



Case study

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Hiring process overview and date cleaning

The hiring process consists of the following phases: application, card mailing, card activation, background check initiation, background check completed, orientation(optional), and first batch complete.

Since the average process from application to completing first batch takes 10.2 days, the attribution window is 2018-10-01 to 2018-10-31. Thus, all application data after 2018-10-31 would not be taken into account.



Q1: A/B testing conclusion

| group | # applicants | # completing first batch | CVR(%) | Average time of completion(days) |
|-----------|--------------|--------------------------|--------|----------------------------------|
| control | 10,024 | 2,678 | 26.7 | 10.2 |
| treatment | 4,958 | 2,115 | 42.7 | 7.1 |

Both the conversion rate(CVR) and the average time of completion have significantly increased for the treatment group at 90% confidence interval. This implies that initiating the background check earlier would boost the conversion rate the reduce the average time to complete first batch.



Q2: cost_effectiveness analysis

| Card activation rate | | | | | |
|----------------------|-------------|--------------------|---------------------|-----------------|----------------------|
| group | total(%) | Job site search(%) | Shopper referral(%) | Social media(%) | Web search engine(%) |
| control | 86 | 67 | 96 | 96 | 83 |
| treatment | 94 | 87 | 97 | 98 | 94 |
| conclusion | significant | significant | insignificant | significant | significant |

This policy is cost effective. For the funnel job site search, social media and web search engine and overall rate, the result demonstrates that the card activation rate for treatment group is significantly higher at 90% confidence interval. However, the results is not significant for shopper referral funnel.



Q3: other suggestions and recommendations

| group | CVR(%) | CVR(%) |
|---------------------------|--------|--------|
| Orientation completed | 47 | 42 |
| Orientation not completed | 53 | 58 |

Since the orientation is optional for the application process, and the conversion rate is correlated with orientation completion, I suggest that we perform an A/B testing on whether the mandatory orientation would improve overall conversion rate.



Thank you