Risk Register D4EoL

			H/M/L	H/M/L	H/M/L		
ID	**Date raised**	**Risk description**	**Likelihood of risk occurring**	**Impact if risk occurs**	**Severity**	**Owner**	**Mitigating Actions**
1	Aug-22	Case studies not representative of industry practice/needs	Medium	High	High	BH	Mitigated through X partners covering various disciplines/fields who will agree case selection and provide additional cases as needed. Additional partners can also be onboarded (see ID 5)
2	Aug-22	Difficulties in prototyping PoC tools/methods	Low	Medium	Medium	JG	Mitigated by expertise of the team in digital and physical tool development and project partners that are major tool vendors e.g., Autodesk and ANSYS. Team can use 'Wizard of Oz' techniques as needed.
3	Aug-22	Generalisability and validation	Medium	Medium	Medium	BH	Mitigated by expertise in ethnographic studies and study design (Hicks) and use of practising designers at AMRC who are embedded within a R&D environment
4	Aug-22	IP and confidentiality	Low	Medium	Medium	JC	Mitigated via the use of a testbed operated at the AMRC.
5	Aug-22	One or more partners drop out	Medium/High	Medium	Medium	BH	UoB, UoC and UoS have dedicated industrial liaison teams and are well placed to identify additional partners already working with the institutions who would be able to join the consortia.
6	Aug-22	Overspend	Low	Medium	Low	BH	Resources have been profiled across the project to ensure value for money while also allowing a 10% contingency. New PhD students within the groups will be able to contribute to aspects of WPs. Investigators have substantive time given to the project and are able to undertake WP tasks as needed.
7	Aug-22	Pandemic	High	Low	High	JC	Online platforms can be used for all workshops and data gathering sessions if needed e.g. Miro. Institutions all have enterprise licences. AMRC design team are able to work onsite in infection resilient facilities if needed.
8	Aug-22	Lack of engagement by industrial partners	Low	Medium	Medium	BH	We have worked with the industrial partners before so can discuss with them personally should they start to lag behind due to their busy schedules. We also have LoS signed by them to use if necessary
9	Aug-22	Capture of irrelevant data from the testbed during redesign processes	Low	Low	Low	AB	The testbed design, will be revised in a two step process, and data captured and data capture points will be revised on a weekly basis during the process so we can change parameters and data capture points if we realise we are not capturing the right data
10	Aug-22	Lack of reliability/validity in the comparative results between existing toolsets vs new toolsets, in order to validate the tools	Low	Medium	High	AB	Data reliability/validity depends on the rigour and suitability of the methodological approach adopted. Our methodology include measures to address reliability/validity of results, and reliability/validity of first captured data and analysis will be checked on a weekly basis to double check if new reliability/validity measures need to be adopted early in the project
11	Aug-22	Unable to augment/extend existing tool(s)	Low	High	High	BH/JG	The research team have extensive experience of tool development using packages such as Blender, Python and Java. With Autodesk as a partner the team will have access to and dev support for the Forge API allowing full access to all product models and model data. Teh team are also proficient in using Wizard-of Oz techniques to emulate minimum viable tools/methods.
12	Aug-22	Unable to recruit appropriately trained PDRAs	Low	Medium	Medium	BH/JC/YL	All partners are part of large research units with multiple projects and large numbers of PDRAs working in related areas. All groups practice team-based, flexible working where PDRAs work across multiple projects contributing the right knowledge at the right time. This model also allows the project resource to be profiled (increased/decreased) as needed.