

Project-based Capital Investment: Value Creation and Distribution

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Call for papers

In 2009, when the *California Management Review* (CMR) published a special issue on Infrastructure meets Business (Gil & Beckman 2009), conceptual frameworks on project-based capital investment were rooted in decades-old Western traditions, where delivering ‘on time and budget’ was the golden standard; project value chains were restricted to customers and suppliers; and cost-benefit analysis was about an additive logic where user willingness to pay outweighs costs. These traditions had fuelled a judgemental, moralising view on project performance, tracing budget overruns to incompetence (Morris 1994; Merrow, McDonnell & Arguden 1988) and managerial biases and dishonesty (Flyvbjerg, Bruzelius, & Rothengatter 2003) - explanations that poisoned the relationship between society and capital projects.

Since then, building on seminal dissenting voices (Miller & Lessard 2000), and access to the ‘insides’ of projects, mainstream explanations on capital project behaviour have been questioned or refuted (eg Love & Ahiga-Dagbui 2018; Gil & Pinto 2018; Gil & Fu 2021; Kreiner 2000). But as a new reality dawns on us, substantive work lies ahead to tackle an inherited legacy that left a huge and costly deficit of trust between society and capital projects. Critically, in a world beset by grand challenges from climate change and biodiversity loss to income inequality, housing shortages, and social mobility loss, the purpose of capital projects is increasingly defined by grand challenges. For example: public-sector projects such as the UK’s High-speed 2 railway and California’s high speed rail are now framed as instruments of ‘economic development’; the potential social value of capital production (job creation, supply chain resilience, national security) is driving governments to pass tax credits, subsidies and other incentives to encourage chipmakers and electric car manufacturers to build production facilities inside borders; and the environmental value of moving energy production away from fossil fuels is driving governments to underwrite the risk of cost growth in private investment in nuclear facilities and decarbonization of the gas and oil industry. These changes have prompted us to announce a call for a new special issue of CMR on *Project-based Capital Investment: Value Creation and Distribution*. Here, we conceptualise capital projects as a form of organizing that is enabled by society to produce capital-intensive technology – broadly defined to include infrastructure, manufacturing facilities, defence systems, and technology to make science and new discoveries.

Importantly, as the purpose of project-based capital investment widens towards “socially valuable outcomes”, capital projects are becoming instruments of value distribution that go beyond the goal of producing economic returns to be captured by investors. Further, as projects intervene into existing situations and are used to ‘make futures’ (Whyte et al., 2022), managers, policymakers, and politicians need to engage with the ethical questions raised. Rather than exploiting nature, an expanded understanding of value can enable us to think

about how projects can care for and enhance the planet on which we live and work for future generations. Such a shift raises questions about the kinds of futures envisioned and desired.

This paradigm shift speaks to the two canonical questions (who is in and who is out; who gets what) that are being recently advanced in new stakeholder theory (McGahan 2021, 2022) – a nascent stakeholder perspective that seeks to move us beyond the ethical and moral reasons to enfranchise stakeholders towards discerning the legal and economic factors that justify the strategic choices that organizations make in order to manage stakeholders and create value. This perspective also resonates with the claim from resource-based theorists that stakeholders will not engage in joint value production activities if the organization wants to appropriate all the upside (Barney 2018). A stakeholder perspective also has direct implications for our understanding of trends in organizing project-based capital investment towards polycentric governance to encourage stakeholder cooperation in consensus-oriented structures (Gil & Pinto 2018; Gil & Fu 2021) and the use of formal contractual agreements to govern collaboration with nonmarket stakeholders (Odziemkowska & Dorobantu 2021).

Project development processes, too, are under radical transformation. Beyond statutory consultation, managers are finding it increasingly difficult to gain consent to progress with a project and create value unless the purpose of a capital investment goes above and beyond the laws and regulations in the environment. As stakeholder enfranchisement deepens, to cope with uncertainty in requirements and ambiguity in organizational boundaries, flexible forms of buyer-supplier contracts with embedded relational elements have become more popular (Pitsis et al. 2003; Gil 2009). In addition, the adoption of new technology to facilitate interorganizational collaboration such as digital twins has become mainstream (Whyte 2019). And a raft of firms is now emerging that is committed to exploring how to mobilize advances in Artificial Intelligence-Machine Learning to create more predictable project environments.¹

But crucially, concomitant with fundamental change in capital production purpose and organizational governance, Western traditions underpinning project evaluation and management seem to be here to stay. Hence, cost-benefit analysis remains the “best game in town” (Pearce, Atkinson, & Mourato 2006) to inform public capital allocation despite the difficulties in monetizing externalities (Vickerman, 2017). And ‘on time, on budget’ remains a marker of high project performance as well as of individual competence despite the feedback loops and nonlinear relationships that are endemic to capital projects (Shapiro & Lorenz 2000) and the “wickedness” (Rittel & Webber 1973) of agreeing a political welfare function. Questions thus arise about how climate change, biodiversity and nature, and social outcomes, become evaluated as part of this Western tradition of viewing projects as linear enterprises and what alternatives may be available. This is particularly challenging as ‘project futures’ become made remotely, with some participants online (Whyte, Comi & Mosca, 2022).

