Navigating the Future: Transforming CI with AI

Section 1

Introduction to AI in Competitive Intelligence

Objectives of the Workshop

- To demonstrate the value of AI tools in competitive intelligence and provide participants with hands-on experience utilizing AI-enabled competitive intelligence tools.

Why is AI relevant to CI?

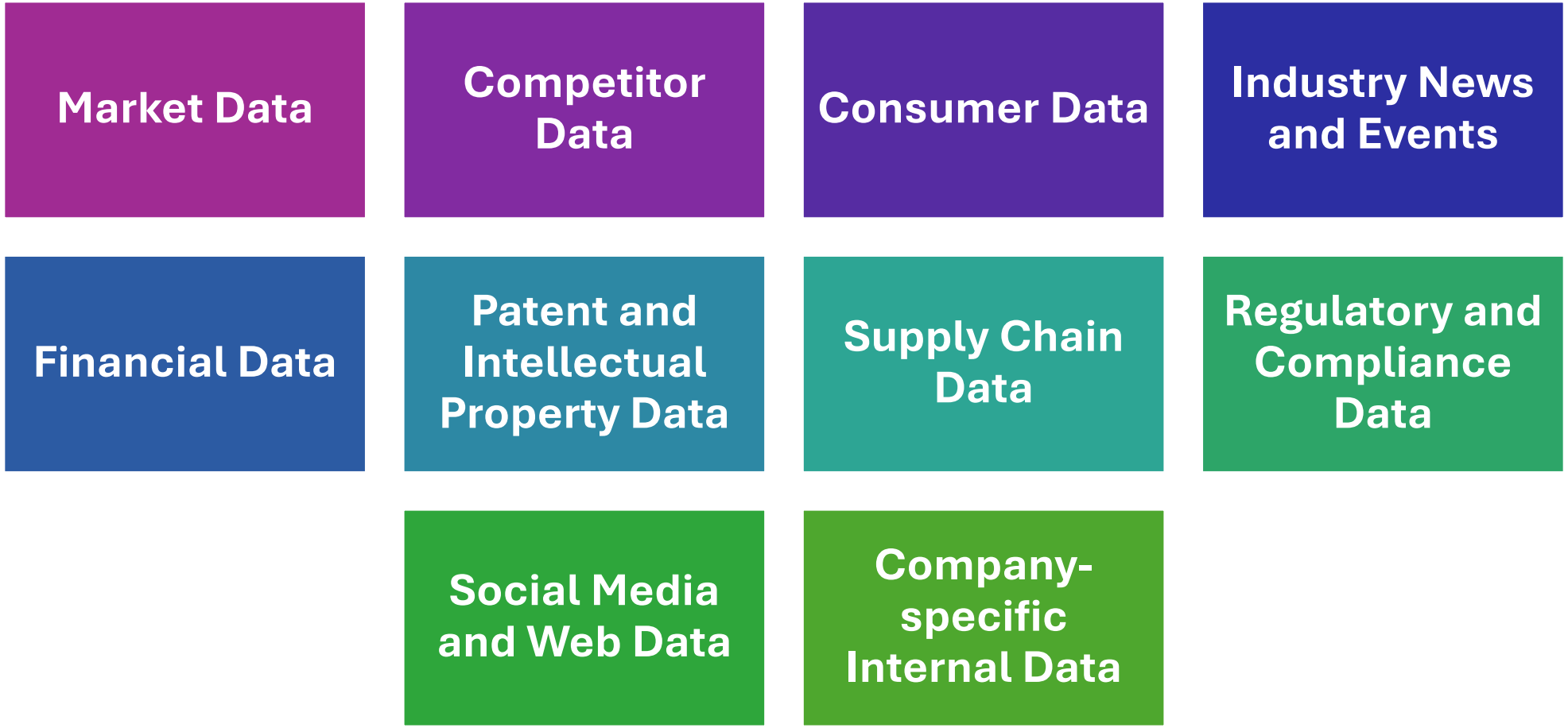
1. **Data Analysis and Pattern Recognition**
2. **Real-time Monitoring and Alerts**
3. **Predictive Analytics**
4. **Natural Language Processing (NLP)**
5. **Competitor Analysis and Benchmarking**
6. **Personalized Insights and Recommendations**
7. **Enhanced Efficiency and Scalability**

Overall, AI empowers CI professionals with advanced analytics capabilities, real-time monitoring, and predictive insights, enabling them to make informed decisions and gain a competitive advantage in today's rapidly evolving business landscape.

