**Heart-Centered Engineering**

This instrument will measure the extent to which you prioritize heart-related constructs (HRC) in engineering design. The survey below includes 29 questions that center on three components of HRC, including empathy, safety, and humanitarian considerations. Please indicate the extent to which you agree or disagree with the following statements. It may be useful to think about the questions in the context of designing an engineered product or solution for a particular user. All responses are anonymous, and the survey should take no more than 10 minutes to complete.

*Note: Each question includes a 5-point Likert Scale with the following options: Strongly Agree, Agree, Disagree, Strongly Disagree, Not Applicable.*

1. I think about the users of my product/solution during the engineering design process.
2. It is important to observe users in the setting that the product/solution will be used before creating my solution.
3. I put myself in the user’s shoes when I am designing something.
4. I prioritize the perspectives of others when working on a design team.
5. Sometimes it is difficult to imagine users’ needs during the design process.
6. I get feedback rom the users of my product/solution during the engineering design process.
7. If a user requests a change that reduces the efficiency of a design, it should be prioritized.
8. Every engineering design should be centered on creating the best user experience.
9. When designing a product/solution, I learn about the potential safety risks involved.
10. Documenting safety issues associated with my design is someone else’s responsibility.
11. I perform safety tests to ensure my design is safe.
12. I am willing to report safety concerns no matter the cost/setback.
13. I value mechanisms that allow users to report safety concerns about engineering products/solutions to designers.
14. Meeting safety standards is more important than meeting technical standards.
15. I am willing to make any change to my design if it improves safety.
16. Designing safe products/solutions is the responsibility of all team members.
17. I recognize that the products/solutions I design could affect the environment.
18. I consider whether my product/solution disadvantages a particular group.
19. Determining how my design may impact potential users is not a good use of my time.
20. I think about the potential impact of my design on the environment.
21. It is important to create sustainable, eco-friendly products/solutions.
22. It is important to create a fair design that can be used by all people.
23. Determining the impact of my design on the environment is not my job.
24. I am willing to change my design if it negatively impacts a group of people.
25. It is impossible to design something that does not negatively affect at least one group of people.
26. Modifying a design to make it user-friendly is a low priority.
27. I am willing to change my design if it negatively impacts the environment.
28. Modifying a design to make it more eco-friendly is a low priority.
29. All engineering designs should protect human health/wellbeing.