

Generative AI augmented HR

CULTURAL ENGAGEMENT EMPLOYEE INTELLIGENCE

K. A. Consultants

www.khalidalhosni.com



THE STARTING POINT

GOALS ALIGNMENT





ORGANIZATIONAL

- Increasing Revenues
- Enlarging Market Share
- Higher Customer Satisfaction
- Professional Development
- Career Advancement

PERSONAL

- Skills Development
- Work-Life Balance
- Sense of Purpose and Fulfillment in their work
- Motivation to Perform
- Taking Ownership

TRANSLATING DATASETS USING AI/ML

- Translate data to understand, measure, and improve the workplace culture and employee engagement.
- Enhance productivity, employee satisfaction, and retention through quantifiable performance scores.
- Predict future engagement behaviors and identify potential areas of disengagement.

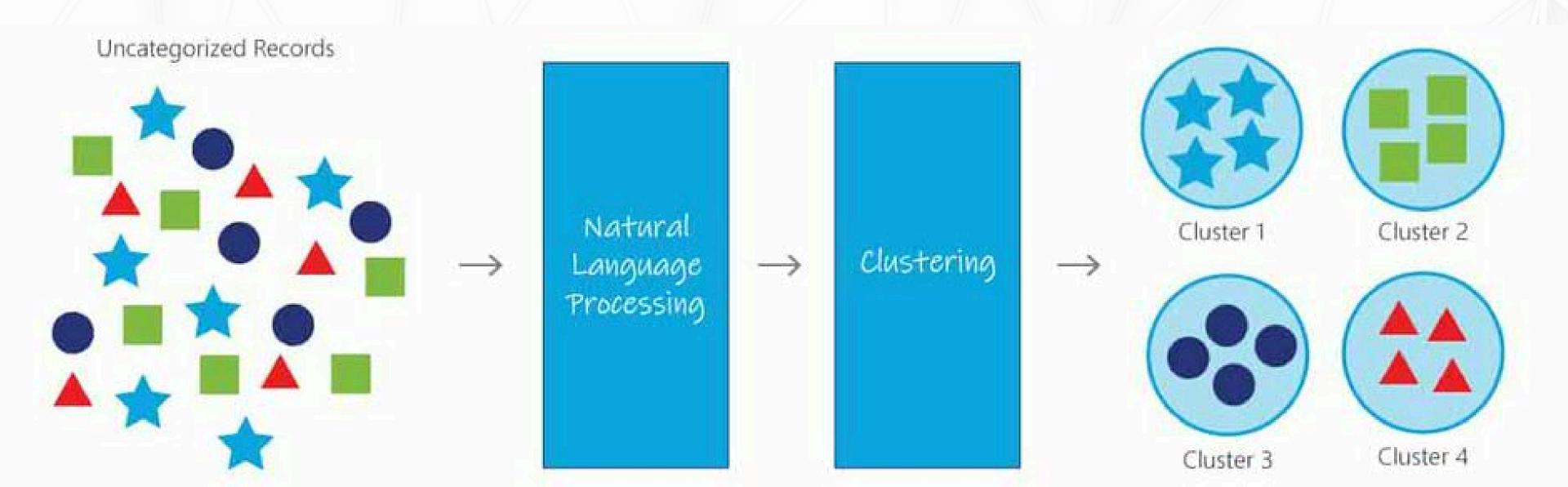


SEMI-SUPERVISED DATA PROCESSING

- Unbiased, Objective Assessment
- Identifies Behavioral Qualities
- Isolates Peculiar Anomalies

