Plan Overview

A Data Management Plan created using DMPonline

Title: Developing an outcome based wellbeing focused business model in construction

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Project abstract:

While the construction industry is essentially a means of delivering change to the physical environment, it should not be assumed that the human resource delivering that change is comfortable with innovative change in the context of custom and practice. An innovation-based approach (to positively transforming the industry) requires a human resource confident in its abilities to find and implement innovative solutions. However, the stress represented by significant change can lead to productivity reduction; across the UK economy, £70-100bn is 'lost' annually due to mental health absences (Davies, 2014). Overall, there is evidence that stress results in approximately 400,000 lost working days annually in the construction industry (Christodoulou, 2017). In 2016/17 stress-related aspects of mental wellbeing became, for the first time, the most commonly reported causes of construction industry work-related illness. The mental wellbeing of the industry's human resource is an important consideration regarding both how innovation is currently implemented and how it may be implemented in the future. This concern is being addressed to some extent but the responses to date, while worthwhile, do not represent innovation (in its transformation sense); they are mostly 'sticking plasters' of a quantitative and largely objective nature (such as HSE's Management Standards approach (TSO, 2017)) which, whilst undoubtedly a useful first step, cannot be regarded as transforming the industry's response to stress. The current situation has arisen while the industry has been operating, for the most part, on a traditional basis of measuring performance against specification. However, as the industry is encouraged to move to outcomes-based procurement (the changed circumstances or behaviours that result from the use of outputs), as opposed to achieving conformance to specification, there will arise a level of uncertainty amongst the human resource. If the industry is to transform to achieve such outcomes as improving the quality of build for structures characterised by embedded active technologies, a disruptive, user-informed, business model will be required.

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Developing an outcome based wellbeing focused business model in construction

0. Proposal name

0. Enter the proposal name

Developing an outcome based wellbeing focused business model in construction

1. Description of the data

1.1 Type of study

This study will include three exploratory case studies for an initial view of wellbeing of employees in the construction industry. Hence this study seeks the opinions of construction stakeholders through an intrepretivist approach. The multiple case study will include three construction companies and will have embedded cases covering wellbeing and outcome-based business model. A focus group workshop will explore and confirm the findings the case study.

This study will be cross sectional in nature and will end within a maximum time frame of six (6) months.

1.2 Types of data

This research will be qualitative in nature. The proposed research strategy will cover case study interviews and focus group through a workshop. Furthermore, the questions for the case study interviews and focus group workshop will be derived from an extensive lietarture review. The literature researh will explore built environment, business models and wellbeing articles in Scopus, Emerald publications, Google Scholar and Science direct.

1.3 Format and scale of the data

The format and scale of the data will be divided into three categories:

1) Meta analysis of lietature in PDF and word files. Over 250 artciles will be reviewed and analysed. A comprehensive database search from Scopus, Science direct, Emerald journals andGoodle Scholar will provide a comprehenisve PDF repository of articles for the meta analysis in this study.

2) Audio recordings and transcribed interview data. Six (6) interviews will be conducted in total. Two (2) interviews each from three (3) different organisations will make up the six (6) interviews. The audio recordings will be in an mp3 format and the trasncribed will be in a doc. format.

3) Video, audio recordings and transcibed data from an industry workshop (focus group). Six (6) respondents from large and small and medium scale construction companies will be part of the focus group interview. A represnetative of the Aberdeen city council (government client) will also be part of the focus group interview. The video recording of the focus group session will be facilitated by RGU's Panopto system. The videos will be in HD format and all audio recodings will be in mp3 format.

2. Data collection / generation

2.1 Methodologies for data collection / generation

New data exploring the perception of construction employee, contractors, cleints and consultants towards an outcome-based business model is required for effective transofrmation of the UK construction industry.

The data will be collected through semi-structured interview questions designed from the findings of the lieterature review. The RGU ethical policy on research will be adhered to. Please see: https://www3.rgu.ac.uk/file/research-ethics-policy-pdf-60kb.

Anonymity, confidentiality and the GDPR 2018 act on data protection will all be followed during the course of collecting data from the respondents.

