



Group 12

Group project

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Our Product

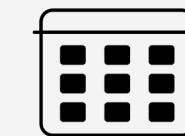


Uploading CV



Key details

**Getting to know
the user**

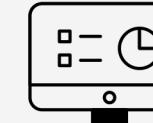


Targeted tests w/
GPT-generated
quizzes

comprehensive
evaluation



**Skill
assessment and
enhancement**



Job interests



Data from top
job site

Job matching



Final report

**AI-driven
insights**



Business Model

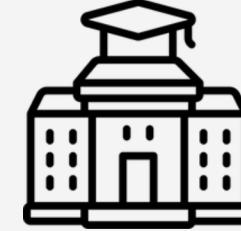


Subscription
model



SaaS: Software
as a Service

**Source of
revenue**



Universities



MOOC provider

Partnerships



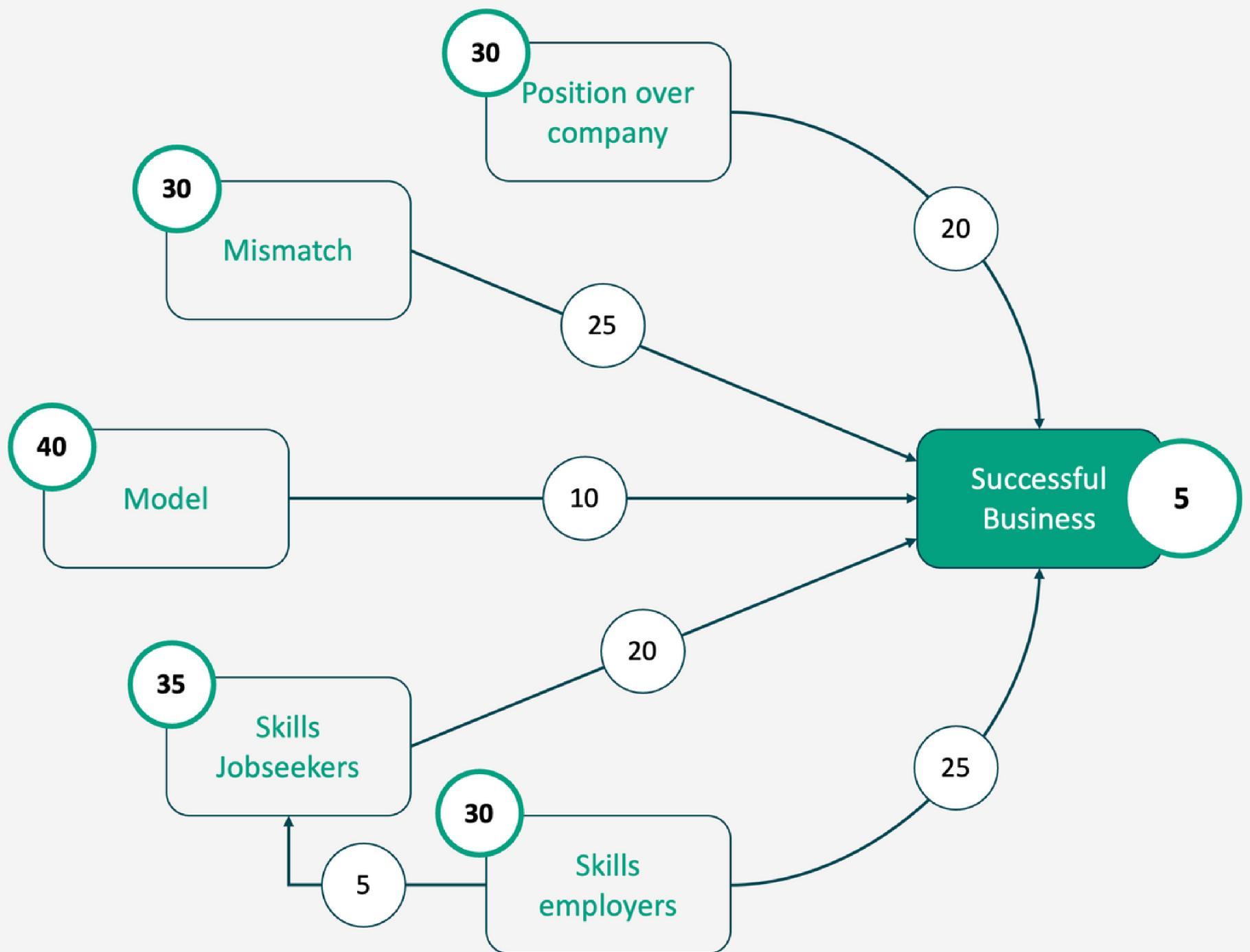
Algorithm
Enhancement



Integrated
Ecosystem

**Future
directions**

Causal map



$$\begin{aligned}V &= \omega V_{\Theta} + (1 - \omega)V_{\hat{\Theta}} \\ \omega &= 0.31 \\ V_{\Theta} &= 0.5 \\ V_{\hat{\Theta}} &= 0.2 \\ V &= 0.26\end{aligned}$$

