

LEVEL 7 ASSESSMENT SPECIFICATION

Student name:	Tsoi Mei Kwan	Student ID number:	2322638
Programme:	MBA		
Module:	Human Resource Management		
Module code:	HKBM 7007	Contribution to Overall Module Assessment (%):	50%
Lecturer:	Dr Leo Ho	Internal Verifier:	Dr Terence Li
Assignment Title:	Assignment #2 – Individual oral presentation	Word count (or equivalent):	12-15 mins Individual Presentation
Submission deadline:	Submit PPT & Presentation: 23 December 2023	Return date of provisional marks & written feedback:	Within 20 days after submission
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): Late submission of the assessment will result in a late penalty mark. Penalties for late submission: Up to one week late, maximum mark of 50%. Over one week late, 0%. Only the Extenuating Circumstances Panel may approve a change to submission dates.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Topic: Unlocking Efficiency: AI-Driven Frontline Staff Recruitment in Property Management

UWTSD

HKMB7007

Human Resource Management (Prof. Leo Ho)

Student Name: Tsoi Mei Kwan (Cherrie)

Student No.: 2322638

Date: 23 Dec 2023



1. Introduction and Background

A. The Evolution of HRM

- HR: from Professional to Strategic Partner
- Provide a competitive advantage to organization
- HR: align their human resources practices with the organization's overall business strategy
- Measurement Challenge

(Becker, Huselid, and Ulrich 2001)

B1. Case study background

- Savills Property Management Limited
- Manages 850 properties (managed by 3 teams)
- 4500 Frontline staff, positions: Customer Service Manager, CS Officer, CS Assistant, Building Manager, Building Superintendent, Building Assistant, Part-time & Permanent
- High turnover rate & vacancy rate
- Frontline Staff: Shortage of manpower, staff do two jobs, low quality, low morale
- HR Officers and Managers: repeatedly perform resignation procedures and recruitment tasks
- Operation Officers and Managers: repeatedly interview candidates, train new staff

1. Introduction and Background

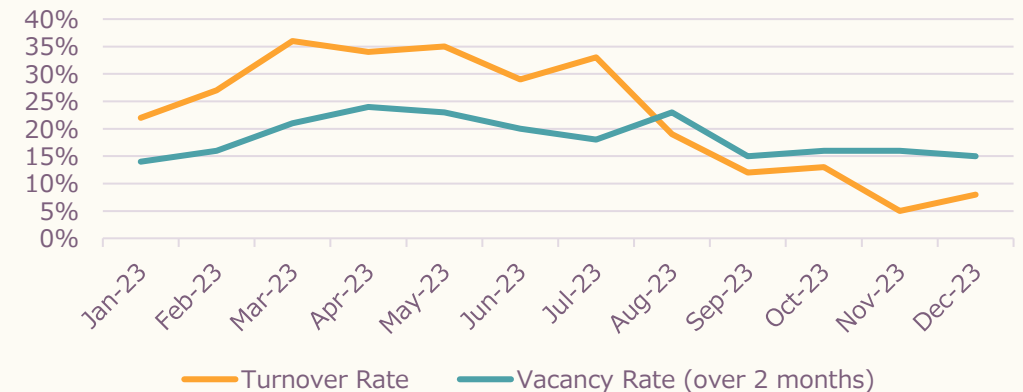
B2. Why is the turnover rate so high?

- Low barriers to entry for these roles
- Abundance of available positions
- Relatively uniform salary range
- Minimal specialized skills required

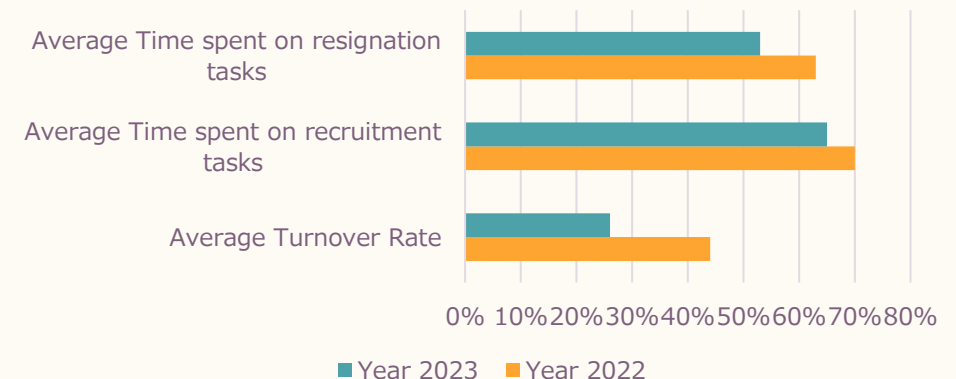
B3. Currently situation:

