

Who is Going to Lead Change? Equipping Future Project Managers to Drive Disruptive and Sustainable Projects

David Pontin

Nicholas Dacre

Caroline N J Tite

Lydia Adigun

Abstract

Efforts to drive sustainable and disruptive change are gaining significant attention in the literature, highlighting the importance of project managers as crucial actors in driving such transformations. This paper seeks to identify the competencies and skills that future project managers will require to drive disruptive and sustainable projects. A mixed-methods approach will be employed to gather and analyse data on the subject within the context of project management students and alumni at UK universities being representative of the next generation of project managers. Early insights suggest that the emerging skill set for project managers leading disruptive and sustainable change projects involves a combination of technical, interpersonal, and ethical competencies. Therefore, the potential implications of this research underpin the argument that it is crucial to examine how project managers can gain the necessary skills and competencies to lead such transformations.

Keywords: project management, sustainability, responsible management, competencies, skills, disruptive change.

Project Managers as Crucial Actors in Driving Sustainable Change

Efforts to drive sustainable and disruptive change are gaining significant attention in the literature as organisations seek to reduce their carbon footprint, adopt more sustainable practices, and promote social responsibility (Lozano, 2013; Silvius & Schipper, 2014b; Stanitsas et al., 2021; White et al., 2019). Emerging technologies, systems, and policies play an essential role in this regard (Onat et al., 2020), disrupting traditional business models and transforming industries across sectors. For instance, renewable energy technologies, such as solar and wind power, are enabling organisations to adopt more sustainable energy sources and reduce their environmental impact (Sankaran et al., 2022). Similarly, green transportation solutions, including electric vehicles and shared mobility (Bohn & Braun, 2021), are reshaping the transportation sector, reducing greenhouse gas emissions, and promoting sustainable modes of transportation. The circular economy (Piyathanavong et al., 2022), which leverages innovative technologies like 3D printing, blockchain, and AI, is also gaining momentum by optimising resource consumption and reducing waste. These technological initiatives are having a significant impact on future expectations from businesses, but implementing these initiatives can be more challenging than devising solutions, underscoring the importance of project managers as crucial actors in driving such transformations.

The role of project managers as leaders in driving change is gaining increased attention in the literature (Karlsen et al., 2020). For example, project managers may rely on specific skill sets that ideally should include ethical considerations, responsibility, and sustainability, as these concepts are interconnected (Silvius & de Graaf, 2019). This emergent approach, referred to as responsible leadership (Clarke et al., 2017), recognises the need for project managers to be mindful of social and environmental impacts, in addition to extant project management priorities such as scope, schedule, and budget. Furthermore, although a growing body of literature is being developed relating to teaching responsible management, much of this is focused on the educationist perspective and a learner-centric gap in teaching responsible management has been identified (Cullen, 2020). We therefore argue that examining the

competencies and skills that future project managers will require to successfully lead disruptive and sustainable projects is essential.

This research thus seeks to identify the key challenges and trends in project management and explore the implications for future leaders. Specifically, we aim to investigate the competencies and skills that future project managers will require to drive disruptive and sustainable projects. We aim to examine the current state of project management and identify the key challenges and trends that affect future project managers. Ensuing this, we seek to investigate the competencies and skills that future project managers will need to succeed in driving change, with a particular focus on disruptive and sustainable projects. Finally, the outcomes of this research will aim to provide recommendations for organisations and individuals on how to prepare the next generation of project managers to lead successful change initiatives. By doing so, we plan to contribute to the growing body of literature on project management and sustainability and to offer practical insights into how future project managers can drive progress towards a more sustainable future.

Sampling Method and Participant Group

To address the research objectives of this study, we propose a mixed-methods approach to gather and analyse data on the competencies and skills required by future project managers to drive disruptive and sustainable projects (Tashakkori & Creswell, 2007). Specifically, we seek to investigate this within the context of project management students at UK universities being representative of the next generation of project managers.

