

Narrative Persuasion

Instructions

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This is a document including the instructions of the experiments reported in our paper
Narrative Persuasion. Click [here](#) to jump to the paper.

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1 ASYMMETRIC

1.1 Welcome Screen

Welcome to our experiment!

This experiment will take approximately **25 minutes** to complete. It is divided into **10 rounds**. In each round, the computer will randomly match you with one other player. You and the other players that you are matched with will remain anonymous.

You will receive a show-up fee of **£3.50** for participating in the experiment. You can also earn a **bonus** payment of **£3.75** during the experiment. The amount that you earn will depend on the decisions made by you and other participants during the experiment. It is therefore important that you read the instructions carefully as this will help you to make better choices. In addition, there will be a set of understanding questions to check that you read and understood the instructions properly. You will need to answer these questions correctly in order to complete the experiment.

At the end of the experiment, one of the 10 rounds will be randomly chosen to be relevant for your payment. The decisions made by you and your matched partner in the chosen round will determine your payment.

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1.2 Advisor Instructions

1.2.1 General Instructions

Your task as an advisor

There are two types of roles in this experiment: **investors** and **advisors**. You have been randomly chosen to be an **advisor** throughout the whole experiment.

In each round, you will be randomly matched with an **investor**, who is another participant in the experiment. You will send a message to the investor. After receiving the message, the investor will make a decision.

In each round, the **investors** are asked to evaluate a hypothetical company and assess how likely it is that the company will be successful (i.e., profitable) in the coming year. Since there are ten rounds, the **investors** will each evaluate ten companies labelled Company A, Company B, Company C, ..., Company J.

Your job as an **advisor** is to send a message to your matched **investor** about the company being considered in each round. The message that you send to the **investor** could influence their evaluation of the company.

Each of the companies that the **investor** will evaluate produces a fictitious product called a Widget. Widgets are a type of technological product. As the built-in technology advances very quickly, the product is outdated after about a year. At the start of each year, the company, therefore, discontinues the previous year's model and releases a new model of the Widget. In every year, the company's success depends on the model produced in that year.

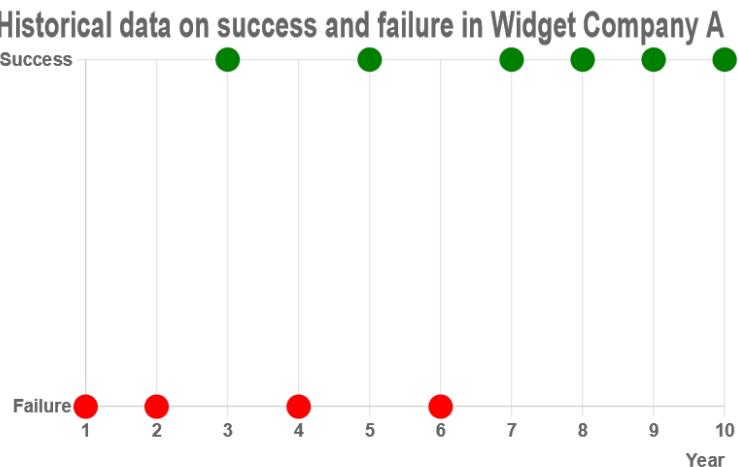
To evaluate how likely it is that the Widget company will be successful with the model it will produce in the coming year, the **investor** is given several pieces of information.

THE PIECES OF INFORMATION ARE:

1. Historical data

First, the **investor** will be shown the historical data for the company, showing whether it was "successful" or "not successful" with the models it produced in each of the past ten years (i.e., from Year 1 to Year 10).

For example, the data could look like this:



Here, you can see that Widget Company A was successful with the model it produced in six out of the past ten years. This historical data is **public**. So, both the **investor** and you, as the **advisor**, will have access to it.

(continued on next page)

2. The Widget company's probability of success depends on its CEO

Second, the **investor** knows that the CEO of a Widget company determines the probability of success in each year. The **investor** also knows that the CEO of each company under evaluation changed exactly once during the ten years. This occurred at the **start of Year 3, 4, 5, 6, 7, 8 or 9**, but the investor does not know exactly which year. The investor further knows that under a specific CEO the probability of success is the same in every year.

This means that when evaluating each company, there are three important things to consider:

- a. The **year** in which the CEO changed.
- b. What the company's **initial** probability of success was, in each year *before the change of the CEO*.
- c. What the company's **current** probability of success is, in each year *after the change of the CEO*.

All companies are completely independent of one another. So these features differ between companies.

*3. Advice received from **you**, the matched advisor*

Third, in each round the **investor** knows that they will receive a message from their **advisor** (i.e., from **you**). In each round, as an **advisor**, **you** will know the truth about the following information: the **year** in which the CEO changed, what the company's true **initial** percentage probability of success (Initial PoS%) was and what its true **current** percentage probability of success (Current PoS%) is. In other words, as an advisor, **you** are fully informed about (a), (b) and (c). The **investor** knows that you are fully informed.

Given your informational advantage, your task is to send the **investor** a **message** before they submit their evaluation of the company's **current** percentage probability of success. **Your** message will contain your assessment of the **year** in which the CEO changed, as well as your assessment of the company's **initial** percentage probability of success and **current** percentage probability of success. For example, the investor could receive a message from you that looks something like this:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **71** was Widget Company A's **initial** percentage probability of success. They say that **45** is Widget Company A's **current** percentage probability of success.

Important information: As an advisor, you are free to choose the content of the message that you send; you do not need to truthfully report the information that you have to the investor. The investor knows this.

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1.2.2 Explanation of the Payment Scheme

Details about how your payment is calculated

Investor's incentives

In each round, the investor's task is to estimate the company's **current** percentage probability of success (Current PoS%) **as accurately as possible**. The more accurate the investor's estimate is, the higher is the probability that they earn a bonus.

Your incentives

As an **advisor**, your earnings will also depend on the decision that the investor makes after seeing your message. Specifically, your payment in a given round will depend on the investor's estimate of the company's **Current PoS%**. Exactly how your payment depends on the investor's estimate depends on what type of advisor you are. There are three possible types:

- ↑
 - The ↑ advisor wants their matched investor to believe that the company has a **high Current PoS%**—i.e., the ↑ advisor's payment is **higher** when the investor estimates that the company is **more likely to succeed**.
- ↓
 - The ↓ advisor wants their matched investor to believe that the company has a **low Current PoS%**—i.e., the ↓ advisor's payment is **higher** when the investor estimates that the company is **less likely to succeed**.
- - The → advisor wants their matched investor to hold **accurate** beliefs about the **Current PoS%** of the company—i.e., the → advisor's payment is **higher** when the investor's estimate of the company's likely success **becomes more accurate**.

You are the ↑ advisor whose payment increases as your matched investor's estimate increases. Therefore the higher the investor's estimate of the company's **current** percentage probability of success is, the higher is the probability that you will win the **bonus** of £3.75.

If you would like to see the formula that explains exactly how your payment is calculated, you can click on the following button:

[Click here to see the formula](#)

Investors may or may not know your incentives. That is, investors may or may not know that you are more likely to earn a bonus if their estimate of the Current PoS% is higher.

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Details about []

Investor's incentives

In each round, the investor's estimate of the company's current percentage probability of success (Current PoS%) is a number between 0 and 100. This number is used to determine your payoff according to the following formula:

Your incentives

As an **advisor**, your earnings in a given round will depend on the investor's estimate depending on the following:



- The ↑ advisor's estimate leads to a higher payment.



- The ↓ advisor's estimate leads to a lower payment.



- The → advisor's estimate leads to a higher payment.

You are the ↑ advisor who estimates the company's current PoS%.

If you would like to see the formula, click here.

Explanation of the formula for calculating your payment



The investor's estimate of the company's current percentage probability of success (Current PoS%) is a number between 0 and 100. This number is used to determine your payoff according to the following formula:

$$\text{Probability of winning the bonus (in percent)} = 100 - \frac{(x - 100)^2}{100},$$

where x is the investor's estimate of the company's Current PoS%. The formula squares the difference between the investor's estimate and 100. This number is divided by a constant and then subtracted from 100. Therefore, if the investor estimates 50, then you win the bonus 75 percent of the time, because

$$100 - \frac{(50-100)^2}{100} = 75.$$

The principle underlying the above formula is simple: the closer the investor's estimate is to the highest possible estimate, the higher the percentage probability that you win the bonus of £3.75.

Note that the investor's estimate can be different from the estimate that maximizes your payment by at most 100. In this case, the formula shows that your probability of winning is 0 percent.

At the end of the experiment, the computer will randomly choose one round of the experiment to determine whether or not you will win the bonus.

current PoS% **as** high as possible to earn a bonus.

Specifically, your payment depends on the investor's estimate of the company's Current PoS%—i.e., the ↑ advisor's estimate.

Specifically, your payment depends on the investor's estimate of the company's Current PoS%—i.e., the ↓ advisor's estimate.

Specifically, your payment depends on the investor's estimate of the company's Current PoS%—i.e., the → advisor's estimate.

higher the investor's estimate of the company's Current PoS%, the higher the bonus of £3.75.

Close

Click here to see the formula

following button:

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1.2.3 Explanation of the Data Generating Process

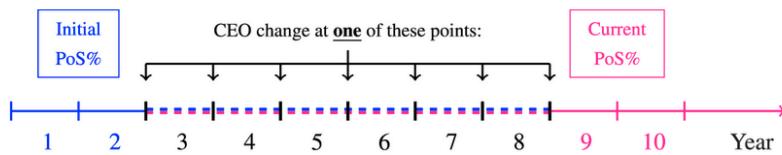
More details on what determines success and failure in each company

The details below may help you to decide which message you would like to send to the investor. While you, as an advisor, are fully informed about the important characteristics of each company (i.e., the CEO change date, the Initial PoS%, and the Current PoS%), the investor is not. When the investor is evaluating the company, the following information is what they will have available to them:

INFORMATION THAT THE INVESTOR RECEIVES:

(a) When did the CEO change?

Recall that the CEO of each company changed once and for all at the **start of Year 3, 4, 5, 6, 7, 8 or 9**. For each company, the year in which the CEO changed will be **randomly determined** by the computer. So each of these seven years has an equal probability of being chosen.



Example Suppose that the start of Year 3 is randomly chosen by the computer for a particular company as the moment when the company's CEO changed. This means that the Initial PoS% is relevant for Years 1 and 2 while the Current PoS% is relevant for Years 3 to 10.



Hint Success in Years 1 and 2 is always determined by the Initial PoS%. Success in Years 9 and 10 is always determined by the Current PoS%.

(b) How is a company's Initial PoS% determined?

For each company, the computer will **randomly** draw a whole number between 0 and 100. Each whole number is equally likely to be drawn. This number determines the company's Initial PoS%.

(c) How is a company's Current PoS% determined?

Similarly, to determine each company's Current PoS%, the computer will **randomly** draw a second whole number between 0 and 100 (i.e., each whole number is equally likely to be drawn).

Important information: The company's Current PoS% is completely **independent** of its Initial PoS%. This means that, no matter what the company's initial percentage probability of success was, any number between 0 and 100 is equally likely to be drawn as its current percentage probability of success. Intuitively, the quality of the company's initial CEO does not tell you anything about how good its current CEO is.

Also, there is no relationship between companies. So, the Initial PoS% and Current PoS% of each of the companies is completely unrelated to all other companies.

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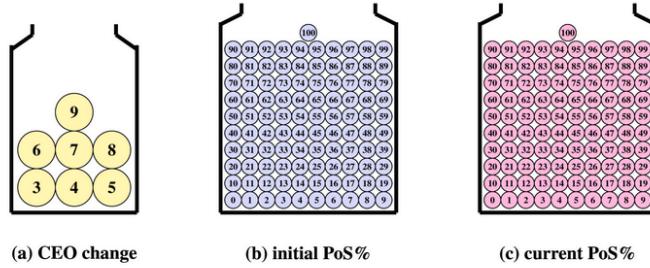
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How does the CEO affect the company's success in every year?

INFORMATION THAT THE INVESTOR RECEIVES:

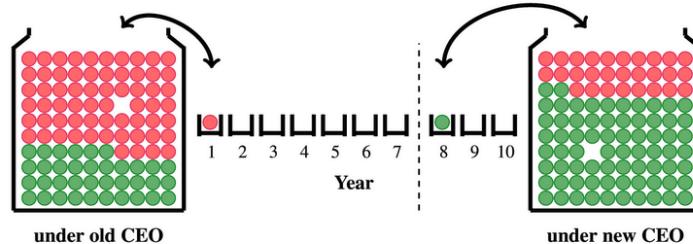
You can think of the computer going through a **two-step process** prior to each round.

In **Step 1**, the computer draws one ball at random from each of the following three urns (i.e., three balls in total). These three ball draws determine the year in which the CEO changed, the **initial** percentage probability of success (Initial PoS%), and the **current** percentage probability of success (Current PoS%).



Say, for example, that ⑧⑯⑦ are drawn. This means that the CEO changed at the **start of Year 8**. The new CEO is in charge in Years 8, 9 and 10. Compared to the old CEO, this new CEO also turns out to be quite good: compared to a **36%** probability of success in Years 1 to 7 under the old CEO, the company has a **72%** probability of success in every year when the new CEO is in charge.

In **Step 2**, the computer determines success and failure for each single year. To do so, the computer draws from an urn with 100 balls, which are either green or red. The number **36** determines the quantity of green balls in a company's urn under the old CEO; the number **72** determines the quantity of green balls in the urn under the new CEO. The computer draws a ball at random from the relevant urn for each of the years that a CEO is in charge. If the ball drawn is **green**, then the company is **successful** in that year. If the ball drawn is **red**, then the company **fails** in that year. After each draw, the computer places the ball back into the urn before making a draw for the next year. This means that, in each period, success and failure are only determined by the percentage probability of success and do not depend on success or failure in earlier periods.



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1.2.4 Explanation of the Matching Process

How does the matching of investors and advisors work?

At the beginning of the experiment, you will be randomly allocated to a group containing six participants – three investors and three advisors. In every round of the experiment, the advisors and investors are randomly re-matched into three pairs. This means that in each round you could be matched with any one of the three investors in your group.

Your group includes one advisor of each type. In particular:

- One advisor in your group is the ↑ advisor, who has an interest in their matched investor believing that the company has a **high Current PoS%**.
- One advisor in your group is the ↓ advisor, who has an interest in their matched investor believing that the company has a **low Current PoS%**.
- One advisor in your group is the → advisor, who has an interest in their matched investor to hold **accurate** beliefs about the **Current PoS%** of the company.

