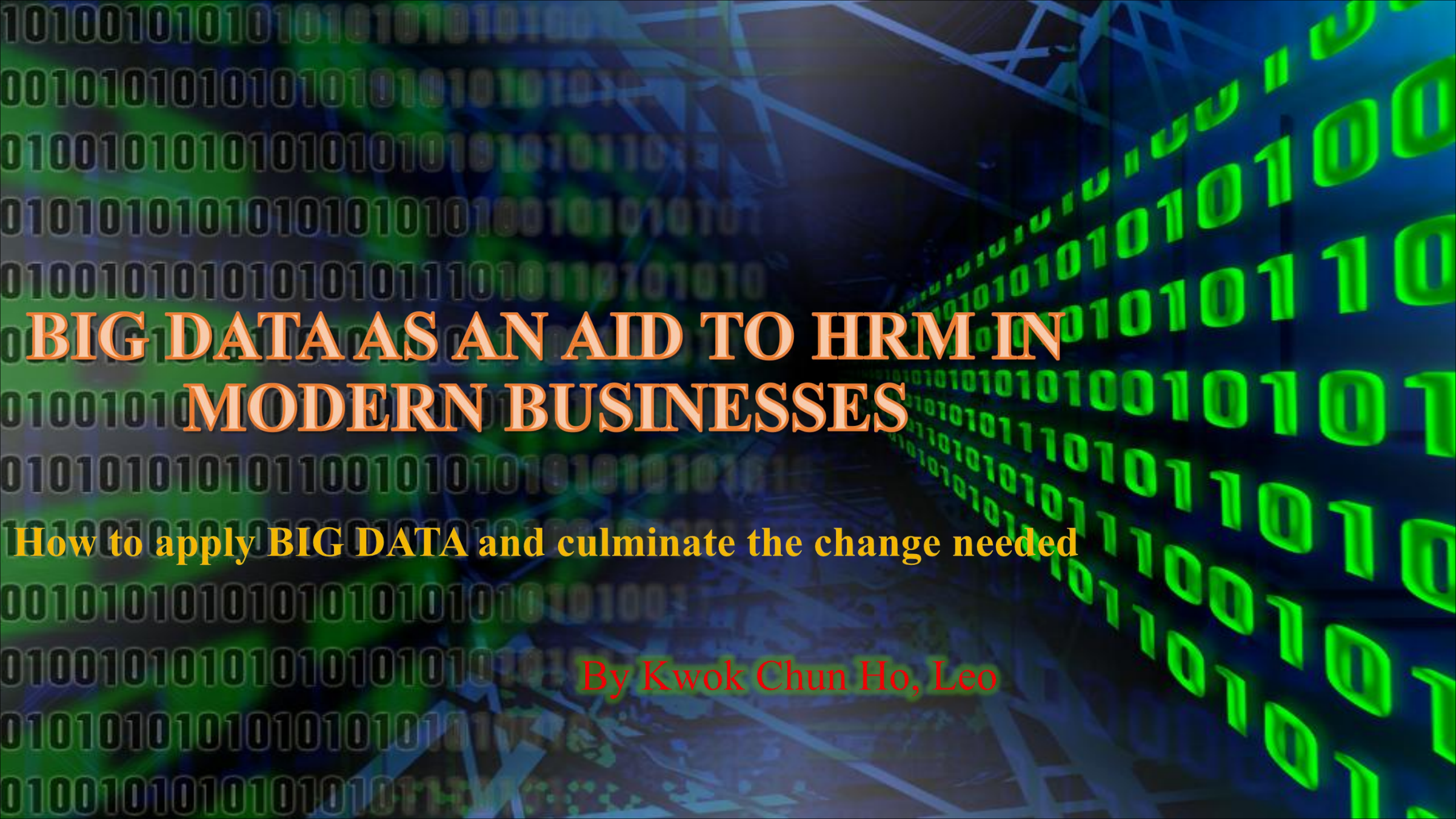




BIG DATA AS AN AID TO HRM IN MODERN BUSINESSES

How to apply BIG DATA and culminate the change needed

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1. INTRODUCTION

- The Roles of HRM in an organization play
- The most important asset - its employees (Lengnick-Hall et al., 2019)
- Attract and retain the best talent
- Keep competitive
- Requirements with the appropriate candidates (Zhang et al., 2021)