As of now, reconciling increasing societal pressure to make capital investment more responsive to Environmental, Social, and Governance (ESG) issues with holding managers accountable to keep projects within targets has fuelled an obsession with control to the detriment of novelty and flexibility (Lenfle & Loch 2010), where stakeholder claims are “anti-value” (Browning 2019). As a result, indirect project costs (defined as corporate staff, project management, accommodation, IT and consultancy costs, e.g. legal, surveys, but

¹Klewinman, 2021. Alphabet venture arm GV backs UK machine-learning start-up nPlan. Skynews, 23rd March <https://news.sky.com/story/alphabet-venture-arm-gv-backs-uk-machine-learning-start-up-nplan-12254422>

excluding design) can easily reach over 15% of a capital investment² – an unproductive trend that seems unsustainable. At the same time, major budget overruns suggest that endowing capital projects with even more substantive contingencies, a form of financial slack, in order to ‘hide’ the costs of renegotiating the value distribution is also unsustainable.³

Finally, as the purpose of capital investment widens, governments are also looking into new forms of organizing to attract more private investment into capital production (Quelin et al. 2019), and harness contributions from civil society (Puranam 2021). Governments are making substantive public investment- the \$55 billion US infrastructure Investment and Jobs Act is a case point -- that creates opportunities to innovate.⁴ Beyond public investment, new forms of public-private partnership are emerging such as Strategic Alliances and Regulated Asset Base models by which governments underwrite the risks of late renegotiation of the value distribution. Attracting more private capital to tackle Africa’s infrastructure gap, which is threatening the global order given the exponential population growth and quick urbanization, is also a grand challenge (Gil, Strafford & Musonda 2019). This grand challenge is fuelling multilateral initiatives such as the “Build Back Better World” G-7 and EU’s Global Gateway’ Initiative, both of which will struggle to offer a credible alternative to China’s One Belt One Road Initiative unless they find ways to create value quickly. This search for new forms of organizing project-based capital investment raises intriguing questions on how value is co-produced, who is “in” and “out”, who gets what, and who pays what. Further, it suggests a trend to break the mirror between organizational architecture and the architecture of the technology to be produced, which is largely underexplored.

With this background, in this special issue we are interested in contributions that are theoretically anchored and empirically informed to further our understanding of fundamental challenges facing managers of project-based capital investment, such as:

- Emerging forms of organizing to govern project-based capital investment
- Explore options to reconcile traditional pressures for accountability with increasing pressure for organizations to produce socially valuable outcomes
- Fresh approaches to enable project-based capital investment to value nature, bridging work on projects and nature-based solutions, biodiversity and nature positive projects
- Novel resource acquisition strategies to enable project-based capital investment to progress and encourage essential nonmarket stakeholders to cooperate
- New insights on overcoming an organizational design duality between building robust project governance and be quicker in producing capital-intensive technology
- Perspective on how emerging technologies such as AI-ML can add value to project-based capital investment, and address the challenges of a changing world
- Original frameworks to help discern the legitimacy of nonmarket stakeholder claims, prevent conflict, and resolve stakeholder disputes that cannot be avoided
- Nascent forms of coordinating public and private interests in project-based capital investment defined by purpose and grand challenges
- Innovative project performance metrics aligned with the rise of ESG issues
- Challenges of socialising new forms of project leadership to address the challenges of value creation and distribution in project-based capital investments

² See for example Higgins, D. 2014. The HS2 Review, March , Presentation Slides.

³ For example, the recent £3bn budget overrun in Crossrail, a £15.9bn London railway, which had been endowed with a £5bn contingency back in 2008 when the capital investment was approved (final prices)

⁴ <https://www.whitehouse.gov/bipartisan-infrastructure-law/>

DEADLINES

Submission of first draft by April 30, 2023. Authors are encouraged to attend the 8th International Megaprojects workshop: Theory meets Practice to be held by the University of Sydney on 3-4 April 2023, where the editorial team will run paper development seminars. Details about contributing to the workshop will be announced soon. Still, attendance of the Megaprojects workshop is not a requirement to submit a draft to the special issue.

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