Since you are the the ↑ advisor, you are in a group with one → advisor, one ↓ advisor, and three investors.

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1.2.5 Explanation of the Timeline

Overview of the sequence followed in the experiment

The experiment will consist of ten rounds. Each round consists of the same five steps:

1. You are matched randomly with an investor.
2. You receive accurate information about the year in which the CEO changed, the initial PoS% and the current PoS%. You also observe the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year).
3. You choose the message that you wish to send to the investor. The message will contain an assessment about the year in which the CEO changed, the initial PoS% and the current PoS%.
4. The investor sees:
 - i. the public dataset that shows the past performance of the company, and
 - ii. the advisor's message.
5. The investor submits their estimate of the Current PoS%.

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1.2.6 Control Questions

Your task Payment details Details on success/failure CEO Influence Groups Overview Questions

Understanding questions

Please answer the following questions to make sure that you understand the experimental instructions.

You can use the navigation bar above to quickly access specific screens of the instructions.

How many advisors are there in your group?

----- ▾

How many investors are there in your group?

----- ▾

Are you an advisor or an investor?

----- ▾

How many different companies will each investor evaluate?

----- ▾

Will a specific investor be matched with the same advisor in every round?

----- ▾

Is it possible that in one of the companies the CEO did not change during the last ten years?

----- ▾

Relation between the initial CEO on the current CEO

If a company was very successful before the CEO changed, does this mean that it is more likely that it was successful after the CEO changed?

----- ▾

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After the CEO changed in a company, is the probability of success the same in every year after that?

----- ▾

What is the probability that a company is successful in Year 10?

----- ▾

Advisor knowledge

Do advisors always know the true date at which the CEO changed and the true probability of the company succeeding in every year?

----- ▾

Which of the following statements is correct?

----- ▾

Which of the following statements is correct?

----- ▾

1.2.7 Decision Screen

Choose your message – Round 1

In this round, you will send a message about Widget Company A to an investor.



Please note: You are the ↑ advisor whose payment increases as your matched investor's estimate of the **Current PoS%** increases.

YOUR INFORMATION



The CEO of Widget Company A changed at the **start of Year 5**. Widget Company A's initial percentage probability of success (initial PoS%) was **36**. Widget Company A's current percentage probability of success (current PoS%) is **92**.

Year of change	Initial PoS%	Current PoS%
5	36	92

Please choose your message.

CEO changed at start of year...

Initial PoS%

Current PoS%

Please enter a year between 3 and 9.

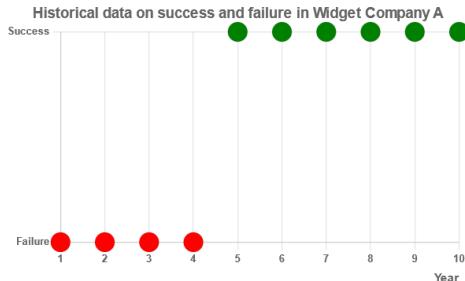
Please enter a number between 0 and 100.

Please enter a number between 0 and 100.

Confirm your decision

X

Based on your decisions, the investor will see the message below.



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 4**. They say that **2** was Widget Company A's **initial** percentage probability of success. They say that **3** is Widget Company A's **current** percentage probability of success.

Year of change	Initial Pos%	Current PoS%
4	2	3

Please confirm your decision below.

[I confirm](#) [Close](#)

Please choose your message.

CEO changed at start of year...

4

Initial PoS%

2

Current PoS%

3

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1.2.8 Endline Survey

Survey

Before you are finished with today's experiment, we ask that you please answer a few more questions:

Age

How old are you?

Gender

Please select the gender that you identify with.

Education

What is the highest level of education you have completed?

How did you decide?

Please briefly explain how you took your decisions in the study.

Comments

Do you have any comments about the study? Or anything you'd like to tell us?

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1.3 Investor

1.3.1 General Instructions

Your task as an investor

There are two types of roles in this experiment: **investors** and **advisors**. You have been randomly chosen to be an **investor** throughout the whole experiment.

In each round, you will be randomly matched with an **advisor**, who is another participant in the experiment. The advisor will send you a message. After receiving the message, you will make a decision.

As an investor, in each round your task is to evaluate a hypothetical company and to assess how likely it is that the company will be successful (i.e., profitable) in the coming year. Since there are ten rounds, you will evaluate ten companies labelled Company A, Company B, Company C, ..., Company J.

Each of the companies that you will evaluate produces a fictitious product called a Widget. Widgets are a type of technological product. As the built-in technology advances very quickly, the product is outdated after about a year. At the start of each year, the company, therefore, discontinues the previous year's model and releases a new model of the Widget. In every year, the company's success depends on the model produced in that year.

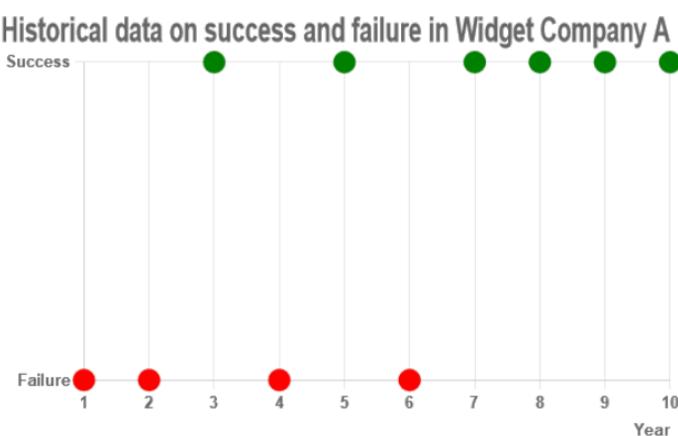
To evaluate how likely it is that the Widget company will be successful with the model it will produce in the coming year, you are given several pieces of information.

THE PIECES OF INFORMATION ARE:

1. Historical data

First, you will be shown the historical data for the company, showing whether it was "successful" or "not successful" with the models it produced in each of the past ten years (i.e., from Year 1 to Year 10).

For example, the data could look like this:



Here, you can see that Widget Company A was successful with the model it produced in six out of the past ten years. This historical data is **public**. So both you and your matched **advisor** have access to it.

2. The Widget company's probability of success depends on its CEO

Second, you know that the CEO of a Widget company determines the probability of success in each year. You also know that the CEO of each company that you're evaluating changed exactly once during the ten years. This occurred at the **start of Year 3, 4, 5, 6, 7, 8 or 9**, but you do not know exactly which year. Under a specific CEO the probability of success is the same in every year.

(continued on next page)

This means that when evaluating each company, there are three important things to consider:

- a. The **year** in which the CEO changed.
- b. What the company's **initial** probability of success was, in each year *before the change of the CEO*.
- c. What the company's **current** probability of success is, in each year *after the change of the CEO*.

All companies are completely independent of one another. So these features differ between companies.

3. Advice received from your matched advisor

Third, in each round, you are matched with an **advisor** who knows the truth about the following information: the **year** in which the CEO changed, what the company's **initial** percentage probability of success (Initial PoS%) was and what its **current** percentage probability of success (Current PoS%) is. In other words, the advisor is fully informed about (a), (b) and (c).

The advisor's task is to send you a **message** before you submit your evaluation of the company's **current** percentage probability of success. The message will contain the advisor's assessment of the **year** in which the CEO changed, as well as their assessment of the company's **initial** percentage probability of success and **current** percentage probability of success. For example, an advisor's message to you could look like this:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **71** was Widget Company A's **initial** percentage probability of success. They say that **45** is Widget Company A's **current** percentage probability of success.

Important information: Each advisor is free to choose the content of the message that they send to you; they do not need to truthfully report the information that they have to you.

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1.3.2 Explanation of the Payment Scheme

Details about how your payment is calculated

Your incentives

In each round, your task as an investor is to estimate the company's **current** percentage probability of success (Current PoS%) **as accurately as possible**. Your payment will, therefore, depend on how close your estimate of the Current PoS% is to the true Current PoS%. The closer your estimate is to the truth, the more likely it is that you will win the **bonus** of **£3.75**. Therefore, it is in your best interest to estimate the Current PoS% as accurately as possible in each round.

If you would like to see the formula that explains exactly how your payment is calculated, you can click on the following button:

[Click here to see the formula](#)

Advisor's incentives

Your advisor's earnings will also depend on your estimate of the company's **Current PoS%**. They know that you want to estimate the likely success of the company as accurately as possible.

You will face advisors with various incentives.

Recall that the experiment consists of 10 rounds. In the course of these 10 rounds, you can meet three different types of advisor:

- ↑ • The ↑ advisor wants their matched investor to believe that the company has a **high Current PoS%**—i.e., the ↑ advisor's payment is **higher** when the investor estimates that the company is **more likely to succeed**.
- ↓ • The ↓ advisor wants their matched investor to believe that the company has a **low Current PoS%**—i.e., the ↓ advisor's payment is **higher** when the investor estimates that the company is **less likely to succeed**.
- • The → advisor wants their matched investor to hold **accurate** beliefs about the **Current PoS%** of the company—i.e., the → advisor's payment is **higher** when the investor's estimate of the company's likely success **becomes more accurate**.

Advisors are told that you, the investor, "may or may not know the advisor's incentives".

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Details about how to calculate your payment

Your incentives

In each round, your task as an investor is to estimate the company's current percentage probability of success (**Current PoS%**) as accurately as possible. Your payoff depends on how close your estimate is to the true Current PoS%. The closer your estimate is to the true value, the higher the payoff.

If you would like to see the formula, click on the following button:

Explanation of the formula for calculating your payment

Your estimate of the company's current percentage probability of success (Current PoS%) is a number between 0 and 100. This number is used to determine your payoff according to the following formula:

$$\text{Probability of winning the bonus (in percent)} = 100 - \frac{d^2}{100},$$

where d is the **difference** between your estimate and the company's true current percentage probability of success. The formula squares this difference and divides it by a constant. This number is then subtracted from 100. Therefore, if you estimate 50 and the true value is 70, then you win the bonus 96 percent of the time, because the difference is 20 and $100 - \frac{20^2}{100} = 96$.

Advisor's incentives

Your advisor's earnings will also depend on the success of the company as accurately as possible.

You will face advisors with various incentives:

Recall that the experiment consists of three types of advisor:



- The ↑ advisor's payment is **high**



- The ↓ advisor's payment is **high**



- The → advisor's payment is **high**

Advisors are told that you, the investor, may or may not know the advisor's incentives.

success (Current PoS%) as accurately as possible. Your payoff depends on how close your estimate is to the true Current PoS%. The closer your estimate is to the true value, the higher the payoff.

If you would like to see the formula, click on the following button:

that you want to estimate the likely success of the company—i.e., the → advisor's estimate becomes more accurate.

different types of advisor:

current PoS%—i.e., the ↑ advisor's success.

current PoS%—i.e., the ↓ advisor's success.

current PoS% of the company—i.e., the → advisor's success becomes more accurate.

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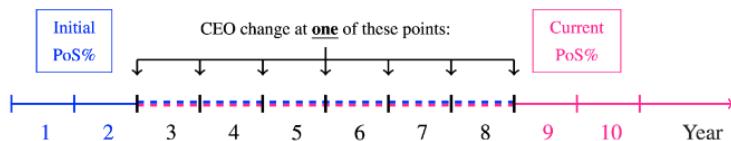
1.3.3 Explanation of the Data Generating Process

More details on what determines success and failure in each company

The details below will help you to estimate each company's current percentage probability of success as accurately as possible.

(a) When did the CEO change?

Recall that the CEO of each company changed once and for all at the **start of Year 3, 4, 5, 6, 7, 8 or 9**. For each company, the year in which the CEO changed will be **randomly determined** by the computer. So each of these seven years has an equal probability of being chosen.



Example Suppose that the start of Year 3 is randomly chosen by the computer for a particular company as the moment when the company's CEO changed. This means that the Initial PoS% is relevant for Years 1 and 2 while the Current PoS% is relevant for Years 3 to 10.



Hint Success in Years 1 and 2 is always determined by the Initial PoS%. Success in Years 9 and 10 is always determined by the Current PoS%.

(b) How is a company's Initial PoS% determined?

For each company, the computer will **randomly** draw a whole number between 0 and 100. Each whole number is equally likely to be drawn. This number determines the company's Initial PoS%.

(c) How is a company's Current PoS% determined?

Similarly, to determine each company's Current PoS%, the computer will **randomly** draw a second whole number between 0 and 100 (i.e., each whole number is equally likely to be drawn).

Important information: The company's Current PoS% is completely **independent** of its Initial PoS%. This means that, no matter what the company's initial percentage probability of success was, any number between 0 and 100 is equally likely to be drawn as its current percentage probability of success. Intuitively, the quality of the company's initial CEO does not tell you anything about how good its current CEO is.

Also, there is no relationship between companies. So, the Initial PoS% and Current PoS% of each of the companies is completely unrelated to all other companies.

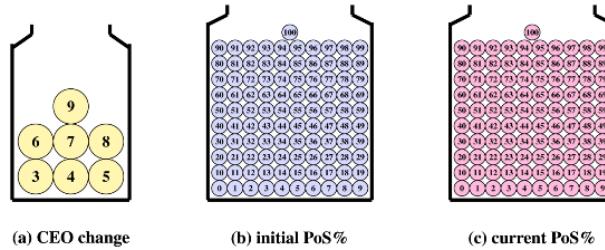
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How does the CEO affect the company's success in every year?

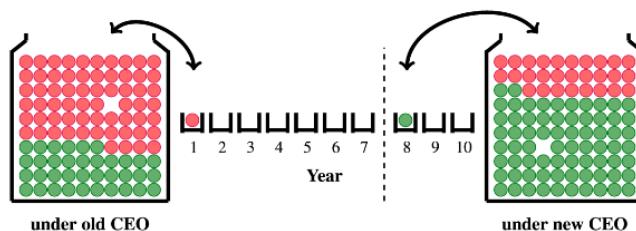
You can think of the computer going through a **two-step process** prior to each round.

In **Step 1**, the computer draws one ball at random from each of the following three urns (i.e., three balls in total). These three ball draws determine the year in which the CEO changed, the **initial** percentage probability of success (Initial PoS%), and the **current** percentage probability of success (Current PoS%).



Say, for example, that 8 36 72 are drawn. This means that the CEO changed at the **start of Year 8**. The new CEO is in charge in Years 8, 9 and 10. Compared to the old CEO, this new CEO also turns out to be quite good: compared to a 36% probability of success in Years 1 to 7 under the old CEO, the company has a 72% probability of success in every year when the new CEO is in charge.

