

**Technical report** 

# Mental models of automated recruiting systems

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> Master's Thesis, 30ects March, 2022

## 1. Introduction

Filippo (1961) defined recruitment as "the process of searching for prospective employees and stimulating them to apply for jobs in the organization". Therefore, this is an important factor for a company with impact in its finances. Through the years, this process has been evaluated and improved to increase its quality.

Oswal et al. (2020) identified five steps that recruiters generally follow:

- 1. Identify vacancy.
- 2. Prepare the job description with the ideal profile.
- 3. Direct search and screening the applicants.
- 4. Shortlist the candidates and conduct interviews.
- 5. Decision making and hiring the suitable candidate.

Nevertheless, these steps imply time, human error, and cost for companies. This occurred in many sectors that have experienced a significant evolution in how to proceed and complete tasks, and it increased the necessity of introducing technology. This has had an impact on how a selection process works (Nawaz, 2019; Oswal et al., 2020).

The recruitment process in organizations has been automated over the years, especially the firsts steps, to decrease time and costs and be able to gather more data (Freire & de Castro, 2021; Van Esch et al., 2019). Therefore, in the digital world of industry 4.0. it was a necessity to improve those aspects, and this is where AI has played a relevant role, which has the goal to support human in different tasks (Lucci & Kopec, 2015), as well as with the help of machine learning, and other technologies, such as Robotic Process Automation (RPA). RPA is an emerging technology that accelerates administrative tasks and also the recruitment of candidates in selection processes. RPA enables technologies such as chatbots to support recruiters in the early stages of the selection process; taking decisions whether to go further with the candidate or discard them. This aims to shorten the selection time and give a faster response to candidates (Nawaz, 2019).

In the last twenty years, AI in recruitment has increased exponentially. Traditional recruitment is still part of organizations, but this has gradually changed by implementing tools to accelerate the selection process, mostly in the first stages (Oswal et al., 2020). Although the use of AI in recruitment has positive aspects, it also presents some challenges and limitations. For instance, human characteristics that are unique and part of a selection process, such as tone of voice, are missing; and some data can be lost or biased during the application process, such as keywords that candidates write in the CV (Oswal et al., 2020).

The way the recruitment process has evolved has had side effects on candidates' experience when applying to positions in terms of the impact of hiring

decisions, since the system implementation does not usually come with a transparent explanation (Upadhyay & Khandelwal, 2018). This article explores precisely this question: what are candidates' mental models of hiring systems when confronted with an automated system versus a human?

Lee (2018) investigated what is the attitude and preference of participants toward the decision made by an algorithm and a recruiter in terms of trust, fairness and emotional response, finding that the algorithm was judged for its lack of trust, fairness and humanization. This result gives us an idea that the perception of reliability can condition a recruitment experience, or even the decision to apply or not to a job position (Van Esch et al., 2019). Previous literature focuses on the decision made by automated recruiting systems or types of explanations, but not on building mental models on how humans perceive those systems. Kaibel et al. (2019) studied if the perception of algorithms in the screening and selection process will be more objective, but participants only evaluated the decision made by the algorithm versus the human.

Another interesting aspect of recruitment is that although they accelerate the selection process and candidates get a faster response. A study by Kaharuddin et al. (2018) compared traditional recruitment versus online recruitment and obtained that, despite participants using both types, participants perceived traditional recruitment to be more reliable and effective in getting a job. In addition, having interaction with the recruiter can increase the chances of getting hired.

Considering previous research, there is a lack of evidence of mental models of automated recruiting systems, that is, how users perceive those models in terms of trust and fairness. Therefore, we want to find out how participants react to an automated recruiting system and conclude with an idea of the mental model that users form towards the recruitment algorithm. To begin answering this question, in this article we describe the results of an exploratory study contrasting the perception of an automated recruiting system and of a human recruiter.

## 2. Study methodology

### 2.1. Participants

We expect to collect 20-30 participants separated, equal in number, in control and experimental groups. We did not define the characteristics of the sample, given the experimental nature of the study.