Figure 1.1: The role of HRM



Source: Dreamstime (2022)

2. BIG DATA DEFINITION

- ❖ Key change driver in digital transformation
- ❖ Sources of data sets
- ❖ Used for predictive analytics, machine learning(Martin-Rios et al., 2017)
- ❖ Better decisions - Criterion-related validity

3. HOW BIG DATA WORKS

Data Collection Unit:

- Collects data from various sources

Storage/Data Management unit:

- Stores data warehouse or data lake

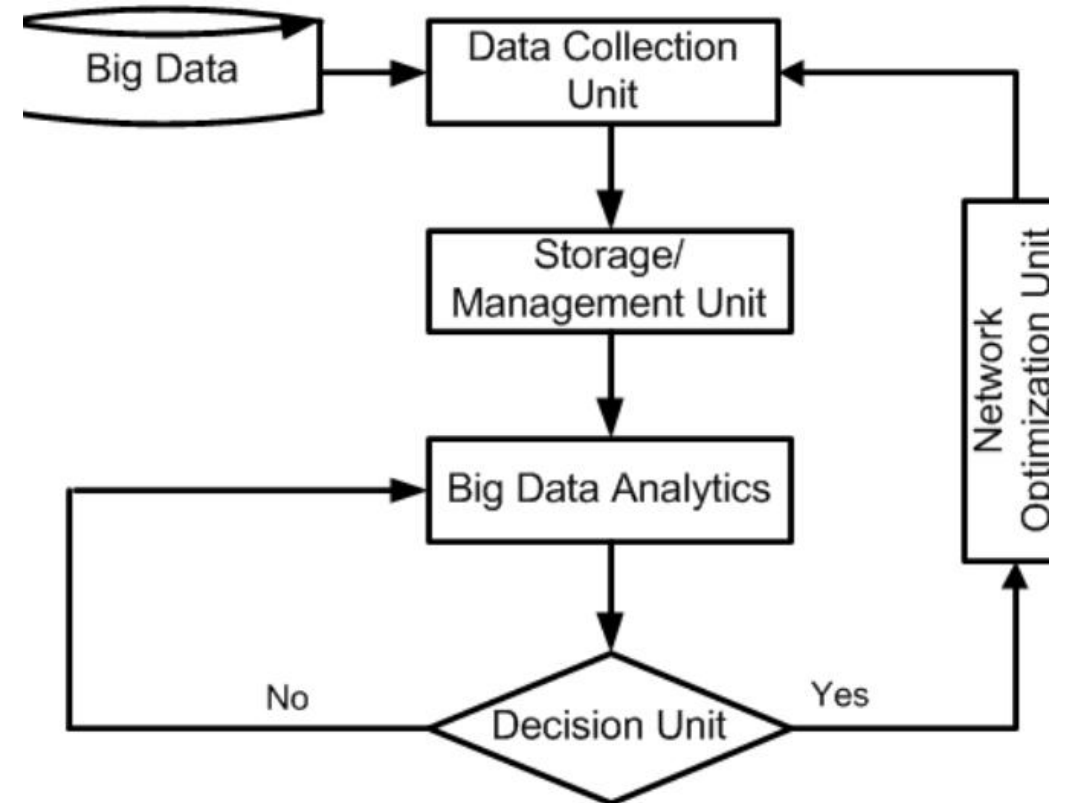
Big Data Analytics:

- Predictive analytics or machine learning

Decision Unit:

- Make better decisions about the business (Sultan et al., 2018)

Figure 1.2: Work flow



Source: Constructed by author

4. HOW BIG DATA WORKS IN HUMAN RESOURCE MANAGEMENT

The Chief Human Resource Officer:

- Advocates for a company culture of using Big Data

The Performance Appraisal:

- Instant and precise

The Change Agent:

