Firing on All Cylinders: Project Management Lessons in a Project Startup

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ABSTRACT

Managing a project startup requires a diverse set of skills, many of which are second nature and common sense to industry veterans. However, the role of a project manager for a new endeavor, in a new area, in a new country, requires dedication to building a coherent team, incorporating best practices, and developing an analytical modus operandi that enables the project to progress on time, on budget, and within the scope defined in the project charter.

Expertise in project management is especially pertinent in drilling startups where the efficacy of the project team is ensured through the competency of the proper personnel with the appropriate skillsets, a project manager who encourages the team, leads with enthusiasm and maintains control while upholding an ethical code of conduct, and through the support of the Project Management Office (PMO). Obtaining sufficient resources, organizing on and offsite facilities and support mechanisms, dealing with scope creep, risk management, management of change and developing processes and procedures for project startups requires experienced focus and energy.

Using project management principles to facilitate control of a project is essential to the accomplishment of anticipated goals. However, an enterprise that ignores feedback from the wider team does so at the peril of the project. A specific environment includes a special set of conditions that, without mindful project leadership, might result in the project failing to meet its objectives in a safe, timely, or efficient manner.

INTRODUCTION

There are many aspects to successfully managing a project startup in a developing country, regardless of the subject matter. During risk analysis both threats and opportunities are identified, but most issues that occur on major projects can be traced back to the very beginning. During the initiation of a project, an agreement to the commitment of resources for the first stage of the project has to be made to enable a smooth transition to the subsequent stage(s) of the project.

Hence, the vital components for success are clear project objectives and robust planning built around three fundamental elements:

- Knowledge: Ensure that the information required for the project team is available.
- Skillset: Design and appoint the Project Management Team
- Create the staging plans.

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Navigating the risks involved in medium- to large-scale operations is a significant challenge associated with projects in frontier areas. Everything from contract type to policy and regulations will be shaped by the needs and desires of host governments. Furthermore, the domestic political, financial, economic, and environmental pressures will drive their external behavior toward foreign companies. Thus, the key to commercial success in these frontier areas is the ability to anticipate how stakeholder demands will evolve.

Stakeholder management is essential and identifying the main players early means that focus can be directed to managing expectations, from government and customer echelons to the project team themselves. Preliminary preparation for this should be completed by the Project Manager before arrival in-country, as well as production of the Project Charter and selection of the project team (in an ideal world the Project Manager would choose the project team he will be working with).

Adequate performance on these project startup activities of requirements analysis, risk analysis, estimating, and planning can mean the difference between success and failure of the project. A poor job on project startup activities means that estimates and plans will be inaccurate, meaningful tracking and forecasting metrics to help manage project delivery will be erroneous and the project will struggle from the moment it begins. According to a KPMG survey these reasons are why up to 70% of projects fail to deliver (Figure 1).

![Figure 1 – Main Reasons for Project Failure, KPMG Survey, 2010.](image)

Depending on the company presence in the country where the project will be undertaken, groundwork may already have been laid. However, in a developing country a significant task for the Project Manager to perform, as the support team is mobilized, is to become the company envoy. The Project Manager must make contact with country and local officials to introduce the company, the way in which it operates (ethically and morally), and short- and long-term development goals. Of course, most importantly to the hosts, how you anticipate your presence in the country will benefit the welfare of the locals at the national and local level. A certain amount of homework should therefore have been undertaken identifying which NGO structures or humanitarian schemes can be supported, what expectations are there with regard to interaction with universities, and what expectations there are with regard to commitment to local employment.

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2 KPMG Project Advisory Services, New Zealand Project Management Survey, 2010
INITIATING THE PROJECT - LAYING THE FOUNDATION

It has been all too common for a project to commence without having the correct framework in place to ensure a smooth and efficient launch. Add to that the vagaries of moving into a country new to your industry and dissimilar to your cultural norms and values, and a start-up project can become complex very quickly. Therefore the most essential element to maintain throughout the project and especially during the set-up stages is the communication structure.

