

Emerging Impact of Artificial Intelligence on Payroll Management

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Abstract: Payroll evolved as a topmost priority for many of the organizations in today's fast changing world. The significant need of establishing a concrete payroll system lies in streamlining the financial records of the employee such as tax filing, tracking work hours and calculating wages etc. AI and ML has accelerated the pace by efficiently handling huge amount of data optimizing the rate of accuracy and minimizing the errors caused by human intervention. Survey opines 19% of the organizations globally have outsourced the payroll function. In this study we will explain the impact of artificial intelligence on payroll management more effectively by resolving payment frauds and how it is transforming the future of payroll.

Keywords: Payroll management, Artificial Intelligence, Machine learning, Outsourcing, financial records.

Introduction:

Artificial Intelligence leads to a radical change in designing practical applications in payroll processing by enabling zero-touch payroll with the rise of robotic process automation. This helps payroll practitioners to align their line of focus more on creating a strategic value to the organization (CloudPay, 2020). Executives globally opine inclining the investments towards incorporating payroll automation will enhance productivity and results in the smooth functioning of the workflow. The accelerating adoption of the robotic process automation gives rise to multi-fold transformations such as simplifying the transfer of the data, reducing time by working on precise data

validation and addressing high priority issues to deliver better results (Kiran Bajpai, 2020). Forrester research study reveals that RPA service markets will grow to reach \$12 million dollars by 2023 and \$2.9 million by 2021 (Aisha Javid, 2020). Moreover, advanced automation technologies such as Natural language processing (NLP), machine learning and Big data which has an enormous potential in reducing the process time with increased efficiency and quality are widely implemented to minimize the error rate. In addition to this by imparting AI in payroll it helps to scale up the employee satisfaction and facilitates consistency across departments which saves time and efforts to a great extent. The purpose of the paper clearly portrays how AI leveraged the payroll process and discusses the future of payroll.

Literature review:

The disruption of digital technologies has created a propelling impact on traditional payroll by driving organizations towards adopting cloud-based models. Organizations also started picking up these new technologies like block chain and Internet of things to automate the monotonous process which in turn results in improving talent management strategies and provides insightful inputs to reduce the fraudulent threats in payroll management. Furthermore, by implementing AI survey reveals cost optimization, increase in the payroll accuracy and control over business operations are the key benefits. (EY, 2017)

Study reveals payroll as a vital element in the organization where it not only focuses

on streamlining financial records of the employee but also focusses on compliance in accordance to organizational policies .It also states that AI created a revolution in payroll technology but the adoption of these technologies remained as a potential barrier for organizations to implement AI in this changing landscape. Moreover, AI stands out by its phenomenal application chatbots which helps in instant query resolution and helps payroll professionals focus on incremental innovation(SandyForrest, 2019).

HR payroll systems study opines payroll software is extremely important for small companies also to adapt because in addition to saving time and costs it entails numerous benefits such as retaining the control of the payroll process and automatically generate reports and reminders to lighten the efforts of the manager before submitting for approval. Even the accessibility is provided for the information regarding the benefits ,deductions and time offs requests etc.(HRPayrollSystems, 2018).

Research Objectives:

To study the core benefits by implementing AI in payroll system

To evaluate the potential possibilities of implementing AI in payroll function

To identify the critical barriers to implement AI in payroll management

Research methodology and Data analysis:

As part of our research study, we conducted both primary and secondary research to perform an analysis to understand the impact of Artificial intelligence on the payroll management. Accordingly, to draw these final conclusions various Newspapers, company blogs, official sites and articles of leading

consulting firms has been taken into consideration. Primary research was carried out to know the role of AI in optimising financial records of the employee from calculating wages to tracking wrongly claimed work hours. It was done by conducting a survey through online questionnaire.

