# 7<sup>th</sup> International Megaprojects Workshop: Theory meets Practice

Call for Papers and Presentations

# Artificial Intelligence and Megaprojects: New processes and value

Université du Québec à Montréal Montreal, Canada June 12-14, 2019

The 7<sup>th</sup> *International Megaprojects Workshop: Theory meets Practice* will be hosted by the Université du Québec à Montréal (Canada), in collaboration with École de technologie supérieure, HEC Montréal, Polytechnique Montréal, Université de Montréal, and Kheops – the International Research Consortium on the Governance of Large Infrastructure Projects.

The conference brings together leading scholars and practitioners from Canada and abroad. They will present and discuss current understandings of megaproject management—seen as a complex form of planning, designing and producing large-scale capital-intensive infrastructure, and to achieve collective system-level goals.

The aim is to create a forum that allows established and emerging scholars to present original research findings and interact with other scholars and practitioners. The conference explores whether insights from one context extend into other settings, and challenges the latest claims and trends in research grounded in megaprojects.

The conference seeks to connect theory with practice through workshops and panels. We encourage presentations that combine theoretically informed studies and phenomena-driven research. Papers may address generic questions on megaprojects context such as complexity, governance, collaboration, knowledge. For this 7<sup>th</sup> edition, we particularly welcome presentations that examine megaprojects under the influence of the **emerging phenomenon of artificial intelligence.** 

Artificial intelligence (AI) has gained interest in recent years, thanks to the accelerated convergence of information technologies and data science. The impacts are starting to be felt today in both project processes and outputs. The capacity to capture, analyse and communicate gigantic datasets, and to create autonomous (human-free) systems bears the seeds for a revolution in the way we imagine, create and manage projects, organizations and societies. Solutions for mobility, public health, infrastructure, energy and environmental challenges can benefit (or suffer) from the development of intelligent systems capable of executing functions traditionally performed by humans including learning and complex decision-making.

Despite the wide enthusiasm aroused by AI, it is still too early to know what will change in our living and working environments. How revolutionary is AI? Will it make us more "intelligent" and therefore capable of accomplishing radically different projects (or accomplishing projects radically differently)? Or else, are we making the management of economic activities, including mega-projects, even more complex? Such prospective and far-reaching questions may be neither easily nor immediately answered. Yet we invite the conference participants to explore them in four panels, and from a variety of perspectives and empirical settings.

In additional to research papers, the workshop seeks to engage with project leaders and policy makers in order to understand and discuss contemporaneous managerial and governance challenges and opportunities that they face.

Participants are encouraged to explore, among others, the following questions:

- How does AI and related phenomena (including Industry 4.0, data analytics, etc.) impact the way large projects are devised and executed?
- Will value creation and appropriation be redefined in view of the potential of AI?
- Does the capacity to harness and use large datasets reduce, or increase complexity in the context of large projects? How will it help deliver "better" projects?
- How do project governance structures and mechanisms need to adapt, in order to benefit from these emerging technologies? How do these technologies and knowledge impact collaboration and coordination amongst stakeholders?
- Will AI help shape megaproject organizational design choices and performance?
- In the context where data and knowledge can be generated, shared, and exploited by numerous stakeholders involved or impacted by megaprojects, what are the key challenges for project sponsors and managers?

These questions also apply in a variety of other contexts than AI. Papers are very welcome that address more generic context of megaprojects such as complexity, governance, collaboration, knowledge, etc.

The conference will be organized around at least four panels. Each panel will last 3 hours and include one keynote presentation, 4 to 5 presentations of 15 minutes (2 or 3 scholars and 2 or 3 practitioners), and one round table (with 2 scholars and 2 practitioners).

Panels will include the following:

**Panel 1. Innovation in Megaprojects:** new tools, new procedures and technology in project processes. How is technology influencing the design, planning and management of Megaprojects today?

**Panel 2. Winners and losers of Megaprojects:** Tensions and secondary impacts of radical change and new technologies in Megaprojects. Who wins and who loses from radical changes in project processes and outputs?

**Panel 3. Governance and Megaproject structures:** new strategies, innovative procurement processes, and new forms of project governance. How is participation and collaboration between stakeholders changing in times of AI?

**Panel 4. Complexity in Megaprojects:** Complex processes, interrelated outputs, complex services. How is complexity growing under the influence of AI in project processes and outputs?

### **Important dates:**

- Submission of papers: 28 February 2019
- Answer to Authors: mi-March 2019
- Confirmation of acceptance by authors: no later than end of March

#### Two formats for submission are possible:

- For professionals papers: extended abstract of about 300 words
- For scientific paper: paper of about 3000 words

Please submit the text to Monique Aubry at: aubry.monique@ugam.ca

Opportunity to leverage the best papers into a Special Issue of IJMPiB (*International Journal of Managing Projects in Business*) is a possibility conditional on the quality of the submissions.

#### **International Advisory Committee:**

Lisa BORNSTEIN, School of Urban Planning, McGill University (to be confirmed)

Andrew DAVIES, University College London, UK

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ChongQing GUO, School of Economics and Management, Tongji University, China

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**Daniel FORGUES**, École de technologie supérieure, Montréal, Canada. Chairholder, Chaire industrielle sur la digitalisation de la construction (CIDIC) et directeur du groupe de recherche sur l'intégration et le développement durable (GRIDD).

**Gonzalo LIZARRALDE**, School of architecture, Université de Montréal, Canada. Chairholder, Fayolle-Magil Construction Chair in architecture, built environment and sustainability. Director of the IF Research Group (grif) and the Disaster Resilience and Sustainable Reconstruction Research Alliance (Œuvre durable for its acronym in French).

**Robert PELLERIN**, Polytechnique Montreal, Canada. Chairholder, SNC-Lavalin/Jarislowsky Chair on International Project Management.

We look forward to welcoming you in Montreal in June 2019!