We classify the participants into two groups:

 Control group: Participants are aware that the information presented is regarding an automated recruiting system.  Experimental group: Participants are first told that the selection process is done by a human recruiter. As a follow up, they receive the same information as the control group.

#### 2.2. Instruments and materials

To gather data, we use Microsoft Forms, which processes the data according to General Data Protection Regulation. We will use SPSS to run an exploratory analysis. We have not defined the characteristics of the sample a priori. However, if we find any pattern during data collection, we will conduct a suitable statistical analysis.

The demographic questions were adapted from Hughes et al., 2016 within the Microsoft Forms interface. For example, one of the most common questions is about gender. It is common to limit participants to male, female and other, which imply biological sex. Therefore, gender is beyond that classification (Westbrook & Saperstein, 2015), and we established it as an open-ended question.

The items in the survey for both groups were built and adapted partially from previous studies. For example: "How fair or unfair is it for [scenario subject] that the [algorithm/manager takes the action specified in the scenario]?" (Brockner et al., 1994; Konovsky, & Folger, 1991); "How much do you trust that the [algorithm/manager] make good-quality [decision specified in the scenario]?" (Lee, 2018); or how much they agreed or disagreed that the decision-maker's decision would make the scenario's subject feel happy or disappointed (Larsson, 2011; Weiss et al., 1999).

All items used a 7-point Likert scale (Lee, 2018). This scale is widely used in research compared to lower scales, due to high test-retest reliability, convergent validity, response preference, i.e. easier to answer, and odd response options (Chang 1994; Preston & Colman, 2000; Colman & Norris, 1997; Jones 1968; Taherdoost, 2019).

#### 2.3. Procedure

After reading the cover letter, which includes the purpose of study, anonymity, voluntary participation and contact information, participants were asked to voluntarily answer demographic questions.

In the control condition, participants were informed that they will read a job description, a fictional candidate's CV, and a conversation between an AI recruiting system and the candidate, based on <u>Paradox</u>, as part of the first stage of the

selection process after which they will complete a survey in relation to the system (Appendix A).

In the experimental condition, instead, they were told that the conversation was between a recruiter and a candidate. They also complete a second survey once we reveal that the conversation was part of a chatbot (Appendix B).

## 3. Results

We are currently waiting for participants' responses.

## 4. Discussion

We cannot conclude our results yet, but we can mention some aspects to consider for future studies. It would be possible to consider the format of the conversation presented; for instance, depending whether participants have more preference for Android or iOS (Morris, & Mueller, 2014). It could also be good to focus more on individual differences in terms of the five-factor model of personality (John et al., 2008), since studies have shown higher trust in extraversion and neuroticism (Robert, 2018). Finally, it could be interesting to convert this study into a qualitative approach, to register participant's personal opinions towards the system, which could be relevant when designing or introducing new automated recruiting systems.

## References

Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin, C., & Bies, R. J. (1994). Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss. *Academy of Management Journal*, *37*(2), 397–409. https://doi.org/10.2307/256835

Chang, L. (1994). A psychometric evaluation of four-point and six-point Likert-type scales in relation to reliability and validity. *Applied Psychological Measurement, 18*, 205-215.

Colman, A. M., & Norris, C. E. (1997). Comparing rating scales of different lengths: equivalence of scores from 5-point and 7-point scales. *Psychological Report, 80*, 355-362.

Flippo, E. B. (1961). Principles of personnel management. New York: McGraw-Hill.

Freire, M. N., & de Castro, L. N. (2021). e-Recruitment recommender systems: a systematic review. *Knowledge and Information Systems*, *63*(1), 1-20.

Hughes, J. L., Camden, A. A., & Yangchen, T. (2016). Rethinking and updating demographic questions: Guidance to improve descriptions of research samples. *Psi Chi Journal of Psychological Research*, *21*(3), 138-151.

John, O. P., Naumann, L. P., and Soto, C. J. (2008). "Paradigm shift to the integrative Big Five trait taxonomy," in *Handbook of Personality: Theory and Research*, 3rd Edn, eds O. P. John, R. W. Robins, and L. A. Pervin (New York, NY: The Guilford Press), 114–158.