- Big data collection

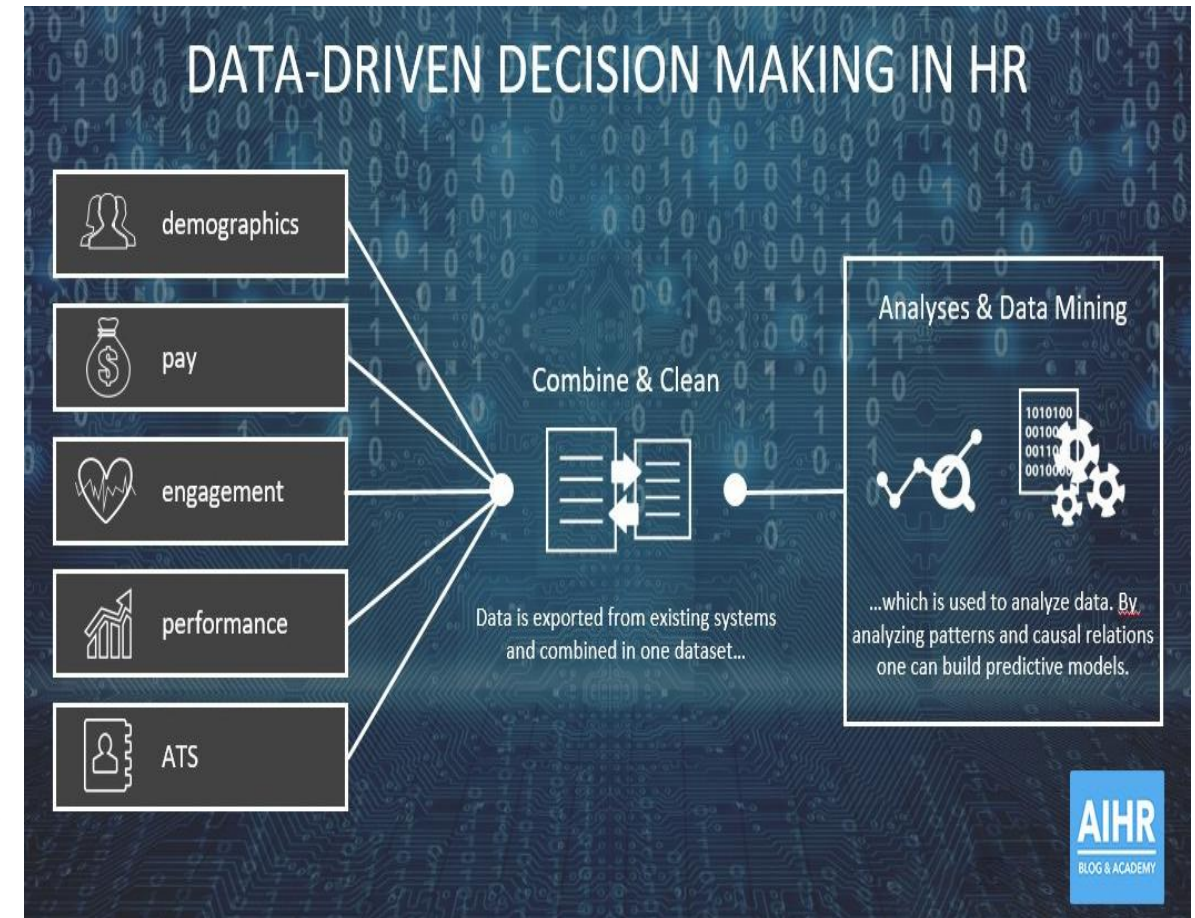
The Workforce Behavior Expert:

- Identify patterns in employee behavior(Huselid and Minbaeva, 2019)

The Workforce Scientist:

- Design and visualization to inform decision making
(Cornerstone, 2022)

Figure 1.3: Decision making



Source: Erik (2021)

