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The University of Auckland Private Bag 92019

MANAGER INFORMATION SHEET

(Manager of Participants)

Project title: Representing and reasoning about the quality of preliminary

design information in engineering product development

Name of Principal Dr David Wynn

Investigator/Supervisor:

Researcher introduction

My name is Jens Brinkmann. I am a PhD candidate in Mechanical Engineering at the University of Auckland. I would like to invite employees at your company to participate in my research project which aims to explore the nature of Preliminary Design Information and how it influences engineering work.

By participating, you and your employees have the opportunity to gain a better understanding of how Preliminary Design Information affects work in your company and how Preliminary Design Information can be managed in practice.

I am now asking for the participation of your employee(s) in this study. This document provides information you will need to make an informed decision.

Purpose of the research

- In the early stages of a design project, many important issues are unknown or only known imprecisely.
- Many design modelling tools (e.g. CAD/CAE tools) require parameter values to be entered in a precise manner, even if the quality of the information is known to be poor.
- This can cause problems in which downstream consumers of design information waste effort on tasks that are not yet justified.
- If the status of the information the Quality of Preliminary Design Information (QoPDI) could be made more explicit, this could help to avoid such problems, potentially leading to reduced rework and to better designs.
- We are currently seeking insight into how practitioners handle Preliminary Design Information, to inform this ultimate goal.

We now ask for permission for your employee(s) to participate in this study and to access your site to talk with them. We also ask for your assurance that an employee's decision to participate, or not, will not result in any advantages or disadvantages for them.

Data destruction/future use

Data collected during the study will be electronically stored at the University of Auckland for a minimum of three years and a maximum of ten years. During this period, it is expected that these data will be used for research purposes similar to what is described above, and in publications (subject to the Anonymity and Confidentiality conditions described below).

At the end of the maximum period collected data will be destroyed, unless further approvals to retain the records have been sought and granted.

Anonymity and Confidentiality

According to the University's Code of Conduct for Research:

- The recording or transcript from a participant's interview will not be shared with any third party (including their manager)
- Any potentially sensitive information that is mentioned concerning product design details, profit margins, financial key figures will not appear in any research report
- Individuals' names and your company name will not appear in any research report.
- Some comments in the interview may appear as quotations in written research reports, but will not be traceable to individuals by name.
- In written research reports individuals will be referred to only by your role and number of years' experience, as well as a general description of the company (including its size and a description of the type of product, but not including the name of the company)

What do I do if I have questions or concerns about this research?

Any questions or concerns about this research should be notified in the first instance to the Principal Investigator, Dr David Wynn, <u>d.wynn@auckland.ac.nz</u>, +64 9 373 7513 or the Student Researcher, Jens Brinkmann, <u>j.brinkmann@auckland.ac.nz</u>, +64 9 277184219

For any concerns regarding ethical issues you may also contact the Chair, the University of Auckland Human Participants Ethics Committee, at the University of Auckland Research Office, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 ext. 83711. Email: ro-ethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on May 7th, 2018 for three years. Reference Number 021145.