Jones, R. R. (1968). Differences in response consistency and subjects' preferences for three personality inventory response formats. *Proceedings of the 76th Annual Convention of the American Psychological Association*, 247-248.

Kaharuddin, I. W., Pangemanan, S. S., & Rumokoy, F. S. (2018). Analyzing Employees' Perception of Traditional and Modern Recruitment. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 6(4).

Kaibel, C., Koch-Bayram, I., Biemann, T., & Mühlenbock, M. (2019, July). Applicant perceptions of hiring algorithms-uniqueness and discrimination experiences as moderators. In *Academy of Management Proceedings* (Vol. 2019, No. 1, p. 18172). Briarcliff Manor, NY 10510: Academy of Management.

Konovsky, M. A., & Folger, R. (1991). The effects of procedures, social accounts, and benefits level on victims' layoff reactions. *Journal of Applied Social Psychology, 21*(8), 630–650. <u>https://doi.org/10.1111/j.1559-1816.1991.tb00540.x</u>

Larsson, G. (2011). The Emotional Stress Reaction Questionnaire (ESRQ): Measurement of stress reaction level in field conditions in 60 seconds. SWEDISH NATIONAL DEFENCE COLLEGE STOCKHOLM (SWEDEN).

Lucci, S., & Kopec, D. (2015). *Artificial intelligence in the 21st century*. Stylus Publishing, LLC.

Lee, M. K. (2018). Understanding perception of algorithmic decisions: Fairness, trust, and emotion in response to algorithmic management. *Big Data & Society*, *5*(1).

Morris, J., & Mueller, J. (2014). Blind and deaf consumer preferences for android and iOS smartphones. In *Inclusive designing* (pp. 69-79). Springer, Cham.

Nawaz, D. N. (2019). Robotic process automation for recruitment process. *International Journal of Advanced Research in Engineering and Technology*, *10*(2).

Oswal, N., Khaleeli, M., & Alarmoti, A. (2020). Recruitment in the Era of Industry 4.0: use of Artificial Intelligence in Recruitment and its impact. *PalArch's Journal of Archaeology of Egypt/Egyptology*, *17*(8), 39-47.

Preston, C. C., & Colman, A. M. (2000). Optimal number of response categories in rating scales: reliability, validity, discriminating power, and respondent preferences. *Acta Psychologica*, *104*(2000), 1- 15.

Robert, L. (2018, December). Personality in the human robot interaction literature: A review and brief critique. In *Robert, LP (2018). Personality in the Human Robot Interaction Literature: A Review and Brief Critique, Proceedings of the 24th Americas Conference on Information Systems, Aug (pp. 16-18).* 

Taherdoost, H. (2019). What is the best response scale for survey and questionnaire design; review of different lengths of rating scale/attitude scale/Likert scale. *Hamed Taherdoost*, 1-10.

Upadhyay, A. K., & Khandelwal, K. (2018). Applying artificial intelligence: implications for recruitment. *Strategic HR Review*.

Van Esch, P., Black, J. S., & Ferolie, J. (2019). Marketing AI recruitment: The next phase in job application and selection. *Computers in Human Behavior*, *90*, 215-222.

Weiss, H. M., Suckow, K., & Cropanzano, R. (1999). Effects of justice conditions on discrete emotions. Journal of Applied Psychology, 84(5), 786–794. <u>https://doi.org/10.1037/0021-9010.84.5.786</u>

Westbrook, L., & Saperstein, A. (2015). New Categories Are Not Enough: Rethinking the Measurement of Sex and Gender in Social Surveys. *Gender & Society, 29*(4), 534–560. https://doi.org/10.1177/0891243215584758

## Appendix A



# How do you perceive online recruitment?

Over the past years, the recruitment process has evolved to online platforms and it changed the way we apply and experience a selection process. For this reason we are working on a project to find out how you perceive an online recruitment process.

This study takes approximately 10 minutes to complete. There are no correct or incorrect answers, and you are free to stop this study any time.

The data collected are anonymous and they will only be used for scientific research and the demographics will not associate with any participant. Any data captured in this survey will be saved and processed in accordance with Umeå University's GDPR Policy. You have the right to withdraw at any moment.

