# **OUSE Project – Terms of Reference**

## **Introduction**

**Background:** The initiative is based on a doctoral study that examines how professionals specialising in change management may create technological projects that incorporate strategies for reducing energy consumption and carbon emissions. To establish the framework, the researcher intends to employ a collaborative action research group methodology that involves persons possessing knowledge and a comprehensive understanding of the subject being addressed. The GSF, with its emphasis on tooling, ideals, and teaching, possesses the essential elements to foster research incubation. Furthermore, individuals from a diverse range of organisations are ideal candidates to join the action research group.

**Objective:** The key question we are trying to address: ***is how to embed and use software emissions data in organisations?***

**Scope:** The project will offer a written exposition of a framework and its underlying methods. The content will draw upon the tools and principles derived from GSF, as well as those from other organisations, academics, and consultancies. Developing a software programme to assist change professionals in managing technology initiatives that include energy and carbon savings is not part of the objectives of this project.

## **Parties Involved**

**PhD Researcher**

**Name:** Pindy Bhullar

**Affiliation:** University of Southampton (PhD research) / UBS

**Contact Information:** p.k.bhullar@southampton.ac.uk / pindy.bhullar@ubs.com

**Foundation Organization**

**Name :** Green Software Foundation (GSF)

**Contact Information:**

## **Project Description**

**Research Topic:** This research aims to develop a framework and methodology that enables change and project organisations to make well-informed decisions regarding energy and carbon reduction while implementing technology-based projects. The definition of technology based projects will be agreed with the action research group.

**Methodology:**

‘Action Research Group’ Research Methodology is a cooperative strategy for research that entails a repetitive sequence of planning, implementing, observing, and contemplating, with the objective of enhancing practices or resolving challenges within a group or community.

This methodology is characterised by its participatory and collaborative nature. It follows a cyclical process of planning, acting, observing, and reflecting. The main objective is to bring about change or improvement in the situation under study. The iterative procedure will facilitate the creation and testing of the methodology for ongoing enhancement.

The advantages encompass practical solutions, the empowerment of participants by their active involvement, increased comprehension, enhanced collaboration and communication among group members, and the utilisation of evidence-based practice.

This research is most appropriate for this research methodology and collaborating with GSF and its members to address the problem collectively. An action research group will be established within the GSF. The participants will consist only of members of the GSF who are all volunteers.

**Expected Outcomes:** The objective of the OUSE project is to establish a framework that incorporates a practical approach to enable change professionals to make well-informed decisions on energy and carbon reduction when executing technology based projects. The content from the action research group will be open source and be part of the GSF creative commons license.

## **Roles and Responsibilities**

**PhD Researcher:** The researcher is responsible for leading the project and ensuring that the action research group stays within the defined project scope and research issue. The researcher will offer expertise and direction, overseeing academic perspectives, project planning and implementation, and assistance from her industry group that are supporting the research.

**Foundation Organization:** The foundation will oversee the management and organisation of the project, ensuring that meetings are conducted and that questions and comments are addressed on GitHub. The members of the action research group will contribute their perspectives, guidance, and recommendations to ensure a cooperative approach.

## **Timelines and Milestones**

The timelines are focused on the development of the framework:

* January 2024 – Agree the project scope with GSF.
* February 2024 – Define the key terms – e.g. how we classify technology based projects.
* March to August 2024 – Development of the framework.
* September to October – Solicit feedback and update changes.
* October 2024 to January 2025 – Write PhD paper incorporating the methodology used and the development process of the framework.

Testing the framework will be planned separately.

## **Funding and Resources**

For this project there are no requirements for additional funding. The project is a candidate for the accelerator workshop(s) as part of the GSF initiative.

Online tools may be required, and will be requested when needed.

## **Reporting and Evaluation**

**Reporting Schedule:** The OUSE project meeting will be conducted bi-monthly on Wednesdays for 45 minutes.

**Evaluation Criteria:** A framework with the underlying methodology agreed by the action research group and is ready to trial in organisations.

## **Confidentiality and Intellectual Property**

Preserving the privacy of data is essential for upholding confidence and maintaining the integrity of our community and stakeholders. Confidential data encompasses non-public information that is designated as sensitive or personal. This encompasses various types of information, such as user data, personal information of contributors, security details, and any information that the project maintainers have designated as confidential.

The OUSE project will be overseen through the GitHub platform, under the management of the GSF. The action research participants will be provided with full access to all paperwork, project tracking, and communications.

The PhD researcher will document the process of constructing the framework, including significant milestones, framework iterations, questions and responses, and the final framework. This documentation will be included in the research report. All sensitive data protocols will strictly adhere to the protocols established by the University of Southampton. The PhD has received permission from the ethics committee. The key data confidentiality protocols are listed below:

* The PhD research paper will not provide any personal data, such as names, roles, ranks, or age, of the action study participants.
* The PhD study paper will not reveal the names of the companies participating in the action research.
* The PhD study paper will provide the categorization of industries among the participants of the action research.
* The GSF role and their contribution to the action research group will be disclosed in the research paper. The foundation will be cited in accordance with the University's guidelines.
* The GSF management team and the action research participants will be given the chance to review and comment on the research paper prior to the publication process.
* Upon completion of the PhD, all data gathered during the framework development process will be deleted from the University of Southampton systems.

The framework and methodology will be available on the GSF website after it has been syndicated and approved by the GSF members. The content produced from this action research group will delivered in accordance with the GSF creative commons license.

The process of creating the framework and methodology, the learnings, the improvements and linkages to the academic theory will be the property of the PhD researcher.

## **Risk Management**

The OUSE project is susceptible to the possible hazards of failing to meet crucial deadlines. In order to reduce these risks, all instances of delays will be promptly conveyed to the action research group and recorded in the agenda minutes on GitHub.

Additionally, there is a potential risk of action research participants being unavailable or withdrawing from the research group. To minimise this risk, the GSF management team will be informed and a request will be made to increase the number of participants.

## **Termination Conditions**

**Project Completion:** The Terms of Reference will be considered fulfilled and thus terminated upon the successful completion of the project as outlined in the project objectives and deliverables section. Completion is subject to the approval of the GSF management team, who will assess if the deliverables meet the agreed-upon standards and objectives

**Mutual Agreement:** The Terms of Reference can be terminated at any time by mutual agreement of both parties. In such an event, both parties must provide a written notice of agreement, outlining the reasons for termination and the conditions for concluding any pending work.

## **Signatures**

This Terms of Reference document is hereby agreed upon and accepted by the undersigned parties. The signatures below represent an understanding of the responsibilities and expectations as outlined in this document.

**GSF:**

Name: ……………………………………………………………………………………………………………

Title: ……………………………………………………………………………………………………………

Signature: ……………………………………………………………………………………………………………

Date: ……………………………………………………………………………………………………………

**PhD Researcher:**

Name: ……………………………………………………………………………………………………………

Title: ……………………………………………………………………………………………………………

Signature: ……………………………………………………………………………………………………………

Date: ……………………………………………………………………………………………………………