To achieve the mentioned objective, we had the following research design. The sample size includes 100 respondents including under graduates/Postgraduates, working professionals and business owners ranging from the age group of 20 to age group of 60. In terms of segmentation I chosen Age and Gender as my segmentation variables. Moreover, to pursue detailed analysis we made use of various tools such as bar graphs, pie charts and line charts with the obtained responses. The methodology of research is purely based on the facts and insights that we collected through secondary research and the responses we received through the questionnaire as part of primary research.

Profile of the target sample: We included males and females of the age group ranging from 20 to 60, where the sample size comprises of students, working professionals and business owners

Source of the data:

Primary research: Sample size of 100

Secondary research: Newspapers, official sites, blogs, and articles published by consulting firms.

Secondary research:

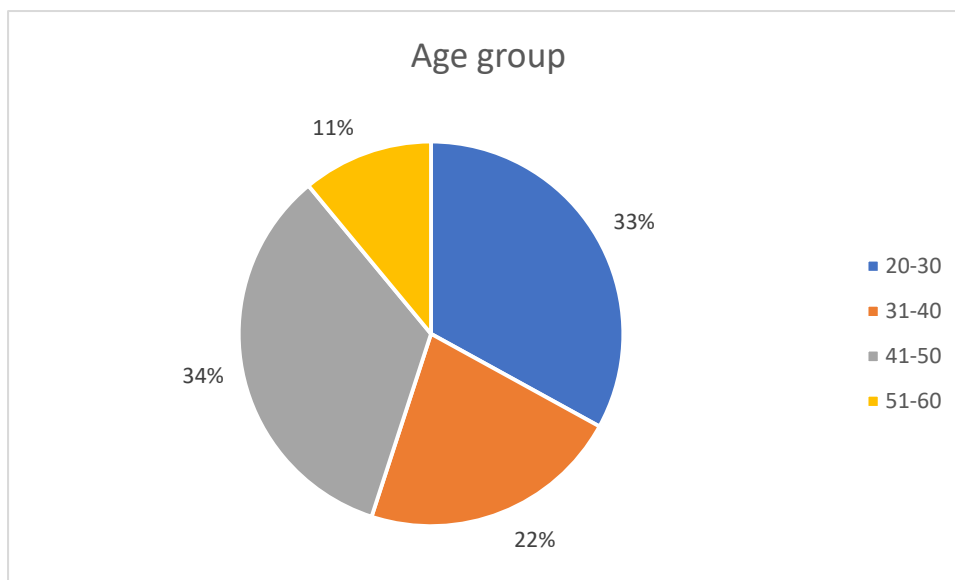
CIOL study reveals that the advent of AI and machine learning helps organizations to assess employees and managers can formulate smart strategies to efficiently handle the queries of the customers. The capabilities of machine learning help to enhance the interactivity and tap the irregularities to make sure employees are

compensated for their efforts. In addition to this it eases up the payroll operations and reduces cases of human errors and frauds related to payments(CIOLBureau, 2019).

Smart data collective study opines its highly crucial to implement concrete payroll systems backed by AI in the organizations as it accommodates complex interfaces and adopts new solutions.27% of the organizations opine clocking wrong work hours is one of the potential challenges to address but it can be easily done by AI based payroll software, Moreover, machine learning helps to figure out the employees who are willing to resign and also benefits management in

Primary research:

