

Editorial

Welcome to the first issue of Volume 5 of the *Engineering Project Organization Journal*. It is interesting to note that it was only a few years ago that the thought of creating a line of inquiry around engineering project organizations raised concerns around whether this area was deep enough to demand individual attention. At that time, defining the field of engineering project organizations required significant discussion and self-reflection by many of the scholars in the field. Was the field based on organizational theory or was it focused on public policy, or perhaps it was the study of how institutions worked to fund public infrastructure. Or perhaps it was all of these together. In the end, the consensus was that it was all of these and none of these. In fact, the field is bound by the interest in how organizations, public and private, formal and informal and project-based and institution-based, function at the project, portfolio and institutional levels. The outcome of this functionality is varied across both tangible and intangible results; infrastructure project funding, project team effectiveness, cultural impacts and organization success to name only a few. Hence, determining the focus of the project organization community can often be confusing as individuals understand the underlying ties between the communities, but often are challenged to bridge the gap between specific focal points of research.

Today, as we enter the fifth volume of this journal I will take a few moments to expand upon this topic of challenges and join it with the topic of changes. Changes and challenges are often two sides of the same coin, separated by perspective. However, perspectives may be harder to bridge than reality in many cases. In an effort to bridge this potential gap, I will address some of the changes and challenges that face scholars in this community as we enter a new year and a new volume.

Challenges and changes

As a starting point, let me comment on the state of maturity of the engineering project organization community. Ten years ago when this community began to coalesce, it was more common to hear scholars decry the lack of support for this line of inquiry than to hear discussions around the spreading of new methods and techniques for studying organizations. I am pleased to

say that this challenge has been altered over the last decade to the point where organization theory may not be common yet in the engineering domain, but it is no longer an unusual topic among engineering researchers. Rather, a true generational revolution is occurring where scholars entering the field have strong foundations of sociological and organizational knowledge in addition to traditional engineering knowledge. Additionally, researchers in sociology and business are increasingly viewing engineering projects and organizations as legitimate fields to study in addition to traditional manufacturing and financial organizations.

The change that has occurred over the last decade is a reflection of the maturing of the engineering project organization field. Specifically, the field is no longer a collection of individuals interested in expanding inquiry beyond traditional boundaries. Rather, the field is now a community of researchers who are schooled in the methodologies required to undertake serious inquiry and who are basing their careers on project organization inquiry. The challenge for these two groups is to understand the difference in perspective that each brings to the field. Older generation researchers need to recognize the deeper understanding of methodologies that the new generation brings to the conversation. Similarly, the newer generation of scholars needs to recognize the greater understanding of the domain that the older generation brings to the discussion. The challenge for the community is to bring these two groups together to leverage the strengths that each group brings to the research endeavour.

The second change and challenge facing the engineering project organization community is the rapidly changing domains that project organizations must address. Historically, this community centred on the domain challenges of the last several decades. Namely, the implementation of transport infrastructure, energy infrastructure and green buildings provided the case studies for much of the work presented in the community's conferences and in this journal. However, changes are rapidly forcing a discussion as to the limits of inquiry within the community. For example, the role of communities in encouraging energy conservation, water sustainability and urban design are a few of the broader issues that organizations can influence. Similarly, broader topics such as the role of engineering organizations in international development, climate change and sustainability investment are emerging as areas where organizational study are crossing over into

emerging topics. The challenge for the community is the question of whether and how these new areas fit into the concept of engineering project organization research. The potential benefit of expanding into these domains of inquiry is the concurrent expansion of the community and to remain relevant to emerging areas of inquiry. The community must decide which direction it will follow and what is the underlying theory that ties the old and new domain areas together in a coherent body of study.

The third challenge for the engineering project organization community, and perhaps the greatest challenge, is the question of community. This may sound like a circular question, but it is in fact a prompt for a maturing community to examine the definition of its community. The previous issues of generational change and domain expansion are components of a broader question of defining the community. The genesis of the engineering project organization community originated with discussions among a small group of researchers who were determined to establish a foothold for a new line of research. The first conferences on the topic consisted of 20–30 individuals. Today, the community is international in scope and multi-generational. However, the long-term success of the community is most likely in the ability of the community to continue its expansion into related communities such as business and sociology. Although individual researchers from these communities are cornerstones of the project organization community, greater integration with existing communities in these areas needs to be a priority. This expansion brings all of the traditional concerns about expansion including understanding new perspectives and integrating new ideas. However, the long-term success and health of the community will be dependent on this expansion.