The project initiation process consists of two operational stages in the post-award planning phase; establishing infrastructure and operations set-up.

Take East Africa as an example case, where focus on exploration in new frontier areas has led to significant deepwater gas field discoveries off the shores of Tanzania. However, a thorough understanding of the geo-political risk in the country where the project is to be launched is essential (Figure 2). The lessons learned during the early years of developing East Africa’s hydrocarbon resources ensured that commercial expectations were aligned with political realities in the host country. Cultural empathy is therefore the first of many vital attributes to bring to the project start-up, remembering also that the country infrastructure with respect to the oil and gas industry may still be in its infancy. Iraq on the other hand, is not new to the oil and gas industry and has infrastructure in place. However, the International Operating Companies (IOC) that have drilling operations there use service providers to improve integration, but also transfer project risk by executing turnkey operations.

The support team, consisting of discipline-specific experts, should be self-motivated and have a clear understanding of the objectives. Their mission is to provide the foundation for success. Without an operational base from which to work from, including all the amenities that are commonplace in any office environment, the ensuing operational tasks are much more difficult to coordinate and introduce discontinuity. For example, as a priority Real Estate Services (RES) should be busy working with local realtors to finding suitable office space.

There has to be a clear understanding of the needs of the operating team and there should be close liaison with the IT department to ensure functionality of internet and telephone access, even to the point where a communications mast may need to be erected. RES is also charged with finding suitable staff accommodations, renting property that can house a number of team

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Figure 2 – Risk Ratings, after IHS³

³ IHS Research and Analysis; http://www.ihs.com/index.aspx
members that rotate in and out of the country. This becomes far more cost effective than using hotel rooms, provides a common working space, and a safe house in the event of internal unrest. RES becomes the touch-point for HSE and Security, which need to be involved in auditing the safety features of the buildings, local medical center registration for inoculations and emergency medical needs, and advice on how to adequately guard and secure personnel and operations in country.

Warehouse/workshop space could also be a necessity, especially when the operation calls for bulk dry goods storage and mechanical or electrical repair and maintenance facilities. If expansion is required, land has to be negotiated for and local permits obtained. Often these premises are separate and some distance from the operations office, since proximity to the customer is paramount, yet goods may be arriving and leaving from a port some kilometers away. This also raises the question of communication and transportation between the two sites including security issues that may accompany a remote location.

Most companies have a preferred vendor list, however when moving into a new country it makes logistical sense to use local vendors and there is a truncated selection period for the procurement manager. Nonetheless, due diligence still needs to be performed. Initially the cost of doing business may mean accepting terms and conditions from local vendors that are not cost effective and these need to be anticipated and budgeted for until an alternative is found. However, using a trustworthy local agent can filter out enterprises that prey on the naivety that a newcomer may have. It becomes clear very quickly that attempting to operate without a local agent is overly time-consuming and expensive. As the project matures, there will be a need for such things as machine shops, catering for the staff, accommodation to flights, accommodation bookings, and in-country transport arrangements, not to mention paying for building maintenance, visa requirements, work permits, and country entry tax.

This is also true for the Logistics Manager. Without a registered local clearing/forwarding agent in-country to navigate through the vagaries and complexities of Customs requirements for import and export of goods, legal regulations for transportation of goods including chemicals, radioactive sources, explosive charges and their storage, advice on road, rail, and sea routes, and to ensure all operating licenses are obtained, the Logistics Manager will find life extremely difficult and inevitably delay the project start. Furthermore, with respect to ethics and codes of business practice, the Logistics expert must be aware of the appropriateness and legitimacy of providing facilitating payments to local officials and be aware of potentially corrupt practices. During oil exploration there are occasions when equipment is lost in the borehole and has to be fished out using specialized fishing equipment, which is essential to have on hand at all times in the event of such an occurrence. Local Customs officials on the other hand, who have little to no concept of the oil and gas industry but who have to verify and ensure that manifests reflect the goods being brought into the country, can be dismayed by the fact that the equipment required bears no resemblance to their idea of ‘fishing’ equipment, which would otherwise consist of a rod and line! In addition, the oil industry sometimes needs to install explosives in the well via a perforating gun, to puncture the surrounding formation to induce hydrocarbon flow, but similar confusion and consternation ensues when Customs officials see the word ‘gun’ on a manifest.