1) Please specify your Age group

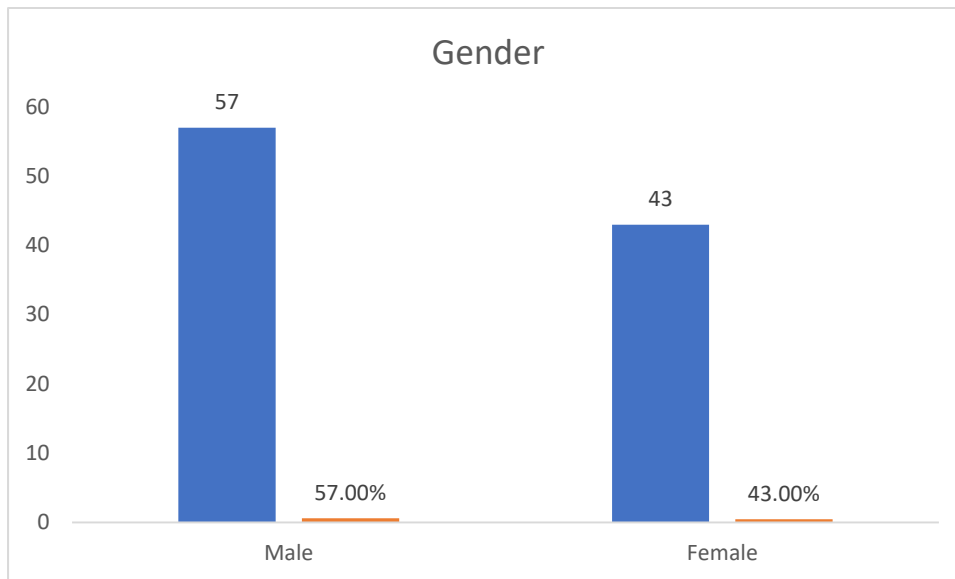


People across the age groups have participated in the survey. 34% of the respondents are in the age group of 41-50 followed by 33% of the respondents in the age group ranging from 20-30.

2) Please specify your Gender

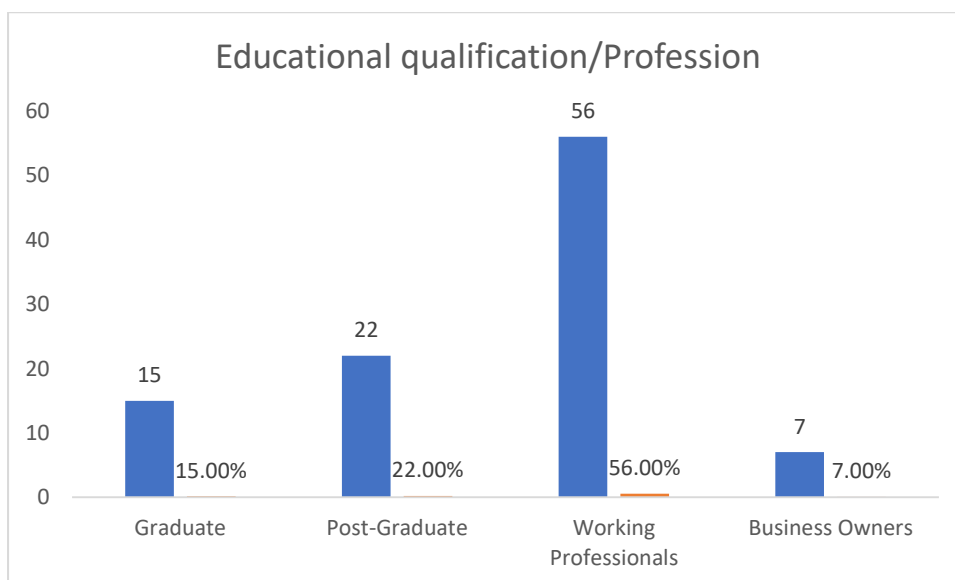
observing patterns to solve complicated issues.(AnnieQureshi, 2018)

Survey with HR leaders from various organizations reveals that by implementing cutting edge technology like AI helps to ensure stronger compliance and security. The digital revolution creates a broader set of solutions to scale up the business operations. The complications involved in payroll and calculating taxes are also accommodated by devising an efficient workforce management strategy.It also provides fact based insights and gives accurate analysis report to tackle the hurdles in organizations payroll system(KatherineJones, 2019).



