Validation Exercise Survey Questions

When developing a novel system, how important is it to evaluate the complexity of the system, and how effective are decision support tools for aiding system complexity evaluation?

We are interested in the challenges facing organisations as they evaluate candidate systems and the projects that strive to realise them; where uncertainty, unintended consequences and conflicting world views can make successfully realising the target system challenging to varying degrees.

Please now picture a set of systems in your own mind, ones that are relevant to you. Perhaps they are systems that you have worked on, or have extensive knowledge of, or ones that you feel comfortable talking about. Keep the same systems in mind throughout the survey. Please note down this set of systems somewhere you can access.

Imagine that your organisation has seen a Request for Proposal for a new version of the systems that you are thinking of, versions that involves some enhanced capabilities or novel deployment challenges, or are on a larger scale than previous projects. Your organisation is working on bids in response to this Request for Proposal. As part of this process, you are asked to help evaluate the complexity of the proposed systems and their operational environment. You have been told the aim of your evaluation is to enable your organisation to identify, and communicate, system complexity, and to guide the creation of an action plan to manage this complexity.

We have left details about these systems, which we will refer to from now on as your "target systems", and their context deliberately vague as we are interested in your individual perspectives and opinions on systems that are relevant to you and that you feel comfortable with.

With your target systems in mind, please now answer the following questions.

- 1. Please indicate whether you have read the instructions. (Yes,No).
- 2. How important is it to evaluate the complexity of your target systems early in their lifecycle? (Not At All Important, Somewhat Important, Moderately Important, Very Important, Extremely Important).
- 3. How important is it to evaluate the complexity of your target systems throughout their system lifecycle? (Not At All Important, Somewhat Important, Moderately Important, Very Important, Extremely Important).
- 4. When you think about evaluating the complexity of your target systems, which of the following terms come to mind? Please select up to five terms. (Tricky, Context-Specific, Complicated, Important, Confusing, Perspective, Informative, Valuable, Process, Domain, Challenging, Insightful).
- 5. In your own words, what terms come to mind when you think about evaluating system complexity? Please provide at least five terms.
- 6. How experienced are you at evaluating the complexity of a system? (Not Experienced, Slightly Experienced, Moderately Experienced, Very Experienced, Extremely Experienced).
- 7. How experienced are you at using the [TOOL]? (Not Experienced, Slightly Experienced, Moderately Experienced, Very Experienced, Extremely Experienced).
- 8. How effective do you think the [TOOL] can be at supporting a successful complexity evaluation of your target systems early in their system lifecycle? (Not At All Effective, Slightly Effective, Moderately Effective, Very Effective, Extremely Effective).
- 9. How effective do you think the [TOOL] can be at supporting a successful complexity evaluation of your target systems throughout their lifecycle? (Not At All Effective, Slightly Effective, Moderately Effective, Very Effective, Extremely Effective).
- 10. Please briefly describe the target systems you were thinking of in your own words:
- 11. What role would describe you best over the course of your career?

- 12. Approximately how much experience (in years) do you have in the role you answered the previous question with?
- 13. Finally, please provide your name to support data analysis. Remember, your responses will be treated anonymously and your name will never be disclosed.