5. THE ADVANTAGE OF BIG DATA TO HUMAN RESOURCE MANAGEMENT IN MODERN BUSINESS

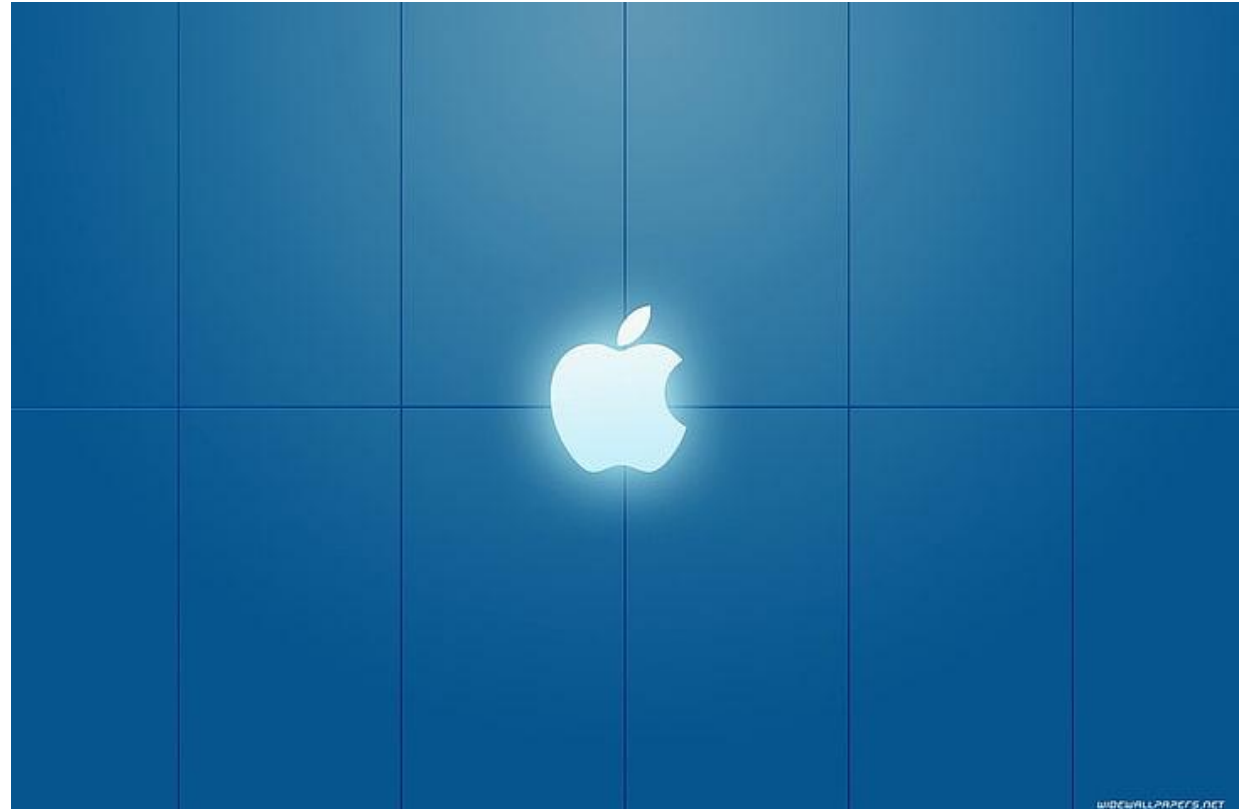
- Uncovering Trends
- Supporting internal mobility
- Automation of processes(Edgar and Geare, 2005)
- Predicting needs of an organization
- Improving workspace safety
- Effective Budgeting(Ali, et al., 2020)
- Healthy retention of employees



6. HUMAN RESOURCE MANAGEMENT IN APPLE INC.

COMPANY BACKGROUND

- Apple Inc is a technological company
- International recognized company
- Focuses on company and its employees (Ramaswamy et al., 2020)
- Talents pool



7. CHALLENGES FACING THE HRM & CHALLENGES IN ADOPTING THE USE OF BIG DATA

HRM

- **Lack of promotions amongst employees:**
 - Feeling undervalued
- **Toxic workplace environment:**
 - Sexism and racism
- **Lack of diversity in the workplace:**
 - Employee records are not checked thoroughly
- **Uncertainty about the future:**
 - Uncertainty can be very stressful(Fan et al., 2014)

