# AI IN PROJECT MANAGEMENT: TRENDS AND IMPLICATIONS

A brief overview of how artificial intelligence is transforming the field of project management

April 2024





# **Table of Contents**

Introductions	3
What is Al	5
Latest Trends for AI in Project Management	8
Al for project planning and scheduling	
Al for project monitoring and control	
Al for project communication and collaboration	
Al for project risk and change management	
Al for project learning and improvement	
How Al is Affecting Project Managers and Other Stakeholders	14
Al can augment the human capabilities and capacities	
Al can change the roles and responsibilities	
Al can influence the behaviors and attitudes	
Appendix	16

# Introductions



# Haniel Croitoru

Associate Director, Protiviti Canada

# **Enterprise Architect Global Power Platform Practice Lead**

Passionate about simplifying life

**Business Applications MVP | Speaker | Author** 

#FlowInSixtySeconds

- in linkedin.com/in/hanielcroitoru
- @hcroitoru
- haniel.croitoru@protiviti.com



# What is Al

# WHAT IS ARTIFICIAL INTELLIGENCE?

Artificial intelligence (AI) can be widely thought of as the ability of a system or algorithm to perform tasks without being explicitly programmed to do so.



### **AI Sub Types**

### Predictive Analytics

Make predictions about future or otherwise unknown events

Demand Forecasting, Financial Forecasting

# Computer Vision

Interpret and transform images and video into more structured, consumable data

Facial Recognition,
Autonomous Vehicle

# Natural Language Processing

Comprehend "written" unstructured information

Siri, Alexa, Google Assistant, Google Search

### **Robotics**

Operating physical robots autonomously or with minimal human intervention

Plant Assembling, Harvesting, Surgical

# **Generative Al**

Ability to create novel output

Image Synthesis, Text Generation

# Machine Learning

Using algorithms to improve task performance over time

Email Spam
Detection,
Recommendations

### Deep Learning

Specialized machine learning using neural networks to learn complex patterns

Subset, Learn and Make Predict

protiviti®

# Leveraging the right tools



### Out of the Box

### **Microsoft Copilot**

Leverage pre-built models without influencing training or integrating data into the training process



### **Hybrid**

### **Open AI or other Azure Services**

Start with pre-built, extensible models and solutions, and perform enterprise-specific training cycles leveraging relevant data



### Custom

### **Azure Machine Learning**

Build an AI-ML model from the ground up, including model type selection and design, fully custom training cycles and data

### **Microsoft Copilots**

### Bing & Edge **Copilots**

Better interaction with web content

### Microsoft 365 Copilot

Copilots for Productivity

Better

Word Reading and writing assistance

Outlook Better email management

PowerPoint Excel Better data presentations analysis

**Teams** Better meetings

**Business** Chat Knowledge management

### **Windows Copilot**

Better interaction with OS, apps and files

### **Dynamics Copilot**

Better sales and customer support

### **Fabric Copilot**

Better data analysis and business intelligence

### **Security Copilot**

Better threat detection identification, and mitigation

### **GitHub Copilot**

Better code development

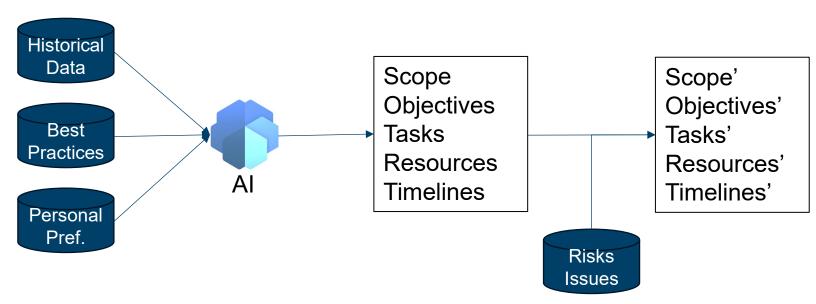
### **Power Platform** Copilot

Better creation of apps, workflow, and agents

# Latest Trends for Al in Project Management

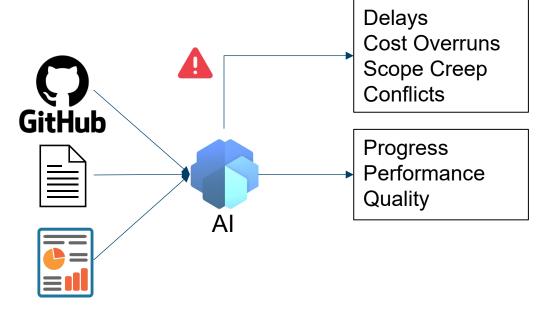
# Al for Project Planning and Scheduling

- Define scope, objectives, tasks, resources, and timelines of a project, based on historical data, best practices, and stakeholder preferences.
- Optimize the project plan and schedule, by considering various constraints, risks, and uncertainties, and suggesting alternative scenarios and trade-offs.

