

WINNING THE SYDNEY TO HOBART A CASE STUDY IN PROJECT MANAGEMENT

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Introduction

Campaigning for an ocean classic yacht race is a project. The campaign has a starting point which can be defined and the end of the race is the end of the project(1). It involves a process which requires management if the objectives are to be defined and achieved. Unlike many other projects where success may be open to debate and achievement of objectives may be unclear, this is a project in which project success or failure is as clear as the race results. As an interesting and atypical project type, it provides excellent opportunities to illustrate, examine and question the application and operation of the project management framework.

The project was successful. The objectives were achieved, the races were won. This paper will briefly present, as a project, the campaign which culminated in the winning of both the 1992 Sydney to Hobart Yacht Race and the 1992 Kodak Asia Pacific Ocean Racing Championship. The phases of the project life cycle - Concept, Development, Execution and Finishing(2); the four basic project management functions - management of scope, quality, time and cost; and the other essential project management functions - human resource management, communications management, contract/procurement management and risk management will be discussed in relation to the project.

As a case study, a project management framework is applied to the project, in retrospect. Many project managers tackle their task without conscious reference to the various project management frameworks developed by theorists. This project was carried out by a project initiator with many years experience and a reputation for success in leading projects in the corporate and financial field. Application of a rigorous and systematic process to a project outside his normal field of activity was both instinctive and a major reason for initiation of the project. However, the project process used does not necessarily fall neatly into accepted project management frameworks. Interpretation of the project in terms of project management theory is open to fruitful debate which provides project managers with useful insights to apply in planning and evaluating their own projects. An interesting question for debate is:

What stage in this project can be regarded as Execution or Implementation in the project life cycle? Is it the point at which

- the decision was made on the type of boat to be procured? or
- a commitment was made to acquire the boat? or
- the race entry was lodged? or
- the race started?

This case study adopts the acquisition of the boat for the race, as the point marking the start of the Execution phase, but other interpretations could be equally valid.

The project demonstrates the value of strategies which can be applied to a wide range of project types.

Project Life Cycle

The project life cycle(3) is used hereto provide a summary of the major activities undertaken throughout the project. The phases and activities will be covered at varying levels of detail in the balance of the paper. Refer Figure 1.

Phase 1: Concept

Identification of Needs and Opportunities

Projects arise in response to an identified need. In February 1992, a former corporate high flyer and keen sailor, decided that he needed a new boat. His current yacht, "a 10.2 m speed machine, designed by Ben Lexcen, called *The Pink Boat*"(4) was then four years old and no longer competitive.

Important bits, like the mast, were falling over too often when the boat was pushed too hard. There was no longer any point in persevering with it in serious racing.

With excellent timing, the project initiator had retired from the corporate rat race at the height of the boom. Accustomed to a high pressure business environment in which he had enjoyed considerable success, the project initiator had begun to miss the challenges of corporate life. Spurred on by the need to replace his current yacht, he decided to address his need for a new challenge by using his planning, organisational, financial and general business

skills to achieve success in a totally unrelated field - yacht racing.

Figure 1: Project Life Cycle for Ocean Race Campaign

| CONCEPT | DEVELOPMENT | EXECUTION | FINISHING |
|---|---|--|--|
| <p>Identification of Need and Opportunity</p> <p>Initial Risk Assessment</p> <p>Review alternative approaches</p> <p>Scope Management Definition of Project Objectives: - Time - cost - Quality</p> | <p>Boat Select boat design - Performance and Market research Decide acquisition strategy</p> <p>Project Team Establish initial project team</p> <p>Communications Monitor project environment</p> <p>Prepare project plan</p> <p>Risk Assessment</p> | <p>Boat Procure boat Fitout boat</p> <p>Project Team Commit crew Train crew</p> <p>Testing Test boat and crew</p> <p>Administration Ensure rule compliance Lodge race entries</p> <p>Risk Assessment</p> <p>Communications Monitor project environment Manage Public Relations</p> | <p>Start race 1 Continually tune boat and crew Review, establish and implement strategy for each race</p> <p>Finish race 5 (Each race a separate project or subproject)</p> |

In taking on this challenge he held a strong belief that winning in yacht racing is at least 80% over before you even get to a race -40 % in the choice and setting up of the boat and 40% in selection and training of the crew. On this basis, 80% of the challenge of winning can be directly controlled, leaving 20%, the actual race, which is subject to unpredictable factors, primarily weather.

