

LEVEL 7 ASSESSMENT SPECIFICATION

Student name:	Lam Pui Ki	Student ID number:	2227331
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Lecturer:	Dr Leo Ho	Internal Verifier:	Dr Terence Li
Assignment Title:	Assignment 1	Word count (or equivalent):	15 mins Individual Presentation
Submission deadline:	Nov 26, 2022 - Oral Presentation Nov 26, 2022 - Submission of finalized PowerPoint slides	Return date of provisional marks & written feedback:	14 working days after submission of finalized PowerPoint slides
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 <u>submission</u> 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.		



*How Machine Learning impacts on "F Company"
in Human Resources Management Functions for
higher performance today and in the future*

HKBM7007 Human Resources Management
Name: Lam Pui Ki
26th November 2022

Overview of Presentation

- *Insight on using Machine Learning in Human Resources Management Functions*
- *How & Why “F Company” use Machine Learning in Human Resources Management Functions?*
- *Application of Machine Learning (Workday) and Impacts on Human Resources Management Functions*
- *F Company – To do list for HR leader & HR team*
- *F Company – Candidate Assessment & Skills Management*
- *Key Challenges for HR leaders on real workplace*
- *Conclusions & Recommendations for better results*



Insights on using Machine Learning in Human Resources Management Functions

Automation with Intelligence:

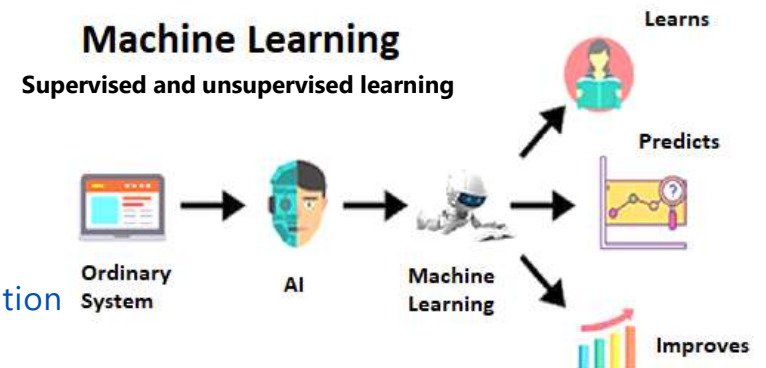
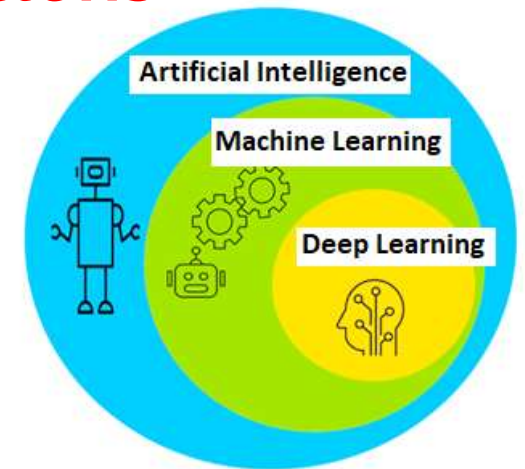
- To perform manual tasks with combination of intelligent insights and decisions
- To perform the repetitive processes to boost efficiency and productivity

Identification candidate's patterns:

- To feed data in machine learning software
- To shortlist a set of candidates and take follow up action

Data-Driven decision making:

- To extract insights from data and give recommendations in real-time
- To remove many of the common human biases and inconsistencies in a function



F Company



How & Why use Machine Learning in Human Resources Management Functions?

Background of F Company: An international listed company

10,000 employees all over the world while 500 employees in Hong Kong

HR team handle a lot of manual tasks previously - Time consuming and human errors may occur

To be consistent with the rank of each employee in different countries

In 2018, F Company start to use a cloud-based software, Workday

Workday: Appropriate for the medium-to-large-sized companies

User-friendly, Employees can access by mobile, tablet and desktop anywhere easily

Other companies using Workday



Application of Machine Learning (Workday) and Impacts on Human Resources Management Functions

