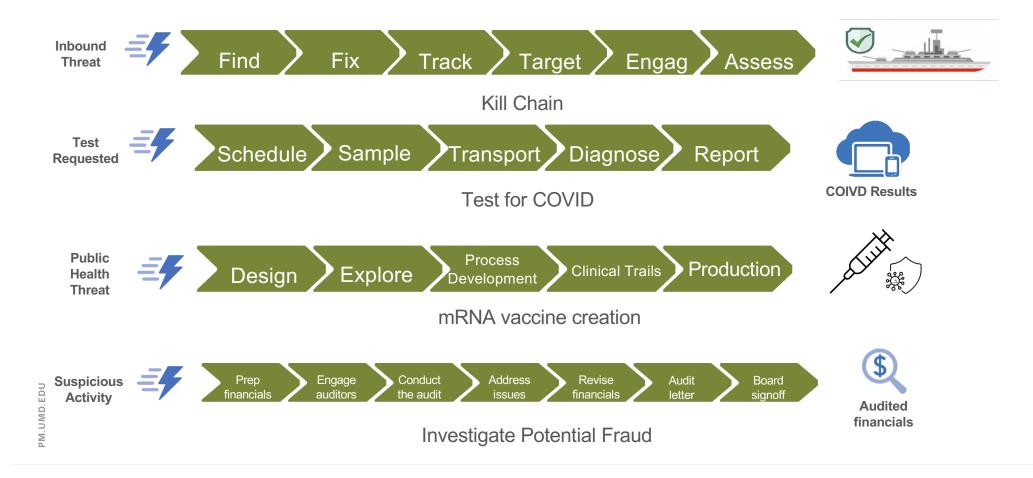
2.1.1 Value Delivery Components – "There are various components, such as portfolios, programs, projects, products, and operations, that can be used individually and collectively to create value. Working together, these components comprise a system for delivering value that is aligned with the organization's strategy."





Government Value Streams

Slide 10





The Three Ages of Al: Classification (1950 – 2011)

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MALL RIVER

LATION

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ChatGPT

We've trained a model called ChatGPT which interacts in a conversational way. The dialogue format makes it possible for ChatGPT to answer followup questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests.

Try ChatGPT A Read about ChatGPT Plus

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we we need to decide

out of Bucharout the fit

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id the actions it can ta of a hypothetical jou gets to Bucharest. On e its goal by carryin eneral, an agent wit

immediate options of unknown value can decide what to do by first examining futur that eventually lead to states of known value.

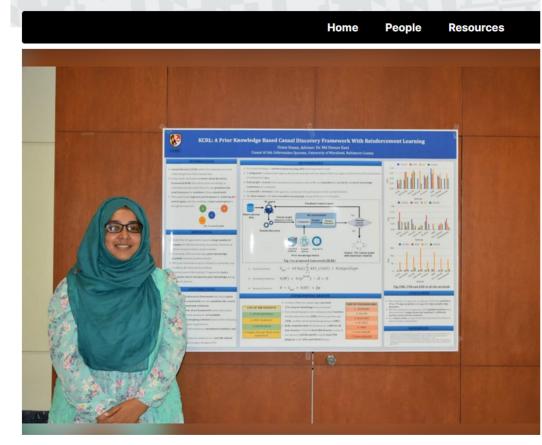
To be more specific about what we mean by "examining future actions," w be more specific about properties of the environment, as defined in Section 2.3.

The Three Ages of AI: Generative (1966 [Eliza]; 2014 - Now)



College of Engineering and Information Technology

Causal Artificial Intelligence Lab (CAIL)

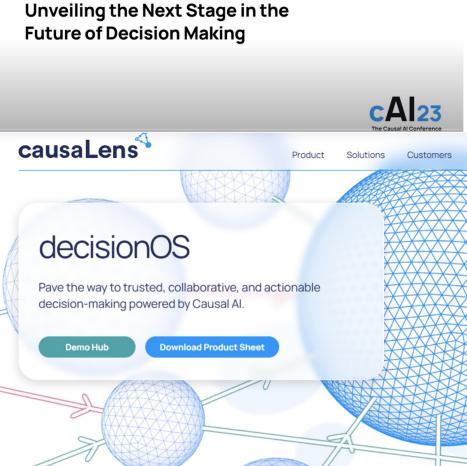


The Three Ages of Al: Causal (2022 - Now)