- Repeating time-consuming tasks of offboarding departing employees and onboarding new hires
- Not considering internal transfers for job vacancies
- No standard interview questions or assessment form
- Conducting interviews and only hiring candidates deemed suitable for the role
- Restricting communication and interviews to regular business hours

Frontline Staff Turnover Rate and Vacancy Rate (over 2 months)



HR & Operation Officer & Assistant Manager



2. AI-Driven Frontline Staff Recruitment

- To divide into stages to achieve “e-recruitment”
- Feature: the requirements for the security guard are very unambiguous and standard, holder of SPP (Security Personnel Permit), QAS (Quality Assurance System), secondary school, age range, district, experience, etc.
- AI can significantly streamline the recruitment process
- AI can be used to find, select, and interview candidates, as well as how it decides who is admitted.

The Reasons of Using Artificial Intelligence in HR

- To solve pressing business challenges
- To attract and develop new skills
- To improve the employee experience
- To provide strong decision support
- To use HR budgets as efficiently as possible

(Guenole and Feinzig 2018)

2. AI-Driven Frontline Staff Recruitment

A. DEFINITION OF AI IN HR

- Based on similarities between AI and natural intelligence (NI)
- Human's Brain and Behavioral similarities of NI
- Mimic certain functions of NI: perceiving, learning, knowing, or reasoning, to augment or automate human tasks

B. CATEGORIZATION BY CONVENTION

1. Computer vision
2. Knowledge
3. Reasoning
4. Machine learning
5. Robotics
6. Robotic Process Automation
7. Evolutionary computing
8. Natural language processing
9. Affective computing

(Strohmeier, 2022, p.3-10)

AI fields are not neatly separated, autonomous areas of AI research and application, but quite contrarily show complex overlaps and interactions.

		Supported or Enabled Category								
		Computer Vision	Knowledge Representation	Reasoning	Machine Learning	Robotics	Robotic Process Automation	Evolutionary Computing	Natural Language Processing	Affective Computing
Supporting or Enabling Category	Computer Vision					○	○			○
	Knowledge Representation			○						
	Reasoning									
	Machine Learning	●	○			○	○		●	●
	Robotics									
	Robotic Process Automation									
	Evolutionary Computing					○				
	Natural Language Processing					○	○			○
	Affective Computing					○	○			

○ Supporting Relationship

● Enabling Relationship

2. AI-Driven Frontline Staff Recruitment

C. E-RECRUITMENT



C1. FINDING & FILTERING CANDIDATES



i. Data-Driven Profiling- AI algorithms analyze large datasets



ii. Job Posting Optimization- AI tools optimize job listings to reach the most qualified individuals - keywords (SPP holder, QAS cert, No criminal record)



iii. Resume Screening- scans through hundreds of resumes - align with job requirements



iv. Social Media Analysis- scour social media platforms to find potential candidates



v. Predictive Analytics- prioritize applicants who are most likely to excel in a frontline role



vi. Candidate Engagement-chatbots engage applicants with pre-screening questions and interactive communication to maintain their interest and assess fit



vii. Passive Candidate Outreach- passive candidates are identified and contacted

2. AI-Driven Frontline Staff Recruitment

C2. CONDUCTING INTERVIEW

i. Conversational AI-

- utilizes natural language processing (NLP) to simulate a human-like interview conversation
- engages candidates with pre-set or dynamic questions based on the role requirements

ii. Facial and Voice Recognition-

- analyzes facial expressions and voice modulations to assess candidates' emotions and confidence
- ensures a consistent interview experience for all candidates

iii. Automated Video Interviews-

- candidates record answers to pre-set questions, analyzed by AI for content and delivery
- allows interviews to be conducted asynchronously, respecting candidates' time

iv. Sentiment Analysis-

- evaluates the candidate's enthusiasm, passion, and cultural fit by assessing word choice and speech patterns

v. Competency-Based Assessments-

- AI evaluates technical skills, problem-solving ability, and critical thinking through virtual tasks and questions
- scores candidates objectively based on performance

vi. Predictive Analytics-

- compares interview responses with profiles of high-performing employees to predict candidates' success
- identifies potential red flags or areas of concern to guide follow-up interviews