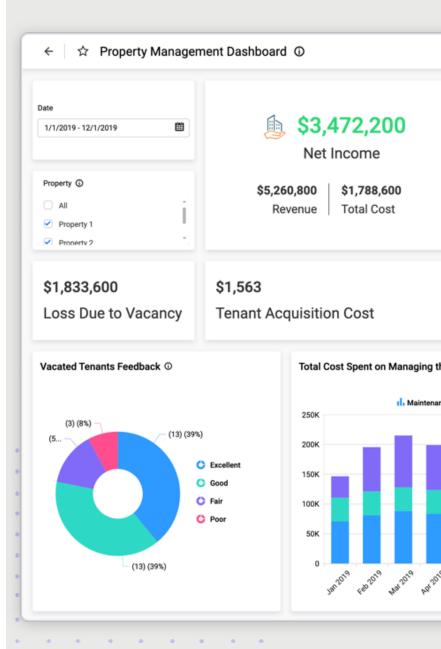


# Al for Project Monitoring and Control

- Track the progress, performance, and quality of a project, by collecting and analyzing data from various sources, such as sensors, documents, reports, and feedback.
- Detect and prevent potential issues, such as delays, cost overruns, scope creep, and conflicts, by alerting project managers and providing recommendations for corrective actions.



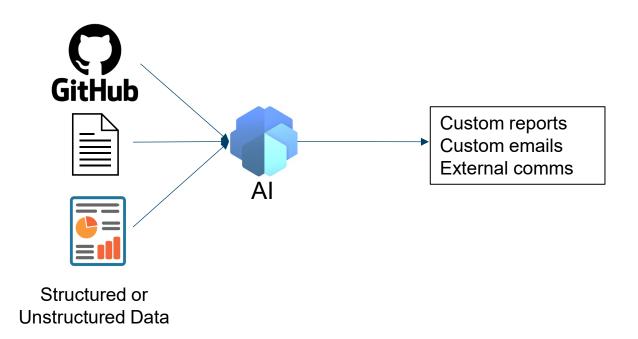
Structured or Unstructured Data





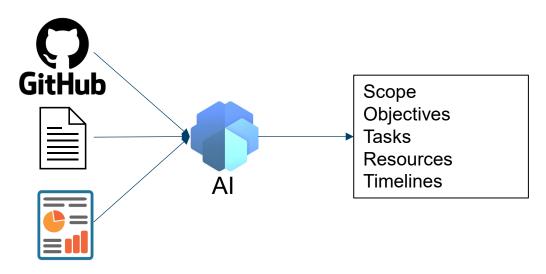
# Al for Project Communication and Collaboration

- Communicate and collaborate more effectively, by facilitating information sharing, knowledge management, and decision making.
- Enhance the communication and collaboration with external stakeholders, such as customers, suppliers, and regulators, by providing personalized and timely information, feedback, and support.

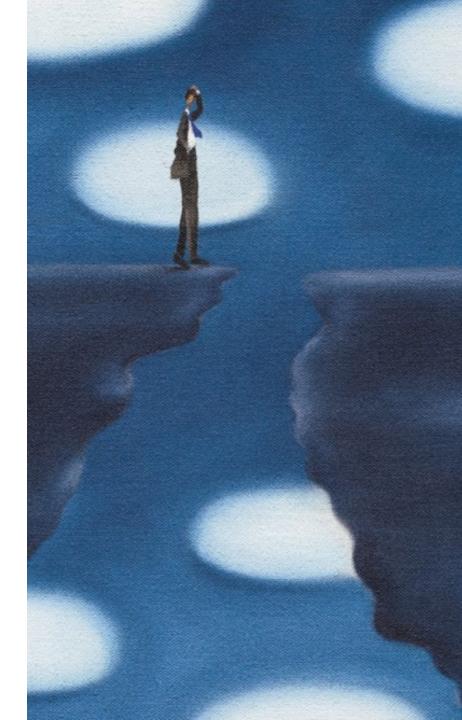


# Al for Project Risk and Change Management

- Use data-driven and probabilistic methods to Identify, assess, and mitigate the risks and changes that may affect a project
- Anticipate and adapt to the changes in the project environment, such as market trends, customer needs, and technological innovations, by providing insights and foresights.



