AI & Quantum Trailblazers in Chicago: Fostering Innovation and Enhancing Governance

NACD® CHICAGO CHAPTER

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Global Business Consulting

BETTER TOGETHER: AI BUILDING BLOCKS

Predictive Analytics
Demand Forecasting

Computer Vision
Parking Occupancy

Natural Language Processing
Disease State ID

Audio
Tone Analysis

Generative AI
Image Creation

Enabling Technologies

Natural Language Processing

+

Generative AI

=

ChatGPT

User Experience

Predictive Analytics

+

Computer Vision

+

Natural Language Processing

=

Interactive Product Recommendations

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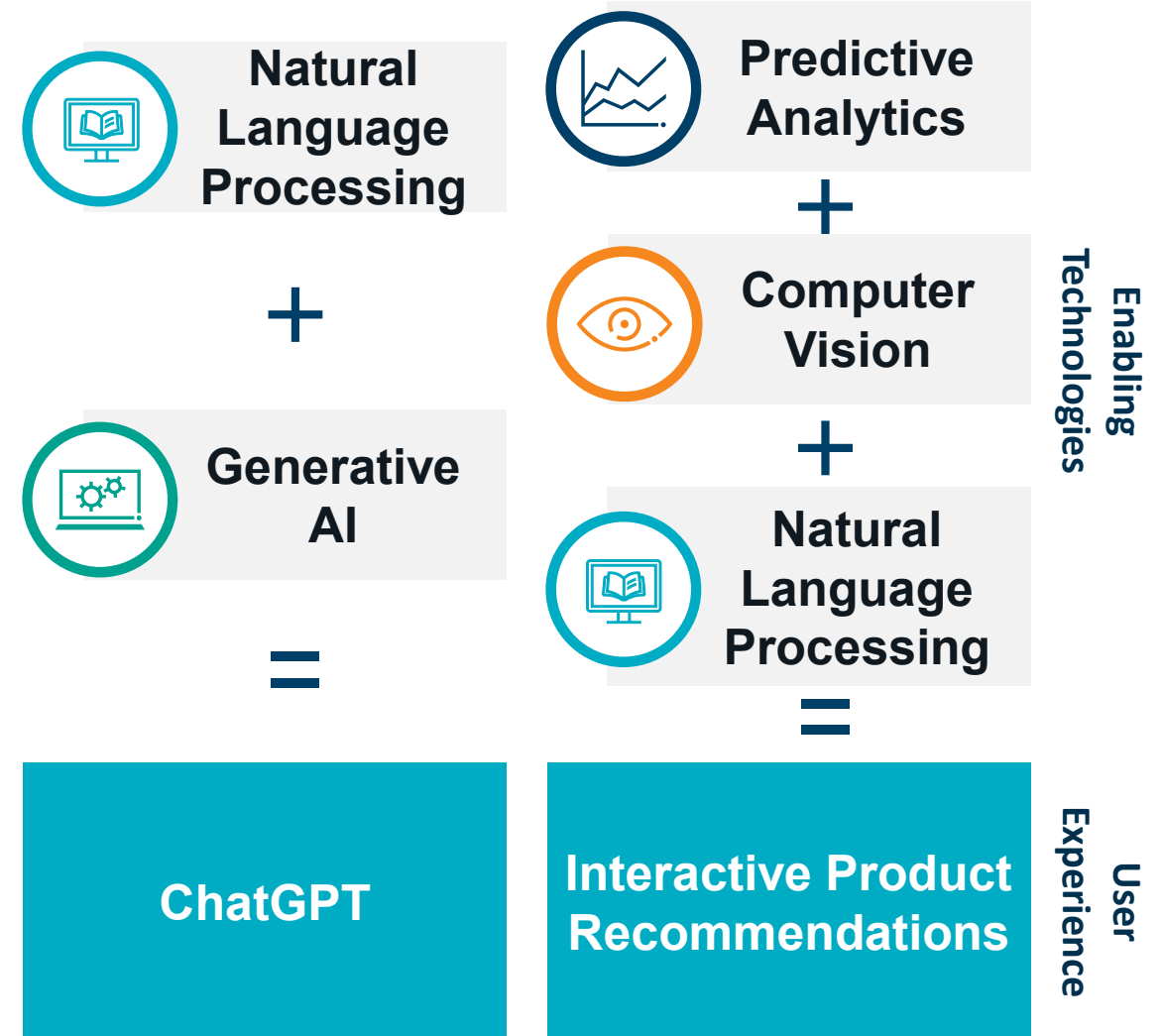
GET STARTED WITH GENERATIVE AI: 3 APPROACHES

Accelerated Strategy

- Identify
- Decompose
- Prioritize and Initialize
- Pilot
- Adapt and Reflect

Hack-a-thon

- Establish a Challenge Statement
- Prepare an Environment
- Formulate Evaluation Process
- Communicate and Market
- Define Teams
- Execute Hack-a-thon
- Evaluate Results

Rapid Prototyping

- Challenge and Problem Statement
- Refinement and Prioritization
- Rapid Prototyping
- Evaluate and Test

