

Robotic Process Automation for Recruitment Process -A Roadmap Towards Human Resource Management

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Abstract: Now a days all the business organizations need highly qualified candidates for the job opening. Recruitment is an important process in the competitive market across the world where human resources are the important key components in every organization. In recent years human resource management has undergone tremendous technological advancement, Traditional methods of recruitment has been revolutionized by the emergence of the internet in the present scenario i.e., E-recruitment is the latest trend in the recruitment process which is globalized in this new area which are been adopted by the HR departments in many small and large organization. These business firms use robotic process automation for recruiting the candidates to the jobs and also to accept the resume on the internet and communicate with the applicants through E-mails. It is the step by step process which has certain procedures such as analysing recruitment of jobs, filter the employees according to the criteria which is set by the organization. The applicant is screened and selected and then they hire and integrate new employees to the organizations. Automation is a most important technology which is currently being deployed in business. Artificial Intelligence along with automation allows the modern jobs to become more flexible, fluid and helps to ensure employees freedom for high-volume-mundane administration work. The purpose of this paper to view the Robotic process automation in the recruitment process and the practical implementations. This paper also analyses the features and benefits of Robotic Process Automation (RPA) for recruitment process and also focuses on the various tools of RPA, HR and recruiting application for Robotic Process Automation (RPA) technology.

Index Terms— Robotic Process Automation (RPA), Features, benefits, Tools, HR and applications of RPA.

I. INTRODUCTION

In year 21st century there are many technological developments and the way the organizations are doing their work and also the business firms adopting the new technology. Human resources are doing their tasks well and also the life of the public has changed drastically with new hardware, many software technologies with the smart devices. The life of the people has changed where they are adopting new technology due to multinational cultures, with new technology like artificial intelligence, big data, deep learning, machine learning and other technologies besides Robotics Process Automation applications which is helping the HR department in recruitment process rapidly.

Robotic Process Automation is the emerging technology in the recruitment process which helps many industries to progress and compete to stay in the high position in the market. HR department in each organization is responsible for any task from hire-to-retirement process of the employees. In this process there are lot of activities like repetitive, efficiency, applicant engagement and also their experience, time consumed and also many works still depend on the manual based process to help the employees to complete their tasks.

Robotic Process Automation (RPA) is an emerging form of clerical process automation technology based on the robots or artificial intelligence (AI) workers. It is the application of technology which allows the employees in the firm to configure computer software or a robot to capture and also to interpret the existing applications for the processing transaction, manipulating data, triggering responses and also communicating with other digital systems. PA approach helps in streamlining the internal processes, in which people and technology both play a very vital part in synchrony, enabling better insight in trends and many opportunities in the business.

The next sessions brief many technologies related to Robotic Process Automation, which are the inputs for integration of robotic process automation and also future application for recruitment industries from the robotic process automation [2].

II. ROBOTIC PROCESS AUTOMATION (RPA) TECHNOLOGY FOR RECRUITMENT

Robotic Process Automation (RPA) reduce the manual work which speed up the growth of the business organization by facilitating real-time communication to find out the suitable candidate with job matching and also helps to access how to apply for that position. Robotic Process Automation (RPA) also helps the recruiters to eliminate, which is not related to the advertised position in the firm. The RPA bots communicates to the candidates regarding the rejection and also the reason for rejection like deficiency of skills, qualifications and the requirement for the company in the future. RPA technology provides notification, schedule of the interview and the skills which are required by the company for the future recruitment. PA is a trending technology which is very useful in sending automated communication to the applicants through E-mail and text. Beside this RPA also collects, process and organize information about the candidates and also helps in creating the database of the candidates for the future recruitment. Thus, this leads to the enhancement of quality of recruitment process through short listing the applicants and also to process the database. Finally, RPA provides accurate and right information for the right decision in selecting the suitable applicant based on their knowledge and soft skills.

In the year 2019 according to the Ben Slater it is very easy to increase the candidates through type form, beanery surveys and also useful for efficiency and data entry. Unbiased items are eliminated by the automation, increase privacy and also very sensitive data which are very useful in the recruitment process and in decision making. It is empowered process like providing offer letter administration process, new E-mail account, new telephone connection, adding the new employees to the existing list, information regarding login codes to the new employees who have joined the organization. To recognize the candidate's values, behaviours, skills, shortage gap RPA enabled algorithm can mimic human brain activity. It helps to have human conversion 24x7 and builds strong candidate relationship management (CRM) where these agencies which recruits the employees to enhance their quality, decision making and for preparation for the future. According to institute of Robotic Process Automation there are 5 departments deploying the RPA software like Financial Operations, Human Resources, Information Technology, Procurement and Data Analytics [5].

