Looking “back to the future” and marching forward towards best value

Of course we should look in the direction we are marching! However, “looking back” from time to time, is useful, permissible and indeed safer if using a “rear-view mirror” or a suitable “lessons learned” lens, rather than mere nostalgia! Second, some readers may realise that the phrase “back to the future” is borrowed from the title of the 1985 science fiction film that also had sequels in 1989 and 1990. This enigmatically provocative phrase came to mind when trying to capture the trend towards re-integrating our segregated supply chains that were largely integrated to start with, many centuries ago, i.e. in the days of the “master-builders” who designed and constructed, as well as sometimes supervised the maintenance of superstructures of yore, such as cathedrals, pyramids, palaces, dagobas and even irrigation systems. So we may be marching in circles in re-integrating the fragmented functions, which were segregated in the name of specialisation, but often went too far with the need for an additional project management function – striving to bring them back together again and not always doing it so well.

Even construction contracts, which were launched with a handshake or a nod in the East centuries ago, gradually grew into cupboards full of adversarial contracts, complicated documentation and/or many terabytes of data. However, a reverse trend is towards simpler and collaborative contract forms such as the “New Engineering Contract” (from the Institution of Civil Engineers) and better relationships, based on “relational contracting” principles that underpin partnering, alliancing, integrated project delivery and framework agreements. BEPAM which enters its seventh year with this issue, was conceived to provide a platform to help take this re-integration to another dimension – so as to link the upstream planning, design and construction (project management) principles, practices and supply chains, to the downstream operations, maintenance and facility management (asset management) principles, practices and supply chains. Focussing mindsets towards clearly identified common value objectives is arguably the best way to establish such meaningful links and achieve the desired re-integration with sustainable relationships, i.e. “relational integration” towards “overall value”.

It is therefore apt, that the first paper in this issue uses the conceptual framework of such “relationally integrated value networks” (RIVANS) as briefly touched upon above (and originally proposed in an R&D exercise launched from The University of Hong Kong), to propose integrated solutions for total asset management. In this paper, Hedley Smyth, Aaron Anvuur and Illona Kusuma unveil the lack of engagement between “design and construction” and “operation and maintenance” teams; and worse – an unexpected move away from integration across these teams (which runs counter to the above-mentioned re-integrative trend within “project management” teams). They found that BIM is not helping in the expected integration either (one may like to add, so far?) in their UK-based study. The authors provide a perspective for improvement through the RIVANS lens.

The second paper is also on asset management, albeit focussing on “physical asset management practices in the Saudi public sector”. Naief Alhazmi’s mixed methods approach unearths many deficiencies, when using a framework tool based on seven international asset management standards and guidelines. This leads to recommendations for establishing up-to-date and comprehensive asset management practices across the public sector in Saudi Arabia.

The third paper focusses on a specific type of built asset, i.e. toll roads, using data from Indonesia, while the authors are based in Australia. Mohammad Rohman, Hemanta Doli
and Christopher Heywood probe success criteria of toll road projects from a societal perspective, i.e. reaching beyond commercial success metrics, to identify “four significant factors associated with project social benefit” that could deliver better value to the community over the overall project lifecycle, hence complementing the above two papers with examples of improved asset management and enhanced overall value.

Although the fourth paper is also on build-operate-transfer (BOT) projects, the authors switch our attention from social benefits or even “social engineering”, to the still important “financial engineering” aspects – in this case focussing on the influence of risk on the equity share of BOT projects. Authors Alberto De Marco and Giulio Mangano are based in Italy and Timur Narbaev is based in Kazakhstan, while the data sets are drawn from BOT projects connected to energy initiatives, from different parts of the world. By identifying and analysing specific sources of risk that impact on equity levels, the authors suggest that their findings can help develop a base for establishing improved methods to design refined capital structures in BOT projects.

As in the above paper, the multiple authors of the next paper are also based in two countries, in this case in Vietnam and Korea. The authors are Long Le-Hoai, Chau Ngoc Dang, Chau Van Nguyen, Young-Dai Lee, Sun-Ho Lee. Second, this paper, while continuing the “risk” narrative in general does not limit the scope to BOT projects, whereas it does confine it to road and bridge construction in Vietnam. The findings are expected to assist in a better understanding of relevant risk profiles and patterns, so as to improve the risk management of road and bridge projects in Vietnam, in this case from a contractor’s perspective.

Following on from the above example of improving risk management in a specific project type in Vietnam, the sixth paper while also focussing on Vietnam, takes on a broader “brief” in investigating the impact of “human resource development” on “engineering, procurement and construction (EPC) project success, human resource competency, job performance and the interrelationship among them”. Nguyen Thanh Huong and Bonaventura Hadikusumo conclude, apart from their specific findings, that the development of competent human resources for EPC project implementation plays a considerable role in EPC project success.

The seventh paper takes us to another continent, i.e. Africa, while one of the authors is based in yet another continent, i.e. Australia. Olaniyi Isaac Aje, Oluwole Alfred Olutunji and Olanrewaju Olalusi investigate the relationships between causations of overruns when advance payments are issued to contractors in Nigeria. Apart from indexing these relationships, they identify some overrun causes and also initiate the profiling of probability distributions of overruns, particularly under specific advance payment regimes.

The final paper “beams” us back to Asia, or more precisely Jakarta, Indonesia and “homes in” on another type of built asset (compared to Indonesian toll roads studied in the third paper above), namely public-rented residential buildings. Putri Arumsari and Ayomi Rasasati identify dominant factors in maintenance management that affect the physical condition of a building and contribute to precipitating slum conditions. They propose an alternative maintenance strategy to address these factors. Although focussing on one aspect of asset management, this last paper can be considered to “complete the loop” in this BEPAM issue, by connecting us back with examples, to the first and second papers on asset management.

Furthermore, the above quick scan of our BEPAM 7.1 paper package reconfirms the diversity of our contributing authors, as well as of the topics, although the above mapping of the various connections indicate the linkage patterns, hence a common thread and more importantly, the significant synergies which add even greater value.

Looking ahead, two special issues are planned for 2017: the first is on “Securing clients’ objectives throughout construction project life cycles”, the Guest Editors being Chamila Ramanayake and Monty Sutrisna (both based at the Curtin University, Australia); while the
other is on “Emerging issues in the built environment sustainability agenda” Guest Edited by Thanuja Ramachandra in Sri Lanka and Gayani Karunasena in Australia.

A special issue proposal on “Service innovation through linking design, construction and asset management”, by Hedley Smyth, Grant Mills and Kamran Razmdoost from the University College London, is targeted for 2018, since it is also linked to a special track they are leading at the September 2017 ARCOM Conference in the UK. Indeed, readers who notice that this theme also links to the first paper in this Issue 7.1, may realise that this is not a coincidence, since the first author of that paper is also Hedley Smyth. Furthermore, it meshes very well with the overall goal of BEPAM in linking the project management for the delivery of a built asset to its downstream asset management.

In the above context of special issues, this is an invitation to any of you who may have a good idea for a topical theme relevant to BEPAM, along with a basic strategy and strong commitment to shepherd a “special issue” from conception to delivery, on the selected theme: you are welcome to submit to me, a preliminary proposal in about 250 words, also indicating any previous editorial experiences as a guest editor, on an editorial board.

Mohan Kumaraswamy