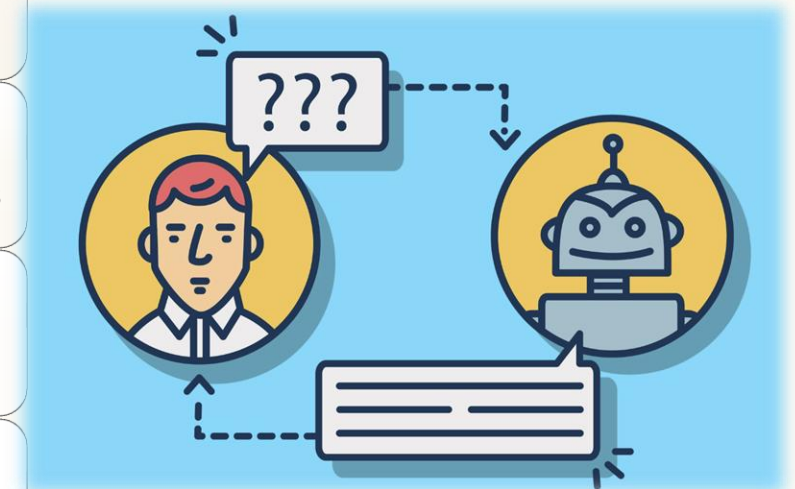


Photo: <https://www.thecreativepenn.com/2019/07/01/ai-disruption-publishing-authors>

Photo: <https://www.prindleinstitute.org/2023/03/whats-wrong-with-ai-therapy-bots/>

2. AI-Driven Frontline Staff Recruitment

C3. RESULTING

i. Comprehensive Candidate Profiles

- AI compiles interview data into detailed profiles highlighting strengths, weaknesses, and fit for the role.

ii. Objective Scoring

- AI assigns scores based on predefined criteria, ensuring a fair assessment for all candidates.
- Scores consider various factors, including technical skills, communication, and problem-solving abilities.

iii. Behavioral Insights

- Provides analysis on behavioral traits and compatibility with company culture.
- Identifies soft skills and personality attributes that may predict job performance.

iv. Fit and Success Prediction

- AI uses historical data to predict the likelihood of a candidate's success in the role.
- Cross-references candidate profiles with traits of top-performing employees.

v. Risk Assessment

- Evaluates potential risks, such as job-hopping tendencies or mismatched skills.
- Offers a risk rating to inform the final decision-making process.

vi. Final Recommendations

- AI generates a ranked list of candidates, summarizing their suitability for the role.
- Presents actionable insights and data-driven recommendations to HR personnel.



3. Reflection from Recruiter & Job Seeker for AI-Driven Recruitment

IN THE VIEW OF RECRUITER

PROS

i. Efficiency and Speed	ii. Improved Quality of Hire	iii. Enhanced Candidate Experience	iv. Data-Driven Decisions	v. Cost Reduction
- Streamlined Process - Quick Screening	- Improved Quality of Hire - Predictive Analytics	- Enhanced Candidate Experience - Faster Feedback	- Data-Driven Decisions - Comprehensive Analysis	- Lower Overhead - Reduced Time-to-Hire

CONS

i. Lack of Human Touch	ii. Dependence on Data Quality	iii. Integration and Adaptation	iv. Overreliance and Complacency	v. Costs of Implementation and Maintenance
- Reduced Personal Interaction - Potential for Detachment	- Bias in Algorithms - Data Privacy Concerns	- Learning Curve - Resistance to Change	- Less Vigilance - Technology Failures	- Upfront Investment - Ongoing Maintenance

