Product Analyst EOR

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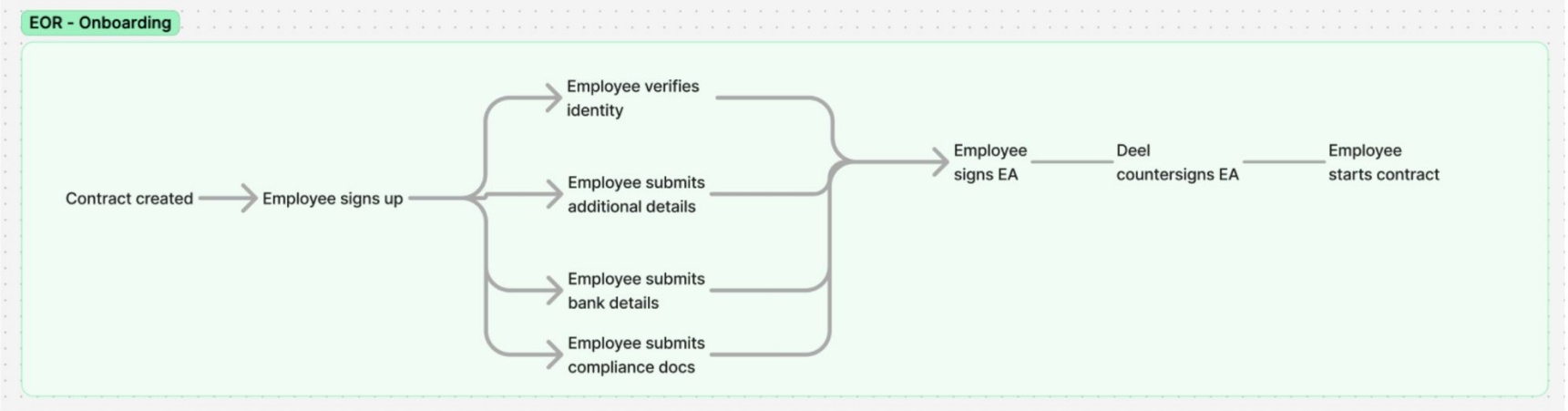
Task #1 - Analytics

Objective: Evaluate the ability to analyze and interpret key metrics from operational data.

Scenario: Analyze the activation process for contracts. Highlight bottlenecks and provide actionable insights.



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Delayed contracts

Facts

Number of contracts = 1,357

Contracts delayed = 1,020

Percentage delayed contracts = 75%

Average delay time = 5 days

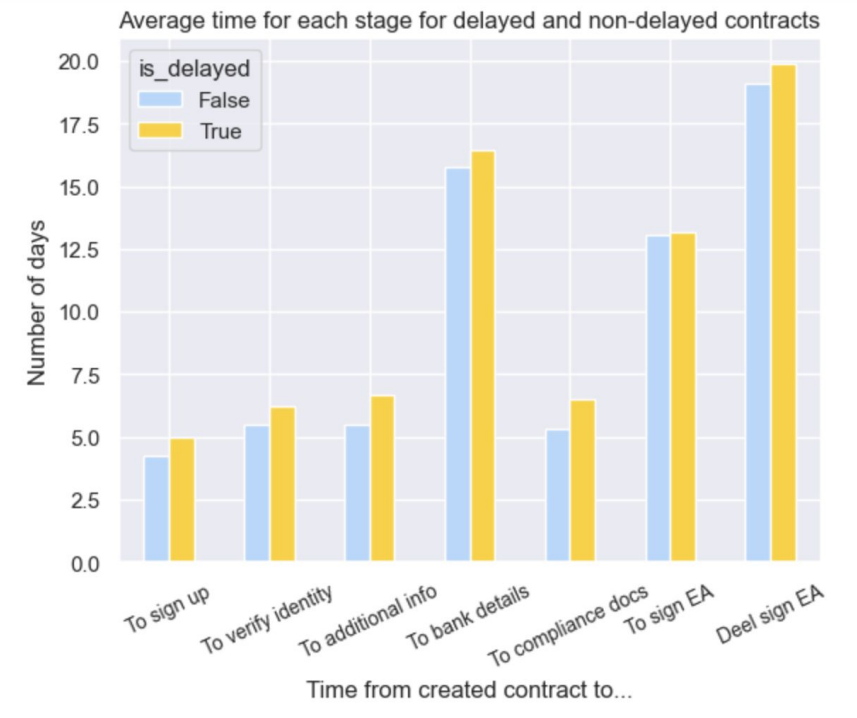
Median delay time = 3 days

Maximum delay time = 78 days

Observations

- The average as well as median delay time is low, however most of the contracts fall into this category.
- A few outliers make the average go higher, however we know 75% of the contracts fall under 7 days of delay.
- Understanding but not fixating in outliers is important as well.

Delayed contracts



Observations

- Average number of days from the creation of the contract is shown.
- Main bottleneck seems to be providing **bank details with 16 days**.
- Difference in average number of days between **delayed and non-delayed** contracts varies between **0 and 1 day**.
- Biggest differences can be observed in **providing additional info** and **compliance docs**.
- Time for deel to countersign is 19 days, 6 more days after employee signs.

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Delayed contracts - conclusions

- Bottle neck in providing **bank account details** could be due to employees having to open a new bank account. Suggesting and providing the employee with **online banking solutions** (where possible), could improve the time the employee takes to have an account. We could have a closer look at the country split, to understand better the banking situation.
- Evaluation of **deel process** to countersign EA should take place to understand **why there is such a big difference** between the employee signs and deel.
- For non-delayed contracts, seems that **verify identity, provide additional info and compliance docs** happens on the **same day**. Understanding how this users are able to do it altogether could help us provide guidance for the rest of the users to do it like that.
- Looking into demographics like country, could help us draw more tailored solutions that fit the working culture of the country.

Task #4 - A/B Test

Objective: Evaluate the understanding of A/B testing principles and their application.

Scenario: Deel implemented a new feature to automatically review the compliance documents using AI. The feature was tested with a subset of users.

Metric to be impacted	**Problem**	**Hypothesis**	
# of days to sign EA Actual = 13.1	It takes too long from the employee sign up to the EA sign	If an AI tool is implemented to review the compliance documents, the time to sign a contract will be reduced	**KPI 1:** Time from employee compliance docs submission to employee EA sign. (**6 days**) **KPI 2:** Total time from created date to actual start date. (**20 days**) **KPI 3:** % of delayed start dates (**75%**)

Test and control groups	**Time frame to run the test**	**Analyse results**	**Secondary KPI evaluation**
Randomly assign 50% users to a group	Run until number of users reached statistical significance	Look at Metric to be impacted and compare control vs test group	If difference in control and test group is statistically significant, look into KPI's for further insights

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Results evaluation

- Using T sample test, which means all users are assigned randomly to a group.
- Define the sample size based on the margin of error and confidence level that we want to have, as well as the total population available.
- We would evaluate whether the implementation in the control group makes a significant improvement in our metric by looking at the p-value, which takes into account the confidence level we want to have with the experiment.
- If the p-value is less that 0.05 we can say the difference between both groups is statistically significant and proceed with the rollout.