Alternative Theory

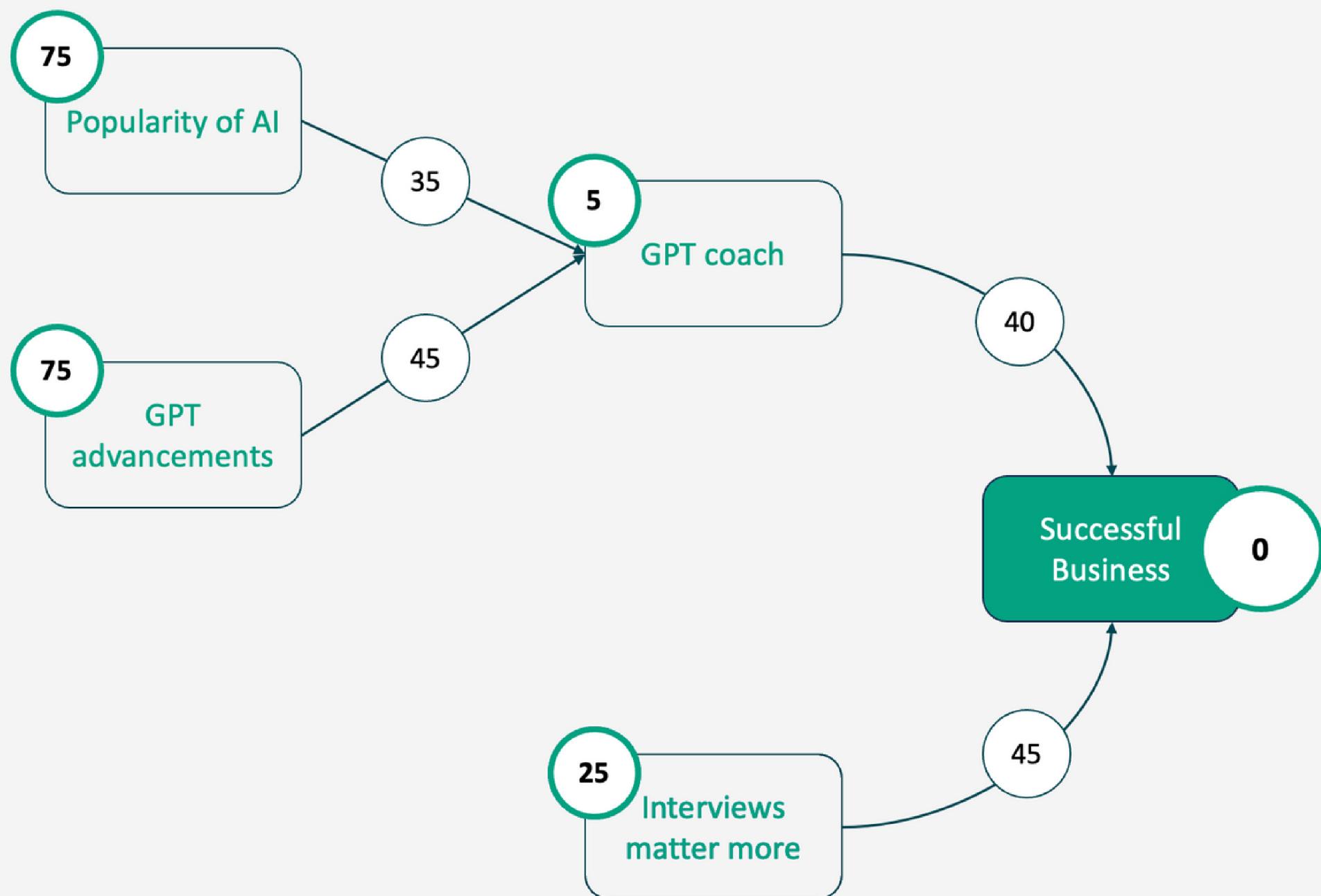


What if skills are not the most important aspect

Interview performance

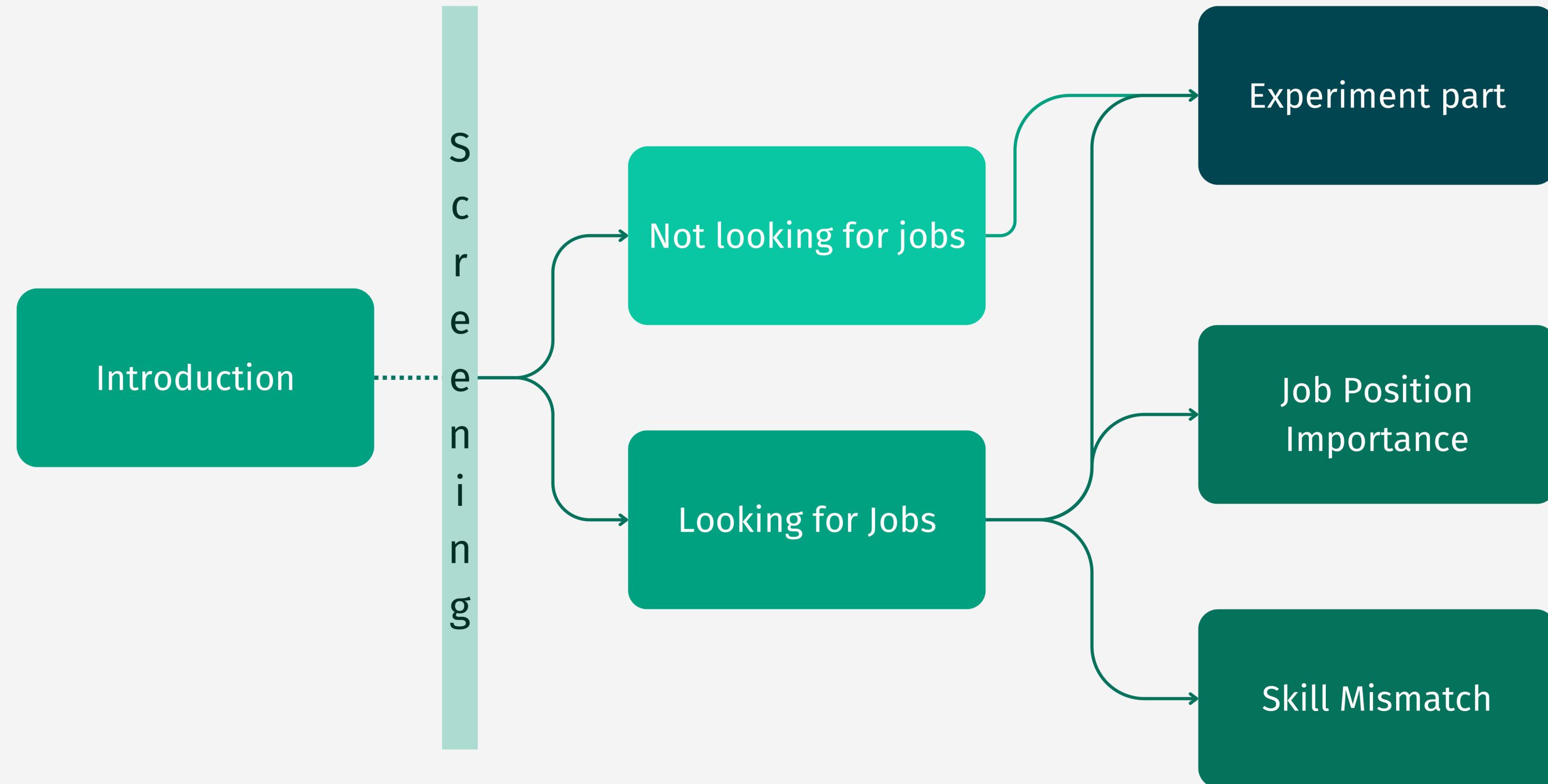
GPT powered interview coach

Alternative Theory



$$V = \omega V_{\Theta} + (1 - \omega)V_{\hat{\Theta}}$$
$$\omega = 0.37$$
$$V_{\Theta} = 0.35$$
$$V_{\hat{\Theta}} = 0.25$$
$$V = 0.29$$

Survey Formulation



Experiment

Starting case

Consider that a job candidate has a given [set of skills].
What is his probability in getting the following [positions] in a
major company?