To begin your AI journey contact **christine.livingston@protiviti.com**

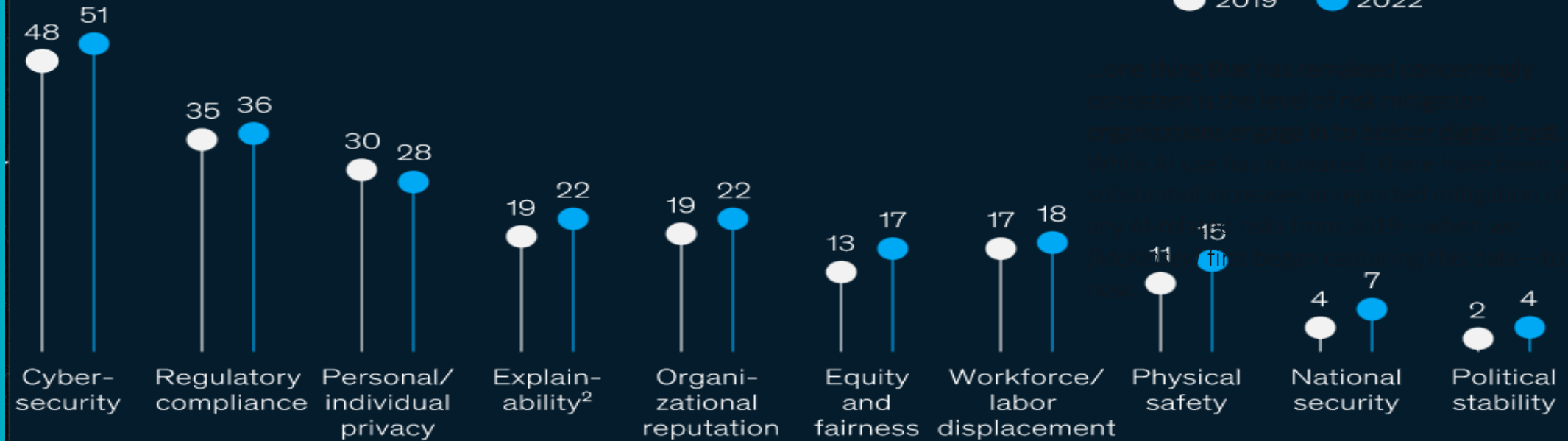protiviti®

REGULATORY ACTIVITY: TOO MUCH TO EVEN SEE IT!

Proposed

US: Algorithmic Accountability Act (AAA) of 2022

- Proposed by a committee of two US Senators and a representative of the House.
- High level overview of AI governance, leading to areas that are open for interpretation
- Implementation is delegated to the Federal Trade Commission (FTC) for monitoring
- Requires 'impact assessments' both at deployment and periodically post deployment.
- Framed in terms of 'ADS' and 'critical decision processes' throughout (considered more 'future proof')
- Scoped for 'large companies' that 'employ ADS to make critical decisions'

EU: Artificial Intelligence Act (AIA / AI Act)

- Proposed by the EU's executive branch.
- Detailed requirements associated with ADS usage and enforcement
- Mandates an organization to perform 'conformity assessments' at deployment and 'post-market monitoring' periodically.
- Framed in terms of 'high-risk AI systems' throughout – which may end up resulting in a reduced scope.
- Offers support for small and medium sized enterprises (SMEs) to reduce their costs for ensuring and demonstrating compliance.

Established

United States

- Fair Credit Reporting Act (FCRA) – 1970
- Health Insurance Portability and Accountability Act (HIPAA) – 1996
- General Data Protection Regulation (GDPR) – 2018
- National Institute of Standards and Technology (NIST) AI standards – 2019
- Algorithmic Accountability Act – 2019
- National AI Initiative Act – 2021
- Request for Information and Comment on Financial Institutions' Use of Artificial Intelligence, Including Machine Learning – 2021

European Union

- General Data Protection Regulation (GDPR) – 2018
- High-Level Expert Group on Artificial Intelligence – 2018
- AI Ethics Guidelines – 2019
- Platform-to-Business Regulation – 2019
- Proposal for a Regulation on Artificial Intelligence – 2021

United Kingdom

- The Centre for Data Ethics and Innovation – 2018
- The UK AI Sector Deal - 2018: In 2018
- The Data Protection Act 2018 – 2018
- The UK AI Code of Conduct – 2020
- The UK AI Ethics Guidelines – 2021

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AI RISK MITIGATION: NOT MUCH PROGRESS

There has been no substantial increase in organizations' reported mitigation of AI-related risks.

AI risks that organizations consider relevant and are working to mitigate, % of respondents[1]

● 2019   ● 2022

Risk	2019	2022
Cyber-security	48	51
Regulatory compliance	35	36
Personal/individual privacy	30	28
Explain-ability[2]	19	22
Organizational reputation	19	22
Equity and fairness	13	17
Workforce/labor displacement	17	18
Physical safety	11	15
National security	4	7
Political stability	2	4

[1]Question was asked only of respondents who said their organizations had adopted AI in at least one function; n = 1,151. Respondents who said "don't know/not applicable" are not shown.
[2]That is, the ability to explain how AI models come to their decisions.