Functions of Machine Learning	Impacts on Human Resources Management Functions
1. Candidate Assessments	To predict a candidate's behaviours, emotions, or personality in video interviews or other assessments
2. Candidate Sourcing	To focus on sourcing passive candidates by using publicly available data to enrich profiles and for predicting a candidate's chance of readiness to change jobs
3. Employee Flight Risk Analysis	To find employees at high risk of turnover by study candidate's behaviours
4. Skills Management	To conduct skills detection, analysis, and matching based on skills in job descriptions or CVs
5. Payroll Optimization	To detect payroll calculation and input errors, fraud, legal risk, or exceptions by the automated analysis of pay rules and pattern
6. Sentiment Analysis	To identify employee emotion by analyzing long text answers in surveys
7. Workforce Optimization	To detect optimum task times, distribution, and work schedules by analyzing the specific functional teams with very similar roles normally
8. Workforce Scheduling Optimization	To automate intra-day management and decrease manager planning and administrative burden by leveraging operational data (e.g., production volumes, or foot traffic) along with worker-related scheduling constraints To optimize worker schedules for business performance and labour costs.

F Company – To do list for HR leader & HR team

Before implementation of Workday



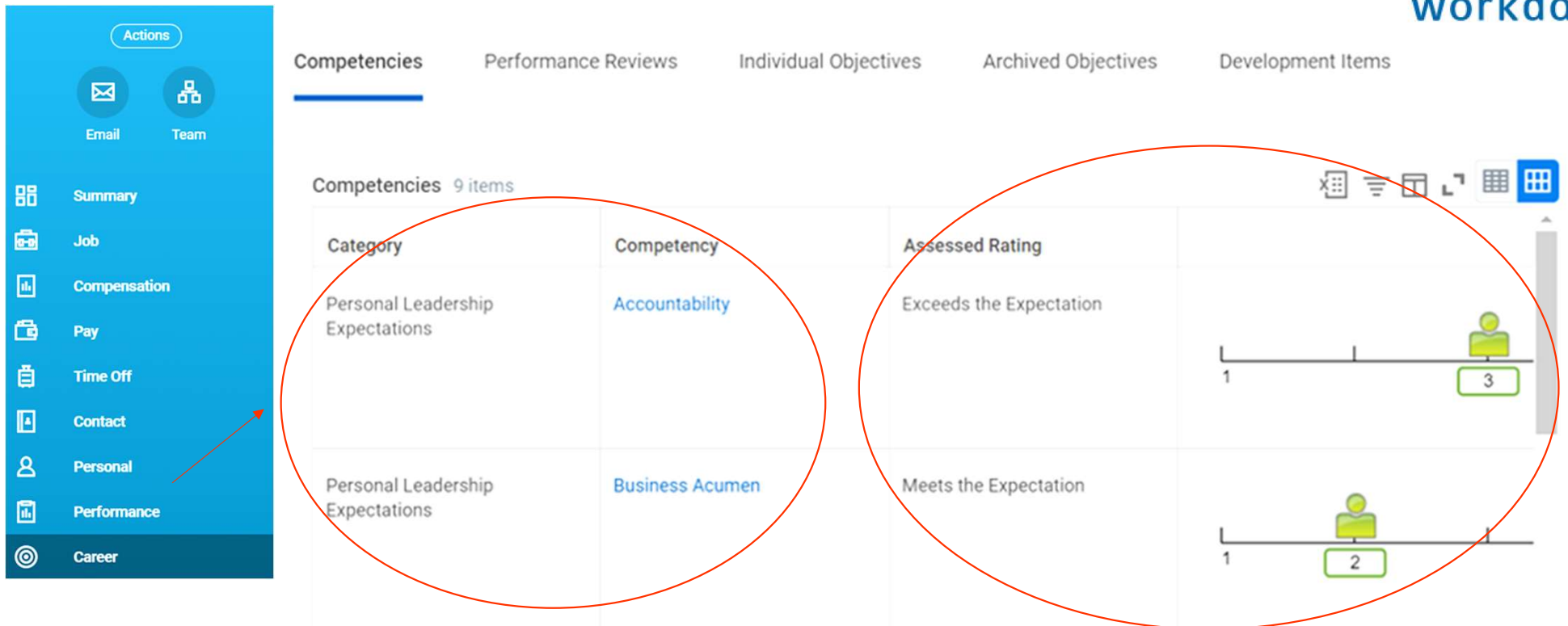
To input a large number of data of each employee shortly

To ensure the accuracy of data input as some CV is over 40 years

To partner with IT consultant and prepare a powerful computer & server in advance

To communicate with employees of different departments in organization about the launch of Workdays and educate them briefly how to use

F Company – Candidate assessment



> The above are the findings from appraisal, Machine learning learned and predict the behaviours of this employee.

