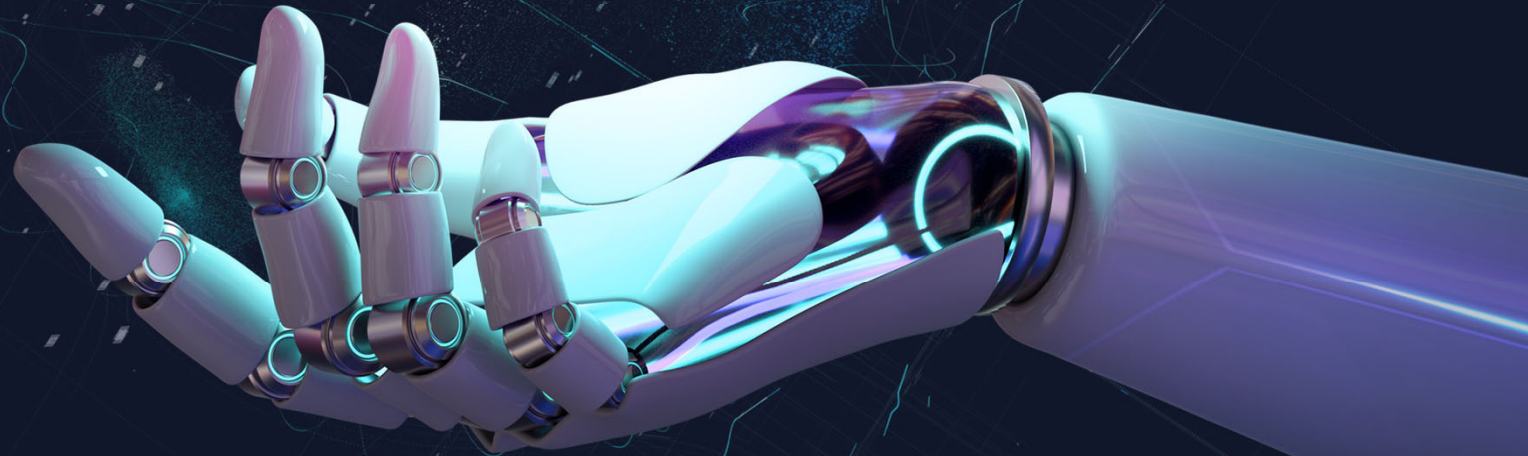


Robotic Automation

KEY DRIVER OF HRM DIGITAL TRANSFORMATION



HKBM7007_HKMA

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1. Digital Transformation of HRM

What is Robotic Automation?

2. Importance and tangible benefit

What are the potential advantages of Robotic Automation?