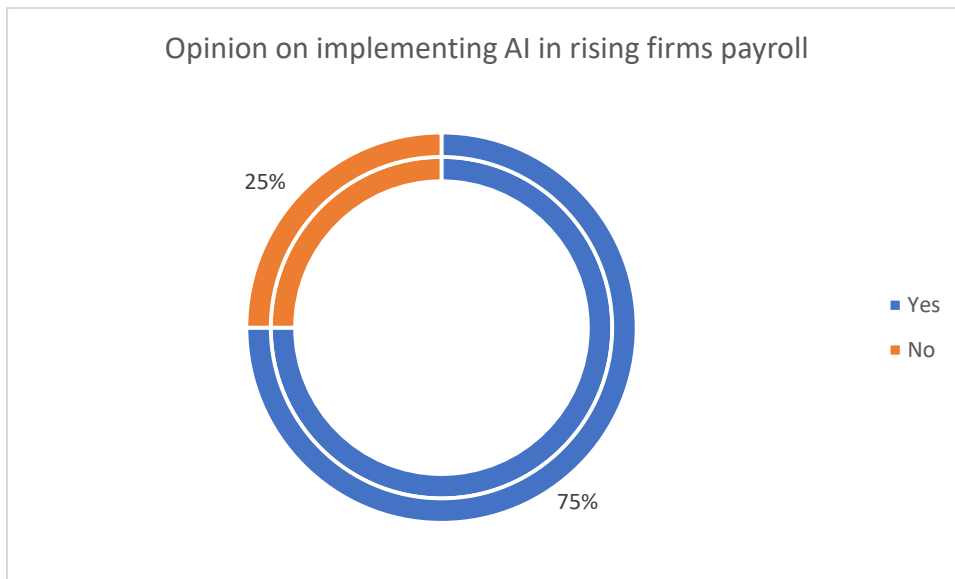
According to the data male respondents are more with 57% followed by females with 43%.

3) Please specify your Educational qualification/Profession



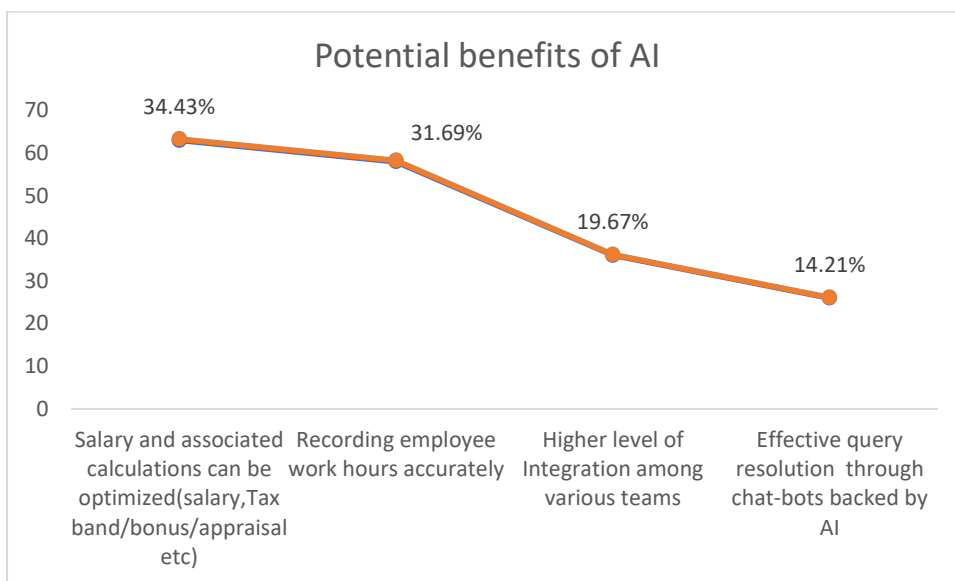
As per the respondents working professionals are more followed by postgraduates. Even few business owners also responded to the survey.

