

# Agentic AI in HR - Resume Screening:

This business case outlines an Agentic AI-driven solution for HR Resume Screening, designed to revolutionize talent acquisition. By leveraging advanced AI models and automated workflows, we aim to enhance hiring speed, consistency, and candidate experience, while significantly reducing recruiter workload and operational costs.



# Executive Summary: The Future of Hiring is Here

HR teams often grapple with overwhelming volumes of resumes. Manual screening is not only time-consuming and inconsistent but also heavily reliant on individual recruiter availability and expertise. Our proposed Agentic AI solution offers a robust alternative.



## Intelligent Evaluation

AI models and intelligent scoring mechanisms.



## Automated Workflows

Utilizes n8n for seamless evaluation, scoring, and notification.



## Enhanced Efficiency

Improves hiring speed and ensures fair, consistent screening.



## Scalable Talent Acquisition

Scales talent acquisition without increasing HR costs.

# The Business Problem: Manual Screening Challenges

Traditional resume screening presents significant hurdles, impacting efficiency, candidate experience, and hiring costs. These challenges necessitate a modern, AI-driven approach.



## Time-Consuming

Excessive recruiter time spent on manual review.

## Inconsistent Decisions

Lack of standardization leads to varied screening outcomes.

## Missed Talent

High chance of overlooking qualified candidates.

## Communication Delays

Slow candidate feedback negatively impacts experience.

## Poor Scalability

Struggles to handle large volumes (1000+ resumes).

# Business Objectives: Driving Hiring Excellence

Our strategic objectives are focused on leveraging AI to create a more efficient, fair, and scalable recruitment process.

1

## **Automate End-to-End**

Streamline the entire resume screening process.

2

## **Reduce Workload**

Minimize manual effort for recruiters.

3

## **Ensure Fair Evaluation**

Implement skill-based and unbiased candidate assessment.

4

## **Accelerate Decisions**

Speed up shortlisting and rejection notifications.

5

## **Enable Large-Scale Processing**

Efficiently handle over 1000 resumes per role.