What Data Characteristics make for better AI Models?

Relevance	Completeness	Quality
Representative	Variability	Quantity
Labeled Data (for Supervised Learning)	Temporal Relevance (for Time-Series Data)	Ethical Considerations

Data Relevant to AI-enabled CI Models



Understanding Data for AI-Enabled Training Models

1. **Healthcare: Predicting Patient Outcomes**
    1. Case Study: A healthcare provider used AI-enabled training data to predict patient outcomes and improve treatment strategies.
    2. Method: The provider collected electronic health records (EHR) and clinical data from patients, including demographics, medical history, lab results, and treatment outcomes.
    3. Results: By training machine learning models on the collected data, the provider developed predictive models to identify patients at risk of adverse outcomes, such as readmissions, complications, or mortality. This allowed healthcare professionals to intervene early, personalize treatment plans, and improve patient outcomes.

Understanding Data for AI-Enabled Training Models

1. **Manufacturing: Predictive Maintenance**
    1. Case Study: A manufacturing company utilized AI-enabled training data to implement predictive maintenance for its machinery and equipment.
    2. Method: The company gathered sensor data, operational logs, and maintenance records from its production facilities.
    3. Results: By training machine learning models on the collected data, the company developed predictive maintenance algorithms capable of forecasting equipment failures before they occur. This enabled proactive maintenance scheduling, reduced downtime, and increased operational efficiency.

Section 2

AI Tools for Competitive Intelligence

Crayon: Crayon is a market and competitive intelligence platform that uses AI to track competitors, analyze market trends, and gather insights from various sources such as websites, social media, and customer reviews.

Kompyte: Kompyte offers a competitive intelligence platform that uses AI to monitor competitors' websites, digital marketing strategies, and product changes.

CB Insights: CB Insights provides a platform for market intelligence, investment insights, and competitive analysis. It uses AI and machine learning to track startups, emerging technologies, and industry trends.

SimilarWeb: SimilarWeb offers a digital market intelligence platform that uses AI to analyze competitors' web traffic, user behavior, and online trends.

AI Tools for Competitive Intelligence

Brandwatch: Brandwatch is a social listening and analytics platform that uses AI to monitor social media conversations, trends, and sentiment. It provides insights into competitors' brand reputation, customer feedback, and marketing strategies.

Talkwalker: Talkwalker is a social media analytics and listening platform that uses AI to track brand mentions, trends, and influencers across social media channels.

Quid: Quid is a market intelligence platform that uses AI to analyze unstructured data from news articles, blogs, and other sources. It provides visualizations and insights to help businesses understand market trends, competitive dynamics, and emerging opportunities.

Owler: Owler is a competitive intelligence platform that uses AI to track company news, funding announcements, and executive changes. It provides real-time alerts and competitive insights to help businesses stay informed about their industry.

Datanyze: Datanyze offers a sales intelligence platform that uses AI to identify prospects, track technology usage, and analyze competitive landscapes.

Social Media Monitoring & Sentiment Analysis Tools for Competitive Intelligence*

- Brandwatch
- Talkwalker
- Sprout Social
- Hootsuite
- Meltwater

- *These tools provide user-friendly interfaces and dashboards that allow non-programmers to monitor social media mentions, track brand sentiment, analyze engagement metrics, and generate reports without requiring technical expertise.

Machine Learning Tools for Predictive Analytics*

- Microsoft Azure Machine Learning Studio
- Google Cloud AutoML
- RapidMiner
- DataRobot
- H2O.ai
- BigML

- *These tools provide user-friendly interfaces and dashboards that allow non-programmers to monitor social media mentions, track brand sentiment, analyze engagement metrics, and generate reports without requiring technical expertise.

Image Recognition Tools for Competitive Intelligence*

- Clarifai
- Google Cloud Vision API
- Amazon Rekognition
- Microsoft Azure Computer Vision

- *These tools provide user-friendly interfaces and dashboards that allow non-programmers to monitor social media mentions, track brand sentiment, analyze engagement metrics, and generate reports without requiring technical expertise.