4) Do you think artificial Intelligence scales up firm's payroll system



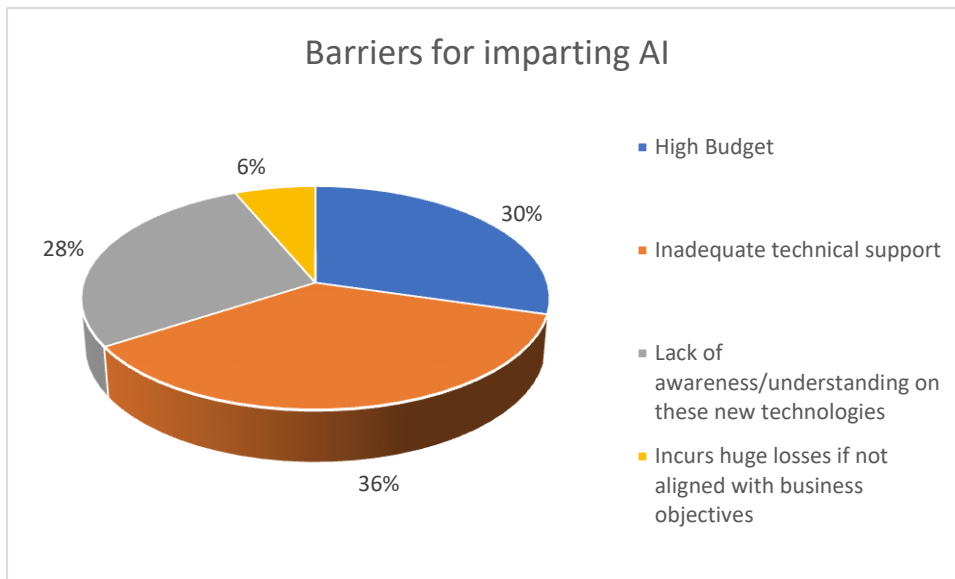
Most of the respondents opine Artificial intelligence scales up the payroll management system due to its capabilities of reducing errors and increasing productivity and efficiency.

5) What do you think are the potential benefits of implementing AI in payroll function



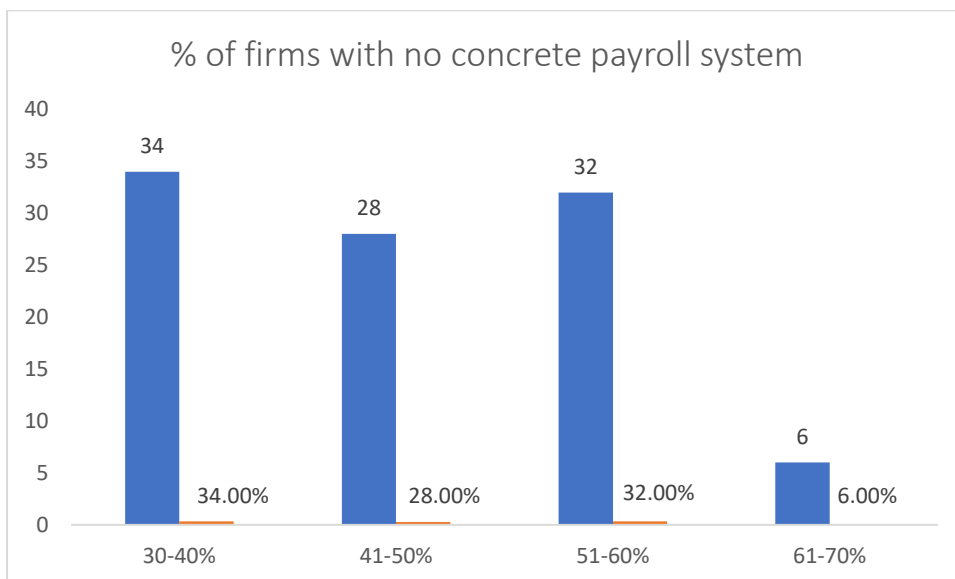
According to the data, people opine implementing AI in payroll management helps to calculate salary, tax band and appraisals followed by recording employee work hours accurately. Few others opine even query resolution can be effectively done and higher levels of integration is maintained.