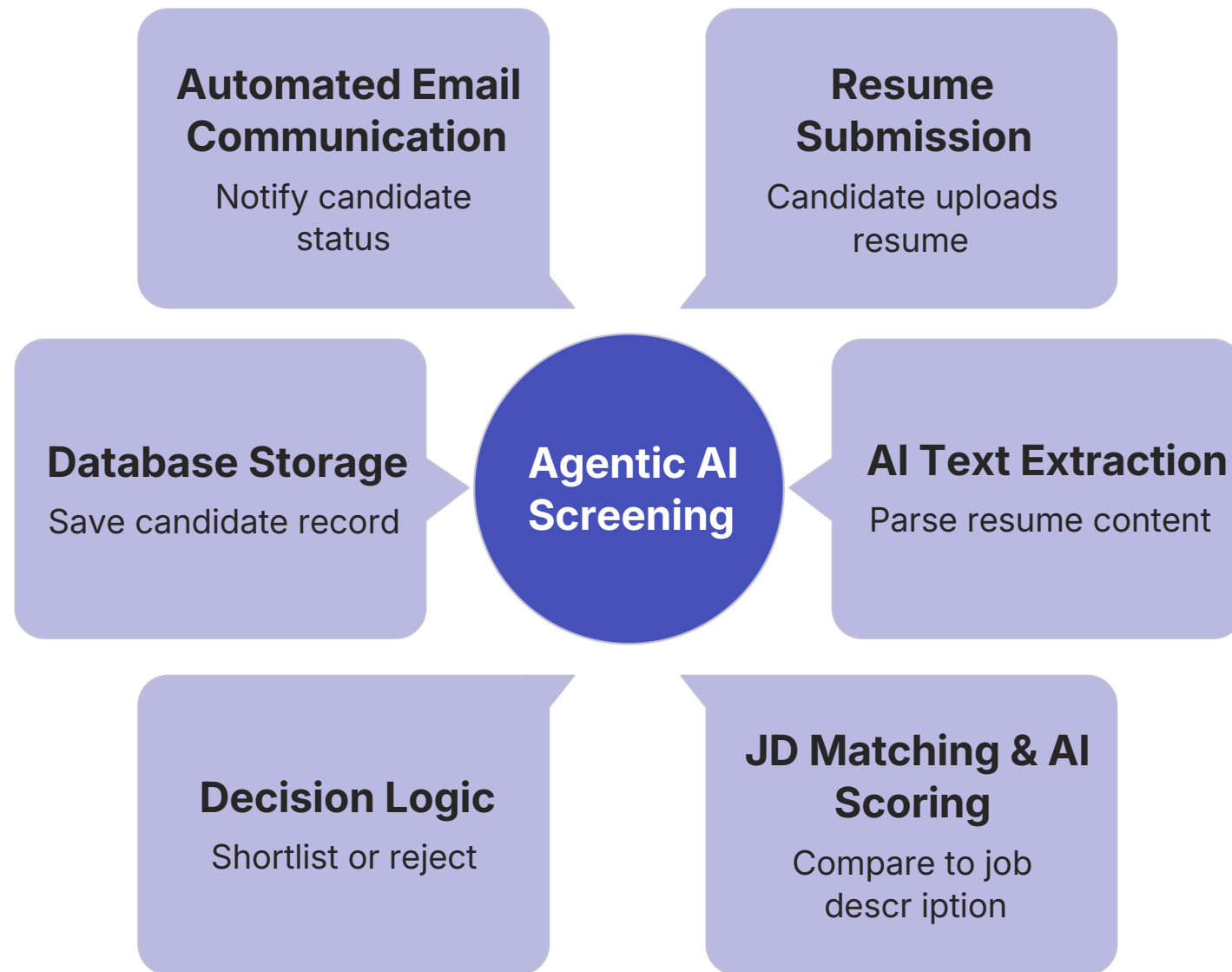
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## **Improve Candidate Experience**

Enhance communication and engagement throughout the process.

# Proposed Agentic AI Solution: An Overview

The Agentic AI-powered resume screening workflow is designed to automate key stages of the recruitment funnel.



This workflow is orchestrated using n8n, seamlessly integrating AI models, databases, and email systems for maximum efficiency.

# Detailed Resume Screening Workflow

Our comprehensive workflow ensures every step, from submission to notification, is managed efficiently and transparently.

01

## Resume Submission

Candidates upload via forms or automated drive triggers.

02

## Content Extraction

AI extracts structured text from PDF resumes.

03

## JD Matching & AI Scoring

AI evaluates skills, experience, role suitability, and overall match.

04

## AI Output Normalization

Raw AI data converted into clean, structured JSON.

05

## Decision Logic

Automated shortlisting or rejection based on match score.

06

## Database Storage

Candidate details and screening results saved for tracking.

07

## Automated Communication

Shortlisted candidates receive interview emails; rejected receive polite notices.

08

## Audit & Traceability

Every screening decision is logged for full transparency.



# Decision & Shortlisting Strategy

Our strategy leverages data-driven parameters to ensure fair, consistent, and accelerated hiring decisions, eliminating human bias.

## Key Decision Parameters

- Skill match percentage
- Experience relevance
- Job Description alignment score
- AI-generated recommendation