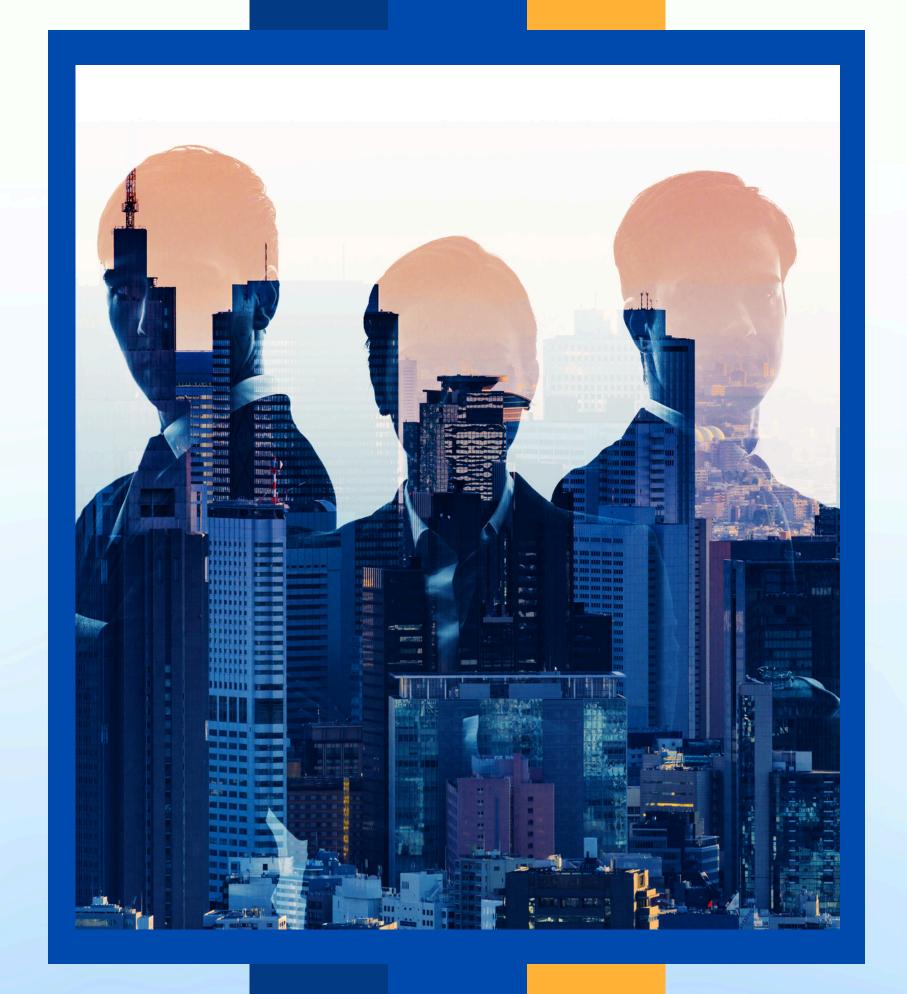
IS IT ML, AI, OR GEN-AI?

- ML & QML for Preliminary Modelling
- Al is a Triggered Action-taking layer
- GenAl is a Decisioning Tool on-top



ML BEHAVIORAL SEGMENTATION

- Segmenting employees by engagement scores to identify engagement rates by groups with their Characteristics.
- **Demographics revealing diverse needs** and preferences within the workforce.
- Understanding how engagement varies across different Job roles and Departments.
- Segmenting employee participation in voluntary programs, training sessions attended, and usage of company resources.



AI/ML HR Predictive Model Train & Prepare Test Model jupyter Register and Manage Model 101010010100101010 CODE 010001000111101001 orYx **Build** model (your favorite IDE) Prepare Data **Deploy Service** Build Monitor Model Image

Semi-Structured Data Processing

Data Format Framework

Which We Use to Obtain
Performance Indicators &
Organizational Benchmarks

ata Source

Interna



DATA.gov

flickr 🕶

Data Format

Structured



Human-Generated

- Survey ratings
- · Aptitude testing

Machine-Generated

- Web metrics from Web logs
- Product purchase from sales Records
- Process control measures

Unstructured









Human-Generated

- · Emails, letters, text messages
- Audio transcripts
- Customer comments
- Voicemails
- Corporate video/communications
- · Pictures, illustrations
- Employee reviews

Human-Generated

- Number of Retweets, Facebook likes, Google Plus +1s
- Ratings on Yelp
- Patient ratings ratings