If you have any questions, please contact Teodora Neagu (<u>tene0010@student.umu.se</u> (<u>mailto:tene0010@student.umu.se</u>)), who is organizing the data collection for Umeå University.

Thank you in advance for your participation!

\* Obligatorio

These questions are not mandatory, but your answers will contribute to our research.

1

How do you describe your gender? (Man, woman, non-binary, etc.)

#### What is your age? (Please, enter a number)

El valor debe ser un número.

3

## What is your native language?

4

#### What is the highest level of education that you completed? (Select one)

 $\bigcirc$  High school or equivalent

#### O Bachelor's Degree

O Master's Degree

- O Doctoral or Professional Degree
- O No formal education

#### In which field would you place your education? (if applicable)

- O Social Science
- O Medical Science
- Science and Technology
- O Humanities
- 🔿 Art
- Other

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#### In which field would you place your main occupation? (if applicable)

- O Healthcare
- O Finance
- O Technology
- O Education
- ◯ Sales
- O Other
- Not employed
- O Retired

|  | , |
|--|---|
|  |   |
|  |   |
|  |   |

#### Have you ever worked in recruitment?

◯ Yes

🔘 No

O I prefer not to answer

In the following sections you will read a job description and one of the applicants' CV. Then, you will read a conversation between the recruitment system and the candidate. Finally, you will answer a survey.

The estimated time to complete the study is 10 minutes. You can take notes, if you would like to.

## Store Manager Retail

Stockholm, Sweden

Fulltime · Intermediate

#### 51 to 200 employers · Textile and fashion industry

A multinational clothing company is looking for a Store Manager. They are looking for someone who will manage a store in Sweden, including staff, inventory and overseeing sales. They have decided on the following requirements for the position:

#### **Requirements:**

- 5 or more years of experience in retail
- Recruit, hire and train associates
- Enforce all company policies
- Lead a team of 10-15 and delegate tasks
- Handle customer service issues
- Maintain stock replenishment
- Ability to negotiate and have direct contact with suppliers
- Education: Bachelor's in Marketing, Business or related field. Master's degree in Business Administration is a plus

Send your application before February 28TH, 2022.



A potential candidate sees the position, and sends their CV to apply. The CV is as follows:

| • | CV<br>ADDRESS<br>Stockholm, Sweden<br>070000000<br>cn2367@gmail.com | 2018 -<br>Retail Assistant Manager • (clothing company)<br>• Assist Store Manager in determining plans and objectives<br>• Arrange merchandise to promote sales<br>• Train new employees<br>• Inventory controls and contact suppliers<br>2016 - 2018<br>Retail Associate • (clothing company)<br>• Assess customers' needs and offer solutions<br>• Recommend customers sales and offers<br>• Process payments<br>• Setting sales goals<br>2015 - 2016<br>Store Associate • (clothing company) |
|---|---|---|
|   | cn2367@gmail.com  | <ul> <li>2015 - 2016</li> <li>Store Associate • (clothing company)</li> <li>Display and organize products to locate easily</li> <li>Assist customers to find products and in payment and returning processes</li> </ul>   |
|   |   | Keep the store clean  |
|   |   | Bachelor's in Marketing (2015-2018)   |
|   |   | SKILLS<br>Organization, customer service, interpersonal communication   |

The company is using an AI System for the first stage of the recruitment process, to filter the candidates' CVs. It consists of a simple SMS conversation. After answering some questions, the system decides if the applicants continue for an interview with a recruiter or rejects them if they are unsuitable. The system will make the decision using only the candidate's profile and the requirements in the job description.