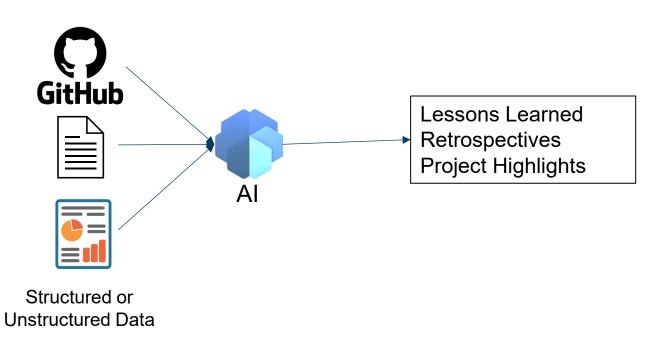
Internal/External
Structured or
Unstructured Data





# Al for Project Learning and Improvement

- Learn from their experiences and improve their skills and competencies, by providing feedback, coaching, and training.
- Improve the project management processes and practices, by capturing and transferring the lessons learned and best practices across projects and organizations



# How Al is Affecting Project Managers and Other Stakeholders

# Al is not only a tool, but also a partner and a catalyst for project managers and other stakeholders

# Benefits for Project Team

Augment the human capabilities and capacities by providing data, analysis, and advice.

Automate and streamline the routine and repetitive tasks, such as data extraction, data entry, reporting, and documentation.

Influence the behaviors and attitudes of project managers and other stakeholders, by creating new opportunities and challenges, such as learning new skills, adopting new mindsets, and embracing new cultures.

Affect the trust, transparency, and accountability, by raising ethical, legal, and social issues, such as data privacy, security, and bias.

Create new roles and responsibilities, such as AI specialists, AI trainers, and AI ethicists, who can design, develop, and oversee the AI applications in project management.

# Appendix



# Haniel Croitoru

Associate Director, Technology Consulting

CONTACT
P: +1.416.274.5708
haniel.croitoru@protiviti.com

### AREAS OF EXPERTISE

- Business process optimization using Microsoft Power Platform
- Microsoft Teams
- SharePoint Online
- Microsoft Office 365 strategy, roadmap, design, and implementation
- Migration Planning & Execution

### **INDUSTRY EXPERTISE**

- Public & Private sector industries, including
- Healthcare
- Financial Services
- Engineering
- Education
- · Not For Profit

### **EDUCATION**

- M.S. Computer Science Queen's University
- B.S. (Hons.) Computer Science
   & Biology York University
- Masters Certificate Project Management – York University

# PROFESSIONAL MEMBERSHIPS & CERTIFICATIONS

- Member, Microsoft Valuable Professional (MVP) Program
- Project Management Professional (PMP)
- Agile Certified Practitioner (PMI-ACP)

### PROFESSIONAL EXPERIENCE

Haniel is a seasoned consulting professional and Microsoft Business Applications MVP with over 20 years of experience in various verticals. He leads the Protiviti Power Platform practice with clients spanning the globe in many verticals. Since 2003 he has been focusing on Microsoft 365, delivering solutions and contributing as an enterprise architect, consultant, project manager, business analyst, and trainer.

In addition to his professional tenure he has always been a big proponent of sharing knowledge and giving back to the community through presenting at conferences and networking meetings on the topics of utilizing Microsoft 365 for various business verticals, SharePoint and business process optimization as well as managing projects. He recently published a book titled Agile Office 365, which focuses on agile project management practices as they are applied to Office 365 implementation.

Earlier in his career, Haniel spent nine years in the medical imaging industry where he was a key member of a team that launched an orthopedic software division for Merge Healthcare (now IBM) and published four patents and numerous articles in the field.

### **MAJOR PROJECTS**

- Lead the Protiviti Power Platform practice globally, developing a Center of Excellence and nurturing the internal team of architects and developers.
- Lead digital transformation initiatives for one of Canada's largest food processing and distribution companies which includes migrating all their on-premises content to Microsoft 365, replacing paper-based or manual processes with automated ones, and setting up information protection and data retention policies across the organization.
- Lead design and implementation of a multi-year digital transformation for a Canadian non-profit
  organization with over 8,000 users, where one major focus area was the digitization of manual, paperbased processes into a digital, mobile-friendly user experience. The outcome of this project resulted in
  significant time and resource savings for these processes
- Architected and developed multiple enterprise-scale solutions using the Microsoft Power Platform, including multilingual and responsive apps to enhance business processes that require multiple stakeholders and process steps.
- Lead numerous Office 365 rollout Strategy and Discovery initiatives that focused on enterprise content management, communication and collaboration, security and compliance, and business process automation.
- Developed multiple Governance frameworks for Office 365 and specifically Microsoft Teams and Power Platform
- Designed and implemented various intranet solutions using SharePoint and other Office 365 applications, that resulted in better collaboration for organizationally and geographically-dispersed teams.