Text Analysis Tools for Competitive Intelligence*

- MonkeyLearn
- Aylien
- MeaningCloud
- TextRazor

- *These tools provide user-friendly interfaces and dashboards that allow non-programmers to monitor social media mentions, track brand sentiment, analyze engagement metrics, and generate reports without requiring technical expertise.

Webscraping & Data Extraction Tools for Competitive Intelligence

- Octoparse
- ParseHub
- Import.io
- WebHarvy
- Content Grabber

- *These tools provide user-friendly interfaces and dashboards that allow non-programmers to monitor social media mentions, track brand sentiment, analyze engagement metrics, and generate reports without requiring technical expertise.

Demo

Section 3

Use this link:
https://techreport.chnexplorer.com

Use Case- Market Entry Analysis (45 minutes)

Facial Recognition

- **Scenario:** Participants are divided into groups representing different market segments (e.g. fintech, law enforcement & national security). Each group is tasked with conducting a market entry analysis for Facial Recognition in their respective segment.
- **Exercise:** Groups research market trends, customer segments, competitive landscape, regulatory requirements, and potential barriers/opportunities to entry. They identify opportunities, challenges, and key success factors for entering the facial recognition market in their chosen segment.
- **Outcome:** Groups present their findings and recommendations, highlighting market opportunities, target customers, value propositions, and strategic approaches for market entry.

Use Case - Comparative Technology Maturity Analysis (30 Minutes)

Carbon Capture Economy and Facial Recognition

- **Scenario:** Participants are divided into groups representing the Carbon Capture and Facial Recognition markets. Each group is tasked with conducting a technology maturity analysis for each technology.
- **Exercise:** Groups will research elements of technical maturity for each (see next slide for details to drive analysis).
- **Outcome:** Groups present their findings and recommendations, highlighting market opportunities, customer targets, and strategic approaches for market entry.

Comparative Technology Maturity Analysis

1. **Current State**:
   - What is the current state of the technology?
   - How long has the technology been in development or use?
2. **Development Stage**:
   - What stage of development is the technology in (e.g., conceptual, prototype, commercialization)?
3. **Market Adoption**:
   - How widely is the technology adopted in the market?
   - What industries or sectors are using the technology?
4. **Commercialization**:
   - Are there commercially available products or services based on the technology?
   - What companies or organizations are leading the commercialization efforts?
5. **Competitive Landscape**:
   - Who are the key players or competitors in the technology space?
   - What are their strengths, weaknesses, and market positioning?
6. **Technical Feasibility**:
   - What are the technical capabilities and limitations of the technology?
   - Are there any technical challenges or bottlenecks that need to be addressed?

Custom AI Query Challenge (30 Minutes)