III. FEATURES OF ROBOTIC PROCESS AUTOMATION(RPA)

3.1 RPA is Code Free:

RPA technology does not require any programme knowledge skills or coding. Candidates with any educational qualification can be trained easily to the automation tool of RPA software within the short period. Most of these RPA software provide a flowchart similar to Microsoft visio where all the business process definitions which are created graphically by dragging , dropping and also using various icons which represents steps in a process.

3.2 RPA is Very User-Friendly:

RPA is not only accepted by the IT department but also by the various business operation. RPA project is very easy to implement and also to learn hence, requires less IT skills and less investment in new technology platforms.

3.3 RPA is Non-Troublesome:

RPA software technology avoids risk and complexity. In this software the robots are able to access the ender user's system easily via a controlled user interface and hence requirement of systems programming is reduced to a very great extent. Due to this, many large organizations hesitant to redesign, replace and to improve the running system [10].

IV. BENEFITS OF ROBOTIC PROCESS AUTOMATION (RPA)

4.1 Exhaustive Data Capture:

This software process is well designed to capture the complete data. In every step the various tasks can be observed as it can produce a valuable data and also a review tract which provides a support for the further process in enhancing the efforts and helps in the monitoring submission.

4.2 Reduced Costs:

By using this automating software tasks, cost savings about 30% can be achieved through the output of productivity. These software robots also cost less compared to the full-time employees.

4.3 Better Customer Experience:

RPA frees up the high values of resources for them in putting back on the front line defining the success of the customers.

4.4 Improved Internal Processes:

Many companies are forced to define clear governance procedure in order to leverage AI and also RPA which in turns allows for faster and improved internal reporting, on boarding and also other activities related to the internal management.

V. THE RECRUITING CASE FOR RPA ADOPTION

In the present scenario automation and artificial intelligence has gained the traction in human resource and talent acquisition. LinkedIn survey on talent trends gives information that 35% of the talent professionals and hiring managers says that artificial intelligence is the top trend which is imparting how they recruit the applicants.

Many organizations are looking to optimize the recruitment process where these RPA software helps in minimising the time, increase recruiting accuracy and also reduces the bias in the recruitment process. High-level repetitive tasks such as candidates and resume screening are done using RPA technology. PA systems works every day every hour to source, screen and to organize the candidates for suitable position. This helps the recruiters to establish a more consultative relationship with the clients and also engage the candidates in a personal one-on-one relationship.

These RPA software solutions helps to optimize the HR department and recruitment initiatives in the organizations through automation tasks such as

- Sending the automated communication to the applicant's i.e, auto reply emails and text.
- It helps the recruiters to collect, process and also to organize the information of the candidates and to store them in the ATS system of the organization.
- Recruitment process like the candidate sourcing and also screening by the HR departments in the organizations.

RPA software solutions helps in answering various simple questions asked from the candidates and helps in providing automated application instruction [12].

VI. ROBOTIC PROCESS AUTOMATION TOOLS (RPA):

Robotic Process Automation (RPA) is an application of technologies which are been directed by the business logics and structured inputs, aimed at the business automation processes and to implement the RPA tools.

6.1 Blue Prism:

Blue Prism is an RPA tool which is holding the capabilities of a virtual workforce which are powered by the special software robots. This RPA tool helps many enterprises to automate the business operations in simple and a cost-effective manner. It is a technology built based on Java Programming Language, Microsoft, NET framework which offers a visual designer with drop and drag functionalities. Blue Prism helps in automating applications and supports any platforms which is presented in variety of ways. Blue Prism is a multi-environment deployed model which is been designed with both physical and logical access controls.

6.2 UiPath:

UiPath is a global software companies which develops a platform for Robotic Process Automation (RPA). UiPath is a rich feature which is well designed to help the business analysis in the organization and administrators to automate the processes within the organizations. UiPath helps to automate faster thanks to the particular point then click drag and drop technology. This is an highly extensible automation process tool for the web apps and automating any desktop. This tool provides support for a very high range of applications which includes web and desktop applications to work. UiPath has auto-login a special feature to run the robots and can be hosted in the cloud environment.

6.3 Automation Anywhere:

This RPA tool combines conventional RPA with intellectual elements such as language understanding and also reading the data which is unstructured. With this tool enterprises and also companies create smart bots which performs many tasks in the different areas of the business. Automation anywhere is used in intelligent automation for the business and for IT sectors to operate and it also uses the SMART automation technology. This tool distributes the tasks through multiple computers which offers script less automation.

6.4 Work Fusion:

It is a crowd computing RPA platforms software which automates the process of monitoring the data feed and assists to manage crowd-sourced workers from different global talent markets. Work fusion automates across the teams in the business. These deploy bots as needed to operate and simultaneously for the scale automation of the enterprise. This RPA tool helps in collaborating with multiple users across various work stations [21], [22].