2.2 Data quality and standards

The consistency of the data collected will go through an intial pilot phase where the semi-structured interview questions will be reviewed internally. All the co-investigators will be requested to review the consistency, vocabular, accuracy, standard, and relevance of the questions posed for the case study and focus group workshop interviews.

The transcribed audio data will also be reviewd by each co-investigator for bearing the aforementioned criteria for quality in mind.

3. Data management, documentation and curation

3.1 Managing, storing and curating data

The transcribed data and artciles collected will be stored in Robert Gordon University's web based storage system which could centrally be backed up and restored in case of any loss or damage. The University's data storage and accessibility will be followed throughout the duration of this research (6 months). Furthermore, the UKRI concordant on open research data will be implemented during and after this research.

3.2 Metadata standards and data documentation

Data from the case study and focus groups will be converted to transcibed interview data. They will be categorised accordingly for accessibility and storage. The caset study interview data will involve consultant and contractors. The categorisation will further involve gender, age, years of experience and profession.

A detailed content analysis will also follow the project objectives 3 and 4 which seeks to establish the components of the stakeholders and associate these components with a wellbeing business model.

3.3 Data preservation strategy and standards

Data collected in this study will be presrved for over the next six (6) months after the project completions. This is necessary for dissemination of findings in ARCOM and COBRA 20201 conferences. The data will be stored accoriding to the UKRI data sharing standards for further research into wellbeing of construction employees in the UK.

Please see https://www.ukri.org/files/legacy/documents/concordatonopenresearchdata-pdf/

4. Data security and confidentiality of potentially disclosive information

4.1 Formal information/data security standards

Personal information from the respondents will be anonymised and will not be disclosed to any other party. Hence, the names of the respondents will not be part of the data collection. The data collected will only include information about their wellbeing, working hours, profession, gender, age, years of experience, and other conceptual variables which will be developed from the lietature rveiew findings. The data collected will follow the GDPR 2018 regulations for data protection. The storage of data will eb web based in accordance to RGU's standard.

In case of data sharing amongst the co-investigator, all data will be shared through the University Shared drive and deleted when they are no longer required.

4.2 Main risks to data security

There are no main risks to the data security once the data is stored in RGU's web storage system.

5. Data sharing and access

5.1 Suitability for sharing

The data collected will be suitable for sharing because personal information will not be collected from the participants. All data will be anonymised and there are no sensitive data addressing, race, nationality, political affiliation or sexual orientation. The UKRI concordant on shairng and storing data will be adopted in this study.

5.2 Discovery by potential users of the research/innovation data

Potential new users can find the data through:
https://www.ukri.org/funding/information-for-award-holders/data-policy/https://www.ukri.org/files/legacy/documents/concordatonopenresearchdata-pdf/

5.3 Governance of access

The contact person for data sharing will be:
Principal Investigator: Dr Huda Salman
Co-Invesytigator: Dr Temitope Omotayo
The data will be stored in the UKRI specified database for this further research.

5.4 The study team's exclusive use of the data

The primary data will be accessible to toher researchers in January 2021. Although the project will end in July 2020, adequate time will be required for journal and conference paper preparation. This will necessitate additional data analyses.

5.5 Restrictions or delays to sharing, with planned actions to limit such restrictions

There are no restrictions to sharing after the project completion date apart from the aforementioned timeline.

5.6 Regulation of responsibilities of users

The external users will be bound by UKRI data sharing agreement.

6. Responsibilities

6. Responsibilities

Dr Temitope Omotayo
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7. Relevant policies

7. Relevant institutional, departmental or study policies on data sharing and data security

Policy	URL or Reference
Data Management Policy & Procedures	https://library.rgu.ac.uk/researchdata#section-4
Data Security Policy	https://library.rgu.ac.uk/researchdata#section-4
Data Sharing Policy	https://library.rgu.ac.uk/researchdata#section-4
Institutional Information Policy	https://library.rgu.ac.uk/researchdata#section-4
Other	
Other	

8. Author and contact details

8. Author of this Data Management Plan (Name) and, if different to that of the Principal Investigator, their telephone & email contact details

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