3. Case Study

Adaptation of Robotic Automation in HR in Lenovo

4. Considerations

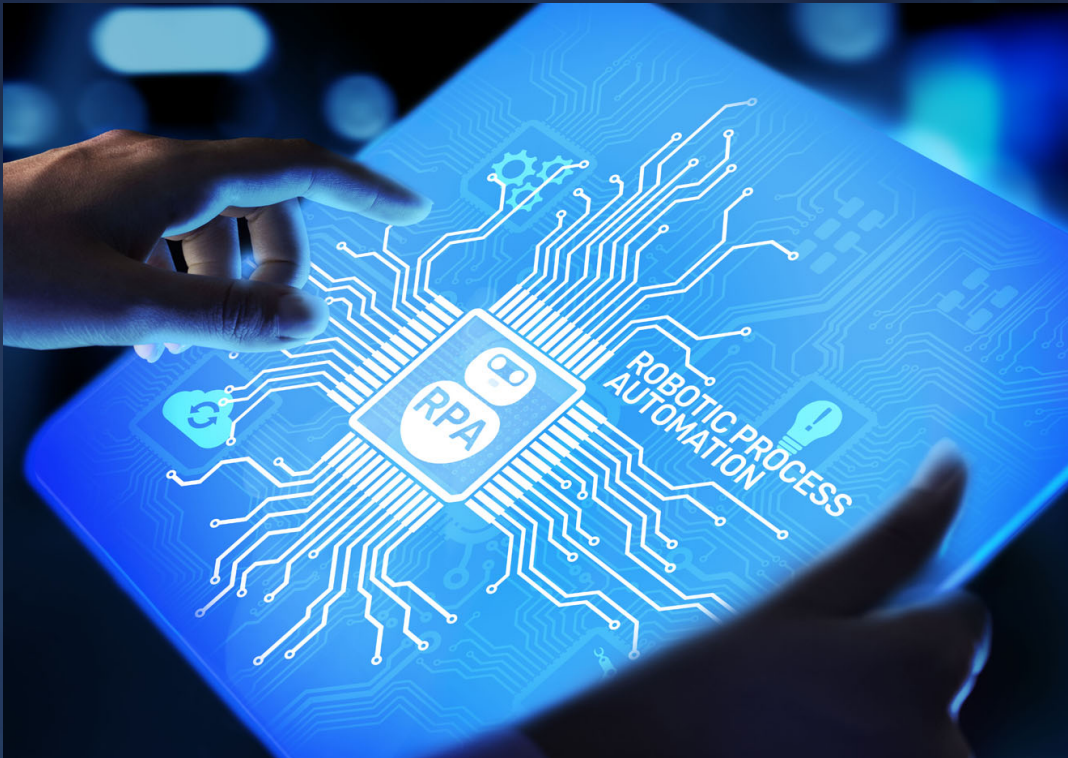
What need to take into considerations in implementing the technology?