# Who We Are

Protiviti (www.protiviti.com) is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and its independent and locally owned member firms provide clients with consulting and managed solutions in finance, technology, operations, data, digital, legal, HR, risk and internal audit through a network of more than 90 offices in over 25 countries.

Named to the 2023 Fortune 100 Best Companies to Work For® list, Protiviti has served more than 80 percent of Fortune 100 and nearly 80 percent of Fortune 500 companies. The firm also works with government agencies and smaller, growing companies, including those looking to go public. Protiviti is a wholly owned subsidiary of Robert Half (NYSE: RHI). Founded in 1948, Robert Half is a member of the S&P 500 index.

\$2.10 BILLION REVENUE IN 2023\*





90+ OFFICES

COUNTRIES
(AMERICAS, EUROPE, MIDDLE EAST, ASIA-PACIFIC)

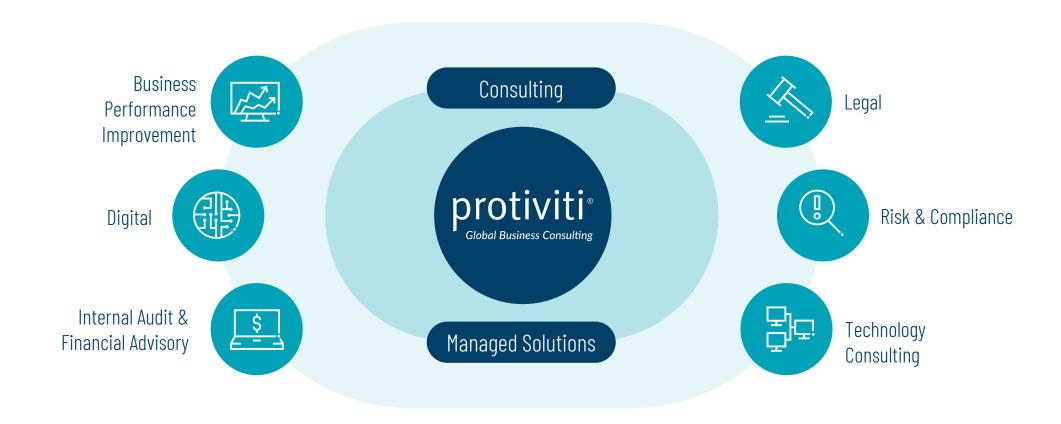




11,000+ PROFESSIONALS

# Protiviti Solution Offerings

We provide end-to-end advisory and support services leveraging our six value-added solution families, each of which brings fully dedicated, global teams and has industry-specific expertise:



# **Protiviti Solution Offerings**

We provide end-to-end advisory and support services leveraging our six value-added solution families, each of which brings fully dedicated, global teams and has industry-specific expertise:

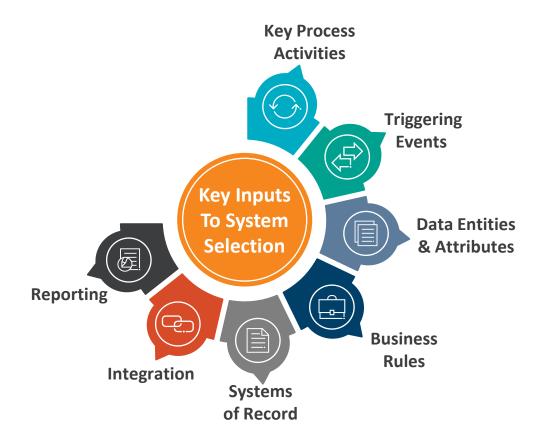


protiviti

# Our Solution Design Approach to Systems Selection

Our approach at Protiviti is to view a system selection and implementation as part of a larger transformation initiative.

We come with a lens of not only looking to establish and transform your processes, but to also support your broader business transformation. Our requirements gathering process leverages 7 dimensions to help develop a clear future state vision:



## Differentiators of Our Approach:

- Increased process optimization & automation
- Integrated capabilities across multiple business processes and applications
- Assess reusability of existing business applications
- Development of unique demo scenarios
- Systems of records to create a lean data environment and efficient data access governance
- Reporting and analytics aligned to business needs and leading practice models
- Clearly understood total cost of ownership (TCO) for business applications

Face the Future with Confidence®