We will use a purposive sampling method to select a cohort of over 500 project management students and alumni from four UK universities to participate in our study (Etikan et al., 2016). A survey questionnaire using Qualtrics will be used to collect quantitative data (Obondi, 2022), and in-depth interviews will be conducted with a sub-sample of students to provide qualitative data. The survey questionnaire will include closed-ended questions to explore responsible leadership, sustainability, and ethics among project management students and their interests and desires for their future careers. The qualitative data collected from the in-depth interviews will provide rich, in-depth insights into the participants' experiences, perceptions, and opinions on the subject (Deterding & Waters, 2021).

The data collected from the survey questionnaire and in-depth interviews will be analysed using a mixed-methods approach. Descriptive statistics, such as means and standard deviations, will be used to summarise the quantitative data, and inferential statistics, such as regression analysis, will be used to examine the relationships between variables (Chatterjee & Hadi, 2006). Thematic analysis will be used to identify common themes and patterns in the qualitative data. To triangulate the findings, we will also conduct a systematic review of the literature on teaching and learning responsible leadership, sustainability, and ethics in project management. The systematic review will be conducted using a comprehensive search strategy, and the findings will be synthesised using a narrative approach.

Implications of Research Objectives

Despite the lack of comprehensive findings, this discussion will explore the implications of our research question and objectives, and relate them to the current state of project management and sustainability. Firstly, project management has evolved significantly from its traditional form, requiring project managers to possess not only technical skills but also interpersonal and leadership skills (Crawford et al., 2006; Bojeun, 2013). This trend is particularly relevant for complex projects or those at the programme or portfolio level, which

often involve multiple stakeholders, high uncertainty, and a broader scope (Thiry, 2015). This evolution mirrors the findings of other leadership studies, such as those by Goleman (1998) and Collins (2001), who identified the importance of emotional intelligence and a people-centric approach to leadership.

One important aspect that impacts ethical decision making in change projects is the corporate culture or governance structure within which the project exists (Clarke et al, 2017; Hanke et al, 2009). This implies that opportunities for individual agency can be limited, and the "moral intensity" of the project can fluctuate throughout its lifecycle (Clarke et al, 2017). However, responsible leadership places ethical decision making at the core of project management (Clarke et al, 2017). To become a responsible leader, project managers may thus require a combination of acquired qualities, including resilience or grit (Duckworth, 2019) and technical stakeholder management and engagement skills (Pieterse et al., 2022). The ability to influence, persuade, and maintain extensive stakeholder engagement has been noted as being crucial to ensure ethical decision making (Clarke et al, 2017).

There has also been a notable increase in the number and variety of competencies identified for effective leadership in the context of sustainable and disruptive projects. Laasch et al.'s (2022) comprehensive review of high-quality journals in this field highlights this trend, indicating the growing number of competencies and a greater appreciation of their importance. Despite the wealth of competencies identified, navigating and applying them in practice remains a challenge (Silvius & Schipper, 2014a), raising questions about the usefulness of this literature for project management education and practice. However, identifying those competencies most mentioned in this literature and particularly those with each over 100 mentions in the sub-competence or more specific competence category, offers a more succinct list of which includes; Reflexive introspection (138); Handling emotions (101); Resilient persistence (135); Cultivating relationships (109); Principled leadership (102); Systematic appreciation (104); Temporal thinking (125); and Strategic planning (110) (Laasch et al, 2022). As the literature increasingly defines the emerging skill set required for responsible leaders and project managers, the question arises of how aspiring leaders can acquire these competencies.