After the candidate applies to the position, they receive an SMS and the following conversation happens:

| •••   |                                   | Carl and the second second   |
|---|-----------------------------------|--|
| Messages Anna   | Details                           | No, but I trained new<br>employees last month.   |
| Hi! I hope you're<br>having a good day. I<br>want to thank you for<br>applying for the position<br>of Sales Manager. Your<br>profile is interesting but J |                                   | Okay. Do you have<br>experience contacting<br>suppliers?   |
| want to know a little<br>more about you. Is that<br>okay?   |                                   | I did it a couple of times<br>and my manager was<br>very happy with my   |
| Yes,  | of course.                        | performance.   |
| Are you eligible to work<br>in Sweden?  | Yes, I am.                        | And do you feel<br>comfortable in situations<br>that involve management<br>of the inventory?   |
| Great! How long have<br>you been working in<br>Retail?  |                                   | Yes, I have done it a fer<br>times before.   |
| About 7 years,<br>in 2015 and I h<br>working in retai<br>then.  | l started<br>ave been<br>i since  | You have a very<br>interesting profile, but we<br>need someone that has<br>experience leading a  |
| What are your current<br>duties?<br>I organize the d<br>schedule, get a<br>manage orders<br>store clean and<br>organized, and<br>clients                  | lally<br>nd<br>, keep the<br>help | team of 10-15 people<br>and with inventory<br>management. We will not<br>be able to offer you the<br>position at this time.<br>Thank you for applying<br>and do not hesitate to do<br>so again for future<br>openings! |
| Have you led a team<br>during these years?  |                                   | iFakeTextMessage.com   |

## How much do you agree with the following statements?

8

It is fair not to hire the candidate. \*

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

9

The system provided enough information to explain why the candidate was not hired.  $\ensuremath{^*}$ 

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

10

A human would have taken a different decision. \*

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

The best candidate can be selected through this process.  $\ast$ 

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4 | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|---|------------|------------|-----------------------|
| Select one: | 0                           | $\bigcirc$ | $\bigcirc$ | 0 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

#### 12

The system's decision would make the candidate feel happy.  $\ast$ 

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

#### 13

The system's decision would make the candidate feel disappointed.  $\ast$ 

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

## It is fair for the candidate that the recruiting system evaluates the profile. $\ast$

|                       | Strongly<br>disagree<br>(1) | 2          | 3          | 4         | 5        | 6          | Strongly<br>agree (7) |
|-----------------------|-----------------------------|------------|------------|-----------|----------|------------|-----------------------|
| Select one:           | 0                           | $\bigcirc$ | $\bigcirc$ | 0         | 0        | $\bigcirc$ | $\bigcirc$            |
| 15                    |                             |            |            |           |          |            |                       |
| I trust that the syst | em made a                   | good-qu    | ality deci | sion over | the canc | lidate. *  |                       |

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

# Thank you for your participation!

16

Do you have any comments?

Este contenido no está creado ni respaldado por Microsoft. Los datos que envíe se enviarán al propietario del formulario.

<table-of-contents> Microsoft Forms

## Appendix B



# How do you perceive online recruitment?

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#### What is your age? (Please, enter a number)

El valor debe ser un número.

3

#### What is your native language?

4

#### What is the highest level of education that you completed? (Select one)

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| $\smile$ | ingn      | 301001 | UI CC | urvarchic |

#### O Bachelor's Degree

#### O Master's Degree

O Doctoral or Professional Degree

O No formal education

#### In which field would you place your education? (if applicable)

| $\bigcirc$ | Social Science |  |
|------------|----------------|--|
|            |                |  |

- O Medical Science
- Science and Technology
- O Humanities
- 🔘 Art
- O Other

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|---|---|--|--|--|
| 6 | 6 |  |  |  |
| n | n |  |  |  |
|   |   |  |  |  |
|   |   |  |  |  |

#### In which field would you place your main occupation? (if applicable)

| $\bigcirc$ | Healthcare |
|------------|------------|
| $\bigcirc$ | rieanneare |

- O Finance
- O Technology
- O Education
- ◯ Sales
- $\bigcirc$  Other
- O Not employed
- O Retired

7

#### Have you ever worked in recruitment?

O Yes

🔘 No

 $\bigcirc\,$  I prefer not to answer

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A potential candidate sees the position, and sends their CV to apply. The CV is as follows:



The company is using an SMS format for the first stage of the recruitment process, to filter the candidates' CVs. It consists of a simple SMS conversation. After answering some questions, the recruiter decides if the applicants continue for an interview or rejects them if they are unsuitable. The recruiter will make the decision only using the candidate's profile and the requirements in the job description.