5. Future

The future of RPA – Cognitive RPA



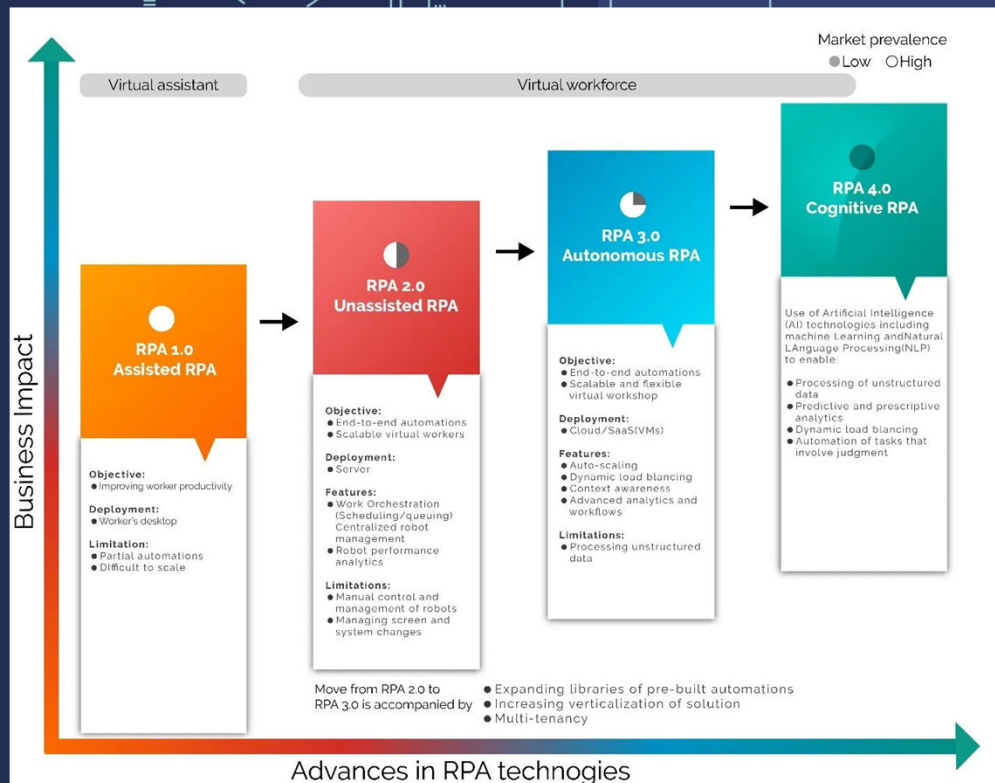
Introduction



Robotic Automation

- Industry 4.0 demands HRM digital transformation (Medis, K. R. S. & D. A., 2020)
- Optimize talent management and handle human capital.
- Digital transformation streamlines processes, enhances experiences, and attracts top talent.
- Digital tools, analytics, and RPA automate tasks, enable data-driven decisions, and unlock workforce potential.

What is RPA



- RPA (Robotic Process Automation) - Process-driven software automation technology (IBM, n.d.)
- Easy to build, deploy, and manage
- Able to mimic back-office tasks of human workers
- In a recent Deloitte survey, 74% of respondents are implementing RPA or 'intelligent automation' (Bennett, T., 2022.)



Source : <https://medium.com/@AIMDekTech/evolution-of-robotic-process-automation-the-path-to-cognitive-rpa-c3bd52c8b865>

Benefit to HRM

RPA

- Cost Reduction
- Improved Accuracy and Consistency
- Efficiency Improvement
- Compliance Management
- Employee Self-Service

(Mohamed, S., Mahmoud, M., Mahdi, M. & Mostafa, S., 2022 & V Bhardwaj, M. K. D. T. V. L., 2023.)



COLUMN FIELDS

Form **W-4**

Department of the Treasury
Internal Revenue Service

Employee's Withholding Certificate

Complete Form W-4 so that your employer can withhold the correct federal income tax from your pay.
Give Form W-4 to your employer.
Your withholding is subject to review by the IRS.

OMB No. 1545-0074

2023

Step 1:
Enter Personal Information

(a) First name and middle initial
Delilah

Last name
Collins

Address
1174 Jamir Lane

City or town, state, and ZIP code
North Alvis NH 62115-789

(c) ☐ Single or Married filing separately
☒ Married filing jointly or Qualifying surviving spouse
☐ Head of household (Check only if you're unmarried and pay more than half the costs of keeping up a home for yourself and a qualifying individual.)

(b) Social security number
893 60 8700
Does your name match the name on your social security card? If not, to ensure you get credit for your earnings, contact SSA at 800-772-1213 or go to www.ssa.gov.

Complete Steps 2-4 ONLY if they apply to you; otherwise, skip to Step 5. See page 2 for more information on each step, who can claim exemption from withholding, other details, and privacy.

Step 2:
Multiple Jobs or Spouse Works

Complete this step if you (1) hold more than one job at a time, or (2) are married filing jointly and your spouse also works. The correct amount of withholding depends on income earned from all of these jobs.
Do only one of the following.
(a) Reserved for future use.
(b) Use the Multiple Jobs Worksheet on page 3 and enter the result in Step 4(c) below; or
(c) If there are only two jobs total, you may check this box. Do the same on Form W-4 for the other job. This option is generally more accurate than (b) if pay at the lower paying job is more than half of the pay at the higher paying job. Otherwise, (b) is more accurate.

REGULAR FIELDS

- F first-name
Delilah
- L last-name
Collins
- S social-security-number
893 60 8700
- A address-street
1174 Jamir Lane
- C address-city-state-zip-code
North Alvis NH 62115-789
- I single-or-married-filing-separately
- M married-filing-jointly
☒

Case study: Adoption of RPA in Lenovo

- Lenovo is one of the worldwide computer manufacturers and technology solutions provider
- Employees headcount of approximately 75,000 worldwide (Lenovo Group Limited, 2022.)
- Lenovo adopted Robotic Process Automation (RPA) to address the high-volume and repetitive nature of its HR processes.



Application of RPA

1. Individual income-tax declaration
2. Payroll Calendar Scheduling

Case Study: Lenovo

Significant digital transformation

Increased accuracy rates and
reduced manual errors in data input

The Lenovo logo is displayed in white text on a red rectangular background.

