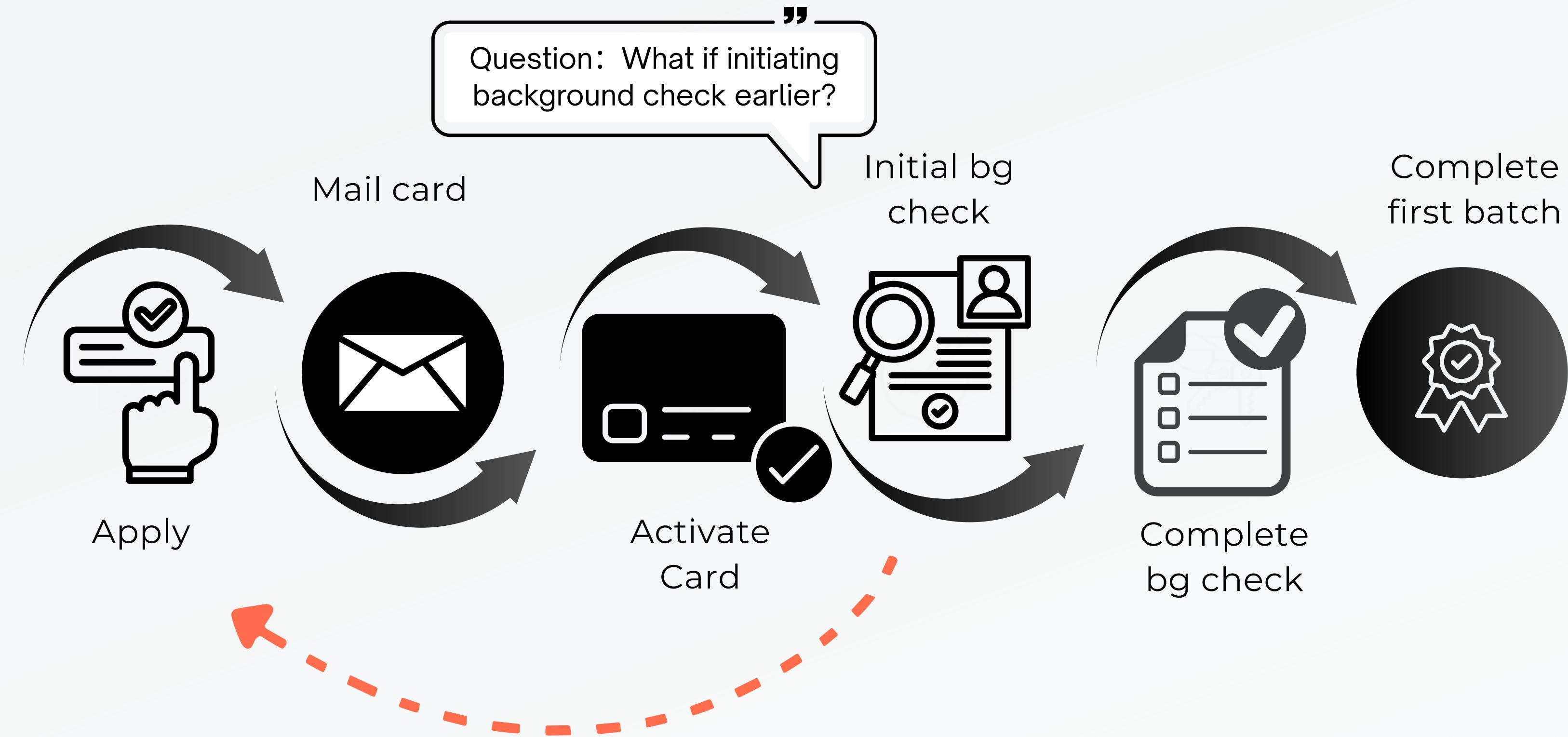




DATA SCIENCE PROJECT



SEQUENCE OF EVENTS FOR HIRING PROCESS



EVALUATE A/B TEST RESULT

If initiating background check earlier, start at the time when people begin to apply

01

Increases first batch completion rate

02

Reduces the entire hiring process time, improve the efficiency

Group	Applicant	Completed First Batch	Conversion Rate	Days from application to first batch completion
Control	14,501	2,873	19.81%	10.00
Treatment	7,197	2,471	34.33%	6.93
Conclusion			conversion rate significantly increased (z score 23.37)	reduce the duration of the hiring process

IS THIS COST EFFECTIVE?

1. Cost per applicant = \$30 (for background check).

2. Revenue proxy / success = an applicant completing their first batch of orders

**3. To evaluate cost-effectiveness, we want to see:
Cost per successful shopper (CPS) = total cost / number of completions.**

4. Compare CPS across control and treatment.

Group	Applicant	Completed First Batch	cost per success
Control	14,501	2,873	151.42
Treatment	7,197	2,471	87.38
Conclusion			It is more cost-effective

OBSERVATION

Group	Channel	conversion	card activat..	orientation ..	background..
control	job-search-site	12.16%	61.22%	46.96%	53.77%
	shopper-referral-bonus	21.14%	77.82%	70.18%	62.89%
	social-media	24.03%	81.59%	15.11%	72.49%
	web-search-engine	19.50%	74.27%	45.03%	65.99%
treatment	job-search-site	32.10%	77.51%	54.68%	89.05%
	shopper-referral-bonus	35.85%	78.18%	69.26%	82.24%
	social-media	31.50%	83.90%	18.70%	90.70%
	web-search-engine	36.66%	83.80%	53.73%	89.99%

OBSERVATION

job site search channel:

- lowest conversion rate in the control group
- orientation completion rate is the lowest in the test

social media channel:

- generates ineffective leads in the test
- conversion rate significantly improved, if initiating background check
- conversion rate insignificantly improved, if initiating background check
- lowest orientation completion rate

shopper referral bonus channel:

- highest conversion rate in the control group;
- generates effective leads.

web search engine channel:

- lowest conversion rate in the control group;
- conversion rate significantly improved, if initiating background check