Machine-Generated

- GPS for tweets
- Time of tweet/updates/postings

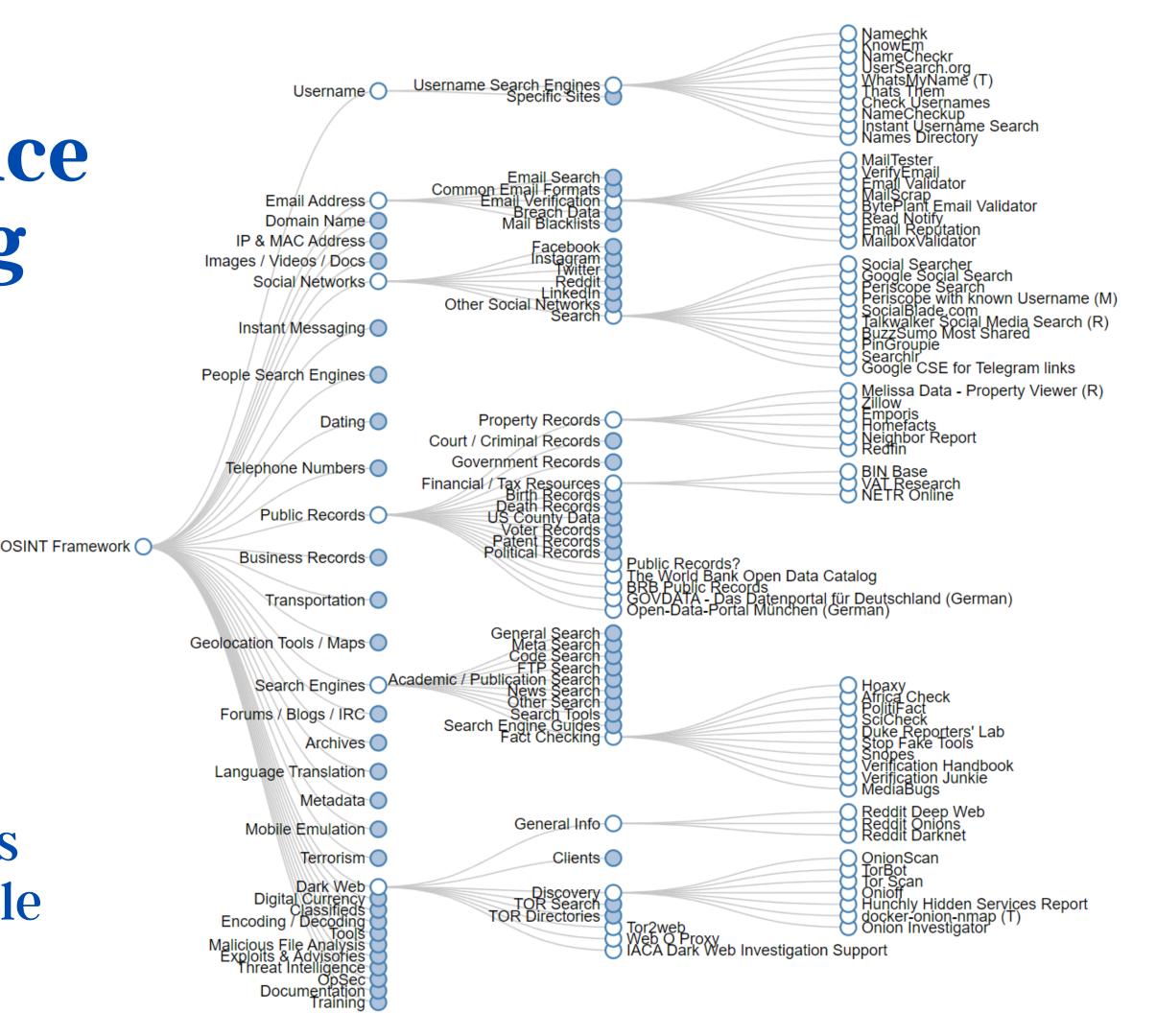
Human-Generated

- Content of social media updates
- · Comments in online forums
- · Comments on Yelp
- · Video reviews
- · Pinterest images
- · Surveillance video

Open Intelligence Data Processing

Open Source Framework

Which We Use to Obtain Online Intelligence that is NOT ordinarily Obtainable



HOLISTIC VIEW OF EMPLOYEE ENGAGEMENT

BI-MODAL NLP

• In-house structured data

Employee Records, Performance

Metrics, Operational Specifications.

Unstructured data

Employee Reviews, Online Sources, Projects Execution Data, Meeting Minutes.



TYPES OF DATA TO BE COLLECTED



QUANTITATIVE DATA

Ratings on specific competencies or skills, based on a predefined scales.



SELF-ASSESSMENT DATA

Employee's own evaluation of their performance, personal skills and competencies.

QUALITATIVE DATA



Open-ended comments providing context to reasons behind Ratings and Actions

BENCHMARKING DATA



Comparisons over time, showing organizational average performance.



AI-DRIVEN PREDICTIVE MODELING FOR EMPLOYEE ENGAGEMENT

ONLINE SURVEYS & FEEDBACK TOOLS

EMAIL & COMMUNICATION ANALYSIS

SENTIMENT ANALYSIS

BEHAVIORAL ANALYSIS

FORECASTING TRENDS



"OBJECTIVELY" REVOLUTIONIZING 360-DEGREE ASSESSMENTS

Analysis of open-ended feedback, identifying themes & sentiments without human bias, and the ability to understand context, sarcasm, and complex emotions in textual feedback.



COLLECT DATA



BENCHMARKS







PREDICTION

Provides quantifiable scores based on vast datasets, reducing subjectivity and provides Personalized Insights highlighting strengths, areas for improvement, and recommended actions.