6) What do you think are the core barriers for imparting AI in payroll management



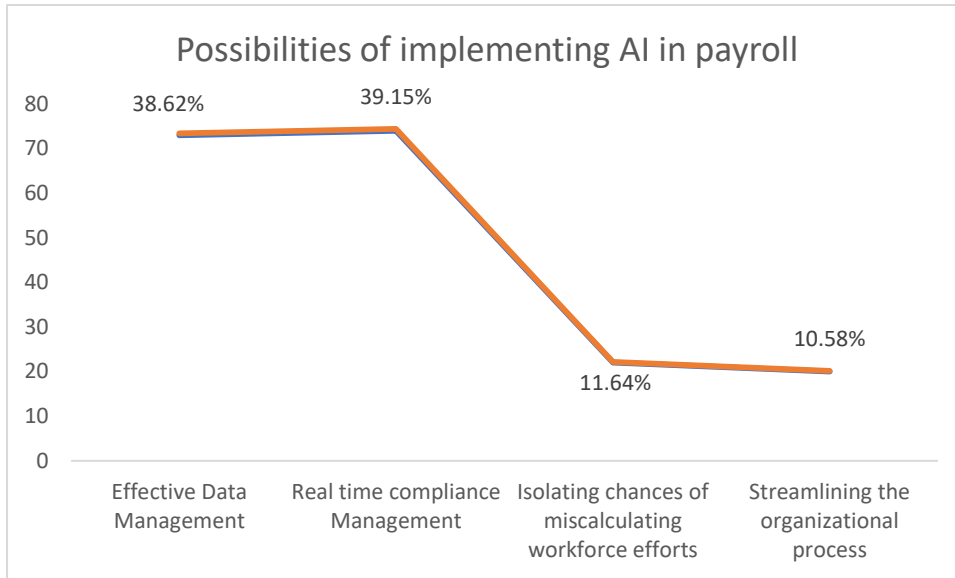
According to the data respondents opine inadequate technical support and high budget are the core barriers for imparting AI in the organisation. Because, if there is no required technical support professionals could not easily adapt and this leads to misalignment of the process w.r.t business objectives. In addition to this it requires high budget to set up AI due to which many of the organizations backstep on adapting AI into the process.

7) How much % globally do you think do not have a concrete payroll system.



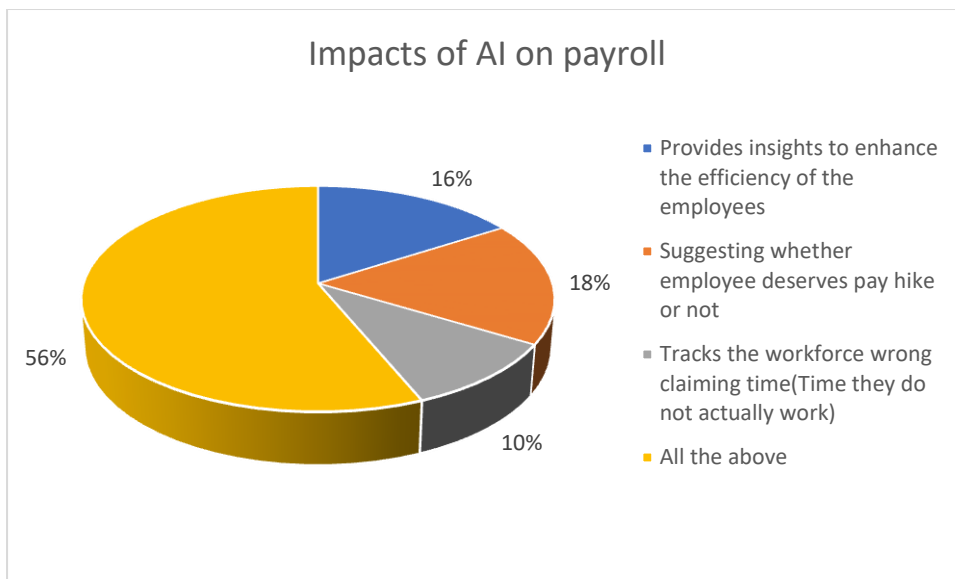
Majority of the respondents opine 30-40% globally don't have a concrete payroll system. This is perfectly in line with the studies which says 33% globally don't have a robust and organized payroll system.