Time Saving
at least 6,000
hours per year



Efficiency
Increase by 5 to
8 times

(UiPath, 2022)

Consideration in implementing the RPA in HRM



- Planning for deployment of RPA
 - Skill development
 - Human involvement
 - Data privacy and security
 - Creating a risk management framework
- (Bennett, T., 2022. , pwc ProEdge, n.d. & Medis, K. R. S. & D. A., 2020.)



Future: Cognitive RPA

- Cognitive RPA (CRPA) integrates technologies Artificial Intelligent, machine learning and deep learning (IBM, n.d.)
- AI: Decision making support, analytics and continuous improvement
- RPA: Automates tasks and processes

- Automate complex, less rule-based tasks, handle non-structured data
 - Strategic Training and Development
 - Cognitive Engagement
 - Decision-Making Support
- (Medis, K. R. S. & D. A., 2020)

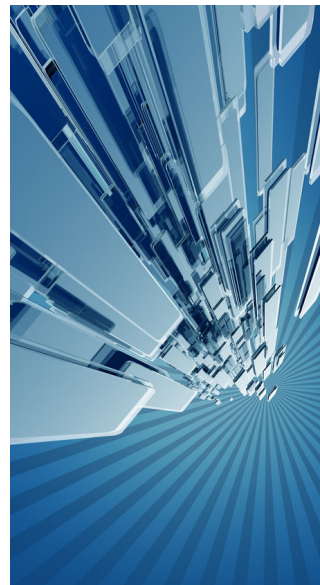
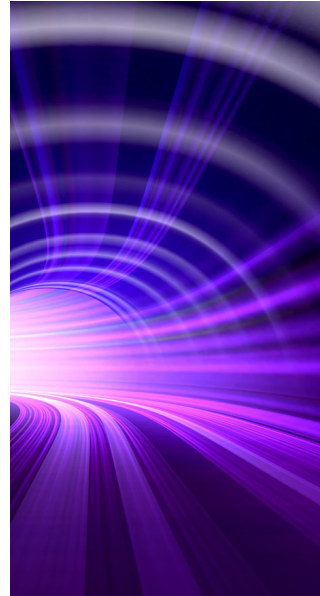
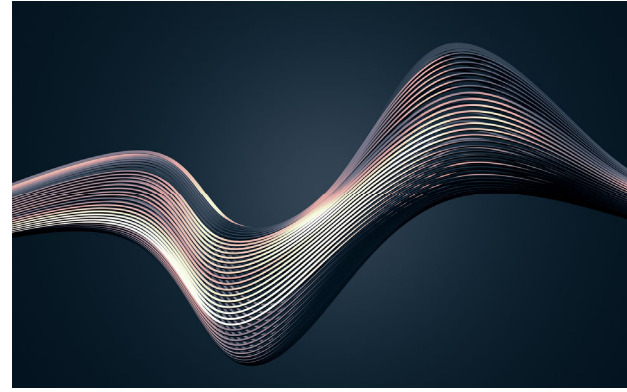
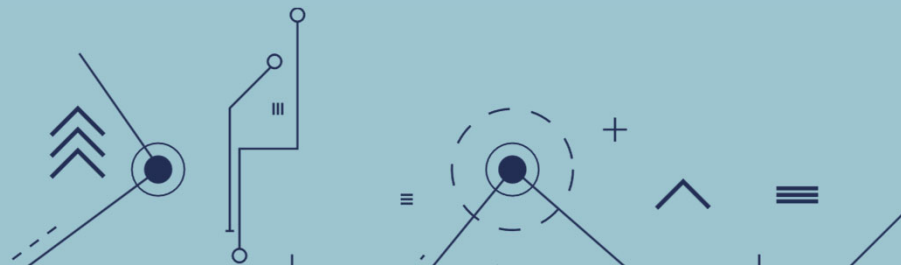


CRPA

Source : <https://www.linkedin.com/pulse/cognitive-process-automation-rpa-mlai-future-next-neeraj-kumar>

Conclusion

- Robotic Process Automation (RPA)
 - Automates repetitive tasks
 - Less human involvement
 - Cost effective
- Cognitive RPA
 - AI brings advanced capabilities like natural language processing and predictive analytics. (IBM, n.d.)
- The integration of AI with RPA provides decision-making support and valuable data insights.