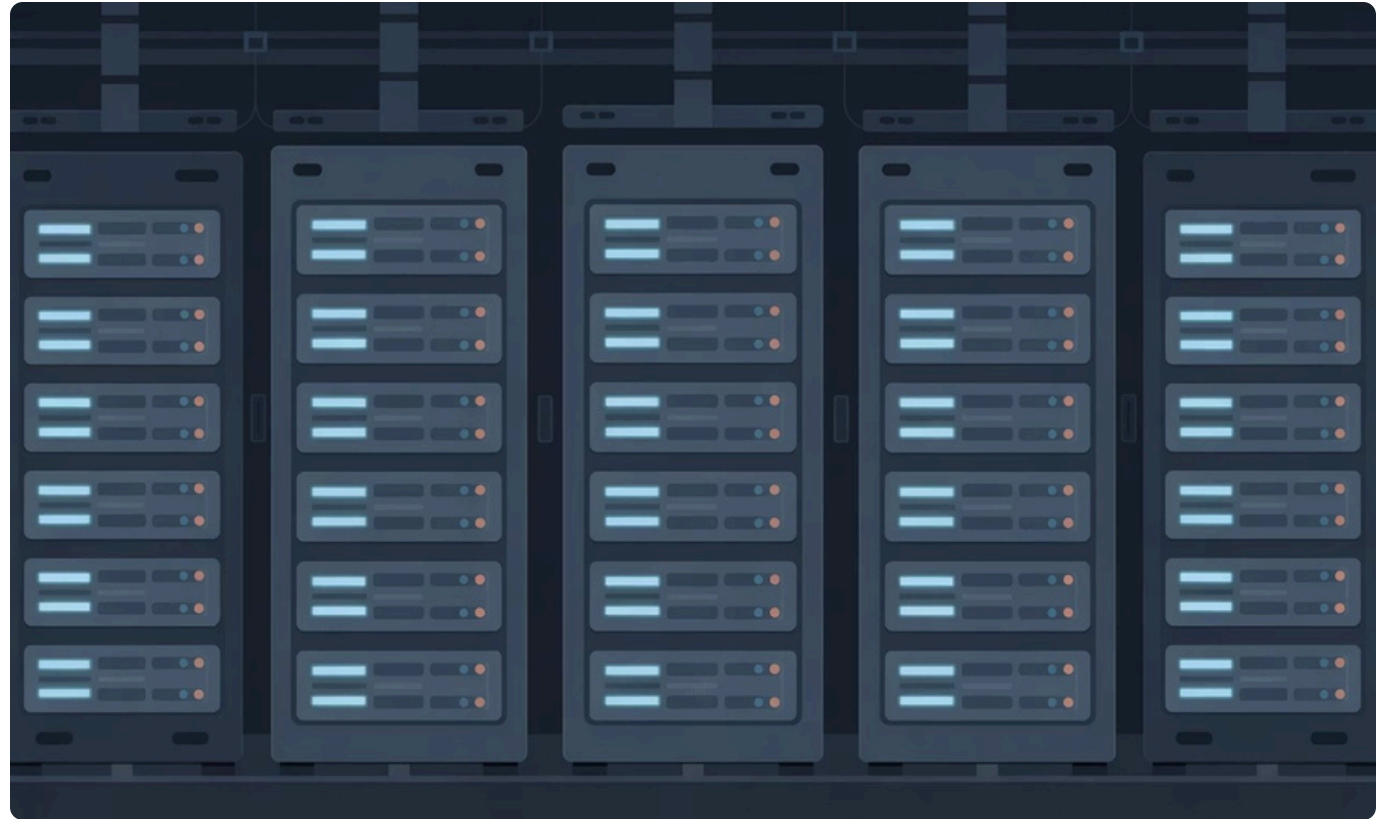
This automated approach ensures consistent evaluation criteria and eliminates unconscious bias from the initial screening phase.

# Database Strategy: Candidate Data Management

A robust database is crucial for centralizing candidate information, enabling advanced analytics, and ensuring compliance.

## What We Store

- Candidate Name & Contact
- Years of Experience
- Extracted Skills
- Match Score
- Screening Decision
- Recommendation Summary
- Timestamp of actions



This structured data is audit-ready and facilitates seamless integration with existing HRMS/ATS systems.



# Benefits: Operational & Talent Impact

The Agentic AI solution delivers substantial benefits across operational efficiency, talent acquisition, and overall business value.