In **Step 2**, the computer determines success and failure for each single year. To do so, the computer draws from an urn with 100 balls, which are either green or red. The number 36 determines the quantity of green balls in a company's urn under the old CEO; the number 72 determines the quantity of green balls in the urn under the new CEO. The computer draws a ball at random from the relevant urn for each of the years that a CEO is in charge. If the ball drawn is **green**, then the company is **successful** in that year. If the ball drawn is **red**, then the company **fails** in that year. After each draw, the computer places the ball back into the urn before making a draw for the next year. This means that, in each period, success and failure are only determined by the percentage probability of success and do not depend on success or failure in earlier periods.



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1.3.4 Explanation of the Matching Process

How does the matching of investors and advisors work?

At the beginning of the experiment, you will be randomly allocated to a group containing six participants – three investors and three advisors. In every round of the experiment, the advisors and investors are randomly re-matched into three pairs. This means that in each round you could be matched with any one of the three advisors in your group.

Your group includes one advisor of each type. In particular:

- One advisor in your group is the ↑ advisor, who has an interest in their matched investor believing that the company has a **high Current PoS%**.
- One advisor in your group is the ↓ advisor, who has an interest in their matched investor believing that the company has a **low Current PoS%**.
- One advisor in your group is the → advisor, who has an interest in their matched investor to hold **accurate** beliefs about the **Current PoS%** of the company.

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1.3.5 Explanation of the Timeline

Overview of the sequence followed in the experiment

The experiment will consist of ten rounds.

Each round consists of the same five steps:

1. You are matched randomly with an advisor.
2. The advisor receives accurate information about the year in which the CEO changed, the initial PoS% and the current PoS%. The advisor also observes the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year).
3. The advisor chooses the message that they send to you. The message will contain an assessment about the year in which the CEO changed, the initial PoS% and the current PoS%.
4. You see the following pieces of information:
 - i. the public dataset that shows the past performance of the company, and
 - ii. the advisor's message.
5. You submit your estimate of the Current PoS%.

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1.3.6 Control Questions

Your task Payment details Details on success/failure CEO Influence Groups Overview Questions

Understanding questions

Please answer the following questions to make sure that you understand the experimental instructions.

You can use the navigation bar above to quickly access specific screens of the instructions.

How many advisors are there in your group?

----- ▾

How many investors are there in your group?

----- ▾

Are you an advisor or an investor?

----- ▾

How many different companies will each investor evaluate?

----- ▾

Will a specific investor be matched with the same advisor in every round?

----- ▾

Is it possible that in one of the companies the CEO did not change during the last ten years?

----- ▾

Relation between the initial CEO on the current CEO

If a company was very successful before the CEO changed, does this mean that it is more likely that it was successful after the CEO changed?

----- ▾

After the CEO changed in a company, is the probability of success the same in every year after that?

----- ▾

What is the probability that a company is successful in Year 10?

----- ▾

(continued on next page)

Advisor knowledge

Do advisors always know the true date at which the CEO changed and the true probability of the company succeeding in every year?

----- ▾

Which of the following statements is correct?

▾

Which of the following statements is correct?

▾

1.3.7 Decision Screen

Make your assessment — Round 1

In this round, you will assess Widget Company A. When making the assessment, you can refer to a message from your advisor for this round.

When composing the message, your advisor had access to:

- The historical data of success and failure in Widget Company A and
- Information about the **year** in which the CEO changed, the company's **Initial PoS%**, and the company's **Current PoS%**.

You can also use the historical data to inform your assessment.

YOUR INFORMATION



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **95** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
5	36	95

What is your assessment of the Current PoS% of Widget Company A?

Current PoS%

91

Next

Confirm your decision

X

Based on the following information, you evaluate Widget Company A to have a Current PoS% of **91**.



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **95** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
5	36	95

Please confirm your decision below.

I confirm **Close**



Year of change	Initial PoS%	Current PoS%
5	36	95

What is your assessment of the Current PoS% of Widget Company A?

Current PoS%

91

Next

1.3.8 Endline Survey

Survey

Before you are finished with today's experiment, we ask that you please answer a few more questions:

Age

How old are you?

Gender

Please select the gender that you identify with.

Education

What is the highest level of education you have completed?

How did you decide?

Please briefly explain how you took your decisions in the study.

Comments

Do you have any comments about the study? Or anything you'd like to tell us?

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2 DISCLOSURE

2.1 Welcome Screen

Same as in the ASYMMETRIC treatment, see Section 1.1.

2.2 Advisor Instructions

Same as in the ASYMMETRIC treatment, see Section 1.2.

2.3 Investor Instructions

2.3.1 General Instructions

Same as in the ASYMMETRIC treatment, see Section 1.3.1.

2.3.2 Explanation of the Payment Scheme

Same as in the ASYMMETRIC treatment, see Section 1.3.2.

2.3.3 Explanation of the Data Generating Process

Same as in the ASYMMETRIC treatment, see Section 1.3.3.

2.3.4 Explanation of the Matching Process

Same as in the ASYMMETRIC treatment, see Section 1.3.4.

2.3.5 Explanation of the Timeline

Same as in the ASYMMETRIC treatment, see Section 1.3.5.

2.3.6 Control Questions

Same as in the ASYMMETRIC treatment, see Section 1.3.6.

2.3.7 Decision Screen

Make your assessment — Round 1

In this round, you will assess Widget Company A. When making the assessment, you can refer to a message from your advisor for this round.

- In this round, you are matched with the → advisor who has an **interest** in your estimate of the company's current percentage probability of success being **accurate**.

When composing the message, your advisor had access to:

- The historical data of success and failure in Widget Company A and
- Information about the **year** in which the CEO changed, the company's **Initial PoS%**, and the company's **Current PoS%**.

You can also use the historical data to inform your assessment.

YOUR INFORMATION



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **92** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
5	36	92

What is your assessment of the Current PoS% of Widget Company A?

Current PoS%

Please enter a number between 0 and 100.

round.

Confirm your decision

X

Based on the following information, you evaluate Widget Company A to have a Current PoS% of **92**.

You are matched with the → advisor in this round who has an **interest** in your estimate of the company's current percentage probability of success being **accurate**.



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **92** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
5	36	92

Please confirm your decision below.

I confirm Close

What is your assessment of the Current PoS% of Widget Company A?

Current PoS%

92

Next

2.3.8 Endline Survey

Same as in the ASYMMETRIC treatment, see Section 1.3.8.

3 INVESTORPRIOR

3.1 Welcome Screen

Same as in the ASYMMETRIC treatment, see Section 1.1.

3.2 Advisor Instructions

Same as in the ASYMMETRIC treatment, see Section 1.3.1.

3.3 Investor Instructions

3.3.1 General Instructions

Your task as an investor

There are two types of roles in this experiment: **investors** and **advisors**. You have been randomly chosen to be an **investor** throughout the whole experiment.

In each round, you will be randomly matched with an **advisor**, who is another participant in the experiment. The advisor will send you a message. After receiving the message, you will make a decision.

As an investor, in each round your task is to evaluate a hypothetical company and to assess how likely it is that the company will be successful (i.e., profitable) in the coming year. Since there are ten rounds, you will evaluate ten companies labelled Company A, Company B, Company C, ..., Company J.

Each of the companies that you will evaluate produces a fictitious product called a Widget. Widgets are a type of technological product. As the built-in technology advances very quickly, the product is outdated after about a year. At the start of each year, the company, therefore, discontinues the previous year's model and releases a new model of the Widget. In every year, the company's success depends on the model produced in that year.

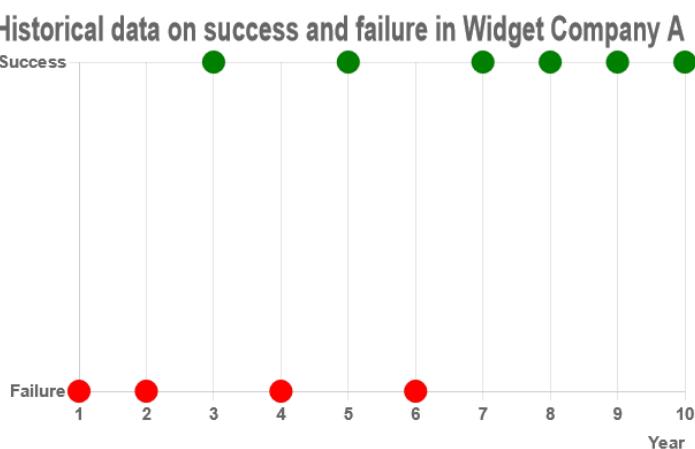
To evaluate how likely it is that the Widget company will be successful with the model it will produce in the coming year, you are given several pieces of information.

THE PIECES OF INFORMATION ARE:

1. Historical data

First, you will be shown the historical data for the company, showing whether it was "successful" or "not successful" with the models it produced in each of the past ten years (i.e., from Year 1 to Year 10).

For example, the data could look like this:



(continued on next page)

Here, you can see that Widget Company A was successful with the model it produced in six out of the past ten years. This historical data is **public**. So both you and your matched **advisor** have access to it.

2. The Widget company's probability of success depends on its CEO

Second, you know that the CEO of a Widget company determines the probability of success in each year. You also know that the CEO of each company that you're evaluating changed exactly once during the ten years. This occurred at the **start of Year 3, 4, 5, 6, 7, 8 or 9**, but you do not know exactly which year. Under a specific CEO the probability of success is the same in every year.

This means that when evaluating each company, there are three important things to consider:

- a. The **year** in which the CEO changed.
- b. What the company's **initial** probability of success was, in each year *before the change of the CEO*.
- c. What the company's **current** probability of success is, in each year *after the change of the CEO*.

All companies are completely independent of one another. So these features differ between companies.

3. Advice received from your matched advisor

Third, in each round, you are matched with an **advisor** who knows the truth about the following information: the **year** in which the CEO changed, what the company's **initial** percentage probability of success (Initial PoS%) was and what its **current** percentage probability of success (Current PoS%) is. In other words, the advisor is fully informed about (a), (b) and (c).

The advisor's task is to send you a **message** before you submit your final evaluation of the company's **current** percentage probability of success. The message will contain the advisor's assessment of the **year** in which the CEO changed, as well as their assessment of the company's **initial** percentage probability of success and **current** percentage probability of success. For example, an advisor's message to you could look like this:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **71** was Widget Company A's **initial** percentage probability of success. They say that **45** is Widget Company A's **current** percentage probability of success.

Important information: Each advisor is free to choose the content of the message that they send to you; they do not need to truthfully report the information that they have to you. Before receiving this information from your advisor, you will observe the historical data from the company and be asked for your assessment of the **year** in which the CEO changed, the company's **initial** percentage probability of success and **current** percentage probability of success. You will then receive the message from your advisor and will then be asked for your final assessment of the company's **current** percentage probability of success.

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3.3.2 Explanation of the Payment Scheme

Same as in the ASYMMETRIC treatment, see Section 1.3.2.

3.3.3 Explanation of the Data Generating Process

Same as in the ASYMMETRIC treatment, see Section 1.3.3.

3.3.4 Explanation of the Matching Process

Same as in the ASYMMETRIC treatment, see Section 1.3.4.

3.3.5 Explanation of the Timeline

Overview of the sequence followed in the experiment

The experiment will consist of ten rounds.

Each round consists of the same six steps:

1. You are matched randomly with an advisor.
2. You observe the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year). You then report your assessment of the year in which the CEO changed, the initial PoS% and the current PoS%.
3. The advisor receives accurate information about the year in which the CEO changed, the initial PoS% and the current PoS%. The advisor also observes the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year).
4. The advisor chooses the message that they send to you. The message will contain an assessment about the year in which the CEO changed, the initial PoS% and the current PoS%.
5. You see the following pieces of information:
 - i. the public dataset that shows the past performance of the company, and
 - ii. the advisor's message.
6. You submit your final estimate of the Current PoS%.

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3.3.6 Control Questions

Same as in the ASYMMETRIC treatment, see Section 1.3.6.

Make your preliminary assessment — Round 1

In this round, you will evaluate Widget Company A. When making the assessment, you can refer to a message from your advisor for this round.

Before you receive your advisor's message, you will observe Widget Company A's historical data. We ask you to make a preliminary assessment of the **year** in which the CEO changed, the company's **Initial PoS%** and the company's **Current PoS%**.

HISTORICAL DATA



What is your preliminary assessment of Widget Company A?

CEO changed at start of year...

Initial PoS%

Current PoS%

Please enter a year between 3 and 9.

Please enter a number between 0 and 100.

Please enter a number between 0 and 100.

3.3.7 Decision Screen

Make your final assessment — Round 1

You will now make your final assessment of Widget Company A. When making the assessment, you can refer to a message from your advisor for this round.

When composing the message, your advisor had access to:

- The historical data of success and failure in Widget Company A and
- Information about the **year** in which the CEO changed, the company's **Initial PoS%**, and the company's **Current PoS%**.

In your initial evaluation of Widget Company A, you assessed that the CEO changed at the **start of Year 5**, that the **Initial PoS%** was **4**, and that the **Current PoS%** is **4**.

Year of change	Initial PoS%	Current PoS%
5	4	4

YOUR INFORMATION



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 7**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **57** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
7	36	57

What is your final assessment of the Current PoS% of Widget Company A?

Current PoS%

Please enter a number between 0 and 100.

Confirm your decision

X

Based on the following information, you evaluate Widget Company A to have a Current PoS% of **34**.



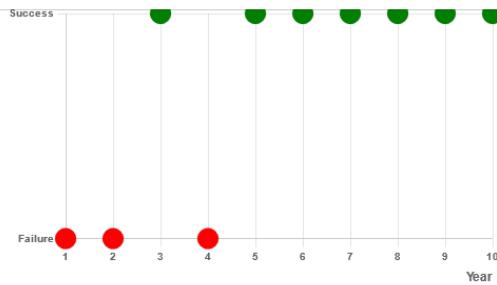
Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 7**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **57** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
7	36	57

Please confirm your decision below.

I confirm Close



Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 7**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **57** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
7	36	57

What is your final assessment of the Current PoS% of Widget Company A?

Current PoS%

34

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3.3.8 Endline Survey

Same as in the ASYMMETRIC treatment, see Section 1.3.8.

4 PRIVATE DATA

4.1 Welcome Screen

Same as in the ASYMMETRIC treatment, see Section 1.1.

4.2 Advisor Instructions

4.2.1 General Instructions

Your task as an advisor

There are two types of roles in this experiment: **investors** and **advisors**. You have been randomly chosen to be an **advisor** throughout the whole experiment.

In each round, you will be randomly matched with an **investor**, who is another participant in the experiment. You will send a message to the investor. After receiving the message, the investor will make a decision.

