

Interview Results

Participants 1

Q: It took about 20 minutes to complete the modeling. What do you think are the main factors affecting your modeling time?

A: The total modeling time was 20 minutes. The biggest factor affecting my modeling was my understanding and memory of the syntax, which hindered my progress. Initially, it was difficult to memorize, requiring me to repeatedly refer to documentation.

Q: If you become proficient, can this time be significantly reduced?

A: Yes, once I became familiar with the process, my speed improved noticeably.

Q: Do you think this method can be applied after a brief training period?

A: I believe it's quite challenging and requires considerable effort to undergo effective training.

Q: What do you think is the biggest obstacle for beginners to get started quickly?

A: Aside from external factors related to modeling tools, the main issue lies in understanding and memorizing the syntax. Scene comprehension is less of a challenge. The correspondence between symbols and their semantics is relatively easy to grasp, but the specific scenarios described in the provided texts are generally easier to understand.

Q: Do you have any other suggestions regarding this method?

A: Overall, because it's difficult to get started, the method has a strong ability to model complex scenarios once mastered, and efficiency improves significantly with proficiency. The main challenge is in the initial learning phase. To address this, I suggest simplifying the notation system or using frameworks and syntax that beginners are more familiar with, to help them get up to speed more quickly.

Participants 2

Q: It took about 25 minutes to complete the modeling. What do you think are the main factors affecting your modeling time?

A: The main factor affecting the time was my understanding of the task scenario. Since the tasks are divided into various roles and properties, understanding their relationships, as well as their correspondence to the diagrams and models, plays a crucial role. Clear comprehension makes the modeling process smoother.

Q: Based on this explanation, do you think the method I proposed can be applied after a brief training period?

A: Yes.

Q: You've undergone brief training, and during the first step, you spent about 10 minutes modeling the first role. For the subsequent three roles, you took another 10 minutes. Do you think, after this short training and hands-on practice, you've become proficient with this method?

A: Yes. After the first step, I gained a general understanding of the relationships between elements, so the next three steps went much more smoothly. The initial step just took a bit longer.

Q: Do you have any other suggestions for this method?

A: No, I don't.

Participants 3

Q: It took you about 25 minutes to complete the modeling. What factors influenced your modeling time?

A: The main factor was my unfamiliarity with breaking down natural language text into these concepts, as this was my first time attempting it. The second factor was understanding modal verbs—I needed to determine which level they corresponded to. These two aspects were the most significant.

Q: If you were more proficient, could the modeling time be reduced?

A: Definitely.

Q: I recall that after completing the task elements, property elements, and role elements, you spent about five minutes on the first constraint modeling step. What caused the delay at that point?

A: It was due to my process of understanding the symbols and figuring out what they meant. Secondly, I needed to map the natural language description to the corresponding level. Another factor that could affect modeling speed is the complexity of the scenario. If there's no automatic layout for the model, it can slow down the process. Even for an expert, a very long and complex scenario can result in a model that appears visually chaotic, which increases the cognitive load and mental effort required to construct the model.

Q: Understood. Do you think, with some additional training—maybe 30 minutes to an hour—you could use this method more proficiently?

A: If I had more examples, especially for modal verbs (as the training examples you provided were limited), I believe I could improve my speed.

Q: Do you have any further suggestions for improving this method?

A: Not at the moment.

Participants 4

Q: Your total modeling time was approximately 30 minutes. What do you think were the main factors affecting your modeling duration?

A: I initially misunderstood the meaning of "p" and "n" in the sections about obligations and permissions. I thought "n" indicated a penalty and that without a penalty, it might be a positive outcome but not "p." Later, I realized that "p" and "n" actually refer to whether permission is granted or not, and similar descriptions about obligations also influenced my understanding.

Q: It seems there was a slight issue with converting natural language into components, which affected your time. Do you think the method would yield better results if you had an additional 30 minutes to an hour of training?

A: Yes, definitely. If this part were explained more clearly, I wouldn't have any issues understanding the rest.

Q: During your modeling process, after completing the object modeling, there was a 2-3 minute pause. What caused this pause?

A: Yes, I went back to review the details. There were many relationships and arrows involved, and the content was relatively complex. I needed to double-check what each element represented.

Q: Do you think this method can handle more complex scenarios?

A: I believe it can, but as the complexity increases, there will likely be more overlapping lines in the model. This would require some form of automation to optimize the modeling process.

Q: Do you have any other suggestions or have you noticed any additional issues with the method?

