

LLM Agents for Simulating Decision Making

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<https://sleepybq.github.io/>

Task Proficiency

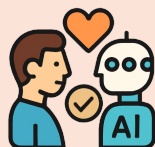


Persona



Knowledge Base

AI Trust Level



I believe they can provide valuable references, but human verification is still necessary.



Likert Scale

Cognition and Thinking Ability

Need for Cognition



I would extremely prefer complex to simple problems.



Likert Scale

Fast Thinking



Memory



Task Simplification

Slow Thinking



Memory



Reflection



Reasoning



Planning



Structured Prompt



Chain of Thought



Theory of Mind

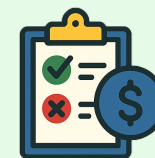
Advice Adoption



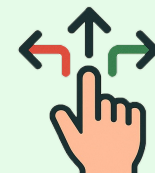
Task



Self-decision



Utility Evaluation



Action Selection

ID	Education	...	Employed	Income annum
1	Graduate	...	Yes	

If you were a bank employee, will you approve this customer's loan?

I think the loan should be approved because the customer has a stable employment, and sufficient assets as collateral.

Initial Reaction and Emotion:

"My first reaction upon seeing the AI's suggestion was..."

Comparison with My Own Judgment:

"This [matches/doesn't match] my initial judgment because..."

Assessment of AI's Capability:

"I think the AI is [reliable/unreliable] in making this kind of judgment because..."

A. Fully follow AI

B. Mostly follow, slight changes

C. Combine AI and own view

D. Mostly own view, slight AI reference

E. Reject AI

Task Proficiency

Beginner Level (0% Knowledge Base)

You are a new employee who has just started working in the bank's credit department for one month. You are not yet familiar with the loan approval process and risk assessment, mainly relying on basic training knowledge. You understand some basic concepts but have limited comprehension of complex risk indicators, and often need to consult manuals or ask colleagues.

Intermediate Level (30% Knowledge Base)

You are a loan officer with 2 years of credit experience. You are familiar with basic loan approval processes and common risk indicators. You can identify obvious high-risk cases but still need to think carefully and analyze in complex situations.

Expert Level (80% Knowledge Base)

You are a senior credit expert with 10 years of extensive experience. You can quickly identify various risk patterns, are familiar with industry best practices, and have a deep understanding of indicators such as CIBIL score and debt-to-income ratio. You are able to make accurate judgments by considering multiple dimensions.

Task Proficiency

Knowledge Base Content (Allocated According to Persona Level)

Key Points for Loan Approval:

1. CIBIL Score Standard:

- 750 and above: Excellent
- 650–750: Good
- 550–650: Average
- Below 550: High risk

2. Debt-to-Income Ratio:

Monthly repayments should not exceed 40% of monthly income.

3. Asset Evaluation:

- Residential assets are the most stable.
- Commercial assets are more volatile.
- Luxury assets are high-risk.

4. Job Stability:

Self-employed individuals usually pose higher risk than salaried employees.

5. Impact of Loan Term:

Long-term loans increase default risk.

6. Number of Dependents:

Affects repayment capacity and financial pressure.

7. Bank Assets:

Reflects the depth of the client's relationship with the bank.

Cognition and Thinking Ability

Cognition and Thinking Ability

Need for Cognition



I would **extremely** prefer complex to simple problems.

1 2 3 4 5 6 7

Likert Scale

Fast Thinking



Memory



Task Simplification

Slow Thinking



Memory



Reflection



Reasoning



Planning



Structured Prompt



Chain of Thought



Theory of Mind

AI Trust Level

Very Trusting (+2):

I believe AI systems are highly reliable in loan approval processes. They can handle complex data analysis and are generally more objective and accurate than human judgment.

Somewhat Trusting (+1):

I have a certain level of confidence in AI systems and think they can provide valuable input, but human verification is still necessary.

Neutral (0):

I don't have a particular preference regarding AI systems. I evaluate the value of their suggestions based on the specific situation.

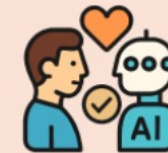
Somewhat Distrusting (-1):

I have some doubts about the capabilities of AI systems in loan approval and tend to trust human experience and intuition more.

Very Distrusting (-2):

I believe AI systems cannot fully comprehend the complexity and human aspects of loan approvals, and we should not overly rely on their recommendations.

AI Trust Level



I believe they can provide valuable references, but human verification is still necessary.



Likert Scale

Advice Adoption

Utility Evaluation:

1. Initial Reaction and Emotion:

"My first reaction upon seeing the AI's suggestion to [approve/reject] was..."

2. Comparison with My Own Judgment:

"This [matches/doesn't match] my initial judgment because..."

3. Assessment of AI's Capability:

"I think the AI is [reliable/unreliable] in making this kind of judgment because..."

4. Consideration of Risks and Benefits:

"If I follow the AI's advice, the potential benefit is... and the risk is..."

5. Inner Conflict and Struggle:

"I'm feeling [uncertain/confident] right now, and the main point of hesitation is..."

Advice Adoption



Task

ID	Education	...	Employed	Income annum
1	Graduate	...	Yes	

If you were a bank employee, will you approve this customer's loan?



Self-decision

I think the loan should be approved because the customer has a stable employment, and sufficient assets as collateral.



Utility Evaluation

Initial Reaction and Emotion:

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Comparison with My Own Judgment:

"This [matches/doesn't match] my initial judgment because..."

Assessment of AI's Capability:

"I think the AI is [reliable/unreliable] in making this kind of judgment because..."



Action Selection

A. Fully follow AI

B. Mostly follow, slight changes

C. Combine AI and own view

D. Mostly own view, slight AI reference

E. Reject AI

Advice Adoption

Utility Evaluation:

- A. Fully adopt the AI's suggestion
- B. Mostly adopt it with slight adjustments
- C. Partially adopt it, combined with my own judgment
- D. Mainly stick to my own judgment, with slight reference to the AI
- E. Completely reject the AI's suggestion

Advice Adoption



Task

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Self-decision

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Action Selection

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B. Mostly follow, slight changes

C. Combine AI and own view

D. Mostly own view, slight AI reference

E. Reject AI