VII. HR AND RECRUITING APPLICATIONS FOR ROBOTIC PROCESS AUTOMATION(RPA) TECHNOLOGY

There are many HR applications of RPA technology which improves HR and recruitment process in the organization. This helps in learning and also understand the significance RPA and HR automation which provides forward thinking business organizations and talent acquisition professionals an additional tool to develop recruiting effectively.

7.1. Sourcing Candidates:

90% of the global professionals according to a LinkedIn report, wants the information about the opportunities available in the organization from the recruiters. Many candidates prefer to enter into the prospective job opportunities, where the recruiters may find it very difficult to engage with the very qualified candidates. PA technology automates online sourcing process by canvassing thousands of talent pools and also the databases for quality candidates. Bots sourcing candidates on the web, recruiters spend lot of time consulting clients on talent strategies like improving the employment offers and bolstering marketing campaigns.

7.2. Chatbots:

In this application RPA technology can deploy chatbots which leverage sentiment analysis and also computational linguistics to identify the candidate's communication and also to formulate the appropriate responses. It enables to offer a more collective, responsive and also engage the candidates experience by eliminating the time between submitting the application from the candidates and receiving the response from the recruiter.

Chatbots performs many tasks such as

- Asking the candidates for their resumes, cover letters and also their contact information.
- Asking the questions to the candidates regarding their education, experiences and skills.
- They also answer the FAQ's from the candidates relating to job advertisement, the application and also the hiring process.
- Interview scheduled with the hiring managers or recruiters.

7.3. Enhancing Recruitment Marketing Campaigns:

RPA's helps every organizations by regularly engage and communicating with the candidates. Recruiters from the HR department design attractive email campaigns which can be sequenced and programmed to drip the messages for both the passive and also active candidates which creates a very high level of engagement. The automating recruitment marketing campaigns regularly correspond and offers relevant job opportunities for multiple candidates which helps in strengthen the employer's brand and also helps in robust talent pipeline.

7.4. Interview Scheduling:

Interview scheduling process along with the RPA technology assist both the organizations HR team and also the candidates. This technology helps the hiring managers or the recruiters to provide candidates with real-time access to recruitment process and suggest specific time slots for interview based on the availability. The candidates after selecting the interview time, an automated invite is set

to both the interviewers and also the interviewees where the schedule time becomes unavailable for other candidates. If any organization adopts a video interviewing platform, bots send and automated emails information containing how to complete the video interview. The recruiters or the hiring managers after reviewing the interviews select the best candidates for the suitable position.

7.5. Enhanced Candidate Experience:

In the organization the candidate's experiences are better managed with the help of RPA tools, where bots are used to collect the real-time information through the experience of the candidates and also monitoring the satisfaction level of each candidate in the recruitment process. The recruiters program bots to generate the email soliciting feedback or any short surveys where the candidates progress through the recruitment process. Automation helps to improve and also to monitor the experiences of the candidates which does not relatively mean to every component in the process which should be turned over to the technology.

7.6. Affinix:

Affinix should be utilised in many of the functions which are related to the automation available through RPA software like artificial intelligence software, chatbots and also automated emails drip campaigns. [24]

VIII. INPUTS FOR SUCCESSFUL INTEGRATION OF ROBOTIC PROCESS AUTOMATION IN THE RECRUITMENT PROCESS

Human and robots work together where the robots will be dealing with copying, repetitive data and other tasks are taken care of by the human at the same time to concentrate in the complex issues in the organization and also in the decision making process. The HR department and the recruiters need to understand the recruitment need, identifying the talent community, recruitment marketing strategies and also employee's turnover in the organization. RPA enables the empowerment and instant gratification of the employees.

It is very important to have a specific time scheduled for the hiring process and also cost effective for recruitment. This helps to reach the perspective candidates very fast. RPA integration has to take care about information related to candidates, communications, sourcing and screening finally automation of simple questions and instructions. These RPA should be user friendly for both the recruiters and also the candidates. RPA software should provide great efficiency and also boost the applicant engagement and experience. It helps to increase the best candidates hiring without compromising on quality.

IX. CONCLUSION

1. Robotic process automation (RPA) is the valuable technique for streamlining the recruitment process and hiring process in the organization.
2. Robotic process automation (RPA) has an impact in finding the right balance between talent and human interactions in the organizations.
3. Automation in the recruitment process enables the talent acquisition and hiring professionals to take right and faster decisions by increasing the efficiency in the hiring process.
4. Due to more benefits of RPA its uses are gradually increasing worldwide.
5. Since RPA technology reduces the cost and frees the other resources most of the companies have started to implement this technology.
6. In the present days most of the organizations are using this technique for RPA testing the application and to eliminate the traditional testing tools due to its limitations.

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