TOTAL INDIVIDUAL PRIVACY



EMPLOYEE ENGAGEMENT BENCHMARK ML SCORE

- Performance in Key Job Functions
- Work Skills and Abilities
- Communication Skills
- Leadership and Management Skills
- Teamwork and Collaboration
- Interpersonal Skills
- Work Ethic and Professionalism
- Adaptability and Flexibility
- Initiative and Creativity
- Customer Service
- Personal Development
- Cultural Fit



Weighted Employee Scores

Activity-wise (customisable)

390

Adaptibility and Flexibility

425

Dedication Towards Team 315

Leadership and Management

470

Initiative and Proactiveness

SAMPLE EMPLOYEE

- Dashboard
- Assessment Module
- Feedback Compilation
- Development Plan
- Communication Features
- Support and Resources
- Accessibility and Customization Options







390



Engagement

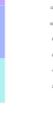
On-Time Delivery

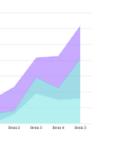
Learning

Productivity











Employees receive well-

rounded feedback from their

and sometimes customers, which provides a more

complete picture of their

performance and behavior.

Weaknesses

Strengths

Improvement





Employees receive wellrounded feedback from their peers, managers, subordinates, and sometimes customers, which provides a more complete picture of their performance and behavior.







Performance Summary for Period

Employees receive well-rounded feedback from their peers, managers, subordinates, and sometimes customers,

- 1. Comprehensive Feedback from Multiple Sources: Employees receive well-rounded feedback from their peers, managers, subordinates, and sometimes customers, which provides a more complete picture of their performance and behavior.
- 2. Personal and Professional Development: The feedback from a 360-degree assessment can highlight specific areas where an employee can improve or develop new skills.
- 3. Increased Self-Awareness: By comparing self-assessment with others' perceptions, employees gain a deeper understanding of how their actions and behaviors are perceived



ROI Areas

NAVIGATING CHALLENGES AND ETHICS IN AI-DRIVEN ENGAGEMENT

- Managing sensitive employee data and data protection laws.
- Ensuring employees are informed about data collection policies.

Data Privacy & Hallucination Avoidance

- Stripping Entity Identifiers before Data Processing
- Collating Domain-specific Contextual Data Features
- Numerical Vectors Database with Specialized Transformer

CHALLENGES

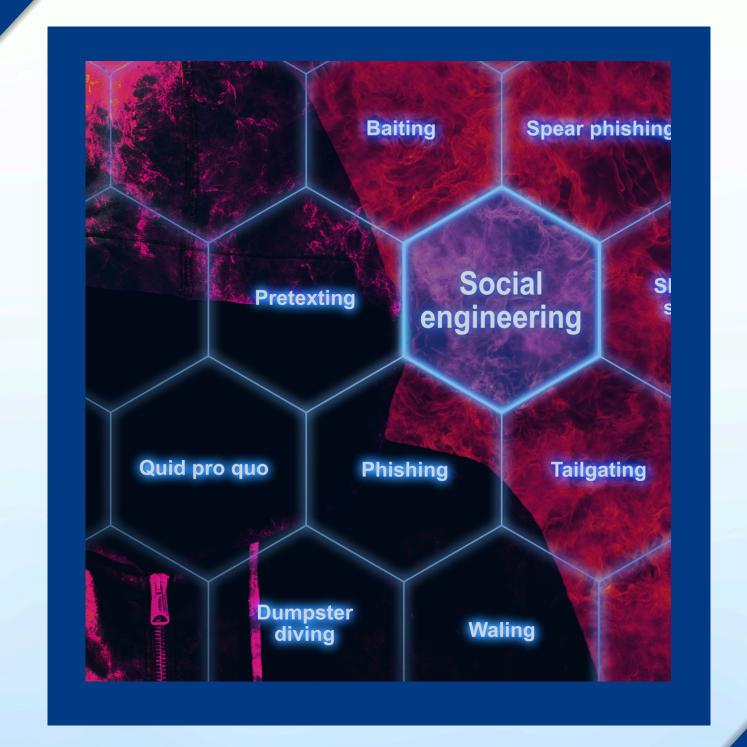
EMPLOYEE TRUST AND ACCEPTANCE

REGULATORY & ETHICAL COMPLIANCE

DATA SECURITY RISKS

Note: MUST run Penetration Tests.

Social Engineering is on the RISE



BENEFITS

Unparalleled Benefits

Only thru Semi-Supervised AI/ML

For the Employee:

- Feedback from Multiple Sources in Privacy
- Clear Personal and Professional Development
- Increased Self-Awareness and Opennes to Change
- Identified Strengths & Weaknesses in Private.
- Gauging oneself against organizational benchmarks

For the Organization:

- Enhanced Performance Management
- Cultural Improvement
- Leadership Development & Succession Planning
- Activity-wise "Obejective" Assessment by Scores
- Department-wise Scoring in total Objectivity