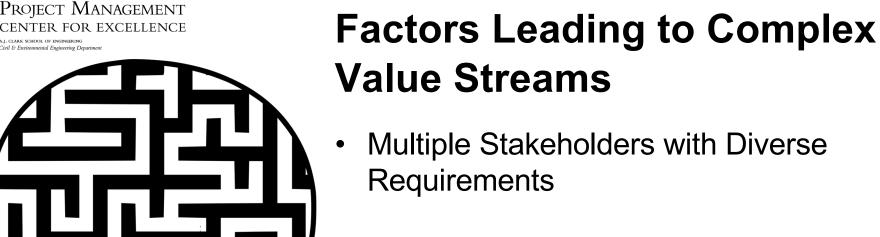


Is Causal AI Real?

causaLens	Product	Solutions	Customers	Resources	Company	decisionOps: Unveiling the N Future of Decis
						causaLens
					\$	decision-making pov
						Demo Hub







- Integration of Different Processes and Systems
- Variability in Demand and Supply
- Compliance and Regulatory Requirements
- Globalization and Geographical Spread



Are there examples of AI-Powered Value Stream Navigators?





SOLUTIONS PRODUCTS
Products Thought Leadership Enquire Now

Value Stream Management: A Leap Towards Enterprise Leadership

Value Stream Management

A Leap Towards Enterprise Leadership

https://qentelli.com/

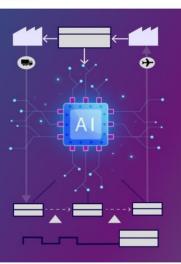
7 Ways Value Stream Tool Integration Can Improve Your Software Quality

Value Stream Tool Integration

Your Key for Improved Software Quality

Using Artificial Intelligence to Identify New Value Streams

Using Artificial Intelligence to Identify New Value Streams



IBM Institute for Business Value | Research Insights



How to create business value with AI

IBM

12 stories from the field

Company interviews

Name	Industry	Function	Business solution	Machine learning technique
BESTSELLER	Consumer	Fashion design	Better design and selling efficiency by extracting product attributes from catalog images	Vision
Boston Scientific	Industrial	Medical device design	Reduced labor cost by automating visual stent inspection using transfer learning	Vision
Crédit Mutuel	Banking	Customer service	Quicker calls by suggesting better answers for customer advisers using hierarchical NLP	Language
Global Bank	Banking	Internal audit	Increased audit capacity by improving documentation quality using an "instant proof-reader"	Language
IFFCO-Tokio	Insurance	Claims automation	Reduced insurance payouts by issuing directly to claimants using automated assessments	Vision
KPMG	Professional Services	Tax credits	Increased tax credits by surfacing better documentation through document search	Language
Marketing Platform	Professional Services	Ad targeting	Controlled cost of training targeting models by exposing marginal incentives of experiments	Other
AcCormick	Consumer	R&D/product design	Improved R&D efficiency by suggesting initial flavor profiles for experimentation	Other
Navtech	Information Technology	Sales	Enabled access to digital product catalogs by building a computer-vision platform	Vision
NVIDIA	Information Technology	Autonomous driving	Unlocked a new business model by pooling data and offering AV tech as a service	Vision
Suncor	Energy	Site operations	Developed early warning of diesel production issues by predicting adverse processing conditions	Other
Zzapp	Information Technology	Public health	Used satellite imagery to identify standing water for antimalarial insecticide treatment	Vision

Source: Neil Thompson, PhD: http://www.neil-t.com/teaching-cases/



Brief Detour: What Is Process Mining?