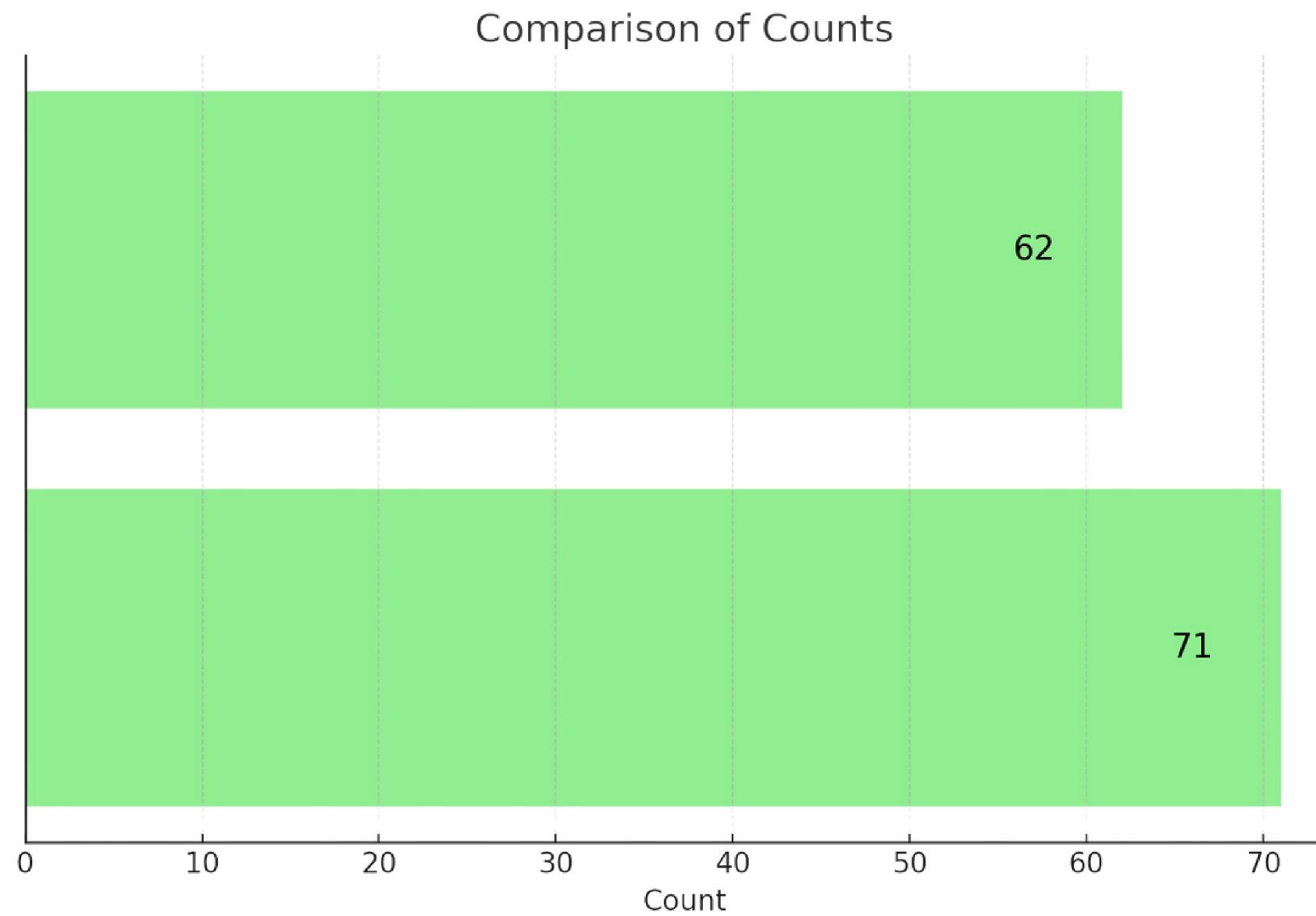
Randomized Follow-up

Now suppose that the candidate acquires [randomized skill].
What would you say is his new probability?

Randomization happens between **6 relevant skills**.