8) What do you think are the possibilities of implementing AI in payroll function



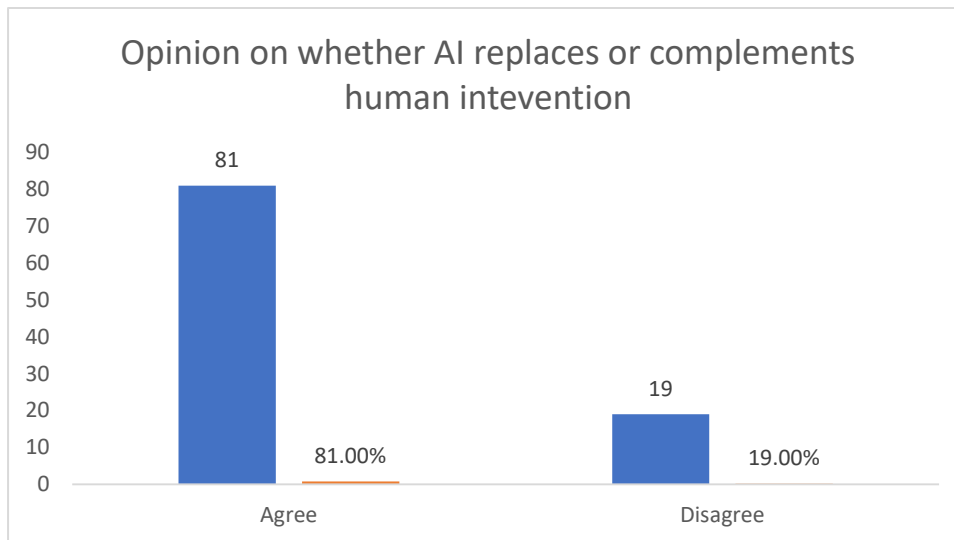
Most of the people opine tackling the real time compliance management and effective data management are the two major possibilities of implementing AI in payroll. Few other opines even it facilitates in reducing the human errors such as miscalculating workforce efforts and also guides payroll professionals in streamlining the organizational process.

9) In which way do you think AI impacts the future of payroll management.



Based on the responses, people opine AI not only enhance the workforce efficacy but also predicts the outcomes such as the pay hike the employee deserves and he/she and also helpful in tracking the workforce wrong claiming time.

10) Do you agree, AI complements employee technical efficiency but it could not possibly replace human intervention at workplace.



Majority of the respondents voiced their sounding opinion by stating that they agree artificial intelligence will complement the human efforts but will never replaces. Because the AI is implemented to transform the way we work and increase the productivity.

Conclusion:Based on the opinions of the respondents, few insights are depicted such as by implementing AI in payroll management calculating employee financial records and work hours are the major benefits .In addition to this AI can guide professionals in maintaining real time compliance and data management. The critical barriers involved in the process of implementing AI are high budget and lack of technical support. Sometimes lack of awareness and inability in adopting to latest technology is also one of the challenges in incorporating AI. Many of the organizations opined AI created a propelling impact in payroll which went beyond automation and assisting organizations in handling payment frauds and critical compliance issues.In future it also helps in elevating the technical efficiency of the workforce with the rising sophistication which in turn helps to create a phenomenal value preposition in the dynamic payroll environments.

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