Adopting the Big Data

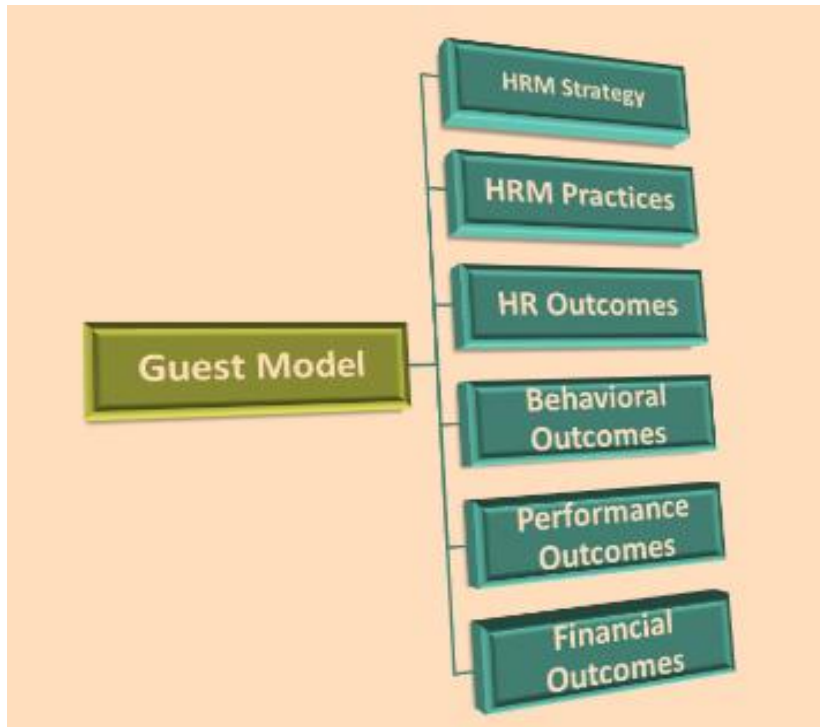
- **Safety of Big Data storage:**
 - Databases, cloud storage, and data warehouses
- **LAWS:**
 - Avoiding Violation of Data Privacy Regulations
- **Access to the Data by employees:**
 - Authorization requirement
- **Resource allocation:**
 - True & Fair

8. SOLUTIONS: Applying Big Data to HRM of APPLE INC.

- Big Data tools - Hadoop, Hevo
- Text analytics
- Social media platforms
- Data mining to ensure effective data analysis(Verma et al., 2016)
- Protect sensitive data
- Remove personally identifiable information(Majeed et al., 2020)
- Data partitioning and virtualization

9. What If? Big Data Strategies to Apply to Improve HRM at APPLE INC.

The Guest HRM Model



- Provide data-driven insights
- Analyze data from employee performance reviews
- Identify patterns of discrimination

10. RECOMMENDED IMPLEMENTATION PLAN

HRM Strategy	Required Resources	Responsible	Key Performance Indicators	Timeline
Defining the goals and Objectives of integrating Big Data in Apple's HRM	Organizational goals Big data integration tools	CHRO Head of IT department	Percentage of employees satisfied with objectives	2 Weeks
Conduct a feasibility study	Experienced team of experts from partner companies	Head of IT department	Budgetary constraints meeting intended objective	1 Month
Training the Human Resource Management	Apple MacBook for each staff Projector	IT experts	Number of staff that complete the training	2 Months
Data Collection, Storage and Analysis	Hardware: Server and Storage, Analytics tools	CRM, R&D and Marketing department	data sets that are collected, stored and analyzed	6 Months
Use of the Data Base	Trained HR professionals and Data experts.	All staff	The number of HRM decisions that are made based on data analysis	3 Months
Evaluating Performance	Data analytical tools	Monitoring and Evaluation officer	The percentage of employees: Satisfied with their jobs That match their skills and interests	6 Months
Making necessary improvements to the Big Data system	IT experts CHRO	Change Agent Data Architect	Percentage success in attaining strategic objectives	2 Months

11. CONCLUSION

- HRM in organizations deserve attention
- To achieve better results
- Big Data is an analytic key change driver
- Big data keep up with changes and be present in trends
- Healthier working environment
- Find Talents

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THANK YOU