After the candidate applies to the position, they receive an SMS and the following conversation happens:

|                                  | Care the second second second   |
|----------------------------------|---|
| Details                          | No, but I trained new employees last month.   |
|                                  | Okay. Do you have<br>experience contacting<br>suppliers?  |
|                                  | I did it a couple of times,<br>and my manager was   |
| of course.                       | performance.  |
| Yes, I am.                       | And do you feel<br>comfortable in situations<br>that involve management<br>of the inventory?                                  |
|                                  | Yes, I have done it a few times before.   |
| l started<br>ave been<br>l since | You have a very<br>interesting profile, but we<br>need someone that has<br>experience leading a<br>team of 10-15 people       |
| laily<br>nd<br>, keep the        | and with inventory<br>management. We will not<br>be able to offer you the<br>position at this time.<br>Thank you for applying |
|                                  | Of course.<br>Yes, I am.  |

# How much do you agree with the following statements?

8

It is fair that the candidate was not hired. \*

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

9

The recruiter provided enough information to explain why the candidate was not hired.  $\ensuremath{^*}$ 

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

10

This evaluation was fair for the candidate. \*

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

The best candidate can be selected through this process.  $\ast$ 

| Select one:   | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |  |  |
|---|-----------------------------|------------|------------|------------|------------|------------|-----------------------|--|--|
| 12<br>The recruiter's decisio   | on would m                  | ake the d  | candidate  | feel hap   | ру. *      |            |                       |  |  |
|   | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |  |  |
| Select one:   | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |  |  |
| <sup>13</sup><br>The recruiter's decision would make the candidate feel disappointed. * |                             |            |            |            |            |            |                       |  |  |
|   | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |  |  |
| Select one:   | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |  |  |

14

I trust that the recruiter made a good-quality decision over the candidate.  $\ast$ 

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

Many companies have implemented different automated recruitment systems to support recruiters in the selection process.

In the SMS conversation you just read, the recruiter "Anna" is a chatbot. This AI chatbot is used in the first stage of the recruitment process, to filter the candidates' CVs. As you read before, it consists of a simple SMS conversation. After answering some questions, the system decides if the applicants continue for an interview with a recruiter or rejects them if they are unsuitable. The system will make the decision using only the candidate's profile and the requirements in the job description.

Please, read the conversation once again, before answering the questions.

We want to remind you that you have the right to stop this study anytime.



## How much do you agree with the following statements?

15

It is fair not to hire the candidate. \*

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

16

The system provided enough information to explain why the candidate was not hired.  $\ensuremath{^*}$ 

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

17

A human would have taken a different decision. \*

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

## The best candidate can be selected through this process. \*

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

#### 19

## The system's decision would make the candidate feel happy. $\ast$

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

#### 20

The system's decision would make the candidate feel disappointed.  $\ast$ 

|             | Strongly<br>disagree<br>(1) | 2          | 3          | 4          | 5          | 6          | Strongly<br>agree (7) |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----------------------|
| Select one: | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |

It is fair for the candidate that the recruiting system evaluates the profile.  $\ast$ 

|                                   | Strongly<br>disagree<br>(1) | 2          | 3           | 4          | 5          | 6          | Strongly<br>agree (7) |  |
|-----------------------------------|-----------------------------|------------|-------------|------------|------------|------------|-----------------------|--|
| Select one:                       | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |  |
|                                   |                             |            |             |            |            |            |                       |  |
|                                   |                             |            |             |            |            |            |                       |  |
| 22                                |                             |            |             |            |            |            |                       |  |
| I trust that the syster           | n made a                    | good-qua   | ality decis | ion over   | the candi  | date. *    |                       |  |
|                                   |                             |            |             |            |            |            |                       |  |
|                                   | Strongly                    |            |             |            |            |            |                       |  |
|                                   | disagree<br>(1)             | 2          | 3           | 4          | 5          | 6          | Strongly<br>agree (7) |  |
| Select one:                       | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$            |  |
| Thank you for your participation! |                             |            |             |            |            |            |                       |  |

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Do you have any comments?

Este contenido no está creado ni respaldado por Microsoft. Los datos que envíe se enviarán al propietario del formulario.