The emerging skill set for project managers leading disruptive and sustainable change projects aligns with this trend, as it emphasises the importance for project managers to consider the ethical, social, and environmental impacts of their projects, in addition to traditional project management priorities (Clarke et al., 2017). This concept, known as Responsible Leadership, recognises the interconnectedness of ethical considerations, responsibility, and sustainability, and has the potential to encourage future project managers to take a holistic and long-term perspective (Laasch et al., 2022). Given the increasing attention on sustainable and disruptive change initiatives, we argue that it is imperative to examine and study the next generation of project managers to lead successful change projects. This preparation requires a learner-centric approach, as identified in the literature gap on teaching responsible management from a learner-centric perspective (Cullen, 2020).

This also implies the need for learning tools and experiences that focus on facilitating the development of competency areas that have been identified as particularly important for responsible leadership, such as cultural intelligence, reflexive introspection and resilient persistence. In addition to learning experiences, equipping aspiring project leaders requires a spectrum of supportive techniques, from mentoring to peer-to-peer learning, that foster the cultivation of the desired leadership traits (Stigmar, 2016). Accordingly, professional

development programmes and courses (Daniëls et al., 2019; Huber, 2011) ought to inculcate principles that transcend conventional economic rationality and advance the cultivation of ethical principles, emotional intelligence, and other related capabilities (Laasch et al., 2021). Moreover, the efficacy of such programmes would be enhanced by supplementing them with social learning activities that enable participants to integrate and agree on the changing ethical responsibilities, roles, values, and skills associated with their project or position (Bai et al., 2019).

This discussion highlights possible implications of responsible leadership in project management and sustainability, in terms of the recently identified emerging skill set for project managers. It has been suggested that individual agency may be limited within existing corporate culture or governance structures, but responsible leadership places ethics at the core of project management and promotes a people-centric approach to leadership. To become a competent responsible leader, the highlights suggests that future project managers should encompass a range of qualities that can be learnt through development programmes, courses, and supportive techniques. Furthermore, the efficacy of these have the potential to be improved through social learning activities and the integration of ethical principles.

Future Competencies for Project Managers

In line with the research objectives and methodology, this study is a work in progress. While findings are yet to be comprehensively executed, the research question and objectives shed light on the importance of taking a people-centric approach and a holistic perspective to project management. Through this research, we aim to identify the key challenges and trends in project management and investigate the competencies and skills that future project managers will require to drive disruptive and sustainable projects. The study also aims to provide valuable insights into the demands for teaching and learning responsible leadership, sustainability, and ethics among project management students at UK universities and the best ways to meet these demands.

The potential implications of this research suggest that the emerging skill set for project managers leading disruptive and sustainable change projects involves a combination of technical, interpersonal, and ethical competencies. As organisations seek to reduce their carbon footprint and adopt more sustainable practices, it is crucial to examine how project managers can gain the necessary skills and competencies to lead such transformations. This research will provide insights into the current state of project management and identify the key challenges and trends that affect future project managers. Doing so will contribute to the growing body of literature on project management and sustainability and offer practical recommendations for practice.

List of References

- Bai, Y., Lin, L., & Liu, J. T. (2019). Leveraging the employee voice: a multi-level social learning perspective of ethical leadership. *The International Journal of Human Resource Management*, 30(12), 1869-1901.
- Bohn, S., & Braun, T. (2021). Field-configuring projects: How projects shape the public reflection of electric mobility in Germany. *International Journal of Project Management*, 39(6), 605-619.
- Bojeun M (2013). Program Management Leadership. Barnes & Noble.
- Chatterjee, S., & Hadi, A. S. (2006). *Regression analysis by example*. John Wiley & Sons.