In each round, the **investors** are asked to evaluate a hypothetical company and assess how likely it is that the company will be successful (i.e., profitable) in the coming year. Since there are ten rounds, the **investors** will each evaluate ten companies labelled Company A, Company B, Company C, ..., Company J.

Your job as an **advisor** is to send a message to your matched **investor** about the company being considered in each round. The message that you send to the **investor** could influence their evaluation of the company.

Each of the companies that the **investor** will evaluate produces a fictitious product called a Widget. Widgets are a type of technological product. As the built-in technology advances very quickly, the product is outdated after about a year. At the start of each year, the company, therefore, discontinues the previous year's model and releases a new model of the Widget. In every year, the company's success depends on the model produced in that year.

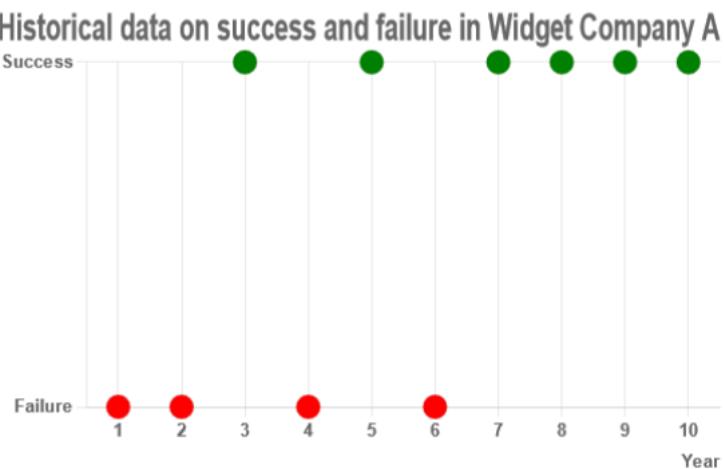
To evaluate how likely it is that the Widget company will be successful with the model it will produce in the coming year, the **investor** is given several pieces of information.

THE PIECES OF INFORMATION ARE:

1. Historical data

First, the **investor** will be shown the historical data for the company, showing whether it was "successful" or "not successful" with the models it produced in each of the past ten years (i.e., from Year 1 to Year 10).

For example, the data could look like this:



(continued on next page)

Here, you can see that Widget Company A was successful with the model it produced in six out of the past ten years. This historical data is **private**. So only the **investor** will have access to it—you will not have access to it.

2. The Widget company's probability of success depends on its CEO

Second, the **investor** knows that the CEO of a Widget company determines the probability of success in each year. The **investor** also knows that the CEO of each company under evaluation changed exactly once during the ten years. This occurred at the **start of Year 3, 4, 5, 6, 7, 8 or 9**, but the investor does not know exactly which year. The investor further knows that under a specific CEO the probability of success is the same in every year.

This means that when evaluating each company, there are three important things to consider:

- a. The **year** in which the CEO changed.
- b. What the company's **initial** probability of success was, in each year *before the change of the CEO*.
- c. What the company's **current** probability of success is, in each year *after the change of the CEO*.

All companies are completely independent of one another. So these features differ between companies.

3. Advice received from you, the matched advisor

Third, in each round the **investor** knows that they will receive a message from their **advisor** (i.e., from **you**). In each round, as an **advisor**, **you** will know the truth about the following information: the **year** in which the CEO changed, what the company's true **initial** percentage probability of success (Initial PoS%) was and what its true **current** percentage probability of success (Current PoS%) is. In other words, as an **advisor**, **you** are fully informed about (a), (b) and (c). The **investor** knows that you are fully informed.

Given your informational advantage, your task is to send the **investor a message** before they submit their evaluation of the company's **current** percentage probability of success. **Your** message will contain your assessment of the **year** in which the CEO changed, as well as your assessment of the company's **initial** percentage probability of success and **current** percentage probability of success. For example, the investor could receive a message from you that looks something like this:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **71** was Widget Company A's **initial** percentage probability of success. They say that **45** is Widget Company A's **current** percentage probability of success.

Important information: As an advisor, you are free to choose the content of the message that you send; you do not need to truthfully report the information that you have to the investor. The investor knows this.

Next

4.2.2 Explanation of the Payment Scheme

Same as in the ASYMMETRIC treatment, see Section 1.2.2.

4.2.3 Explanation of the Data Generating Process

Same as in the ASYMMETRIC treatment, see Section 1.2.3.

4.2.4 Explanation of the Matching Process

Same as in the ASYMMETRIC treatment, see Section 1.2.4.

4.2.5 Explanation of the Timeline

Overview of the sequence followed in the experiment

The experiment will consist of ten rounds. Each round consists of the same five steps:

1. You are matched randomly with an investor.
2. You receive accurate information about the year in which the CEO changed, the initial PoS% and the current PoS%.
3. You choose the message that you wish to send to the investor. The message will contain an assessment about the year in which the CEO changed, the initial PoS% and the current PoS%.
4. The investor sees:
 - i. the private dataset that shows the past performance of the company, and
 - ii. the advisor's message.
5. The investor submits their estimate of the Current PoS%.

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4.2.6 Control Questions

Same as in the ASYMMETRIC treatment, see Section 1.2.6.

4.2.7 Decision Screen

Choose your message – Round 1

In this round, you will send a message about Widget Company A to an investor.



Please note: You are the ↑ advisor whose payment increases as your matched investor's estimate of the **Current PoS%** increases.

YOUR INFORMATION

The CEO of Widget Company A changed at the **start of Year 5**. Widget Company A's initial percentage probability of success (initial PoS%) was **36**. Widget Company A's current percentage probability of success (current PoS%) is **92**.

Year of change	Initial PoS%	Current PoS%
5	36	92

Please choose your message.

CEO changed at start of year...

Initial PoS%

Current PoS%

Please enter a year between 3 and 9.

Please enter a number between 0 and 100.

Please enter a number between 0 and 100.

Confirm your decision

X

Based on your decisions, the investor will see the message below. In addition, the investor will also see the historical data of the firm's successes and failures in years 1-10.

Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **98** is Widget Company A's **current** percentage probability of success.

Year of change	Initial Pos%	Current PoS%
5	36	98

Please confirm your message below.

I confirm Close

Please choose your message.

CEO changed at start of year...

5

Initial PoS%

36

Current PoS%

98

Next

4.2.8 Endline Survey

Same as in the ASYMMETRIC treatment, see Section 1.2.8.

4.3 Investor Instructions

4.3.1 General Instructions

Your task as an investor

There are two types of roles in this experiment: **investors** and **advisors**. You have been randomly chosen to be an **investor** throughout the whole experiment.

In each round, you will be randomly matched with an **advisor**, who is another participant in the experiment. The advisor will send you a message. After receiving the message, you will make a decision.

As an investor, in each round your task is to evaluate a hypothetical company and to assess how likely it is that the company will be successful (i.e., profitable) in the coming year. Since there are ten rounds, you will evaluate ten companies labelled Company A, Company B, Company C, ..., Company J.

Each of the companies that you will evaluate produces a fictitious product called a Widget. Widgets are a type of technological product. As the built-in technology advances very quickly, the product is outdated after about a year. At the start of each year, the company, therefore, discontinues the previous year's model and releases a new model of the Widget. In every year, the company's success depends on the model produced in that year.

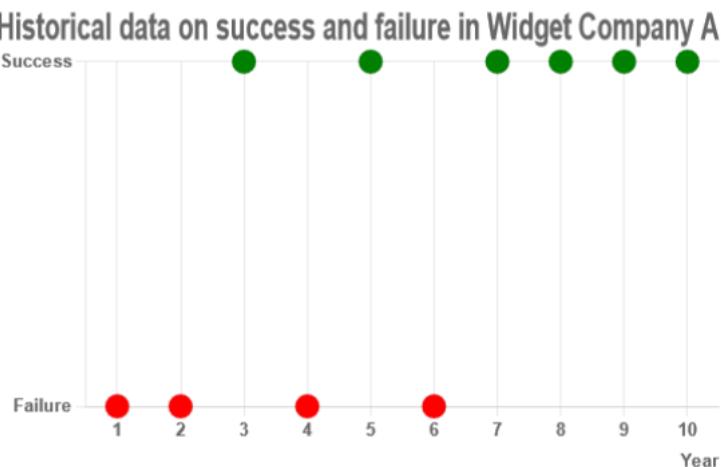
To evaluate how likely it is that the Widget company will be successful with the model it will produce in the coming year, you are given several pieces of information.

THE PIECES OF INFORMATION ARE:

1. *Historical data*

First, you will be shown the historical data for the company, showing whether it was "successful" or "not successful" with the models it produced in each of the past ten years (i.e., from Year 1 to Year 10).

For example, the data could look like this:



Here, you can see that Widget Company A was successful with the model it produced in six out of the past ten years. This historical data is **private**. So only you have access to it. Your matched **advisor** will not have access to it.

(continued on next page)

2. The Widget company's probability of success depends on its CEO

Second, you know that the CEO of a Widget company determines the probability of success in each year. You also know that the CEO of each company that you're evaluating changed exactly once during the ten years. This occurred at the **start of Year 3, 4, 5, 6, 7, 8 or 9**, but you do not know exactly which year. Under a specific CEO the probability of success is the same in every year.

This means that when evaluating each company, there are three important things to consider:

- a. The **year** in which the CEO changed.
- b. What the company's **initial** probability of success was, in each year *before the change of the CEO*.
- c. What the company's **current** probability of success is, in each year *after the change of the CEO*.

All companies are completely independent of one another. So these features differ between companies.

3. Advice received from your matched advisor

Third, in each round, you are matched with an **advisor** who knows the truth about the following information: the **year** in which the CEO changed, what the company's **initial** percentage probability of success (Initial PoS%) was and what its **current** percentage probability of success (Current PoS%) is. In other words, the advisor is fully informed about (a), (b) and (c).

The advisor's task is to send you a **message** before you submit your evaluation of the company's **current** percentage probability of success. The message will contain the advisor's assessment of the **year** in which the CEO changed, as well as their assessment of the company's **initial** percentage probability of success and **current** percentage probability of success. For example, an advisor's message to you could look like this:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **71** was Widget Company A's **initial** percentage probability of success. They say that **45** is Widget Company A's **current** percentage probability of success.

Important information: Each advisor is free to choose the content of the message that they send to you; they do not need to truthfully report the information that they have to you.

Next

4.3.2 Explanation of the Payment Scheme

Same as in the ASYMMETRIC treatment, see Section 1.3.2.

4.3.3 Explanation of the Data Generating Process

Same as in the ASYMMETRIC treatment, see Section 1.3.3.

4.3.4 Explanation of the Matching Process

Same as in the ASYMMETRIC treatment, see Section 1.3.4.

4.3.5 Explanation of the Timeline

Overview of the sequence followed in the experiment

The experiment will consist of ten rounds.

Each round consists of the same five steps:

1. You are matched randomly with an advisor.
2. The advisor receives accurate information about the year in which the CEO changed, the initial PoS% and the current PoS%.
3. The advisor chooses the message that they send to you. The message will contain an assessment about the year in which the CEO changed, the initial PoS% and the current PoS%.
4. You see the following pieces of information:
 - i. the private dataset that shows the past performance of the company, and
 - ii. the advisor's message.
5. You submit your estimate of the Current PoS%.

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4.3.6 Control Questions

Same as in the ASYMMETRIC treatment, see Section 1.3.6.

4.3.7 Decision Screen

Make your assessment — Round 1

In this round, you will assess Widget Company A. When making the assessment, you can refer to a message from your advisor for this round.

When composing the message, your advisor had access to:

- Information about the **year** in which the CEO changed, the company's **Initial PoS%**, and the company's **Current PoS%**.

In contrast to your advisor, you can use the historical data to inform your assessment. Recall that the historical data is private, which means that your advisor did not have access to it when composing the message.

YOUR INFORMATION



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **92** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
5	36	92

What is your assessment of the Current PoS% of Widget Company A?

Current PoS%

Please enter a number between 0 and 100.

MAKE YOUR ASSESSMENT — ROUND 1

Confirm your decision X

Based on the following information, you evaluate Widget Company A to have a Current PoS% of 90.



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **92** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
5	36	92

Please confirm your decision below.

I confirm Close



What is your assessment of the Current PoS% of Widget Company A?

Current PoS%

90

Next

4.3.8 Endline Survey

Same as in the ASYMMETRIC treatment, see Section 1.3.8.

5 SYMMETRIC and COMPETITION

5.1 Welcome Screen

Welcome to our experiment!

This experiment will take approximately **35 minutes** to complete. It is divided into two parts — Part A and Part B.

You will receive a show-up fee of **£3.50** for participating in the experiment. You can also earn a **bonus** payment of **£3.75** during Part A or during Part B of the experiment. The amount that you earn as a bonus will depend on the decisions made by you and other participants during the experiment. It is therefore important that you read the instructions carefully as this will help you to make better choices. In addition, there will be a set of understanding questions to check that you read and understood the instructions properly. You will need to answer these questions correctly in order to complete the experiment. After the end of the experiment, you will be paid the bonus that you earned during Part A of the experiment or the bonus that you earned during Part B of the experiment. Whether Part A or Part B will count towards your bonus will be determined randomly by the computer.

Next

Part A

Part A of the experiment is divided into **10 rounds**. In each round, the computer will randomly match you with one other player. You and the other player that you are matched with will remain anonymous.

At the end of the experiment, one of the 10 rounds will be randomly chosen to be relevant for your Part A earnings. The decisions you make will influence these earnings.

Next

5.2 Advisor Instructions

5.2.1 General Instructions

Your task as an advisor

There are two types of roles in this experiment: **investors** and **advisors**. You have been randomly chosen to be an **advisor** throughout the whole experiment.

In each round, you will be randomly matched with an **investor**, who is another participant in the experiment. You will send a message to the investor. After receiving the message, the investor will make a decision.

In each round, the **investors** are asked to evaluate a hypothetical company and assess how likely it is that the company will be successful (i.e., profitable) in the coming year. Since there are ten rounds, the **investors** will each evaluate ten companies labelled Company A, Company B, Company C, ..., Company J.

Your job as an **advisor** is to send a message to your matched **investor** about the company being considered in each round. The message that you send to the **investor** could influence their evaluation of the company.

Each of the companies that the **investor** will evaluate produces a fictitious product called a Widget. Widgets are a type of technological product. As the built-in technology advances very quickly, the product is outdated after about a year. At the start of each year, the company, therefore, discontinues the previous year's model and releases a new model of the Widget. In every year, the company's success depends on the model produced in that year.