Consequently the clearance of such tools can take an inordinately long amount of time. It takes a patient and fastidious Logistics Manager to balance the inexperience of the local Customs officials and the demands of the operations team who are clamoring for equipment and goods and a knowledgeable Project Manager to understand the dynamics of both.
Procurement has to work closely with Finance and Accounting (F&A) to set up contracts and payment schedules for vendors, negotiate agreements with tax authorities, and transfer pricing (profit allocation used to attribute to the corporation's net P&L (profit and loss) before tax to countries where it does business). F&A also has to set up international and local employee assignments, salaries, petty cash, all or any of which will affect business detrimentally if not organized before the operations team arrive.

Sovereign states seek to use their hydrocarbon resources to generate ancillary economic benefits and boost employment. The key is for governments to establish provisions that promote the development of their resources. Traditionally, accommodating all stakeholders’ objectives has not been easy to achieve, particularly where ambitious targets for local employment have led to the creation of numerous inefficiencies. Countries can force the use of suppliers who lack the requisite technical and financial competencies to perform the work, resulting in having to pay a higher price for services. For example, a key driver of the host country may be local content participation, but this proves to be beyond the capacity of the local industry where a largely unskilled labor force requires significant training. This inexperience will create initial impact on project results and set the stage for inevitable project delays.

An ambitious plan, to establish a testing laboratory within the University of Dar es Salaam (Figure 3) was devised in conjunction with a Non-governmental Organization (NGO).

Having met with the Dean of Studies and other faculty members, it was agreed that a classroom should be dedicated to setting up the laboratory, on the proviso that both university graduates and undergraduates would be trained in the techniques required for analyzing oil well samples. Through project funding a technician would be supplied to train the first intake of post-graduates and from this cadre a candidate would be chosen to take over the role of laboratory technician. The remaining candidates would be offered the opportunity to receive further training in the USA and the potential for subsequent employment with the company.

However, when expectations for local content provision and cultural idiosyncrasies are mismanaged, projects are at risk of backlash from the surrounding population. In Tanzania’s coastal town of Mtwarra, near the border of Mozambique (Figure 3), bouts of unrest in early 2013, fuelled by grievances over unequal distribution of jobs or wealth, resulted in costly damage and delays to a US$1.2 billion gas pipeline project. Lack of community engagement by key stakeholders gave rise to this unrest as communities in the region complained about the opaque manner in which offshore gas was being developed. Although the affected communities held the government accountable, the entire project faced increased risk of
targeted disturbances if the local population continued to feel sidelined in resource development.

With a backdrop such as this, it is important to ensure that regular meetings with the members of the support team take place, in addition to individual daily contact. Despite their highly diverse disciplines each member needs to feel part of a coherent and mutually supportive team. Another significant aspect in a Project Manager’s remit is the management of change. This is a feature that is often neglected, but one that can prevent unregulated scope creep and the associated escalating costs that are never reimbursed. The Project Manager has to be attuned to and manage resistance to change when implementing process, technology, or organizational change, and be especially aware of the dynamic of the project team.

**INITIATING THE PROJECT - EXECUTION**

During this time the Project Manager’s responsibilities must extend to the customer, who may also be in the throes of moving into the country for the first time and experiencing similar difficulties and hurdles. It is an ideal time to compare notes as the opportunity arises. This leads to a feeling of shared experiences making the working relationship much tighter. It is during this process that the Project Manager learns and understands what the customer expectations are at an individual level. This includes reviewing the Scope of Work to identify final project deliverables, identifying sub-deliverables to ensure all responsibilities are allocated, creating a complete deliverables matrix to communicate project requirements to team and client, and establishing communication and working procedures for the project, for example, reporting frequency and type and meeting type and schedules with milestone dates.