McKinsey & Company

Source: The state of AI in 2022—and a half decade in review | McKinsey

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THREATS OF AI IN THE SPOTLIGHT

What does the future of **responsible AI** look like?

Transparency

Privacy & Data Security

Fairness & Bias Mitigation

Accountability
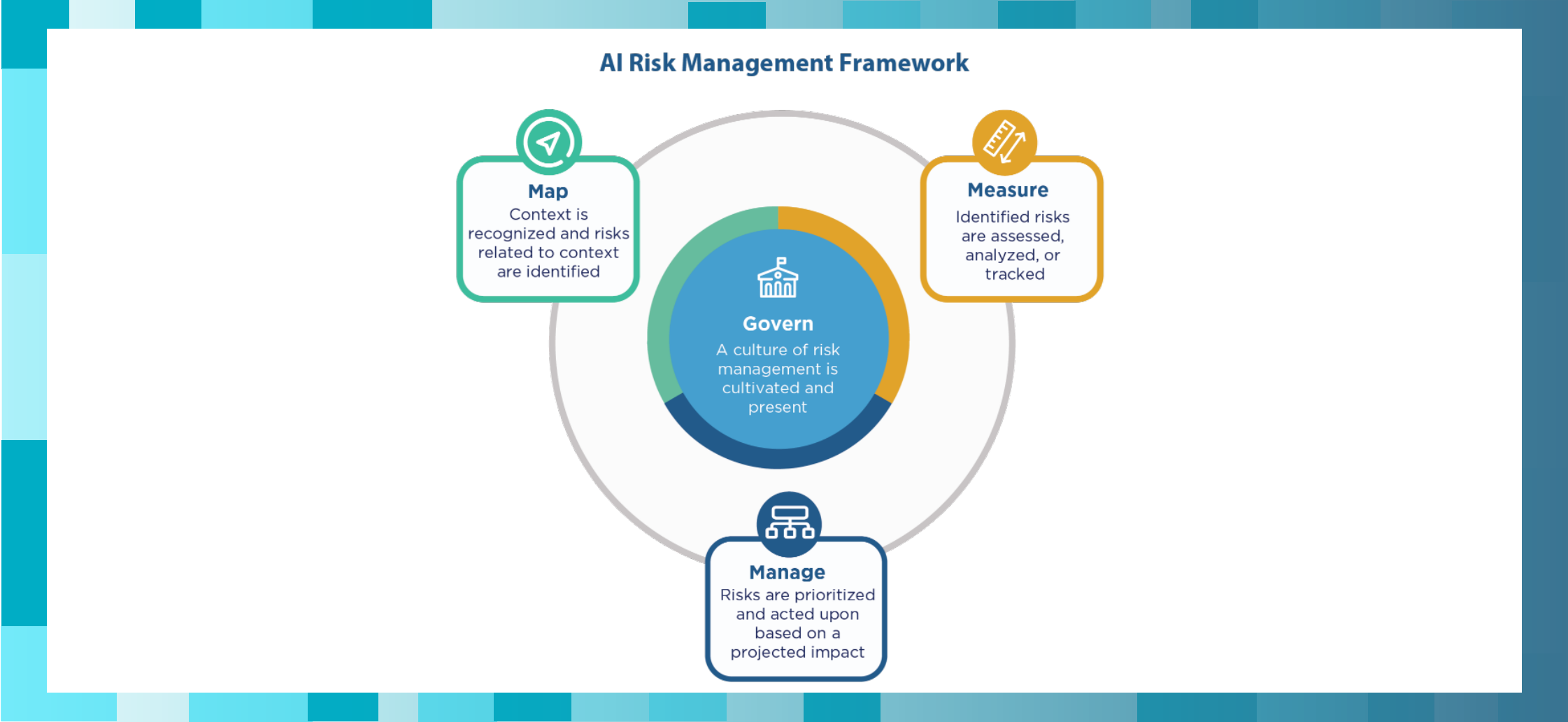
Ethical Considerations

Continuous Monitoring & Improvement

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NIST AI RISK MANAGEMENT FRAMEWORK....

AI Risk Management Framework

Map
Context is recognized and risks related to context are identified

Measure
Identified risks are assessed, analyzed, or tracked

Govern
A culture of risk management is cultivated and present

Manage
Risks are prioritized and acted upon based on a projected impact

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….MANY AI RISK MANAGEMENT FRAMEWORKS

NIST AI Risk Management Framework – January 2023

- Artificial Intelligence Risk Management Framework (AI RMF 1.0) (nist.gov)

ISO AI Framework – June 2022

- ISO/IEC 23053:2022 - Framework for Artificial Intelligence (AI) Systems Using Machine Learning (ML)

ISO AI Risk Management

- Information technology - Artificial intelligence - Risk management - AI Standards Hub

Microsoft Responsible AI Framework – June 2022

- Microsoft Responsible AI Standard v2 General Requirements

Google Responsible AI Practices – 2019+

- Google Responsible AI Practices – Google AI
- Google AI Review Process – Google AI

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