

New british library
and bps andrew field
development
construction essay



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The construction industry is one of the best industry in the world for delivering excellence in result. In United Kingdom we have a fantastic heritage of excellence in construction going back to Victorian times with the remarkable achievements of great engineers. But there has long been a recognition that there is considerable scope for improvement in the way construction projects are delivered. Back in the 1980's clients complained about performance of the industry, the industry complained about clients and a strong belief that we – the public – were not getting value for money! The industry was characterised by poorly performing projects, dissatisfied clients, poor quality end product, adversarial relationships between buyers and suppliers, low profit margins and a claims culture, lack of investment in people and a poor health and safety record. Public sector project in particular were inevitably delivered late, costing far in excess of what was originally

estimated, and often did not meet peoples expectations in terms of performance, aesthetics or lifecycle.

To drive culture change we must move beyond construction to a broader vision of the built environment , leveraging performance in other parts of the economy to deliver better quality of life - in housing, transport, health, education..... etc. Recognising that the relatively small up front construction cost has a big impact on overall business costs and ultimate ' value' to the user. - the social and environmental outcomes.

Focus on the environment - we must be a sustainability leader and adopt carbon efficiency. A green recovery from the current recession is required. Such that young people who want a better world can fulfil their aims by joining the industry to deliver a low carbon economy Find a cohesive voice for the industry. Institutions must collaborate to represent the industry to government and other stakeholders. Focus on how we can help reduce government costs Adopt new business models - find ways to incentives long term value creation Develop new leaders who can communicate their vision and drive culture change Integrate education and training to promote a wider understanding of the built environment. Procure for value rather than lowest price - procurement process needs to be more professionally managed Suppliers take the lead in demonstrating how they can create additional value

New British Library

Aim of British Library

The aim of British Library is to serve scholarship, research and enterprise.

Their purpose to promote the advancement in knowledge through the communication of information and ideas. In order to achieve this they

identify and respond to users' needs for a national library services; build,

catalogue and conserve the collection; provide entry to the world's

knowledge base; provide leadership and initiate co-operative programmes

for the national and international research

library community; and exploit their collections in enterprising ways to raise support for their activities.

Source: The British Library Corporate Plan 1995

Development of British Library

The concept of British Library was established in 1982, the construction of first phase was started at St Pancras. At the early stage there was no budget for complete project and the cost approved phase by phase. This was not an efficient practice for management. In 1988 Minister was agreed for £300 millions as a cash target for phase 1A and also £150 millions for completion phase.

In 1991, the former Committee of public Accounts were critical of the serious lapses in the management control and accountability of the project and elected the management arrangements to be monitored closely. The government accepted the main findings of committee and confirmed that

the expected completion of new building will held on 1996 with in the cash limit of £450 millions but in November minister increased cash limit to £496 millions. It was expected that the whole building should be completed in 1996 but the completion and handover dates of phase 1A changed three times since July 1991, in 1993 phase 1A was planned for operational in the middle of the year but the phase was completed in November 1995 but no part of the building is now expected to open until October 1997. the completion target date of phase 1A was slipped because of identify and resolve technical problems with the book shelving, in order to find out how to deal with cabling damages during installation, how to deal with short comings in the fire protection systems, and to implement remedial works.

BP's North Sea ' Andrew Field Development'

Proposed Idea & Development

In 1974 Andrew was discovered in 1974 in 230 km NE of Aberdeen in 115 m water depth, a relatively small complex reservoir, with estimated 112million barrels of oil and 3. 8 billion cu m of gas. It was proposed for development a number of times between 1981 and 1988 but always commercially unattractive. By 1991 collaborative team work had solved the gas management plan incorporating gas export and re-injection into the reservoir.

BP themselves were not sure of the steps needed to reach their goal and had to hold fast to their vision. They wanted the facilities contractors on board at the pre-sanction stage for them to establish an early sense of ownership and to work on reducing the unacceptably high cost estimate of £450m.

BP moved away from a traditional tendering process and developed a set of 10 new criteria – the Minimum Conditions of Satisfaction (MCOS) against which they would judge prospective candidates. The tender document at only 50 pages was the slimmest ever produced for a major new Offshore development. Brown & Root recognised that BP was serious and came up with it's own response to BP's Minimum Conditions Of Satisfaction that would change behaviour and reduce cost – foremost of these was an end to ' man to man' marking on the project – limiting the client team to 20 and truly integrating them was part of the delivery of the project. Contractors were cautious – especially with the MCOS requiring that the development cost be limited to £270m.

Temporary grillage steelwork to support the structure during fabrication and load out was reduced from 1100T to 300T saving £260k. An example of further cooperation between design and fabrication was that the design team produced drawings for fabrication. Usually 300 primary drawings would be produced. Instead only 30 were needed with all fabrication drawings directly produced from the CAD model saving 12000 man-hours. At sanction the estimated man hours for jacket fabrication were 580, 000 which was reduced to 500, 000 by reduction in work scope. However, by smarter working motivated by the cooperative atmosphere and culture of the Alliance, Andrew's Jacket was built for less than 440, 000 man hours. Sanction estimates, based on other typical projects, was 78 man hours/tonne

The final outcome for Andrew was 66 man hours/tonne. As different contractors would be working under different payment methods – reimbursed costs with fixed overhead and profit – and fixed lump sum prices <https://assignbuster.com/new-british-library-and-bps-andrew-field-development-construction-essay/>

- there was concern that although joint commitment was required under the risk and reward gain share system, one party might not have influence over another in achieving the target cost. Target cost finalised in Nov 93 at £373m - which included £39m contingency - approx 20% reduction in price had been achieved.

And first oil 3 months early, by Sep 96

Way the Both Projects Delivered

In the contrast of both the projects like ; New British Library and BP's North Sea ' Andrew Field Development' s project both started almost on same time and having same magnitude of cost. In the case of British Library, time and cost of project both over runs. the performance and specification of complex systems need to be settle down early during design, the library believed that they were justified in revisiting basic features of the design when construction was well advanced. In their project they did not arranged quality people like architects and other professionals because they provide the financial incentive to complete projects on time and with in budget. there was unclear definition of responsibilities for inspections between Laing, the design team, and the clerks of works. Their had been insufficient planning, resulting in sufficient time being allowed for inspections. Guidance on handover procedures had been confused, their were poor identification and recording of items to be rectified or still outstanding. As a result, there had been uncertainty over the amount of work still to be done before an area could be handed over also uncertainty over what bookshelving contractors were contracted to provide: records of technical discussions and agreement

were not readily accessible. As far as BP's North Sea ' Andrew Field
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Development' s project was concern a totally integrated team approach was done with a gain share mechanism to share risk and reward.

The idea of behavioural change as an essential ingredient for success had taken hold following feedback from another BP project which suggested that the much discussed benefits of ' alliancing' could bear fruit if managed correctly. They defined their roles, strategies and principles. They concentrated on their performance and specification during the project. They delivered their project on time because they monitored the technical issues, accidental issues and weather issues that is why the project finish on time and with in the targeted cost as well

Recommendations

Bibliography & Refrences

Constructing the Team (The Latham Report) (July 1994)

Rethinking Construction (The Egan Report) (Dec 1998)

NAO Report HC362: Progress in Completing the New British Library (15 May 1996)

Lecture notes for EPM 934 Lecture 5 (available on City Space)