However, remember that this is only a snapshot in time. The Project Manager has to be abreast of any subtle changes due to circumstances that may affect the customer’s expectations. Armed with this information, the Project Manager can relay advice to the PMO which in turn advises the project stakeholders. By the time the operations team arrives they will have a full and up-to-date dossier of the customer profile and be appropriately prepared.

As the operations team arrives, getting them started should be a simple matter of allocating desk space and introducing them to their living accommodation, in a ‘plug and play’ fashion. Again this team will consist of self-motivated, discipline-specific experts with a clear understanding of the objectives. However, it is essential to maintain morale, especially in the early stages of a project in a new country. Without the necessary support these stresses can have an immediate and detrimental effect the individual team members.

The Project Manager should use these early days to introduce the team to each other, the customer, and to the local surroundings so that they can find their bearings. The less alienation that takes place for the operations team, in these first few days and weeks, the more they will be focused on the job at hand. A salutary lesson learned from one start-up project was to ensure that the operations team only dealt with subject matter that they were experts in; because the support team did not arrive with the requisite disciplines. Just as significantly, they arrived at the same time as the operations team and there were gaps in the needed functions that had to be filled to move the project forward. Consequently, the operations team found that to begin functioning in their new environment, they had to delegate additional tasks between each member that would have otherwise been done by the support team. These included responsibility for car hire, mobile phone rental, petty cash, visa entry requirements, liaison with government logistics officers, obtaining licenses for import, and transportation of radioactive sources and explosives. Invariably, there will be a need to engage local vendors,
but without procurement skills and often acting in isolation, this operations team (and thus the project) was vulnerable to unscrupulous vendor practices which led to acceptance of exorbitant pricing to get the job done in an ever decreasing time frame.

These seemingly mundane tasks took on a life of their own and the associated time that was required to dedicate to them seriously impacted the ability of the operations team to function efficaciously. Having to divide time between responsibilities to the customer and the roles that would otherwise have been fulfilled by the support team, detrimentally affected the project readiness. Without having a common office to work from and separate accommodation, the team members were spread across and working from three different hotels making cross-functional objectives, goal alignment, and shared experience very difficult to achieve. This failure to achieve a coherent and unified project team began to affect morale within a matter of weeks as individuals were sidelined into tasks they were unprepared for. With their main tasks neglected, the project quickly began to lose momentum. Needless to say, assigning a Project Manager at this stage, albeit belated, became a priority (Figure 4).

Managing Product Delivery

It goes without saying that the Project Manager is the bridge between support services and the operations team, and both groups need to operate efficiently for the project to run smoothly. The monitoring and control activity of the Project Manager ensures that a stage stays on course and reacts to unexpected events. The process forms the core of the Project Manager's effort on the project, being the process which handles day-to-day project management.

Therefore, a pre-startup discussion is always wise to organize—prior to the operations phase of the project. The entire project team should be invited. Include both customer and partner members and set common goals and working procedures. Depending on the prerequisites and what has already been established in conjunction with the PMO, the start-up project phase will typically include creation of method statements, risk assessments, management plans and schedules, and identify gaps or conflicts in information supplied by the client. Once
presented, it’s good to ask for feedback from the team to see if there are concerns about the timeline and tasks.

To expedite the functionality of the office, it is also important at this stage to also create the role of office manager, staffed by a candidate with local knowledge. This multi-tasking individual could be used in a cross-functional capacity to undertake such tasks as arranging airport pick-up, flights, and visa entry requirements as well as general office requirements. It is a position that needs to be filled as soon as office and or/staff accommodation is established to ensure continuity and alleviate workload that might otherwise fall to the operations team.

Discussion

An expensive and time-consuming learning curve, sometimes with disastrous results, has been suffered in projects that forced standardized services beyond their capabilities and overlooked essential details. Thus, planning and more significantly pre-planning is all about preventing untoward situations and reduction of the likelihood of an event and, if all else fails, ensuring that the contingency solution is in place and ready for action.