With these challenges facing the engineering project organization community, the question emerges as to whether the state of the community can be considered healthy. To this concern, it is my opinion that these challenges actually are an indicator of the strength of the community. A weak community does not attract new members and new ideas. Weak communities risk stagnation because of the lack of new ideas and the lack of challenges to existing norms. This community shows no indication of falling into a period of stagnation from these issues. Rather, the challenges emerging from the issues enumerated here are from the distinctly opposite quarter. The infusion of researchers who wish to centre their research portfolios on organizations is growing. The expansion of domains where organization theory can be applied in engineering is expanding rapidly. And, perhaps most importantly, the number of Ph.D. students who are studying organizations and learning formal research methods in the field continues

to escalate. From this perspective, the health of the community is strong.

From this strength, the challenge for the community during this year of transition to a mature organization is to broaden the validity of this line of inquiry among tradition-bound institutions. Institutional change is always slower than change among individuals. In the research domain, this reluctance to change is often seen around concerns about what is considered acceptable for researchers pursuing promotion and among established scholarly communities regarding what are acceptable areas of inquiry. The strength of this community is in its cross-generational membership. To retain this membership, it is essential for established researchers to challenge tradition and break the barriers that are preventing the new generation of researchers from fully having the ability to embrace organization research as a career foundation within their institutions. This will involve challenging traditional ideas of publishing, domains of inquiry and community belonging. The membership in this community has achieved significant gains over the last decade and challenged many norms, it will take such an effort once again to break down these traditional norms and barriers.

Finally, on the topic of change, I will take this opportunity to announce that the journal will be transitioning to a new editor this year. I want to thank all of the individuals who have served to start and support this community and this journal. The health of this community is based on the individuals who have made the commitment to support it and contribute to it. Now, as the community is poised to move to a new level of success and maturity, it is time for a new individual to lead this journal and bring to it the energy and vision for the next decade. I have had the privilege to work with an outstanding group of individuals to bring this journal to a reality and to watch it mature. It has been a decade-long adventure that has been extremely rewarding. However, I do not believe that journals belong to a single individual or institution. Rather, journals require new energy and direction as they mature and the field grows. Hence, it is time for the next individual to inspire the growth of the journal and bring new insights and vision to its success. A new editor will be named over the coming months and I look forward to continuing my association with the journal and to continuing to a member of this vibrant and important community.

Volume 5—Issue 1

As an indication of the health of the project organization community, we present four articles in this issue that reflect the diversity of the community. First, the paper from Hartmann *et al.* showcases the technology

integration perspective of the community by addressing the integration of simulation tools into the design process. The paper provides a framework of how simulation tools can support and benefit the design process. The second paper by Kovacic continues the perspective on technology, but focuses on the impact of technology on interdisciplinary design. By integrating Building Information Models (BIM) technology into a design process, the author documents how BIM can facilitate the interdisciplinary design discussion required in emerging complex design environments.

The third paper in the issue by Bygballe, Dewulf, and Levitt moves away from the technology perspective of the community to one that emphasizes the contracting perspective of the community. In this paper, the authors explore how integrated project delivery (IPD) influences and how construction project teams address project complexity and uncertainty. Utilizing healthcare facilities as a backdrop, the paper explores the

interactions between project participants and how IPD changes the manner in which the individuals address project concerns. Finally, the paper by Matos Castano *et al.* completes the issue by focusing on a fundamental component of project organization and decision-making a group context. The paper focuses on how decisions among 17 actors are completed through compromise and bringing together different perspectives. In this grounded-theory approach, the authors illustrate how different 'frames' can impact the manner in which each actor approaches the problem-solving process.

On behalf of the *EPOJ* editorial board, we hope that you enjoy these articles and we encourage you to contribute to the journal and continue to make this a centre of vibrant discussion.

Paul S. Chinowsky
Editor