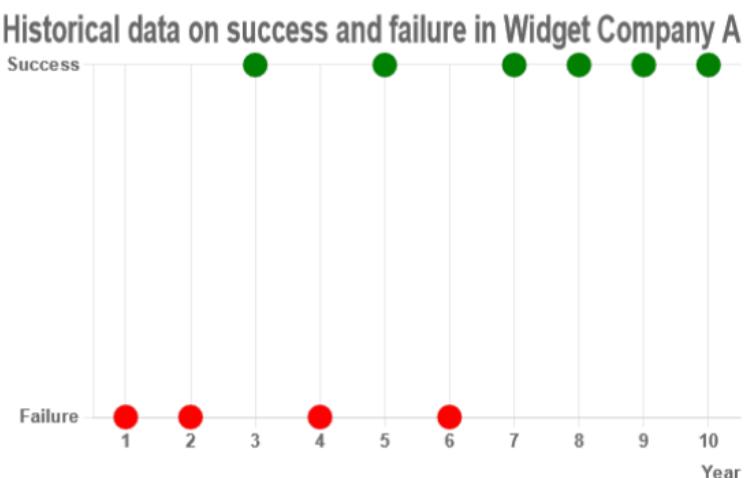
To evaluate how likely it is that the Widget company will be successful with the model it will produce in the coming year, the **investor** is given several pieces of information.

THE PIECES OF INFORMATION ARE:

1. Historical data

First, the **investor** will be shown the historical data for the company, showing whether it was "successful" or "not successful" with the models it produced in each of the past ten years (i.e., from Year 1 to Year 10).

For example, the data could look like this:



(continued on next page)

Here, you can see that Widget Company A was successful with the model it produced in six out of the past ten years. This historical data is **public**. So, both the **investor** and you, as the **advisor**, will have access to it.

2. The Widget company's probability of success depends on its CEO

Second, the **investor** knows that the CEO of a Widget company determines the probability of success in each year. The **investor** also knows that the CEO of each company under evaluation changed exactly once during the ten years. This occurred at the **start of Year 3, 4, 5, 6, 7, 8 or 9**, but the investor does not know exactly which year. The investor further knows that under a specific CEO the probability of success is the same in every year.

This means that when evaluating each company, there are three important things to consider:

- a. The **year** in which the CEO changed.
- b. What the company's **initial** probability of success was, in each year *before the change of the CEO*.
- c. What the company's **current** probability of success is, in each year *after the change of the CEO*.

All companies are completely independent of one another. So these features differ between companies.

*3. Advice received from **you**, the matched advisor*

Third, in each round the **investor** knows that they will receive a message from their **advisor** (i.e., from **you**).

Your task is to send the **investor a message** before they submit their evaluation of the company's **current** percentage probability of success. **Your** message will contain your assessment of the **year** in which the CEO changed, as well as your assessment of the company's **initial** percentage probability of success and **current** percentage probability of success. For example, the investor could receive a message from you that looks something like this:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **71** was Widget Company A's **initial** percentage probability of success. They say that **45** is Widget Company A's **current** percentage probability of success.

Next

5.2.2 SYMMETRIC: Explanation of the Payment Scheme

Details about how your payment is calculated

Investor's incentives

In each round, the investor's task is to estimate the company's **current** percentage probability of success (Current PoS%) **as accurately as possible**. The more accurate the investor's estimate is, the higher is the probability that they earn a bonus.

Your incentives

As an **advisor**, your earnings will also depend on the decision that the investor makes after seeing your message. Specifically, your payment in a given round will depend on the investor's estimate of the company's **Current PoS%**. Exactly how your payment depends on the investor's estimate depends on what type of advisor you are. There are three possible types:

- ↑ • The ↑ advisor wants their matched investor to believe that the company has a **high Current PoS%**—i.e., the ↑ advisor's payment is **higher** when the investor estimates that the company is **more likely to succeed**.
- ↓ • The ↓ advisor wants their matched investor to believe that the company has a **low Current PoS%**—i.e., the ↓ advisor's payment is **higher** when the investor estimates that the company is **less likely to succeed**.
- • The → advisor wants their matched investor to hold **accurate** beliefs about the **Current PoS%** of the company—i.e., the advisor's payment is **higher** when the investor's estimate of the company's likely success **becomes more accurate**.

You are the ↓ advisor whose payment increases as your matched investor's estimate decreases. Therefore the lower the investor's estimate of the company's **current** percentage probability of success is, the higher is the probability that you will win the **bonus** of £3.75.

If you would like to see the formula that explains exactly how your payment is calculated, you can click on the following button:

[Click here to see the formula](#)

Investors know the three possible types of incentives that advisors can have. However, in each round of Part A, they do not know which type of advisor they are matched with.

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Details about

Investor's incentives

In each round, the investor
accurately as possible

Your incentives

As an **advisor**, your earnings in a given round will depend on the investor's estimate of your company's value.

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Explanation of the formula for calculating your payment

X

The investor's estimate of the company's current percentage probability of success (Current PoS%) is a number between 0 and 100. This number is used to determine your payoff according to the following formula:

$$\text{Probability of winning the bonus (in percent)} = 100 - \frac{(x - 0)^2}{100},$$

where x is the investor's estimate of the company's Current PoS%. The formula squares the difference between the investor's estimate and 100. This number is divided by a constant and then subtracted from 100. Therefore, if the investor estimates 50, then you win the bonus 75 percent of the time, because

$$100 - \frac{(50-100)^2}{100} = 75.$$

The principle underlying the above formula is simple: the closer the investor's estimate is to the lowest possible estimate, the higher the percentage probability that you win the bonus of £3.75.

Note that the investor's estimate can be different from the estimate that maximizes your payment by at most 100. In this case, the formula shows that your probability of winning is 0 percent.

At the end of the experiment, the computer will randomly choose one round of the experiment to determine whether or not you will win the bonus.

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earn a bonus.

age. Specifically, your payment depends on the

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cred.

PoS%—i.e., the ↓ advisor's
d.

becomes more accurate.

lower the investor's estimate
the bonus of £2.75

Close

following button:

[Click here to see the formula](#)

Investors know the three possible types of incentives that advisors can have. However, in each round of Part A, they do not know which type of advisor they are matched with.

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5.2.3 SYMMETRIC: Explanation of the Data Generating Process

Same as in the ASYMMETRIC treatment, see Section 1.2.3.

5.2.4 SYMMETRIC: Explanation of the Matching Process

Same as in the ASYMMETRIC treatment, see Section 1.2.4.

5.2.5 SYMMETRIC: Explanation of the Timeline

Same as in the ASYMMETRIC treatment, see Section 1.2.5.

5.2.6 SYMMETRIC: Control Questions

Same as in the ASYMMETRIC treatment, see Section 1.2.6.

5.2.7 SYMMETRIC: Decision Screen

Choose your message — Round 1

In this round, you will send a message about Widget Company A to an investor.



Please note: You are the ↓ advisor whose payment increases as your matched investor's estimate of the **Current PoS%** decreases.

YOUR INFORMATION



Please choose your message.

CEO changed at start of year...

Initial PoS%

Current PoS%

Please enter a year between 3 and 9.

Please enter a number between 0 and 100.

Please enter a number between 0 and 100.

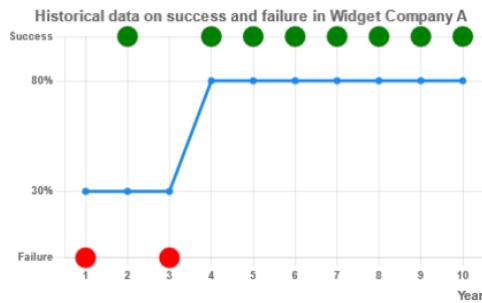
Choose your message — Round 1

In this round, you will send a message about Widget Company A to an investor.



Please note: You are the ↓ advisor whose payment increases as your matched investor's estimate of the **Current PoS%** decreases.

YOUR INFORMATION



The **blue** line visualizes your message. The investor will see this visualization when they receive your message.

Please choose your message.

CEO changed at start of year...

4

Initial PoS%

30

Current PoS%

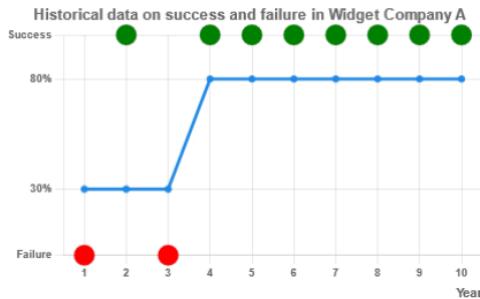
80

Next

Confirm your decision

X

Based on your decisions, the investor will see the message below.



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 4**. They say that **30** was Widget Company A's **initial** percentage probability of success. They say that **80** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
4	30	80

The **blue** line visualizes the advisor's message.

Please confirm your decision below.

I confirm Close

Year

Please choose your message.

CEO changed at start of year...

4

Initial PoS%

30

Current PoS%

80

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5.2.8 COMPETITION: General Instructions

Part B

Part B of the experiment is divided into **5 rounds**. It will be similar to Part A of the experiment, but there are some important differences.

Similarities between Part B and Part A:

You will continue to participate in the same group of 3 investors and 3 advisors as in Part A and you will continue in the role of **advisor**. As in Part A, you will be randomly matched with one of the investors in every round. The investor will again evaluate a company in each round and you will again provide the investor with a message containing your assessment of the company in that round. One of the five rounds of Part B will be chosen to be relevant for your Part B earnings.

Payment in Part B:

The way your payment is calculated will be the same as in Part A. Specifically you remain an ↓ advisor. Recall that the ↓ advisor wants their matched investor to believe that the company has a **low Current PoS%**—i.e., the ↓ advisor's payment is **higher** when the investor estimates that the company is **less likely to succeed**.

Key differences between Part B and Part A:

There are several important differences between Part B and Part A. These are:

- **Two messages:** In Part A, the investor only received a single message in each round from a single advisor. In Part B, the investor will receive two messages in each round. They will receive one message from a human advisor (i.e., from you or one of the other two human advisors in your group), but in addition, they will also receive a message from a robot advisor.
- **Robot advisor:** The robot advisor is always trying to help the investor to achieve their goal of forming an accurate assessment of the company's Current PoS%. However, not all robot advisors are equally skilled in forming an accurate assessment of the company. Some robot advisors are better than others at forming an accurate assessment of the company's history. You are matched to a new robot advisor in every round.
- **You will observe the robot advisor's message before choosing your own message:** As an advisor, you will always observe the robot advisor's message before constructing the message that you want to send to the investor.
- **Investor will not know which message comes from the robot advisor:** The investor will observe both messages along with the historical company data. They will be told that one message comes from one of the three human advisors in their group and that one comes from a robot advisor. They will not be told who sent which message.
- **Investor chooses one of the two messages:** After seeing the two messages the investor will directly choose between them. That is, the investor must choose which of the two messages contains a Current PoS% that they believe is closer to the truth. This is different to Part A where the investor could choose any value of the Current PoS% to report.
- **Payment calculation:** After the investor chooses one of the two messages, the payments of the investor and advisor for that round will be calculated on the basis of the Current PoS% in the chosen message. This calculation will be done in the same way as in Part A.

Next

5.2.9 COMPETITION: Timeline

Overview of the sequence followed in Part B

Part B will consist of five rounds. Each round consists of the same six steps:

1. You are matched randomly with an investor.
2. You observe the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year).
3. You observe the message that the robot advisor is sending to the investor. The message will contain an assessment of the year in which the CEO changed, the initial PoS%, and the current PoS%.
4. You choose the message that you wish to send to the investor. The message will contain an assessment of the year in which the CEO changed, the initial PoS%, and the current PoS%.
5. The investor sees:
 - i. the public dataset that shows the past performance of the company, and
 - ii. the two messages – one from the robot advisor and one from a human advisor (the investor does not know which message comes from the robot advisor).
6. The investor chooses one of the two messages. Their assessment is the Current PoS% contained in their chosen message.

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5.2.10 COMPETITION: Decision Screen

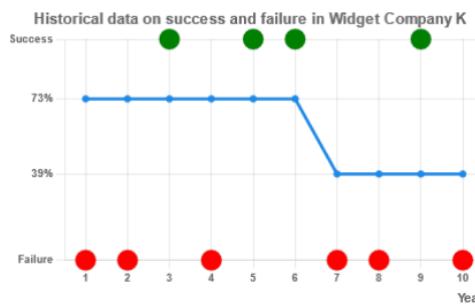
Choose your message – Round 1

In this round, you will send a message about Widget Company K to an investor.



Please note: You are the ↓ advisor whose payment increases as your matched investor's estimate of the **Current PoS%** decreases.

YOUR INFORMATION



The **robot advisor** says that the CEO of Widget Company K changed at the **start of Year 7**. Widget Company K's initial percentage probability of success (initial PoS%) was **73**. Widget Company K's current percentage probability of success (current PoS%) is **39**.

The **blue** line visualizes the robot advisor's message.

Please choose your message.

CEO changed at start of year...

Initial PoS%

Current PoS%

Please enter a year between 3 and 9.

Please enter a number between 0 and 100.

Please enter a number between 0 and 100.

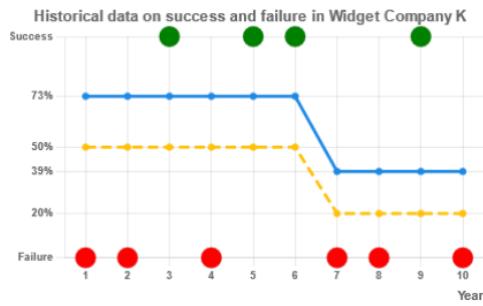
Choose your message — Round 1

In this round, you will send a message about Widget Company K to an investor.



Please note: You are the ↓ advisor whose payment increases as your matched investor's estimate of the **Current PoS%** decreases.

YOUR INFORMATION



The **robot advisor** says that the CEO of Widget Company K changed at the **start of Year 7**. Widget Company K's initial percentage probability of success (initial PoS%) was **73**. Widget Company K's current percentage probability of success (current PoS%) is **39**.

The **blue** line visualizes the robot advisor's message.

The **yellow** line visualizes your message.

These colors were completely randomly determined. When the investor decides, they will see both visualizations but they will not know which color corresponds to your (the human advisor's) message and which corresponds to the robot advisor's message.

Please choose your message.

CEO changed at start of year...

7

Initial PoS%

50

Current PoS%

20

Next

Confirm your decision

X

Based on your decisions, the investor will see the message below.



Message from advisors:

Advisor A says that the CEO of Widget Company K changed at the **start of Year 7**. They say that **50** was Widget Company K's **initial** percentage probability of success. They say that **20** is Widget Company K's **current** percentage probability of success.