3 hard skills and **3 soft skills**

Skill sets and **job positions** are adjusted according
to respondents' academic background

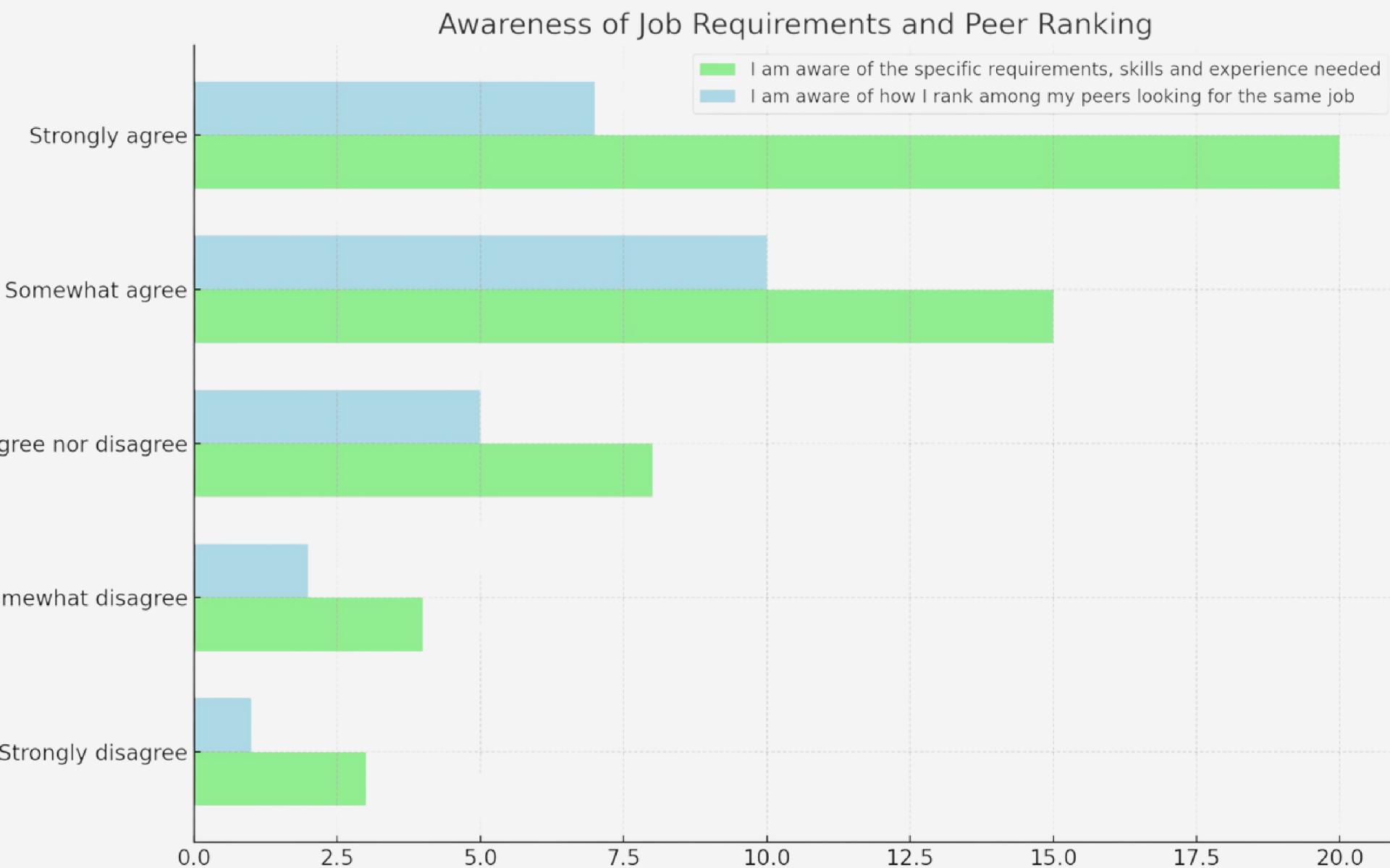
Is position important?