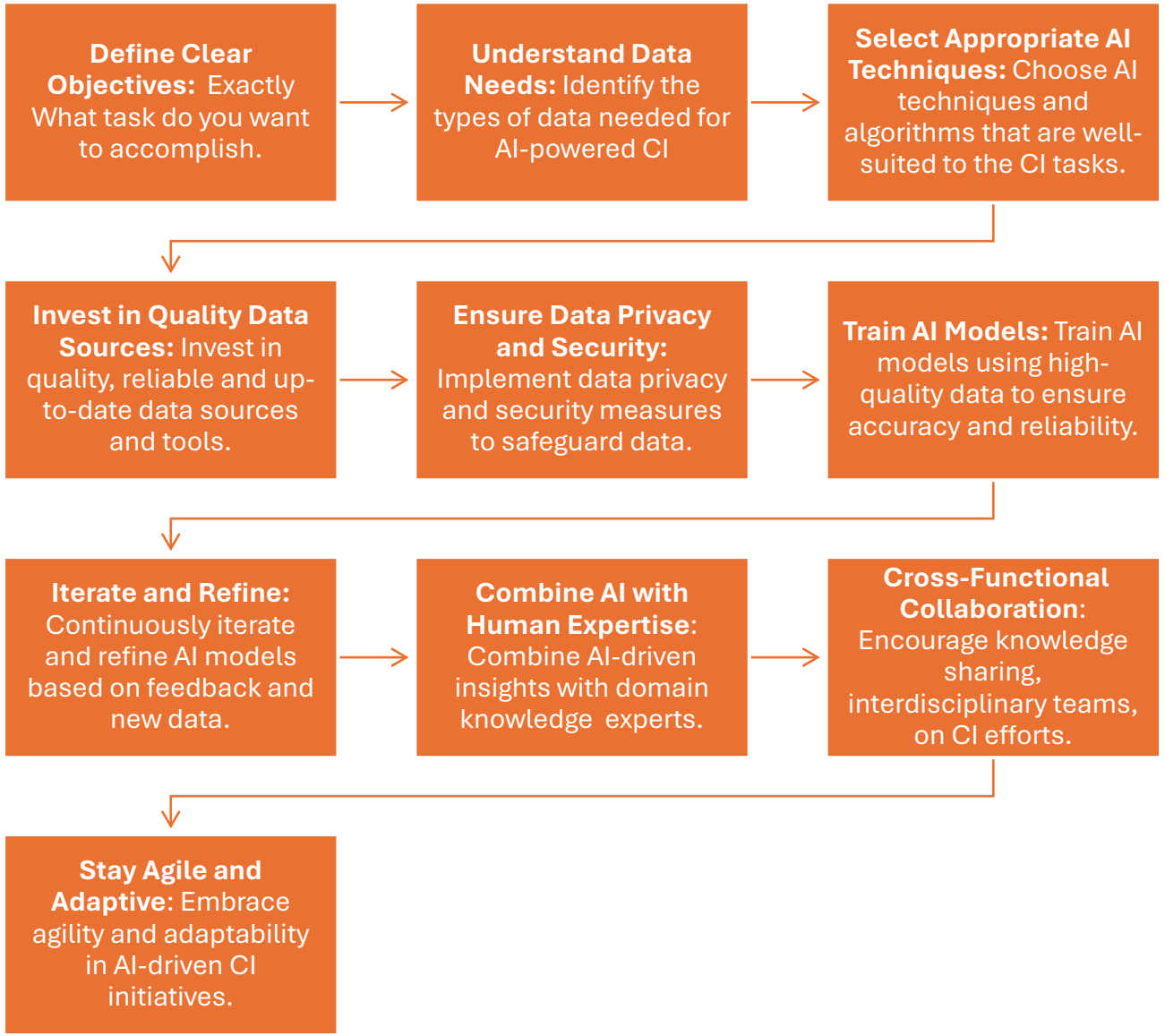
Facial Recognition & Carbon Capture

- **Scenario:** Participants are divided into groups representing the Facial Recognition and Carbon Capture markets. Each group is tasked with conducting a custom query challenge.
- **Exercise:** Groups will research the best queries for understanding the state of the technical advancements in the respective technologies.
- **Outcome:** Groups present their findings and recommendations, highlighting market opportunities, customer targets, and strategic approaches for market entry.

Custom Query Challenge

1. **Be Specific and Clear**: Provide clear and specific parameters for the AI assistant to work with.
2. **Use Keywords and Phrases**: Use relevant keywords and phrases related to the technology or topic of interest.
3. **Provide Context**: Offer context or background information to help the AI assistant understand the purpose and scope of your question.
4. **Ask Open-Ended Questions**: Ask open-ended questions that encourage the AI assistant to provide detailed insights or analysis. Avoid yes/no questions and instead, ask questions that prompt deeper exploration and interpretation of the data.
5. **Request Comparative Analysis**: Request comparative analysis between different datasets or segments within the technology report. For example, ask the AI assistant to compare patent trends across different regions or industries.
6. **Seek Recommendations or Trends**: Seek recommendations or insights on emerging trends, potential opportunities, or areas for further exploration within the technology landscape.
7. **Be Iterative**: Be prepared to ask follow-up questions or refine your queries based on the AI assistant's initial responses.
8. **Leverage Natural Language**: Use natural language to communicate with the AI assistant. Avoid overly technical jargon or complex terminology that may hinder the AI assistant's understanding of your query.
9. **Evaluate Responses Critically**: Evaluate the AI assistant's responses critically and verify the accuracy and relevance of the information provided. Use your domain expertise to interpret the data and extract actionable insights from the AI-generated reports.

Best Practices for Integrating AI into CI Processes



Q&A and Wrap-Up