- Clarke, N., D'Amato, A., Higgs, M., Vahidi, R. (2017). Responsible Leadership in Projects: Insights into ethical decision making. PMI
- Collins, J. (2001). Level 5 Leadership: The triumph of humility and fierce resolve. Harvard Business Review
- Crawford, L., Morris, P., Thomas, J., Winter, M. (2006). Practitioner development: From trained technicians to reflective practitioners.
- Cullen, J. G. (2020). Varieties of responsible management learning: A review, typology, and research agenda. *Journal of Business Ethics*.
- Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational research review*, 27, 110-125.
- Deterding, N. M., & Waters, M. C. (2021). Flexible coding of in-depth interviews: A twenty-first-century approach. *Sociological methods & research*, 50(2), 708-739.
- Duckworth. (2019). Grit: Why passion and persistence are the secrets to success. Penguin.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Goleman, D. (1998). What makes a leader? IQ and technical skills are important, but emotional intelligence is the sine qua non of leadership. Best of Harvard Business Review
- Hanke, T., Stark, W. (2009). Strategy development conceptual framework on corporate social responsibility. *Journal of Business Ethics*.
- Huber, S. G. (2011). The impact of professional development: a theoretical model for empirical research, evaluation, planning and conducting training and development programmes. *Professional development in education*, 37(5), 837-853.
- Karlsen, J. T., Farid, P., & Torvatn, T. (2020). Project manager roles in a public change project: the case of a municipal merger. *International Journal of Organization Theory & Behavior*.
- Laasch, O., Moosaymer, D.C., Antoncopoulou, E.P. (2022). The interdisciplinary responsible management competence framework: an integrative review of ethics, responsibility, and sustainability competences. *Journal of Business Ethics*.
- Lozano, R. (2013). Are companies planning their organisational changes for corporate sustainability? An analysis of three case studies on resistance to change and their strategies to overcome it. *Corporate Social Responsibility and Environmental Management*, 20(5), 275-295.
- Obondi, K. (2022). The utilisation of project risk monitoring and control practices and their relationship with project success in construction projects. *Journal of Project Management*, 7(1), 35-52.
- Onat, N. C., Aboushaqrah, N. N., Kucukvar, M., Tarlochan, F., & Hamouda, A. M. (2020). From sustainability assessment to sustainability management for policy development: The case for electric vehicles. *Energy Conversion and Management*, 216, 112937.
- Pieterse, B., Agyekum, K., Manu, P., Mohandes, S. R., Cheung, C., & Yunusa-Kaltungo, A. (2022). Examining critical project management skills for successful delivery of major maintenance projects: Insights from the United Kingdom energy sector. *Engineering, Construction and Architectural Management*(ahead-of-print).
- Piyathanavong, V., Huynh, V.-N., Karnjana, J., & Olapiriyakul, S. (2022). Role of project management on Sustainable Supply Chain development through Industry 4.0 technologies and Circular Economy during the COVID-19 pandemic: A multiple case study of Thai metals industry. *Operations Management Research*, 1-25.
- Sankaran, S., Clegg, S., Müller, R., & Drouin, N. (2022). Energy justice issues in renewable energy megaprojects: implications for a socioeconomic evaluation of megaprojects. *International Journal of Managing Projects in Business*(ahead-of-print).

- Silvius, A. G., & de Graaf, M. (2019). Exploring the project manager's intention to address sustainability in the project board. *Journal of Cleaner Production*, 208, 1226-1240.
- Silvius, A. G., & Schipper, R. P. (2014a). Sustainability in project management competencies: analysing the competence gap of project managers. *Journal of Human Resource and Sustainability Studies*, 2014.
- Silvius, A. G., & Schipper, R. P. (2014b). Sustainability in project management: A literature review and impact analysis. *Social Business*, 4(1), 63-96.
- Stanitsas, M., Kirytopoulos, K., & Leopoulos, V. (2021). Integrating sustainability indicators into project management: The case of construction industry. *Journal of Cleaner Production*, 279, 123774.
- Stigmar, M. (2016). Peer-to-peer teaching in higher education: A critical literature review. *Mentoring & Tutoring: partnership in learning*, 24(2), 124-136.
- Tashakkori, A., & Creswell, J. W. (2007). The new era of mixed methods. In (Vol. 1, pp. 3-7): Sage Publications.
- Thiry, M. (2015). Program Management. Gower.
- White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22-49.