**Very close
percentages**

**Possible selection on people
having strong awareness of
the job market situation**

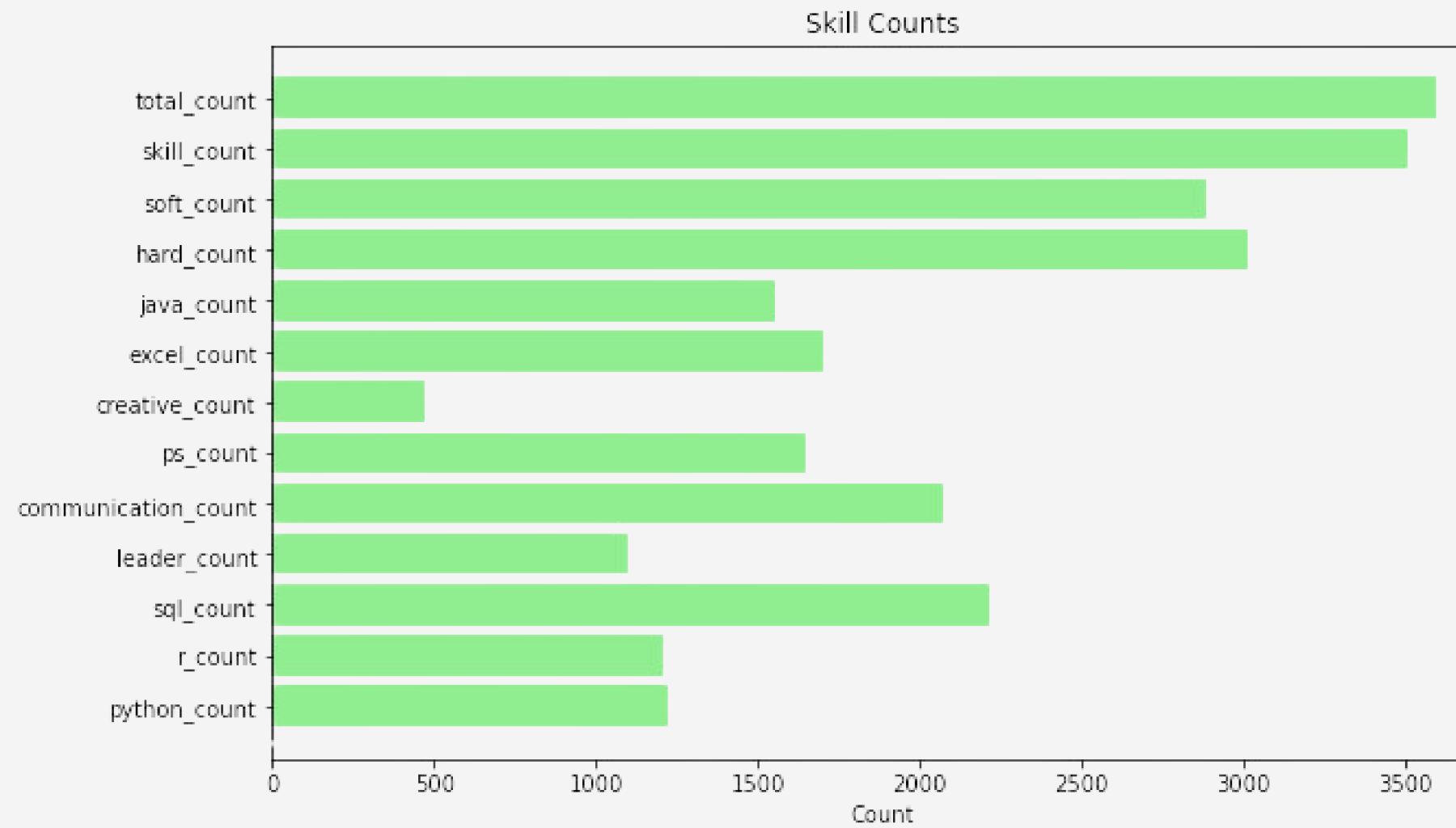
Skills Mismatch



High level of self-reported awareness

Respondents are less certain about how they rank among peers

Importance of skills



Nearly all of the job postings mentioned some skills

Slight advantage of hard skills over soft skills

The Framework: DiffinDiff

$$y_{it} = \beta_0 + \delta_0 \cdot dAfter_t + \beta_1 \cdot dTreated_i + (\delta_1) \cdot dAfter_t \cdot Treated_i + \epsilon_{it}$$

proba	after	treatm~t	gender	location	age_or~d	id
.6666667	1	1	Female	Italy	18-21	11
.77	1	0	Male	Italy	22-25	23
.4533333	0	0	Female	Italy	18-21	16
.2166667	0	0	Male	Italy	22-25	44
.6366667	1	1	Female	Italy	22-25	8
.2733333	1	0	Male	Italy	22-25	44
.7333333	1	1	Female	Abroad	22-25	15
.2733333	1	0	Male	Italy	22-25	51
.58	1	1	Male	Italy	22-25	48
.54	1	0	Male	Italy	18-21	22

We are interested in the interaction between after and treatment

We have controlled with demographics collected in the first phase, as well as fixed effects within individuals

We want to study also possible heterogeneity across Stem and Non-Stem groups

Experiment results

$$y_{it} = 0.5 + 0.05 \cdot After_t + 0.18 \cdot Treated_i + 0.047 \cdot After_t \cdot Treated_i + \gamma \cdot X_i + \epsilon_{it}$$

Linear regression						
	Robust					
Number of obs	=	282				
F(143, 138)	=	4228.29				
Prob > F	=	0.0000				
R-squared	=	0.9599				
Root MSE	=	.05689				
proba	Coefficient	std. err.	t	P> t	[95% conf. interval]	
treatment	.1831319	.0304897	6.01	0.000	.1228446	.2434193
1.after	.0527083	.0085177	6.19	0.000	.0358663	.0695504
1.intera	.0450336	.0135213	3.33	0.001	.0182978	.0717694
educ_enc						
Stem	-.3743512	.0802999	-4.66	0.000	-.5331285	-.215574
intera#educ_enc						
1#Stem	.0053692	.0221481	0.24	0.809	-.0384243	.0491626
gender_enc						
location_enc	.3283333	.082761	3.97	0.000	.1646898	.4919769
id						
2	-.08	.0215032	-3.72	0.000	-.1225184	-.0374816
3	-.7866666	.1314783	-5.98	0.000	-1.046639	-.5266941
4	-.4716666	.0894359	-5.27	0.000	-.6485086	-.2948247
5	.1423154	.0840347	1.69	0.093	-.0238466	.3084775

The coefficient for intera is positive and significant!

The interaction coefficient # is not significant: no differences across Stem and Non-Stem groups

