the understanding of the Technology Acceptance Model (TAM) and the elements evaluated are perceived usefulness and perceived ease of use, which influence the attitude towards using the reuse knowledge pattern during requirements elicitation process.

According to the TAM, a potential user's overall attitude toward using a particular system or an application is hypothesized to be a significant determinant of whether or not he actually uses it. Attitude toward using, in sequence, is a function of two significant beliefs, which are perceived usefulness and perceived ease of use. Perceived usefulness is defined as "the degree to which an individual believes that using a particular system would enhance his or her job performance" while perceived ease of use is defined as "the degree to which an individual believes that using a particular system would be free of physical and mental effort." [20].

Perceived ease of use is believed to have a causal effect on perceived usefulness since, all else being equal, a system that is easier to use will result in increased job performance. Design features usually influence both perceived usefulness and perceived ease of use. They are not theorized to have any direct effect on attitude or behavior, instead of affecting these variables only indirectly through perceived usefulness and perceived ease of use[20]. Therefore, the likelihood of perceived usefulness and perceived ease of use to influence the attitude to use the pattern tool application in order to improve performance and quality is high. Table I describes questions in the questionnaire.

TABLE I
TECHNOLOGY ACCEPTANCE MODEL (TAM) INSPIRED QUESTIONNAIRE

(TAM) Elements	Questions
Perceived Usefulness	1. Do you agree that having a pattern tool application can assist in reuse and requirements management? 2. Do you agree that pattern tool application can make it easier to elicit requirements? 3. Do you agree that pattern tool application can help in producing good quality requirements? 4. Do you agree that the pattern tool application can help in improving the requirements elicitation performance?
Perceived Ease of Use	1. The pattern tool application is easy to use. 2. Learning how to use a pattern tool application is easy for me. 3. It is easy to become skillful at using the pattern tool application.
Attitude	1. Using pattern tool application expedite the requirements elicitation process. 2. Using pattern tool application improves requirements quality.

C. The Protocol

The evaluation protocol is divided into two parts. The first part requires experts to use the tool prototype in order to experience the reuse-based requirements engineering. Beforehand, the researcher provides a briefing to the expert and demo the tool prototype flow and functionalities. Then, ample time is given to the experts to experience the reuse-based requirements engineering through the tool prototype. The second part requires the experts to answer the questionnaire as described in Table 4 in order to capture the experts' judgment.

III. RESULTS AND DISCUSSION

All five experts' judgments were gathered and analyzed. The judgment was about if the reuse-based requirements engineering improves the requirements elicitation process. The implementation of the reuse approach was made easy with the assistance of the tool which is referred to as a pattern tool application in this paper.

An analysis of Perceived Usefulness (PU), which derived from four questions, showed that the majority of the experts agreed that reuse-based requirements engineering through the pattern tool application are useful, as illustrated in Figure 7.

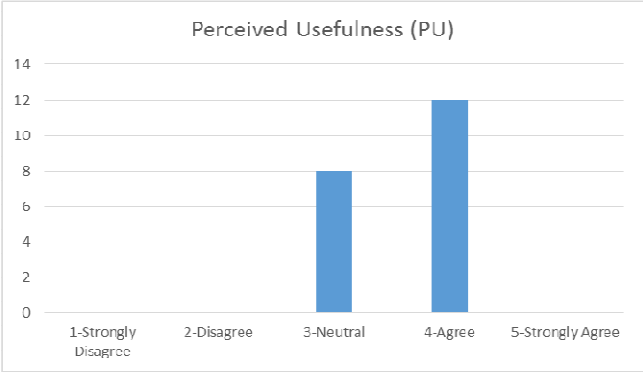

Fig. 7 Perceived Usefulness (PU)

Besides, an analysis of the Perceived Ease of Use (PEoU) which derived from three questions, showed that the experts agreed that the pattern tool application is easy to be utilized while performing requirements elicitation process with reuse, as illustrated in Figure 8.

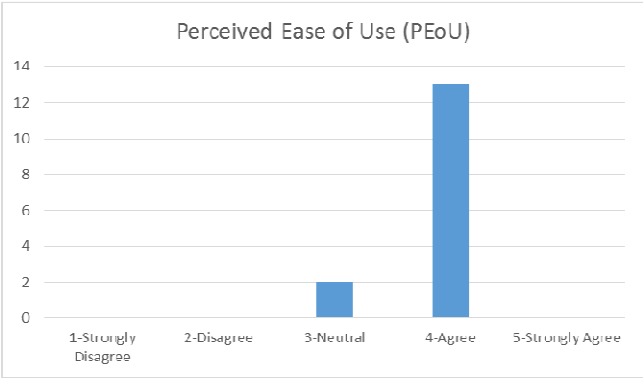

Fig. 8 Perceived Ease of Use (PEoU)

The evaluation results confirm that the theory saying PU and PEoU influence the Attitude (A) is valid. Figure 9 shows that the majority of the experts agreed that reuse-based requirements engineering assists in expediting the requirements elicitation process and improves requirements quality.

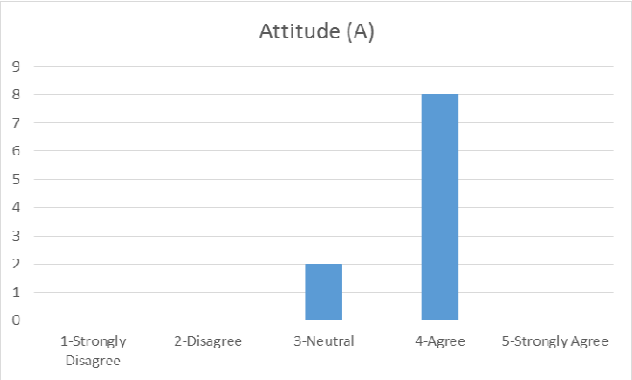

Fig. 9 Attitude (A)

IV. CONCLUSIONS

This paper provides background knowledge of reuse requirements engineering by utilizing knowledge patterns. Related researches are discussed, and the efforts lead to the development of the prototype tool to deploy reuse requirements engineering. The prototype evaluation through experts' judgment method by adapting the Technology Acceptance Model (TAM) shows the experts agreed that reuse improves requirements elicitation process performance and quality.

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