Advisor B says that the CEO of Widget Company K changed at the **start of Year 7**. They say that **73** was Widget Company K's **initial** percentage probability of success. They say that **39** is Widget Company K's **current** percentage probability of success.

Please confirm your decision below.

I confirm Close

advisor's message and which corresponds to the robot advisor's message.

Please choose your message.

CEO changed at start of year...

7

Initial PoS%

50

Current PoS%

20

Next

5.2.11 Endline Survey

Same as in the ASYMMETRIC treatment, see Section 1.2.8.

5.3 Investor Instructions

5.3.1 General Instructions

Your task as an investor

There are two types of roles in this experiment: **investors** and **advisors**. You have been randomly chosen to be an **investor** throughout the whole experiment.

In each round, you will be randomly matched with an **advisor**, who is another participant in the experiment. The advisor will send you a message. After receiving the message, you will make a decision.

As an investor, in each round your task is to evaluate a hypothetical company and to assess how likely it is that the company will be successful (i.e., profitable) in the coming year. Since there are ten rounds, you will evaluate ten companies labelled Company A, Company B, Company C, ..., Company J.

Each of the companies that you will evaluate produces a fictitious product called a Widget. Widgets are a type of technological product. As the built-in technology advances very quickly, the product is outdated after about a year. At the start of each year, the company, therefore, discontinues the previous year's model and releases a new model of the Widget. In every year, the company's success depends on the model produced in that year.

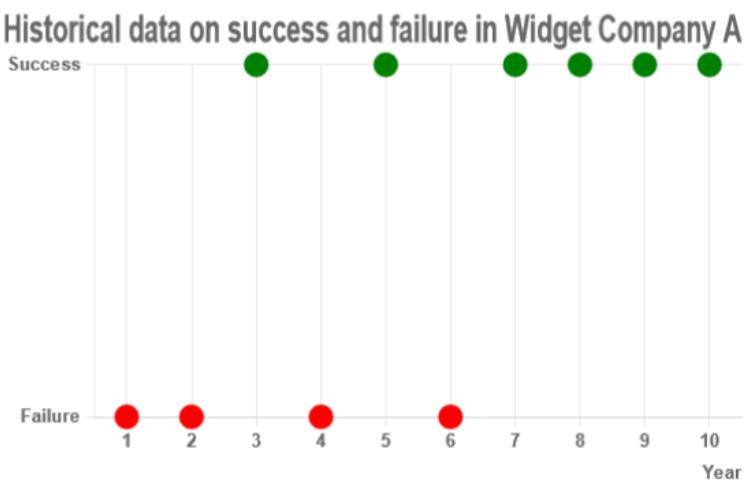
To evaluate how likely it is that the Widget company will be successful with the model it will produce in the coming year, you are given several pieces of information.

THE PIECES OF INFORMATION ARE:

1. *Historical data*

First, you will be shown the historical data for the company, showing whether it was "successful" or "not successful" with the models it produced in each of the past ten years (i.e., from Year 1 to Year 10).

For example, the data could look like this:



Here, you can see that Widget Company A was successful with the model it produced in six out of the past ten years. This historical data is **public**. So both you and your matched **advisor** have access to it.

(continued on next page)

2. The Widget company's probability of success depends on its CEO

Second, you know that the CEO of a Widget company determines the probability of success in each year. You also know that the CEO of each company that you're evaluating changed exactly once during the ten years. This occurred at the **start of Year 3, 4, 5, 6, 7, 8 or 9**, but you do not know exactly which year. Under a specific CEO the probability of success is the same in every year.

This means that when evaluating each company, there are three important things to consider:

- a. The **year** in which the CEO changed.
- b. What the company's **initial** probability of success was, in each year *before the change of the CEO*.
- c. What the company's **current** probability of success is, in each year *after the change of the CEO*.

All companies are completely independent of one another. So these features differ between companies.

3. Advice received from your matched advisor

Third, in each round, you are matched with an **advisor**. The advisor's task is to send you a **message** before you submit your evaluation of the company's **current** percentage probability of success. The message will contain the advisor's assessment of the **year** in which the CEO changed, as well as their assessment of the company's **initial** percentage probability of success and **current** percentage probability of success. For example, an advisor's message to you could look something like this:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **71** was Widget Company A's **initial** percentage probability of success. They say that **45** is Widget Company A's **current** percentage probability of success.

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5.3.2 SYMMETRIC: Explanation of the Payment Scheme

Details about how your payment is calculated

Your incentives

In each round, your task as an investor is to estimate the company's **current** percentage probability of success (Current PoS%) **as accurately as possible**. Your payment will, therefore, depend on how close your estimate of the Current PoS% is to the true Current PoS%. The closer your estimate is to the truth, the more likely it is that you will win the **bonus** of £3.75. Therefore, it is in your best interest to estimate the Current PoS% as accurately as possible in each round.

If you would like to see the formula that explains exactly how your payment is calculated, you can click on the following button:

[Click here to see the formula](#)

Advisor's incentives

Your advisor's earnings will also depend on your estimate of the company's **Current PoS%**. They know that you want to estimate the likely success of the company as accurately as possible.

You will face advisors with various incentives.

Recall that the experiment consists of 10 rounds. In the course of these 10 rounds, you can meet **three different types** of advisor:

- ↑ • The ↑ advisor wants their matched investor to believe that the company has a **high Current PoS%**—i.e., the ↑ advisor's payment is **higher** when the investor estimates that the company is **more likely to succeed**.
- ↓ • The ↓ advisor wants their matched investor to believe that the company has a **low Current PoS%**—i.e., the ↓ advisor's payment is **higher** when the investor estimates that the company is **less likely to succeed**.
- • The → advisor wants their matched investor to hold **accurate** beliefs about the **Current PoS%** of the company—i.e., the advisor's payment is **higher** when the investor's estimate of the company's likely success **becomes more accurate**.

Advisors are told that you, the investor, know about the three possible types of incentives that advisors can have.

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Details about how

Your incentives

In each round, your task as an **incentive** is to estimate the company's current percentage probability of success (Current PoS%) as accurately as possible. Your PoS%. The closer your estimate is to the true Current PoS%, the higher the payoff.

If you would like to see the formula, click on the following button:

Advisor's incentives

Your advisor's earnings will also depend on the company's current percentage probability of success of the company as accurately as possible.

You will face advisors with various types of incentives.

Recall that the experiment consists of three types of incentives:



- The ↑ advisor payment is high.



- The ↓ advisor payment is high.



- The → advisor's payment is high.

Advisors are told that you, the **incentive**, know about the three possible types of incentives that advisors can have.

Explanation of the formula for calculating your payment



Your estimate of the company's current percentage probability of success (Current PoS%) is a number between 0 and 100. This number is used to determine your payoff according to the following formula:

$$\text{Probability of winning the bonus (in percent)} = 100 - \frac{d^2}{100},$$

where d is the **difference** between your estimate and the company's true current percentage probability of success. The formula squares this difference and divides it by a constant. This number is then subtracted from 100. Therefore, if you estimate 50 and the true value is 70, then you win the bonus 96 percent of the time, because the difference is 20 and $100 - \frac{20^2}{100} = 96$.

The principle underlying the above formula is simple: the closer your estimate is to the true value, the higher the percentage probability that you win the bonus of £3.75. Note that your estimate can be wrong by at most 100. In this case, the formula shows that your probability of winning is 0 percent.

At the end of the experiment, the computer will randomly choose one round of the experiment to determine whether or not you will win the bonus.

Close

success (Current PoS%) as accurately as possible. Your PoS% is to the true Current PoS% is to the true Current PoS% as accurately as possible. Therefore, it is in your best interest to estimate the true Current PoS% as accurately as possible.

on the following button:

that you want to estimate the likely

different types of advisor:

current PoS%—i.e., the ↑ advisor's probability of success to succeed.

current PoS%—i.e., the ↓ advisor's probability of success to succeed.

current PoS% of the company—i.e., the probability of success becomes more accurate.

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5.3.3 SYMMETRIC: Explanation of the Data Generating Process

Same as in the ASYMMETRIC treatment, see Section 1.3.3.

5.3.4 SYMMETRIC: Explanation of the Matching Process

Same as in the ASYMMETRIC treatment, see Section 1.3.4.

5.3.5 SYMMETRIC: Explanation of the Timeline

Same as in the ASYMMETRIC treatment, see Section 1.3.5.

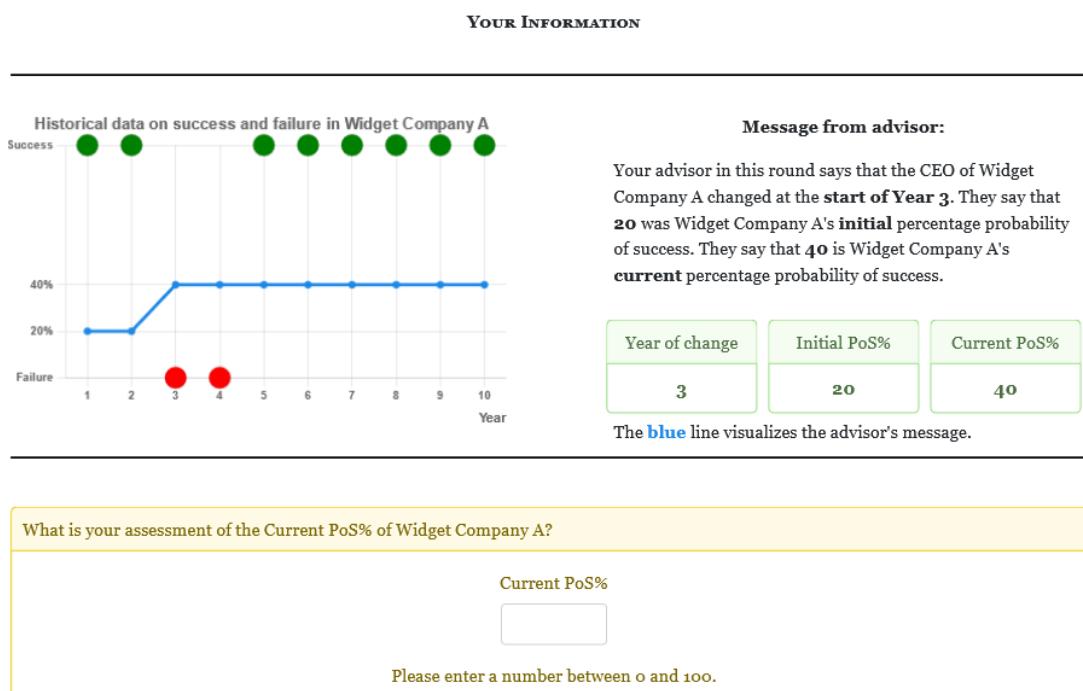
5.3.6 SYMMETRIC: Control Questions

Same as in the ASYMMETRIC treatment, see Section 1.3.6.

5.3.7 SYMMETRIC: Decision Screen

Make your assessment — Round 1

In this round, you will assess Widget Company A. When making the assessment, you can refer to a message from your advisor for this round.



Confirm your decision

X

Based on the following information, you evaluate Widget Company A to have a Current PoS% of **40**.



Message from advisor:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 3**. They say that **20** was Widget Company A's **initial** percentage probability of success. They say that **40** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
3	20	40

The **blue** line visualizes the advisor's message.

Please confirm your decision below.

I confirm Close

What is your assessment of the Current PoS% of Widget Company A?

Current PoS%

40

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5.3.8 COMPETITION: General Instructions

Part B

Part B of the experiment is divided into **5 rounds**. It will be similar to Part A of the experiment, but there are some important differences.

Similarities between Part B and Part A:

You will continue to participate in the same group of 3 investors and 3 advisors as in Part A and you will continue in the role of **investor**. As in Part A, you will be randomly matched with one of the advisors in every round. You will again evaluate a company in each round and you will again receive a message from an advisor containing their assessment of the company in that round. One of the five rounds of Part B will be chosen to be relevant for your Part B earnings.

Payment in Part B:

The way your payment is calculated will be the same as in Part A. In each round, your task as the investor is to estimate the company's **current** percentage probability of success (Current PoS%) **as accurately as possible**. The more accurate your estimate, the higher is the probability of earning a bonus.

Recall that there are three types of advisors in your group. Advisors in Part B have exactly the same incentives as in Part A. Once again, there is an equal chance of being matched with each of the three types of advisors in each round.

[Click here if you'd like to see a reminder of the three types of advisor incentives](#)

Key differences between Part B and Part A:

There are several important differences between Part B and Part A. These are:

- **Two messages:** In Part A, as the investor, you only received a single message in each round from a single advisor. In Part B, you will receive two messages in each round. You will receive one message from a human advisor (as in Part A), but in addition, you will receive a message from a robot advisor.
- **Robot advisor:** The robot advisor is always trying to help you (the investor) to achieve your goal of forming an accurate assessment of the company's Current PoS%. However, not all robot advisors are equally skilled in forming an accurate assessment of the company. Some robot advisors will be better than others at forming an assessment of the company. You are matched to a new robot advisor in every round.
- **The advisor will observe the robot advisor message first:** The advisor will always observe the robot advisor's message before constructing the message that they want to send to you.
- **You do not know which message comes from the robot advisor:** As the investor, you will observe both the messages along with the historical company data. However, you will not be told who sent which message. The human advisor knows that you will not know who sent which message.
- **You choose one of the two messages:** After seeing the two messages you will choose directly between the two messages you receive. That is, you must choose which of the two messages contains a Current PoS% that you believe is closer to the truth. This is different to Part A where you could choose any value of the Current PoS% to report.
- **Payment calculation:** After you choose one of the two messages in a particular round, the payments of you and the human advisor for that round will be calculated on the basis of the Current PoS% in the chosen message. This calculation will be done in the same way as in Part A.