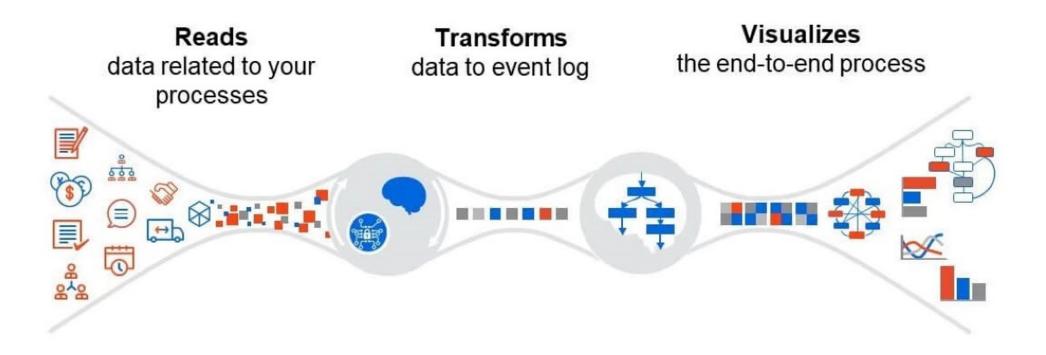


Image source: UiPath





https://mpmx.com/en/digital-automated-predictivevalue-stream-mapping-with-process-mining/

Image Source: mpmX

Five Advantages Of Combining Process Mining with Value Stream Mapping

- Automated Data-Driven Insights
- Identification of Process Variabilities
- Quantitative Analysis of Process Efficiency
- Enhanced Collaboration and Communication
- Continuous Monitoring and Improvement



Do We Still Need Project/Program/ Portfolio/Product Managers?



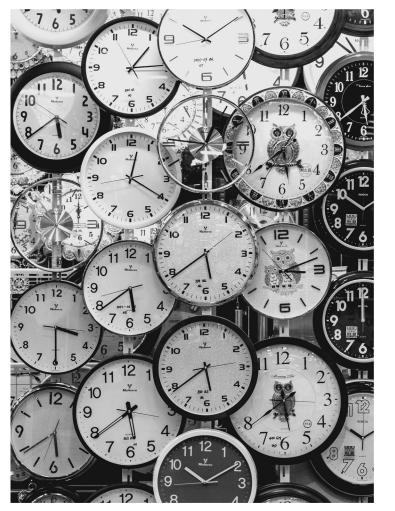


YES!

AI Doesn't Have Wisdom

- No Consciousness
- No Morality
- Cannot Handle Ambiguity
- Limited Context
- No Emotional Intelligence
- Cannot Adapt to New Situations
- Cannot Resolve Ethical Dilemmas

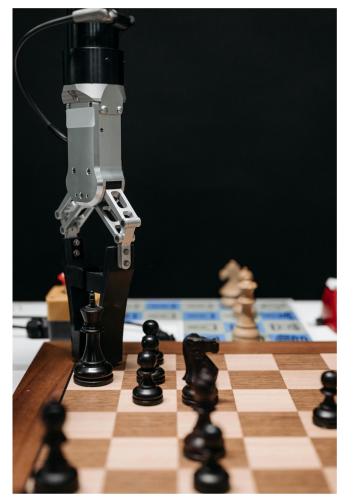




Al-Augmented Mental Time Travel for Project Managers

- Forecasting and Scenario Planning
- Learning from Past Projects
- Enhanced Decision Making
- Optimizing Team Dynamics and Productivity
- Adapting to Change
 - System Solutions





Centaur Teams

- Synergy of Human and Al Strengths
- Superior Performance
- Innovative Approaches
- Democratization of Expertise
- Exploration of Human-Al Interaction





Summary

- Projects, Products, Programs, and Portfolios focus on enhancing value stream success.
- 2. Value Streams tend to complexity, challenging management.
- 3. Al streamlines value stream navigation by managing data and optimizing value.
- 4. Project Managers employ "mental time travel" for insightful guidance.
- 5. Centaur Teams represent the optimal AI collaboration for project or product teams

Questions?





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Evaluate Session

