

Large Infrastructure Projects — Putting Empathy in Operations

How shall project teams apply their ‘hearts and minds’ throughout the project lifecycle to ensure successful delivery?

We are still coming out of an era where the project manager’s job revolved around either spending the budget or building the *damn thing*, namely completing of the physical deliverable(s) no matter at what costs. Very few project practitioners appreciate that projects are *primarily* about improving (or establishing) the workings of the operational environment. It is our contention that no project should see the light of day *unless* it would add value to operations!

It was said, “Charity begins at home”; well, good projects begin with a deep appreciation of the operational needs. A good marriage does not start at the wedding but prior to it, from a shared perception of the kind of family husband and wife intend raising – *Only upon such shall thy wed be locked*, or else divorce will soon loom (i.e. project failure).

Project teams oftentimes wallow through the mud of scope creep, cost and schedule overruns, and organisational politics with the hope that in the end “something new and great” will be standing where there was none before. Any concerns as to whether *that something* will actually add value by improving the operational environment (e.g., increased production, lower operating costs, improved quality of services, enhanced welfare) seem relegated to a bottom drawer – the one some reviewers might look into long after the project team has moved on to the next job.

When it comes to project delivery, and indeed in anything else in life, our charity should start at (the project’s) home, at the operational environment where the delivered solution (e.g., new infrastructure, facility, equipment) will be deployed. Before a new project is launched, some stage of empathy is required, and such should take place in the operational environment to gain a deep appreciation of ills, issues, challenges, and needs begging to be addressed in a technically and socio-economically viable manner; only thereafter shall a project team revert to the conceptual phase and kick-start the project. To return to our earlier analogy, locking the project’s wed (i.e. launching the project) upon a lack of common understanding of project objectives, an evasive sense of agreement as to its worth, and a poor commitment to make it work is definitely the harbinger of divorce or, in the project context, of project failure.

The question is: How will this “empathy” practically apply to your project? We maintain that a good project should start with an appreciation of operational matters (i.e. with the team planting their hearts in operations’ concerns) and only then revert to the beginning of the lifecycle or FEL-1 (i.e. whence the project team will apply their minds in planning and executing *infrastructural* elements that are found wanting in that particular operational environment). The whole idea is to start with the end (e.g., improved operations) in mind, which is a Systems Engineering principle.

During this “empathy” phase, the project team should attain: (1) a shared perception about the project objectives, (2) a broad sense of agreement that the project is worth doing, and (3) an expressed commitment to make it happen – and (4) elucidate items reflecting the operational environment from the sponsor and operational staff, including:

- (i) Competing systems – facilities, equipment, and processes vying for resources with the system once deployed;
- (ii) Collaborative systems – facilities, equipment, and processes that should collaborate with the deployed system;
- (iii) Sustaining systems – facilities, equipment, and processes to support the operations of the deployed system.

Failing to secure the above ingredients, the project team would face the predicament of “building a puzzle over an *ever-changing* canvas”; despite all their efforts and creativity, only one thing is guaranteed: even when the pieces fit together, they will still fail to match the canvas – in our context, say, deliverables that fail to add value to operations.

Assuming that the project team did everything else right (which many project professionals are capable of achieving) they might still disappoint the client (i.e. owner, sponsor) by delivering assets, facilities, and systems, perhaps on-time and on-budget, only to turn into white-elephants; hence, such “investments” will *ad infinitum* drain resources (e.g., capital outlay, operating/maintenance costs) without adding value by improving the operational environment.

GreenPoint stadium (Cape Town, South Africa) was completed on-time, on-budget for the 2010 Soccer World Cup. Nevertheless, it is common knowledge that the charming Xhosa Lady (i.e. referring to its outline) is not adding much value to the City – it is forever gulping resources *just to keep standing pretty*, with hardly any hope of a steady income. (Surprised? Not too far from there, no big plane might land at the R4.5 bn Saint Helena Island airport due to windshear.) A mere trip in thought to its operational environment might have led to a “concept” that connects the stadium to the City’s touristic sites (thus, making it a tourist attraction as well) and even secured revenues from rugby, cycling, etc. – for instance, albeit incidentally, Moses Mabhida stadium (Durban) connects to beaches and thus attracts tourists. As it is, the City might join the public chorus baying for flattening of GreenPoint to make way for a low-cost housing.

Worse still, the Spanish-built *AFRO 4000* locomotives that PRASA procured in 2012 sparked a vivid controversy when it turned out that their height was *out of clearance specifications* (i.e. too tall for South African railways) and, thus, were failing to operate in many sections of the Transnet-owned network – billions of Rands got thrown off the rails. Then as in a twist of irony, the infamous locomotives were finally *dumped* under the Mandela Bridge in Braamfontein.

What more shall be said? Infrastructure delivery will prove vain *unless* acquired capabilities are effectively exploited in *improved* operations to derive the benefits and add value to the business – He who has ears to hear, let him hear!