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5.3.9 COMPETITION: Timeline

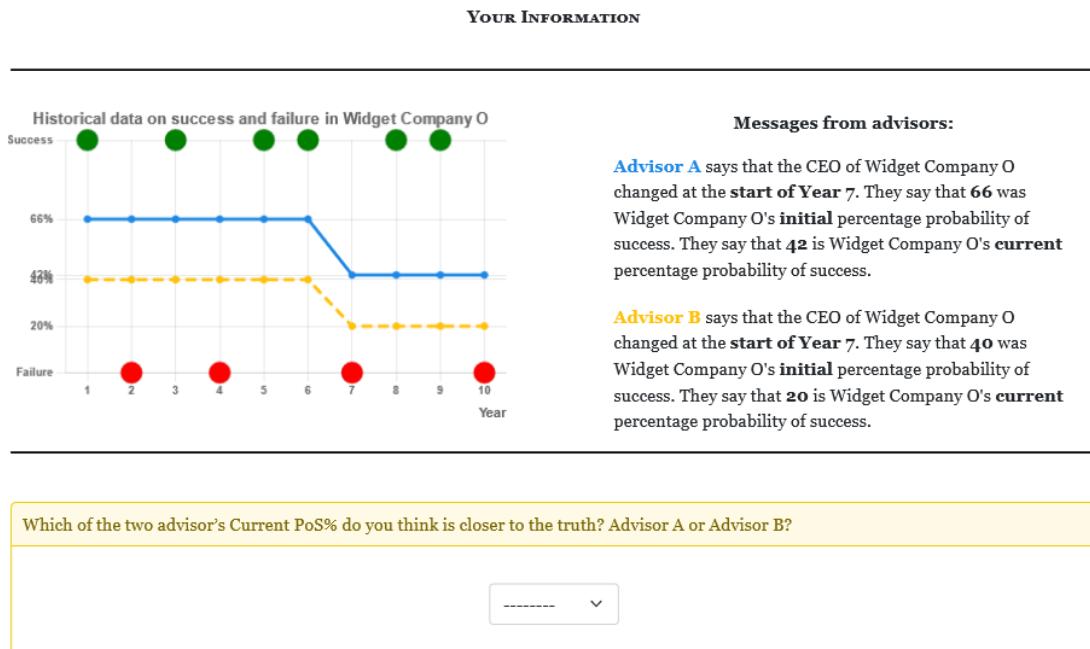
Overview of the sequence followed in Part B

1. You are matched randomly with an advisor.
2. The advisor observes the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year).
3. The advisor observes the message that the robot advisor is sending to you (the investor). The message will contain an assessment of the year in which the CEO changed, the initial PoS%, and the current PoS%.
4. The advisor chooses the message that they send to you. The message will contain an assessment of the year in which the CEO changed, the initial PoS%, and the current PoS%.
5. You see the following pieces of information:
 - i. the public dataset that shows the past performance of the company, and
 - ii. the two messages – one from the robot advisor and one from a human advisor.

5.3.10 COMPETITION: Decision Screen

Make your assessment — Round 5

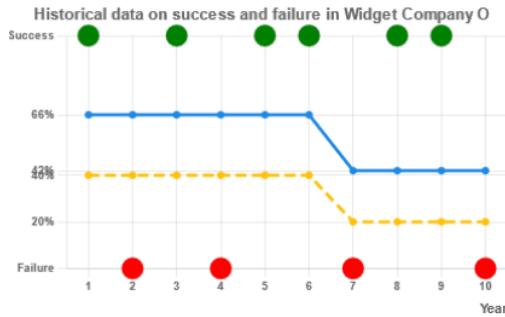
In this round, you will assess Widget Company O. When making the assessment, you can refer to messages from two advisors, which are labeled **Advisor A** and **Advisor B**. One of them is a *human advisor* and the other is a *robot advisor*. Note that the labeling of advisors is completely random. That is, for each round it is randomly determined which advisor (robot or human) gets the **Advisor A**-label and which gets the **Advisor B**-label.



Confirm your decision

X

Based on the information below, your assessment is that **Advisor A's** Current PoS% estimate is more accurate. Therefore, you evaluate Widget Company O to have a Current PoS% of **42**.



Messages from advisors:

Advisor A says that the CEO of Widget Company O changed at the **start of Year 7**. They say that **66** was Widget Company O's **initial** percentage probability of success. They say that **42** is Widget Company O's **current** percentage probability of success.

Advisor B says that the CEO of Widget Company O changed at the **start of Year 7**. They say that **40** was Widget Company O's **initial** percentage probability of success. They say that **20** is Widget Company O's **current** percentage probability of success.

Please confirm your decision below.

I confirm Close

Which of the two advisor's Current PoS% do you think is closer to the truth? Advisor A or Advisor B?

Advisor A ▾

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5.3.11 Endline Survey

Same as in the ASYMMETRIC treatment, see Section 1.3.8.

6 EXPLANATION and NoEXPLANATION

6.1 Welcome Screen

Welcome to our experiment!

This experiment will take approximately **25 minutes** to complete. It is divided into **10 rounds**. In each round, the computer will randomly match you with one other player. You and the other players that you are matched with will remain anonymous.

You will receive a show-up fee of **£3.50** for participating in the experiment. You can also earn a **bonus** payment of **£3.75** during the experiment. The amount that you earn will depend on the decisions made by you and other participants during the experiment. It is therefore important that you read the instructions carefully as this will help you to make better choices. In addition, there will be a set of understanding questions to check that you read and understood the instructions properly. You will need to answer these questions correctly in order to complete the experiment.

At the end of the experiment, one of the 10 rounds will be randomly chosen to be relevant for your payment. The decisions made by you and your matched partner in the chosen round will determine your payment.

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6.2 EXPLANATION

6.2.1 Information about Previous Experiment

Information from a previous experiment

During the experiment today, you will observe information from the decisions made by participants in a previous experiment.

In that experiment, participants were assigned to one of two types of roles: **investors** and **advisors**. The advisors provided advice to the investors, who had to evaluate fictitious companies. This worked as follows: Investors first saw objective data about the historical performance of the companies and then received advice from advisors. Based on the data and advice, they had to assess how likely it is that each of the companies would be successful in the future.

Today, your task is going to be very similar to the task of the investors in the past experiment. You will be shown the same historical performance data of the companies that investors saw in the past experiment. Similarly to the investors in the past experiment, you will then have to make an assessment of each of the companies. However, one key difference is that you will not be matched with your own personal advisor. Instead, you will observe the advice sent by one of the advisors in the previous experiment.

In order to help you understand how to evaluate the companies, we will now show you the instructions that investors saw in the previous experiment. All of the instructions seen by investors in the past experiment are clearly marked as *Instructions for the investor in the past experiment*.

Since your task is very similar to that of the investor from the past experiment, it is important that you pay careful attention while reading these instructions. After you have finished reading through these instructions, we will clarify exactly what your task is and how it differs from that of the past investors.

6.2.2 Previous Experiment: General Instructions

Instructions for the investor in the past experiment

Your task as an investor

There are two types of roles in this experiment: **investors** and **advisors**. You have been randomly chosen to be an **investor** throughout the whole experiment.

In each round, you will be randomly matched with an **advisor**, who is another participant in the experiment. The advisor will send you a message. After receiving the message, you will make a decision.

As an investor, in each round your task is to evaluate a hypothetical company and to assess how likely it is that the company will be successful (i.e., profitable) in the coming year. Since there are ten rounds, you will evaluate ten companies labelled Company A, Company B, Company C, ..., Company J.

Each of the companies that you will evaluate produces a fictitious product called a Widget. Widgets are a type of technological product. As the built-in technology advances very quickly, the product is outdated after about a year. At the start of each year, the company, therefore, discontinues the previous year's model and releases a new model of the Widget. In every year, the company's success depends on the model produced in that year.

To evaluate how likely it is that the Widget company will be successful with the model it will produce in the coming year, you are given several pieces of information.

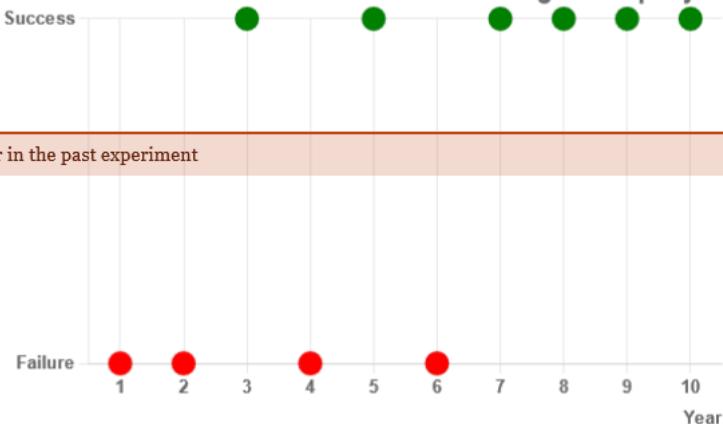
THE PIECES OF INFORMATION ARE:

1. *Historical data*

First, you will be shown the historical data for the company, showing whether it was "successful" or "not successful" with the models it produced in each of the past ten years (i.e., from Year 1 to Year 10).

For example, the data could look like this:

Historical data on success and failure in Widget Company A



(continued on next page)

- b. What the company's **initial** probability of success was, in each year *before the change of the CEO*.
- c. What the company's **current** probability of success is, in each year *after the change of the CEO*.

All companies are completely independent of one another. So these features differ between companies.

3. Advice received from your matched advisor

Third, in each round, you are matched with an **advisor** who knows the truth about the following information: the **year** in which the CEO changed, what the company's **initial** percentage probability of success (Initial PoS%) was and what its **current** percentage probability of success (Current PoS%) is. In other words, the advisor is fully informed about (a), (b) and (c).

The advisor's task is to send you a **message** before you submit your final evaluation of the company's **current** percentage probability of success. The message will contain the advisor's assessment of the **year** in which the CEO changed, as well as their assessment of the company's **initial** percentage probability of success and **current** percentage probability of success. For example, an advisor's message to you could look like this:

Your advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **71** was Widget Company A's **initial** percentage probability of success. They say that **45** is Widget Company A's **current** percentage probability of success.

Important information: Each advisor is free to choose the content of the message that they send to you; they do not need to truthfully report the information that they have to you. Before receiving this information from your advisor, you will observe the historical data from the company and be asked for your assessment of the **year** in which the CEO changed, the company's **initial** percentage percentage probability of success and **current** percentage probability of success. You will then receive the message from your advisor and will then be asked for your final assessment of the company's **current** percentage probability of success.

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6.2.3 Previous Experiment: Explanation of the Payment Scheme

Instructions for the investor in the past experiment

Details about how your payment is calculated

Your incentives

In each round, your task as an investor is to estimate the company's **current** percentage probability of success (Current PoS%) **as accurately as possible**. Your payment will, therefore, depend on how close your estimate of the Current PoS% is to the true Current PoS%. The closer your estimate is to the truth, the more likely it is that you will win the **bonus** of £3.75. Therefore, it is in your best interest to estimate the Current PoS% as accurately as possible in each round.

If you would like to see the formula that explains exactly how your payment is calculated, you can click on the following button:

[Click here to see the formula](#)

Advisor's incentives

Your advisor's earnings will also depend on your estimate of the company's **Current PoS%**. They know that you want to estimate the likely success of the company as accurately as possible.

You will face advisors with various incentives.

Recall that the experiment consists of 10 rounds. In the course of these 10 rounds, you can meet three different types of advisor:

- ↑ • The ↑ advisor wants their matched investor to believe that the company has a **high Current PoS%**—i.e., the ↑ advisor's payment is **higher** when the investor estimates that the company is **more likely to succeed**.
- ↓ • The ↓ advisor wants their matched investor to believe that the company has a **low Current PoS%**—i.e., the ↓ advisor's payment is **higher** when the investor estimates that the company is **less likely to succeed**.
- • The → advisor wants their matched investor to hold **accurate** beliefs about the **Current PoS%** of the company—i.e., the advisor's payment is **higher** when the investor's estimate of the company's likely success **becomes more accurate**.

Advisors are told that you, the investor, "may or may not know the advisor's incentives".

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Instructions for the investor in the past experiment

Instructions for the investor in t

Details about how

Your incentives

In each round, your task as an **accurately as possible**. Your PoS%. The closer your estimate interest to estimate the Current

If you would like to see the form

Advisor's incentives

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Recall that the experiment cons



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- The ↓ advisor payment is hi



- The → advisor wants their matched investor to hold **accurate** beliefs about the **Current PoS%** of the company—i.e., the advisor's payment is **higher** when the investor's estimate of the company's likely success **becomes more accurate**.

Advisors are told that you, the investor, "may or may not know the advisor's incentives".

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Instructions for the investor in the past experiment

Explanation of the formula for calculating your payment



Your estimate of the company's current percentage probability of success (Current PoS%) is a number between 0 and 100. This number is used to determine your payoff according to the following formula:

$$\text{Probability of winning the bonus (in percent)} = 100 - \frac{d^2}{100},$$

where d is the **difference** between your estimate and the company's true current percentage probability of success. The formula squares this difference and divides it by a constant. This number is then subtracted from 100. Therefore, if you estimate 50 and the true value is 70, then you win the bonus 96 percent of the time, because the difference is 20 and $100 - \frac{20^2}{100} = 96$.

The principle underlying the above formula is simple: the closer your estimate is to the true value, the higher the percentage probability that you win the bonus of £3.75. Note that your estimate can be wrong by at most 100. In this case, the formula shows that your probability of winning is 0 percent.

At the end of the experiment, the computer will randomly choose one round of the experiment to determine whether or not you will win the bonus.

Close

success (Current PoS%) as
ent PoS% is to the true Current
5. Therefore, it is in your best

on the following button:

that you want to estimate the likely

different types of advisor:

Current PoS%—i.e., the ↑ advisor's
succeed.

Current PoS%—i.e., the ↓ advisor's
succeed.

6.2.4 Previous Experiment: Explanation of the Data Generating Process

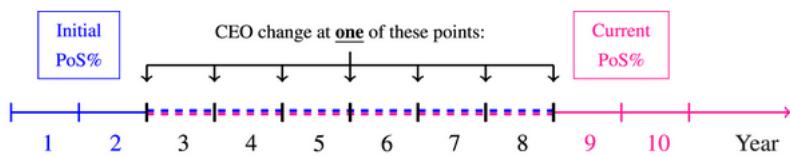
Instructions for the investor in the past experiment

More details on what determines success and failure in each company

The details below will help you to estimate each company's current percentage probability of success as accurately as possible.

(a) When did the CEO change?

Recall that the CEO of each company changed once and for all at the **start of Year 3, 4, 5, 6, 7, 8 or 9**. For each company, the year in which the CEO changed will be **randomly determined** by the computer. So each of these seven years has an equal probability of being chosen.



Example Suppose that the start of Year 3 is randomly chosen by the computer for a particular company as the moment when the company's CEO changed. This means that the Initial PoS% is relevant for Years 1 and 2 while the Current PoS% is relevant for Years 3 to 10.



Hint Success in Years 1 and 2 is always determined by the Initial PoS%. Success in Years 9 and 10 is always determined by the Current PoS%.

(b) How is a company's Initial PoS% determined?

For each company, the computer will **randomly** draw a whole number between 0 and 100. Each whole number is equally likely to be drawn. This number determines the company's Initial PoS%.