IN THE VIEW OF RECRUITER

PROS

i. Accessibility and Convenience	ii. Fair and Objective Assessment	iii. Personalized Feedback	iv. Efficient Job Matching
- Anytime Application - Immediate Responses	- Standardized Screening - Equal Opportunity	- Constructive Insights - Skill Gap Analysis	- Better Matches - Career Path Insights

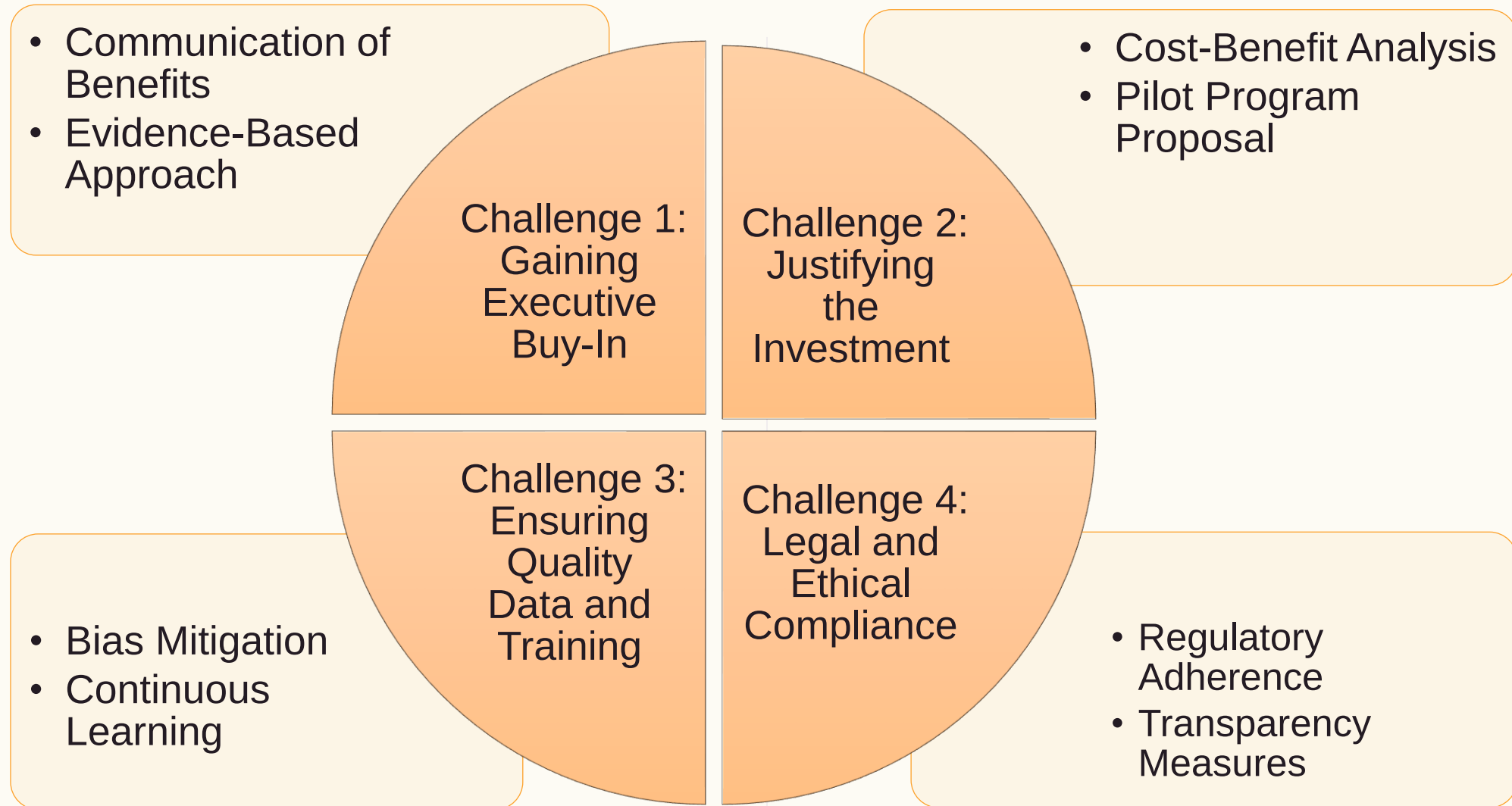
CONS

i. Lack of Human Interaction	ii. Overemphasis on Keywords	iii. Technical Issues and Glitches	iv. Data Privacy Concerns
- No Human Contact - Misunderstandings	- Resume Optimization - Gameable System	- System Errors - Lack of Transparency - Unfamiliar with using the device and system	- Sensitive Data - Misuse of Data