HR leader understand the competencies and the relationships to jobs, there are the chances to arrange the job rotation or inviting to be the member of specific projects.

> Since there are 9 competencies with 4 levels only, the input data may not be comprehensive for candidate assessment. More different aspects should be analyzed.

Scores:

4 - Excellent

3 - Exceeds the Expectation

2 - Meet the Expectation

1 - Below the Expectation

F Company – Skills Management – Learning



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Learning

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Links

[Welcome to Workday Share...](#)

[Activate LinkedIn Learning](#)

[Fugro Academy on Yammer](#)

Not Started 0 items

Name	Content Type	Registration Status	Date Enrolled	Completion Status	Attendance Status	Grade	Score	Record Type
No items available.								

In Progress 9 items

Name	Version	Content Type	Registration Status	Date Enrolled	Completion Status	Attendance Status	Grade	Score
Data Analytics for Pricing Analysts in Excel		Digital Course	Enrolled	15/07/2022	In Progress	Do Not Track		0
Innovation Webinar: Environmental Services – Innovation trigger or beneficiary?		Digital Course	Enrolled	11/03/2022	In Progress	Do Not Track		0

[Learning Home](#)

[Ground Risk](#)

[Digital Course](#)

[Enrolled](#)

[29/10/2021](#)

[In Progress](#)

[Do Not Track](#)



> Machine learning learned the data of skills and highlight where the skills gaps are, HR leader will receive the alert and then assign the related training courses by Workday to the targeted candidate in order to improve the skills and job performance.

> This employee enrolled but have not completed the training, machine learning have not reminded the candidate to finish shortly.
> Should set the alert to solve this issue.

F Company – Skills Management



Interests Job History Education Certifications Training Learning Skills More

Interests

Job History

Education

Certifications

Training

Learning

Skills

Work Experience

Internal Projects

Languages

Achievements

Talent Cards

Professional Affiliations

Work Experience 1 item

Work Experience	Experience Level		
Marketing	5+ Years	Edit	Rem

Edit

- > Machine learning learned the data of skills and highlight where the skills gaps are, this employee has not input all the working experience previously, it is difficult to analyze fully and recommend on career path.
- > HR leader should encourage this employee to update more about him/ her.

Key Challenges for HR leaders on real workplace

➤ **Privacy**

Employees increase the awareness of the context of data privacy, protection and security



➤ **Bias and Discrimination**

Unfair identification may occur as the machine learning input data is not enough

Raising many ethical questions regarding the use of artificial intelligence



➤ **Accountability**

No real enforcement mechanism currently to ensure that ethical artificial intelligence is practiced



Conclusions

HR team's involvement

Some HR functions still have to be handled by HR team, especially for the issues related to social and emotional matters. e.g. Recruitment and retention

Amount of input data

The accuracy of machine learning for making decision is affected by the sufficiency of data input.

Accuracy of input data

The accuracy of machine learning based on the accuracy of input data for analyzing the required HR tasks.

Ethical concerns

Employees increase the awareness of data privacy and there is guidance currently for ethical development and using artificial intelligence in different countries.



Recommendations for better results

Education and Skills signature: To educate employees and let them know which skills are found and let them provide the recommendations

Skills verification: To verify the skills identified of employees

Project staffing recommendations: To recommend employees for project assignments according to their skills, availability, and prior experience with similar projects

Input more data: To increase the accuracy of machine learning

Combination of justifications by HR team and machine

learning: To increase the accuracy of findings for decision making

Referencing: Referring the guidance of different countries before conducting and implementing of machine learning

Figure 1 Timeline: Recent Development of AI Governance around the Globe



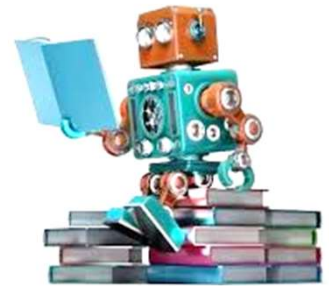
Source (Figure 1): Office of the Privacy Commissioner for Personal Data, Hong Kong (2021) *Guidance on the Ethical Development and Use of Artificial Intelligence*. Available at: https://www.pcpd.org.hk/english/resources_centre/publications/files/guidance_ethical_e.pdf (Accessed: 12 November 2022).

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Q & A Session

Thank you



Contact Person: Lam Pui Ki Kitty Lam

Telephone / WhatsApp: 852 - 5405 8346

Email: kikilam758@gmail.com