Reference

- UiPath, 2022. *Lenovo Global IT Ramps Up HR Digital Transformation with UiPath Automation Technologies Globally*. [Online]
Available at: <https://www.uipath.com/resources/automation-case-studies/lenovo-rpa-release-hyperautomation-value>
[Accessed 9 December 2023].
- Bennett, T., 2022. *Learn How Robotic Process Automation Empowers Your Key People*. [Online]
Available at: <https://www.forbes.com/sites/sap/2022/08/30/learn-how-robotic-process-automation-empowers-your-key-people/?sh=4ae5d4ba5d5c>
[Accessed 5 December 2023].
- IBM, n.d. *What is intelligent automation?*. [Online]
Available at: <https://www.ibm.com/topics/intelligent-automation>
[Accessed 6 12 2023].
- IBM, n.d. *What is robotic process automation (RPA)?*. [Online]
Available at: <https://www.ibm.com/topics/rpa>
[Accessed 4 12 2023].
- Kam K.H. Ng, C.-H. C. C. L. J. (J. Z.-X. Y., 2021. A systematic literature review on intelligent automation: Aligning concepts from theory, practice, and future perspectives. *Advanced Engineering Informatics*, 47(101246).
- L Willcocks, M. L. A. C., 2017. Robotic process automation: strategic transformation lever for global business services?. *Journal of Information Technology Teaching Cases*, 7(1), pp. 17-28.
- Lenovo Group Limited, 2022. *FY2021/22 ANNUAL RESULTS ANNOUNCEMENT*, s.l.: s.n.
- Mandeep Kaur & Franco Gandolfi, 2023. "Intelligent" - Human Resource Management (I-HRM) in the Era of Disruptions: A Value Creation Model. *Empirical Economics Letters*, pp. 73-93.
- Medis, K R Samarasinghe & Dr. Ajith, 2020. Artificial Intelligence based Strategic Human Resource. *Global Journal of Management and Business Research: G Interdisciplinary*.
- Medis, K. R. S. & D. A., 2020. Artificial Intelligence based Strategic Human Resource Management (AISHRM) for Industry 4.0. *Global Journal of Management and Business Research: G Interdisciplinary*, Volume 20.
- Mohamed, S., Mahmoud, M., Mahdi, M. & Mostafa, S., 2022. Improving Efficiency and Effectiveness of Robotic Process Automation in Human Resource Management. *Sustainability*, Volume 14, p. 7.
- pwc ProEdge, n.d. *Putting the power of big data to work for your company means identifying opportunities to implement automation and artificial intelligence (AI)..* [Online]
Available at: <https://proedge.pwc.com/ai-and-rpa-risk-management/>
[Accessed 8 12 2023].
- Sadasiva, S., 2019. *The Rise Of Cognitive Robotic Process Automation*. [Online]
Available at: <https://www.forbes.com/sites/forbestechcouncil/2019/08/19/the-rise-of-cognitive-robotic-process-automation/?sh=740485b42a7f>
[Accessed 8 12 2023].
- UiPath, 2023. *AI-powered automation for HR onboarding*. [Online]
Available at: https://www.youtube.com/watch?v=5J289nRvg_U
[Accessed 8 12 2023].
- V Bhardwaj, M. K. D. T. V. L., 2023. Robotic Process Automation for Automating Business Processes: A use case. *International Conference on Computing Methodologies and Communication (ICCMC)*. IEEE, pp. 762-766.