## Operational Benefits

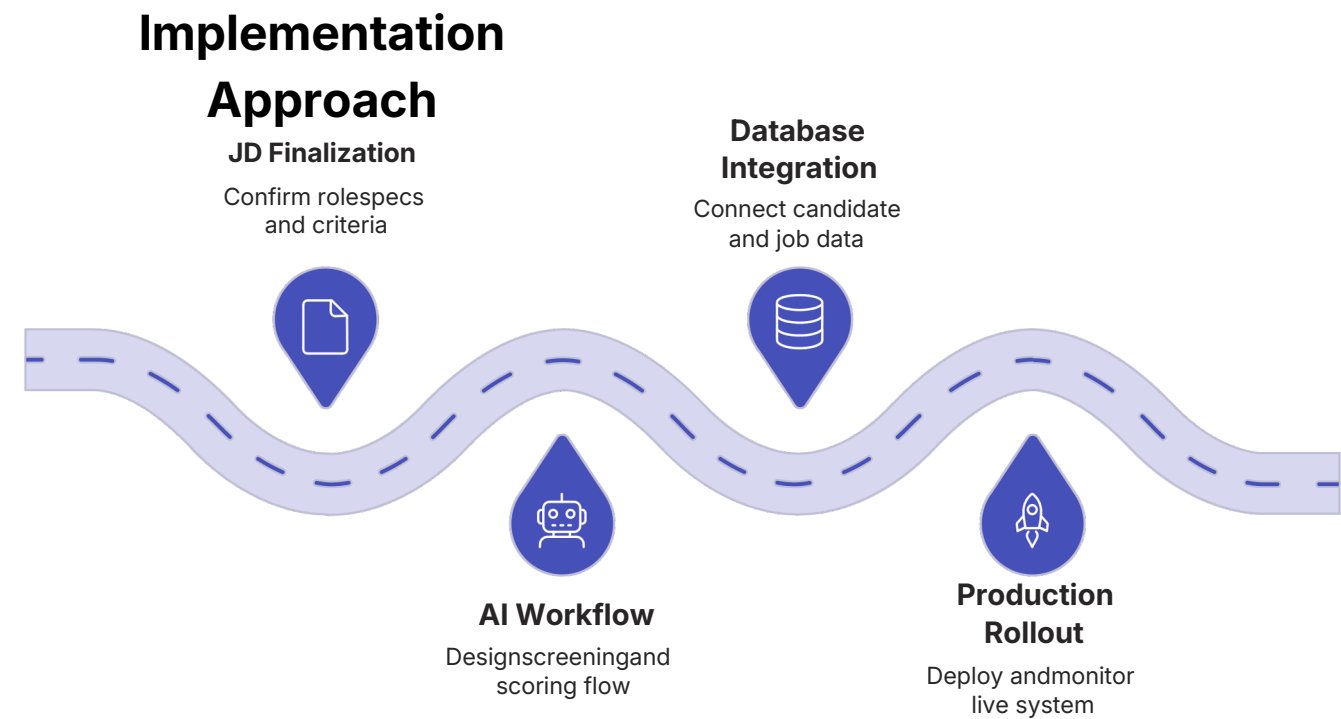
- **70–85% reduction** in resume screening time.
- **Faster hiring cycles** and reduced time-to-hire.
- **Consistent and unbiased** screening decisions.
- Handles **bulk resumes effortlessly** (1000+).

## Talent & HR Benefits

- **Improved candidate experience** through faster responses.
- **Reduced recruiter burnout** and increased job satisfaction.
- **Better quality shortlists** for final interviews.
- **Enhanced employer brand** as an innovative workplace.

# Conclusion & Recommendation

The Agentic AI HR Resume Screening workflow represents a strategic investment in the future of talent acquisition.



This phased approach ensures a smooth transition and continuous optimization.

## Recommendation

"Proceed with implementation as a strategic HR automation initiative to improve hiring speed, quality, and scalability while reducing operational costs."

By combining AI intelligence with automated decision-making, we can transform recruitment into a fast, data-driven, and candidate-friendly process.