Insights

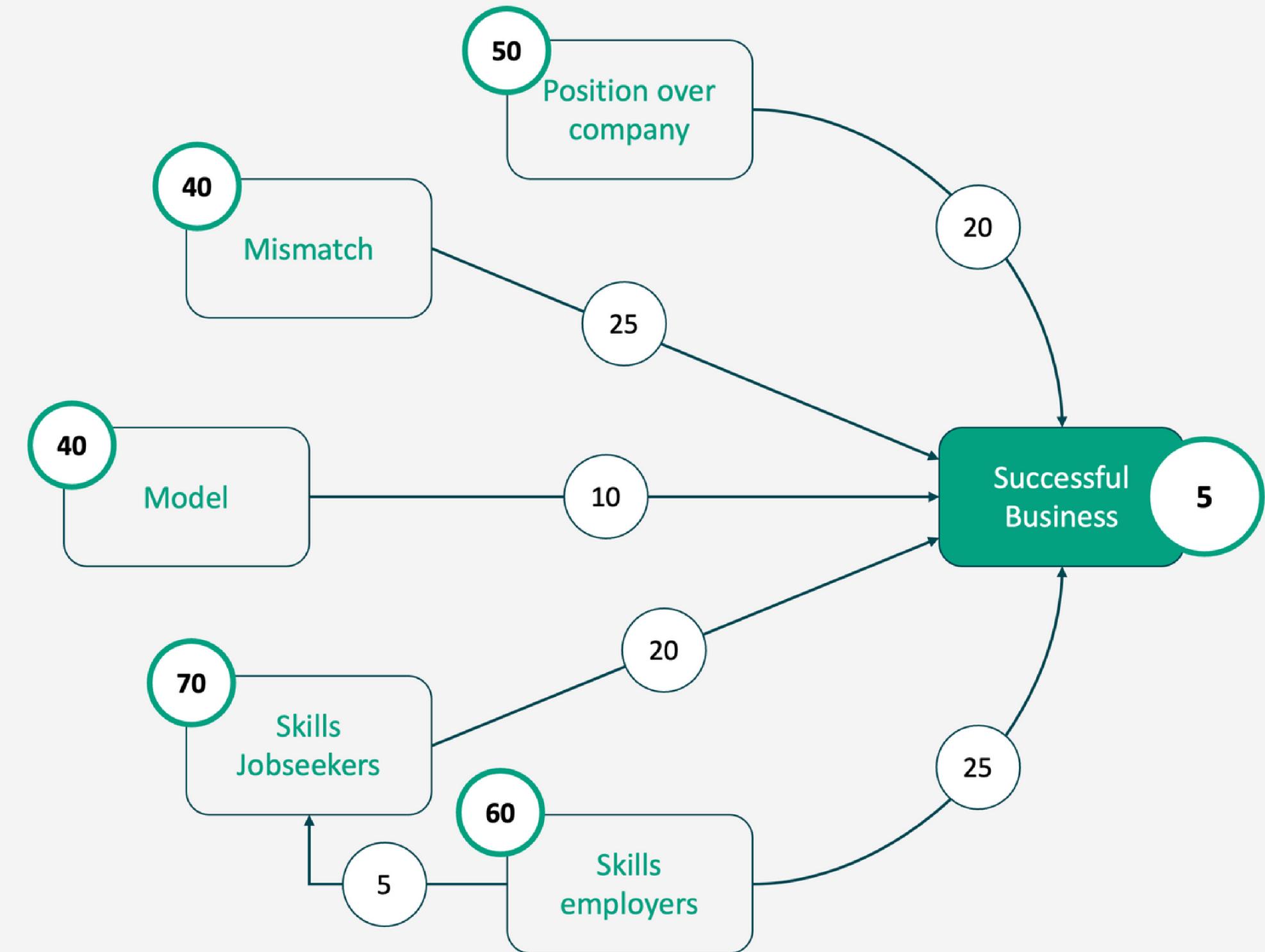
Job seekers are aware of the skills required, they are uncertain about their competitiveness

Slight majority values job positions over the company

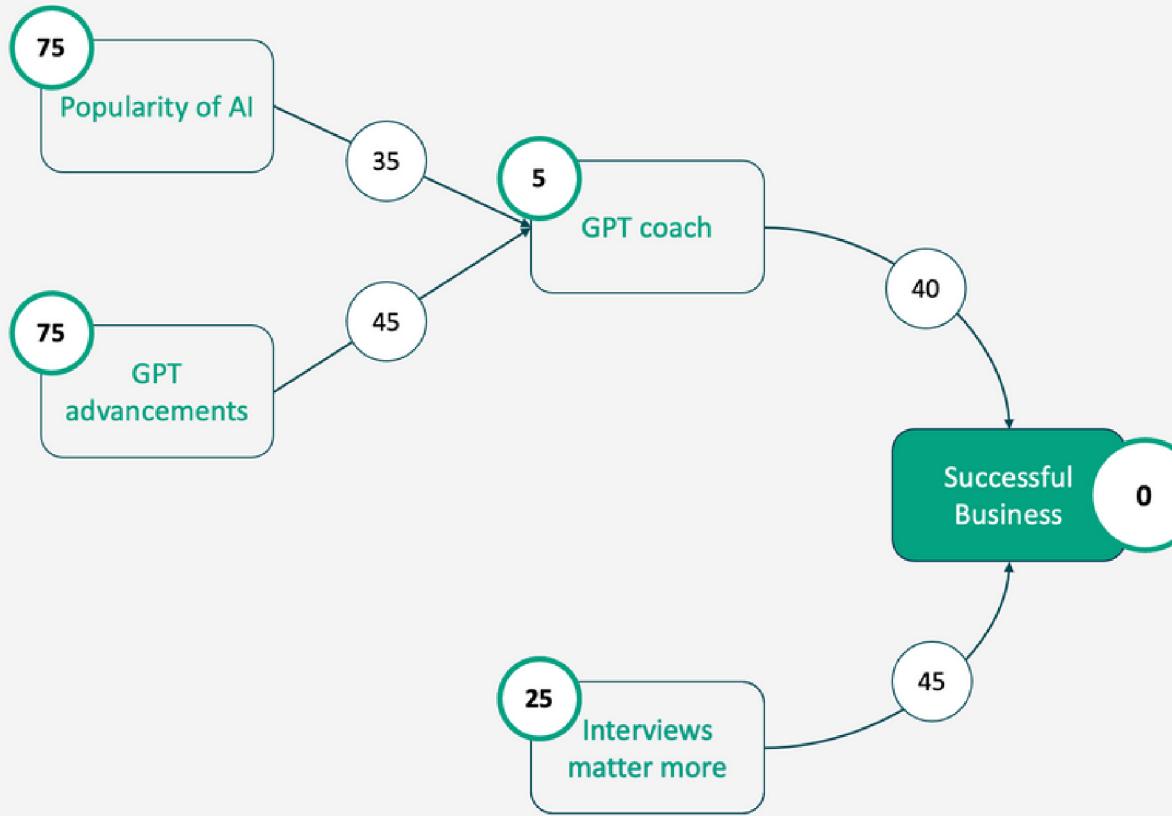
Skills are certainly a priority for job seekers: they are likely to value tools that provide recommendations for improvement.