Support services should be in country no less than three months prior to the arrival of the operations team, to establish the necessary infrastructure. It is a period when Front-End Loading (FEL) of extra resources (later reduced as the project begins to meets its deadlines) and time and energy is spent on creating the right company presence. These early envos are crucial in ensuring that the right company image is introduced professionally. With a mandate to meet a deadline for project execution, these preparatory months dictate how well a start-up project will meet its final objectives and lay the foundation to enable the operations team to concentrate on their deliverables. This two-stage method, the first focusing on the internal customer, the second stage on the external customer, have different approaches that the Project Manager must own by being both adaptable and accountable for their successful implementation.

No two projects are the same, especially in a ‘frontier’ location such as Tanzania. Identifying safety and environmental issues through a hazard or risk assessment, standard operating procedures, safe work practices, and incident investigation procedures should be performed as early as the arrival of the members of the support team allows. This process should be repeated when the operations team arrives.

Effective communicators carefully consider three components: the audience, what is said, and when it is said. Early successes and long-term wins must be recognized and celebrated. Individual and group recognition is also a necessary component of change management to cement and reinforce the changes in the organization and to minimize the impact of the change on productivity and customers.

Essential to any project is stakeholder inclusion and managing stakeholder expectations. These can be problematic depending on the individual, their perception of the risks, and their tolerance level based on their prior experiences. Sometimes a collective opinion is not held by an individual, so the importance of getting to know the customer on a one-to-one basis cannot be over-emphasized. Conflicting objectives can arise in countries where the customer also has a service contract with the National Oil Company (NOC). The relationship becomes ever more complicated when the service company has no direct reporting line to the NOC but communicates via the IOC instead.
Conclusion

Key to the success of every project is an understanding of what business outcomes your project must achieve. Success criteria need to be unambiguous and everyone must know what their particular role is in achieving the milestones. Feedback to the team engenders a common approach and feedback to the customer provides a feeling of cohesiveness.

When the stakeholders are clear about the end-goal of the project and the milestones needed to achieve it, then the project has a solid foundation for success. It is imperative during the start-up of a project, particularly when there are cultural, logistical, and even linguistic issues to overcome that there is clear communication, shared knowledge, and engagement within the team, with the customer, stakeholders, and the PMO. Aligning plans early with the expectations of stakeholders is critical to a project’s success. Omitting this crucial step allows unrealistic expectations and scope creep to develop which in turn affects scheduling and budgetary constraints.

It is vital to ensure that the required infrastructure is present by engaging a highly motivated support team that can work in an unfamiliar and potentially threatening environment. This process requires not only an understanding of the immediate needs when arriving in country, but also the ability to motivate the team over the lifespan of the project. The effectiveness of the support team will dictate how successful the operations team will be and comprehensive pre-planning will affect how well the execution phase of the project is delivered. Change is inevitable, but long-term interests, including the commercial value of the project will benefit from understanding the environment and how it will evolve.

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Having graduated from the University of London with a BSc. (Hons) Geology in 1981, Andy went on to complete an MPhil. in Geology before joining the Oil Industry in 1984. He has 30 years of oilfield experience, 10 years with Schlumberger and 20 years with Halliburton. Amongst the years spent with Halliburton Andy has been involved in projects of ever increasing complexity involving the introduction and coordination of new technology. Time spent as the Project Coordinator for the BG Group in Tunisia in 1995 was succeeded by Project Management in Norway in a production sharing project and on the Talisman Gyda project in 2004. A move to Malaysia in 2006 saw Andy leave project management to take up a regional management position for operations in Southeast Asia, China, the Indian sub-continent and Australasia. A year after moving to Houston in 2009 he resumed his role in Halliburton Project Management and has participated in or is currently involved in projects in the USA, Tanzania, Singapore, India and Iraq. Andy has written or co-authored drilling industry technical papers for the Society of Petroleum Engineers (SPE) on both Directional Drilling and Multilateral Technology and given presentations to the SPE community all over the world. His main hobbies are rugby union; he is an International Rugby Board (IRB) Level II referee, and cycling, especially for charitable causes. He currently lives in Houston with his wife and two children. Andy can be contacted at Andy.Cuthbert@Halliburton.com.

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