A: When there are too many elements, the final model tends to become somewhat cluttered. Other than that, I haven't noticed any major issues.

Participants 5

Q: Your total modeling time was approximately 25 minutes. What were the main factors influencing your modeling process?

A: I feel that the drawing software had a significant impact on me, as did the computer screen. These external factors played a major role. As for the method itself, the modeling diagrams or components, and the natural language text, they didn't seem to affect me as much.

Q: Do you think this method can be used effectively after a brief training session?

A: Yes, it's quite simple.

Q: Do you think this method can handle more complex scenarios?

A: It should be able to, but I'm not entirely sure.

Q: What makes you uncertain about the method's ability to model complex scenarios?

A: The main issue is that the connections between components become too interwoven and messy. The elements are difficult to manage and organize.

Q: Do you have any other suggestions or have you noticed any other issues with this method?

A: The main issue is the chaotic connections between components. In complex scenarios, with more lines, tasks, and properties, everything becomes intertwined, making the model harder to read. Improving this aspect would be helpful.

Participants 6

Q: Your modeling time was approximately 20 minutes. What were the main factors influencing your modeling time?

A: The main factor was clarifying the relationships between roles, tasks, and properties.

Q: Was it about converting natural language into components, or was it more about understanding the relationships in the table?

A: It was about the natural language—the process of converting the natural language in the table into components and becoming proficient at it.

Q: Do you think this method can be effectively applied after a relatively short training session, such as 30 minutes to an hour?

A: Yes.

Q: Do you think this method can handle more complex scenarios, such as those involving 10–15 roles?

A: If a table like this is provided, then yes.

Q: So you're saying that having a document like this table would enable you to model very complex scenarios?

A: Yes.

Q: Your modeling time was relatively short. What do you think contributed to this?

A: It's because I trusted the experimental materials. If I didn't trust them, I might

have questioned the relationships between students and tasks and spent more time considering their correctness.

Q: So the speed of modeling depends on the accuracy of the descriptions in the requirement documents?

A: Yes, it depends on their accuracy.

Q: Do you have any other suggestions or have you noticed any problems with this method?

A: No.

Participants 7

Q: Your total modeling time was approximately 28 minutes. What do you think was the main factor influencing this duration?

A: The main issue was operational rather than knowledge-based. For example, I had to switch between multiple documents to view examples, check rules, and compare elements. Additionally, I had to constantly switch back and forth between the interface and the documents, which took up a lot of time.

Q: Can I understand this as the process of converting natural language into components, combined with the need for constant comparison?

A: Yes.

Q: Do you think this method can be mastered quickly with relatively short training—say, 30 minutes to an hour, even if not as short as 10 minutes?

A: Yes, I think it's possible.

Q: Do you believe this method could handle more complex scenarios, such as expanding from 4 roles to 10 or 15 roles?

A: Yes, as long as there is a clearly written requirement document.

Q: So the main challenge lies in the natural language descriptions in the table, correct?

A: Yes, converting the table into diagrams doesn't involve much technical difficulty.

Q: Do you have any other suggestions or did you encounter any issues with this method during the modeling process? Feel free to share.

A: No.

Participants 8

Q: Your total modeling time today was approximately 45 minutes. What do you think were the main factors influencing this duration?

A: First, it was due to learning the method itself, and possibly because I didn't fully grasp the concepts during the explanation. I mixed up the controls for "obligation" and "permission." Additionally, I confused two constraints within the mandatory modal constraints, as there are two types of mandatory constraints and three types of non-mandatory ones. There were also some issues with understanding the correspondence between natural language and components. Lastly, some controls, like the "possess" control and modal constraints, had overlapping functionalities that were difficult to interpret.

Q: If the training session were slightly longer—say, 30 minutes to an hour—do you think a beginner could grasp the method more proficiently?

A: Yes. I feel that I wasn't very proficient when modeling the first two components. After listening to the explanation, there wasn't much time to review thoroughly. By the time I modeled the later components, I barely needed to refer to the requirement document anymore.

Q: Do you think this method can handle more complex scenarios, such as modeling 10 or 15 roles?

A: I believe it can. Even with 10 or 15 roles, the structure mostly involves roles, tasks, and properties. Adding more elements might make the connecting lines messier and more interwoven, but it should still be manageable.

Q: Do you have any other suggestions or have you noticed any issues with this method?

A: Based on my experience, extending the training time would be beneficial. A slightly longer learning period could allow participants to review and understand the concepts better. Ideally, once people internalize the method and can model without constantly referring to the materials, the process would be faster and more efficient.