Hard skills are more effective than soft skills in boosting candidates chance in landing a job.

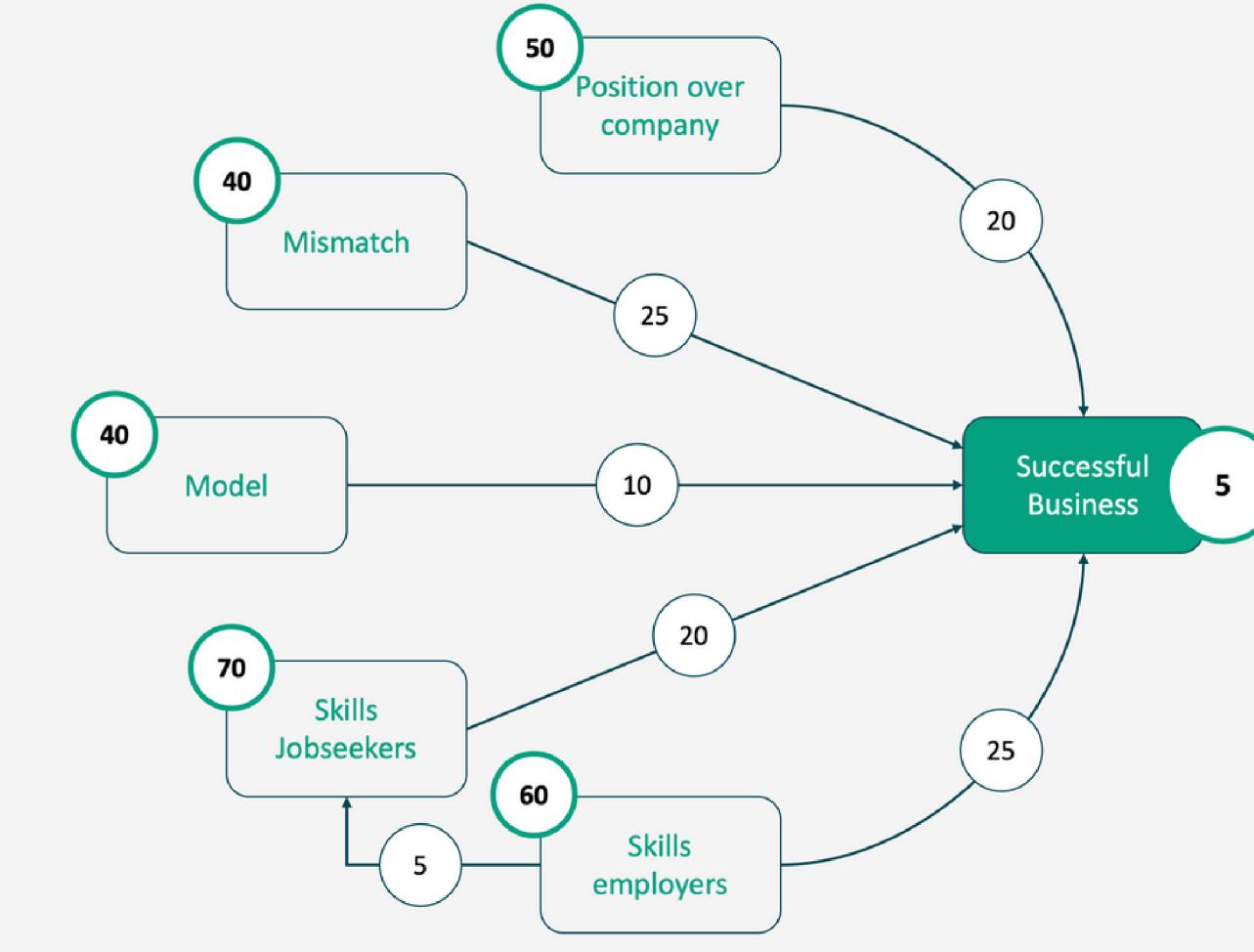
Updated Probabilities



The decision



Alternative theory (29%)



VS

Updated theory (51%)

Finally, we decided to choose our updated theory with an expected probability of our company's future state: 51%.



Do you have
any questions?