3. Reflection from Recruiter for AI-Driven Recruitment

- Cost Reduction:
- A brief calculation for reference:
- 70% of time doing recruitment tasks
- 30% of turnover rate of frontline staff
- Average Salary for Headquarter Officer: HK\$25,000/month; HK\$833/day; \$93/hour
- Working hours for Recruitment: $\text{HK\$}93 \times 9 \text{ hrs} \times 22 \text{ days} = \text{HK\$}18,414$;
- Cost for Recruitment of One Team and HR Department (14 persons) in a month: HK\$257,796
- New Uniforms: $\text{HK\$}500 \times 1350 \text{ resigned staff} = \text{HK\$}675,000$
- (Total: \$932,796)
- If E-recruitment can improve the situation by 50%, then cost saving per month is HK466,398
- [One year is HK\$5,596,776)

4. Implementing AI-Driven Frontline Recruitment: Strategic Considerations



5. Recommendation

FOR STRATEGIC HR LEADERS

A. Stakeholder Engagement

- Early Inclusion
- Change Champions

B. Tech Partnerships

- Due Diligence
- Data Governance

C. Staff Training

- Skill Development
- Ethical Training
- Continuous Learning

Reference list

Becker, B.E., Huselid, M.A., and Ulrich, D. (2001) *The HR Scorecard Linking People, Strategy, and Performance*. Boston: Harvard Business School Press.

Clark, D. (2020) *Artificial Intelligence for Learning*. London: Kogan Page Limited.

Delecraz, et al. (2022) 'Responsible Artificial Intelligence in Human Resources Technology: An innovative inclusive and fair by design matching algorithm for job recruitment purposes', *Journal of Responsible Technology* 11(2022). Available at: <https://www.sciencedirect.com/science/article/pii/S266665962200018X> (Accessed: 28 November 2023).

Fernandez-Martinez, C. and Fernandez, A. (2020) 'AI and recruiting software: Ethical and legal implications', *Palady, Journal of Behavioral Robotics* 2020(11), pp.199-126.

Guenole, N. and Feinzig, S. (2018) 'The Business Case for AI in HR', IBM Smarter Workforce Institute. Available at: <https://research.gold.ac.uk/id/eprint/33662/> (Accessed: 27 November 2023).

Horodyski, P. (2023a) 'Applicant's perception of artificial intelligence in the recruitment process', *Computers in Human Behavior Reports* 11(2023). Available at: <https://www.sciencedirect.com/science/article/pii/S2451958823000362> (Accessed: 28 November 2023).

Horodyski, P. (2023b) 'Recruiter's perception of artificial intelligence (AI)-based tools in recruitment', *Computers in Human Behavior Reports* 10(2023). Available at: https://www.sciencedirect.com/science/article/pii/S2451958823000313?fr=RR-1&ref=cra_js_challenge (Accessed: 27 November 2023).

Kumazaki, et al. (2017) 'Android Robot-Mediated Mock Job Interview Sessions for Young Adults with Autism Spectrum Disorder: A Pilot Study', *Frontiers in Psychiatry* 8:169. DOI: 10.3389/fpsy.2017.00169. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5601082/> (Accessed: 27 November 2023).

On AI, Analytics, and the New Machine Age (2018) Boston: Harvard Business Review.

Strohmeier, S. (2022) *Handbook of Research on Artificial Intelligence in Human Resource Management*. Cheltenham: Edward Elgar Publishing.

The Economic Times (2018) '*Meet the Russian robot that's hiring humans*', 1st April. Available at: <https://economictimes.indiatimes.com/jobs/meet-the-russian-robot-thats-hiring-humans/simultaneous-interviews/slideshow/63565595.cms> (Accessed: 1 December 2023).