Instructions for the investor in the past experiment

(c) How is a company's Current PoS% determined?

Similarly, to determine each company's Current PoS%, the computer will **randomly** draw a second whole number between 0 and 100 (i.e., each whole number is equally likely to be drawn).

Important information: The company's Current PoS% is completely **independent** of its Initial PoS%. This means that, no matter what the company's initial percentage probability of success was, any number between 0 and 100 is equally likely to be drawn as its current percentage probability of success. Intuitively, the quality of the company's initial CEO does not tell you anything about how good its current CEO is.

Also, there is no relationship between companies. So, the Initial PoS% and Current PoS% of each of the companies is completely unrelated to all other companies.

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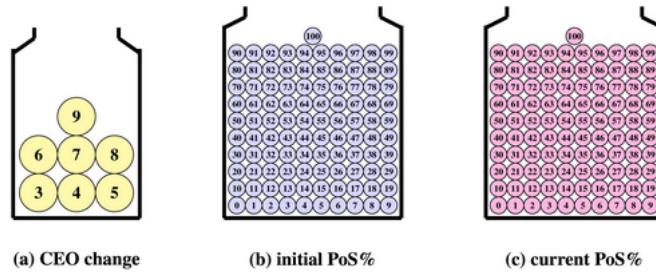
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Instructions for the investor in the past experiment

How does the CEO affect the company's success in every year?

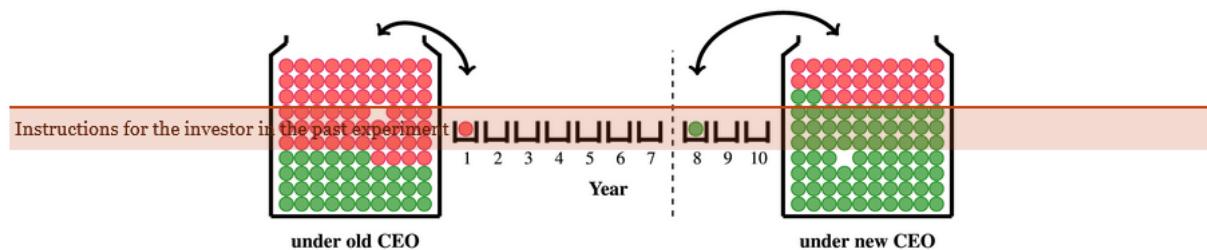
You can think of the computer going through a **two-step process** prior to each round.

In **Step 1**, the computer draws one ball at random from each of the following three urns (i.e., three balls in total). These three ball draws determine the year in which the CEO changed, the **initial** percentage probability of success (Initial PoS%), and the **current** percentage probability of success (Current PoS%).



Say, for example, that (8 36 72) are drawn. This means that the CEO changed at the **start of Year 8**. The new CEO is in charge in Years 8, 9 and 10. Compared to the old CEO, this new CEO also turns out to be quite good: compared to a 36% probability of success in Years 1 to 7 under the old CEO, the company has a 72% probability of success in every year when the new CEO is in charge.

In **Step 2**, the computer determines success and failure for each single year. To do so, the computer draws from an urn with 100 balls, which are either green or red. The number 36 determines the quantity of green balls in a company's urn under the old CEO; the number 72 determines the quantity of green balls in the urn under the new CEO. The computer draws a ball at random from the relevant urn for each of the years that a CEO is in charge. If the ball drawn is **green**, then the company is **successful** in that year. If the ball drawn is **red**, then the company **fails** in that year. After each draw, the computer places the ball back into the urn before making a draw for the next year. This means that, in each period, success and failure are only determined by the percentage probability of success and do not depend on success or failure in earlier periods.



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6.2.5 Previous Experiment: Explanation of the Matching Process

Instructions for the investor in the past experiment

How does the matching of investors and advisors work?

At the beginning of the experiment, you will be randomly allocated to a group containing six participants – three investors and three advisors. In every round of the experiment, the advisors and investors are randomly re-matched into three pairs. This means that in each round you could be matched with any one of the three advisors in your group.

Your group includes one advisor of each type. In particular:

- One advisor in your group is the ↑ advisor, who has an interest in their matched investor believing that the company has a **high Current PoS%**.
- One advisor in your group is the ↓ advisor, who has an interest in their matched investor believing that the company has a **low Current PoS%**.
- One advisor in your group is the → advisor, who has an interest in their matched investor to hold **accurate beliefs** about the **Current PoS%** of the company.

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6.2.6 Previous Experiment: Explanation of the Timeline

Instructions for the investor in the past experiment

Overview of the sequence followed in today's experiment

The experiment will consist of ten rounds.

Each round consists of the same six steps:

1. You are matched randomly with an advisor.
2. You observe the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year). You then report your assessment of the year in which the CEO changed, the initial PoS% and the current PoS%.
3. The advisor receives accurate information about the year in which the CEO changed, the initial PoS% and the current PoS%. The advisor also observes the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year).
4. The advisor chooses the message that they send to you. The message will contain an assessment about the year in which the CEO changed, the initial PoS% and the current PoS%.
5. You see the following pieces of information:
 - i. the public dataset that shows the past performance of the company, and
 - ii. the advisor's message.
6. You submit your final estimate of the Current PoS%.

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6.2.7 Explanation of the Current Experiment

Your task in today's experiment

As mentioned earlier, your task is very similar to that of the investor in the past experiment.

You will also complete ten rounds today. You will be **linked** to one investor from the past experiment. In every round of today's experiment, your task is to estimate the probability of success of the same company that your linked investor assessed in the corresponding round of the past experiment. You will see the **same historical data** that the linked investor saw about that company. You will also observe the **advice** that your linked investor received from their advisor. Therefore, being linked to a past investor means that you will follow a similar path through the experiment. However, your choices will not affect your linked investor in any way, nor will their choices affect you.

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6.2.8 Explanation of the Timeline

Overview of the sequence followed in today's experiment

The experiment will consist of ten rounds.

Each round will consist of the same steps:

1. You observe the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year). After seeing this past performance dataset, you report your assessment of the year in which the CEO changed, the Initial PoS% and the Current PoS%.
2. You will then observe the message sent by an advisor to your linked investor in the previous experiment. This message will contain this advisor's assessment of the year in which the CEO changed, the Initial PoS% and the Current PoS%.
3. You submit your final estimate of the Current PoS%.

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6.2.9 Control Questions

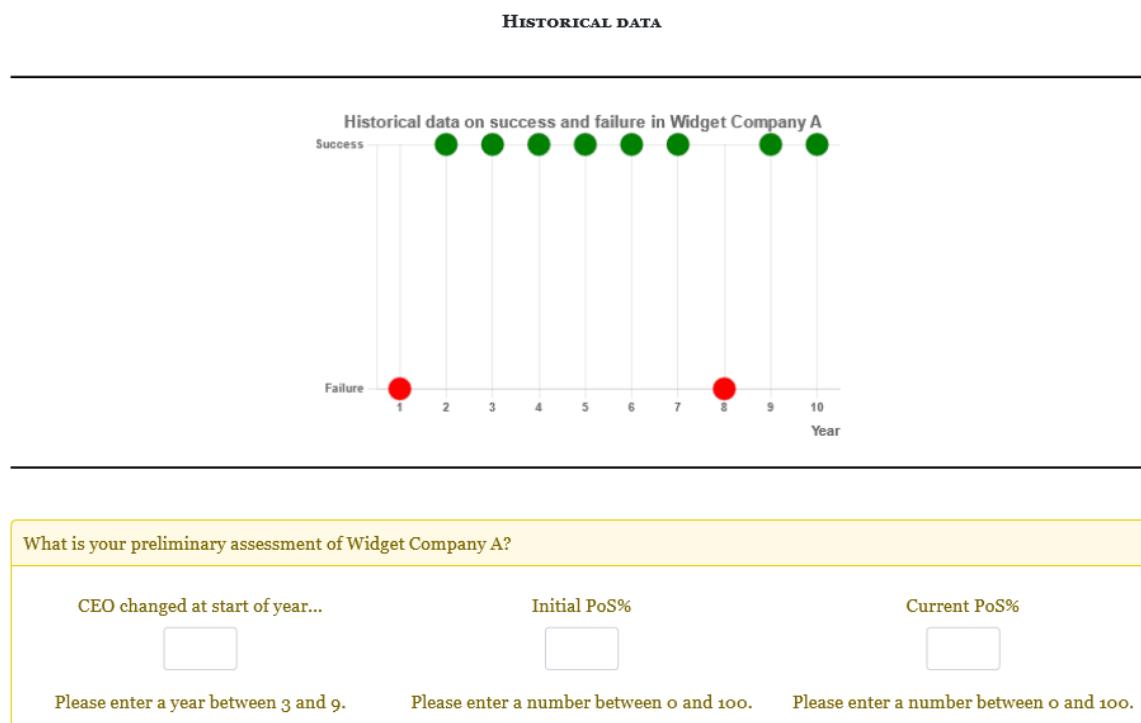
Same as in the ASYMMETRIC treatment, see Section 1.3.6.

6.2.10 Decision Screen

Make your preliminary assessment — Round 1

In this round, you will evaluate Widget Company A. When making the assessment, you can refer to a message from the advisor matched to your linked investor for this round.

Before you receive the advisor's message, you will observe Widget Company A's historical data. We ask you to make a preliminary assessment of the **year** in which the CEO changed, the company's **Initial PoS%** and the company's **Current PoS%**.



Make your final assessment — Round 1

You will now make your final assessment of Widget Company A. When making the assessment, you can refer to a message from the advisor matched to your linked investor for this round.

When composing the message, the advisor had access to:

- The historical data of success and failure in Widget Company A and
- Information about the **year** in which the CEO changed, the company's **Initial PoS%**, and the company's **Current PoS%**.

In your initial evaluation of Widget Company A, you assessed that the CEO changed at the **start of Year 4**, that the **Initial PoS%** was **0**, and that the **Current PoS%** is **0**.

Year of change	Initial PoS%	Current PoS%
4	0	0

YOUR INFORMATION



Message from advisor:

The advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **92** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
5	36	92

What is your final assessment of the Current PoS% of Widget Company A?

Current PoS%

Please enter a number between 0 and 100.

- The historical data of success and failure in Widget Company A and

Confirm your decision

Based on the following information, you evaluate Widget Company A to have a Current PoS% of **92**.



Message from advisor:

The advisor in this round says that the CEO of Widget Company A changed at the **start of Year 5**. They say that **36** was Widget Company A's **initial** percentage probability of success. They say that **92** is Widget Company A's **current** percentage probability of success.

Year of change	Initial PoS%	Current PoS%
5	36	92

Please confirm your decision below.

I confirm **Close**



What is your final assessment of the Current PoS% of Widget Company A?

Current PoS%

92

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6.2.11 Endline Survey

Same as in the ASYMMETRIC treatment, see Section 1.3.8.

6.3 NoEXPLANATION

6.3.1 Welcome Screen

Same as in the EXPLANATION treatment, see Section 6.1.

6.3.2 Information about Previous Experiment

Same as in the EXPLANATION treatment, see Section 6.2.1.

6.3.3 Previous Experiment: General Instructions

Same as in the EXPLANATION treatment, see Section 6.2.2.

6.3.4 Previous Experiment: Explanation of the Payment Scheme

Same as in the EXPLANATION treatment, see Section 6.2.3.

6.3.5 Previous Experiment: Explanation of the Data Generating Process

Same as in the EXPLANATION treatment, see Section 6.2.4.

6.3.6 Previous Experiment: Explanation of the Matching Process

Same as in the EXPLANATION treatment, see Section 6.2.5.

6.3.7 Previous Experiment: Explanation of the Timeline

Same as in the EXPLANATION treatment, see Section 6.2.6.

6.3.8 Explanation of the Current Experiment

Your task in today's experiment

As mentioned earlier, your task is very similar to that of the investor in the past experiment.

You will also complete ten rounds today. You will be **linked** to one investor from the past experiment. In every round of today's experiment, your task is to estimate the probability of success of the same company that your linked investor assessed in the corresponding round of the past experiment. You will see the **same historical data** that the linked investor saw about that company. You will also observe the **advice** that your linked investor received from their advisor. Therefore, being linked to a past investor means that you will follow a similar path through the experiment. However, your choices will not affect your linked investor in any way, nor will their choices affect you.

One key difference is that you will only observe **part of the advice**. The investor in the past experiment observed the full advisor message containing an assessment of the year in which the CEO changed, the Initial PoS% and the Current PoS%. In contrast, you will only observe the advisor's assessment of the **Current PoS%**.

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Overview of the sequence followed in today's experiment

The experiment will consist of ten rounds.

Each round will consist of the same steps:

1. You observe the public dataset that shows the past performance of the company (i.e., whether the company succeeded or failed in each year). After seeing this past performance dataset, you report your assessment of the year in which the CEO changed, the Initial PoS% and the Current PoS%.
2. You will then observe the message sent by an advisor to your linked investor in the previous experiment. This message will only contain this advisor's assessment of the Current PoS%.
3. You submit your final estimate of the Current PoS%.

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6.3.9 Explanation of the Timeline

6.3.10 Control Questions

Same as in the ASYMMETRIC treatment, see Section 1.3.6.

6.3.11 Decision Screen

Make your final assessment — Round 1

You will now make your final assessment of Widget Company A. When making the assessment, you can refer to a message from the advisor matched to your linked investor for this round.

When composing the message, the advisor had access to:

- The historical data of success and failure in Widget Company A and
- Information about the **year** in which the CEO changed, the company's **Initial PoS%**, and the company's **Current PoS%**.

In your initial evaluation of Widget Company A, you assessed that the CEO changed at the **start of Year 3**, that the **Initial PoS%** was **4**, and that the **Current PoS%** is **3**.

Year of change	Initial PoS%	Current PoS%
3	4	3

YOUR INFORMATION



Message from advisor:

The advisor in this round says that **92** is Widget Company A's **current** percentage probability of success.

Current PoS%
92

What is your final assessment of the Current PoS% of Widget Company A?

Current PoS%

Please enter a number between 0 and 100.

- The historical data of success and failure in Widget Company A and

Confirm your decision

Based on the following information, you evaluate Widget Company A to have a Current PoS% of **92**.



Message from advisor:

The advisor in this round says that **92** is Widget Company A's **current** percentage probability of success.

Current PoS%
92

Please confirm your decision below.

I confirm **Clos**



What is your final assessment of the Current PoS% of Widget Company A?

Current PoS%

92

Next

6.3.12 Endline Survey

Same as in the ASYMMETRIC treatment, see Section 1.3.8.