

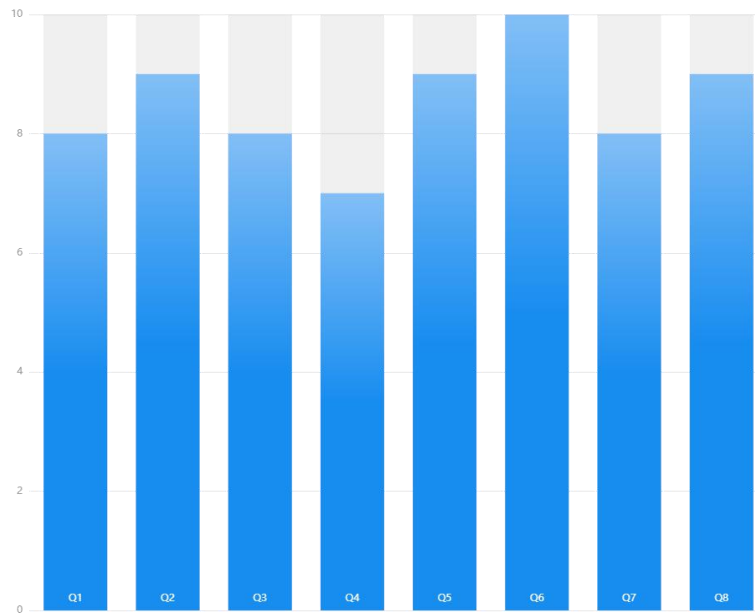
## Users Study

We invite 20 users (U1, U2... U20), including 5 professors and 5 doctors and 10 masters in the field of visualization, to use our visualization analysis framework AcaVis. The study is run on a computer equipped with an Intel Core i7-4790 CPU, a graphics card GTX560, and a 23.8-inch screen (1920 1080).

We asked each user to rate 8 questions, with a full score of 10 for each question.

Table 1. Questionnaire

	Questions
Q1	The system is easy to learn.
Q2	The system is easy to use.
Q3	the trend view metaphors through flow Sankey graph describes the overview of the network is reasonable and useful.
Q4	the topic distribution view metaphors through circular scatter graph provides a high-level overview of the network is reasonable and useful.
Q5	the structure view metaphors through wrapped contour graph shows the detailed structural characteristics of nodes and communities is reasonable and useful.
Q6	The control pancel of AcaVis is reasonable and useful.
Q7	The visual design is intuitive.
Q8	The visual design is aesthetic.



**Fig. 1.** shows the average scores.

As can be seen from the figure, AcaVis performs better in interactivity and practicability.