Hence, there was:

- a need for a new boat, which would be exciting and pleasurable to sail
- a need for challenge

At the same time, the project initiator had identified an opportunity. By February 1992, the International Offshore Rule (IOR) was “still regarded as the grand prix rule of international racing, but rapidly losing worldwide popularity”(5). Although major regattas were still being run under IOR handicapping rules, there was rapid development of cruiser/racer fleets using the International Measurement System (IMS) for handicapping.

From the 1930’s until the late 1980’s, serious off shore racing had been conducted under IOR rules. By the late 1980s. the IOR rules, as a measurement formula for handicapping boats, were out of date, relatively inflexible

and had given rise to fundamentally bad boat design resulting from efforts to cheat the rules. The IMS is based on the use of software (Velocity Prediction Programmed), which, when fed with enough data about boats in a competition, can predict the theoretical maximum speed of any boat on any point under predicted or actual wind conditions. Boats designed for IMS racing were proving cheaper, faster, and more enjoyable to sail. As, Bruce Fur, one of the top half dozen boat designers around the world, and a leader in design of boats specifically for IMS racing said:

“In our early IMS designs we simply chose what we believed were good boat styles and designed as well as we could. . . . This approach yields boats that are very fast for their size, inexpensive relative to size (and especially to performance), an absolute pleasure to sail, and simply a lot of fun”. (6)

Although Australia was lagging behind the rest of the world in converting from IOR to IMS, it was fairly certain that IMS would eventually dominate.

The opportunity - for someone looking for a challenge,

excitement, and a “modem, fast, seaworthy, and far less expensive ocean racer”(7), was to take the lead in IMS by campaigning a yacht purpose designed and built for IMS racing.

Having identified the needs and the opportunity, the next step conscious step was definition of the project scope including objectives.

But in doing this, the project initiator recognised, as all project managers should, that opportunities have corresponding risks. Assessment and addressing of risk should begin at project definition.

His first instincts in response to the need and the opportunity was to replace his current boat with one in which he could enjoy sailing and winning. Being based in Australia the obvious high profile race to aim to win was the Sydney to Hobart, conducted each year, starting on Boxing Day, the day after Christmas Day. Before deciding on project scope, however, the project initiator assessed the risks.

Initial Risk Assessment

Determination of project success on the results of one race, the Sydney to Hobart, over a distance of 630 miles(8), constituted a significant risk, due to the unpredictable and uncontrollable effects of weather conditions over considerable time (approx. 3 days) and distance. This could be offset by aiming to win the 1992 Kodak Asia Pacific Ocean Racing Championships which comprised 5 races, 4 of which were sailed out of Sydney Harbour in December, over distances between 12 to 50 miles, and less subject to unpredictable and uncontrollable conditions as they were sailed basically in the same weather. The Sydney to Hobart, although a race in its own right which could be entered and won independent of the Asia Pacific Championship, is the 5th and final race in the Asia Pacific Championship and carries double points. An objective of winning the 1992 Kodak Asia Pacific Ocean Racing Championship reduced the risk profile of the project.

Although it seemed likely, based on international precedent that IMS division winners would be recognised in the Asia Pacific Championships and the Sydney to Hobart Yacht Race, it was not until mid 1992 that the race organisers finally decided to give dual status for IOR and IMS handicap winners. This constituted a risk at the outset of the project.

Even if the decision was made to recognise IMS division winners, there was no guarantee, early in 1992, that there would be no further change to IMS rules. They were then,

and are still subject to change which might impact on the competitiveness-of boats designed specifically for IMS. It was possible that decisions could be made to adopt one design or special rules for a major regatta.

There was no established precedent for interpretation of rules. An established and entrenched IOR fleet could cause adverse pressures in rule application and interpretation. This would need constant monitoring and potentially require lobbying.

There was a strong risk that it might not be possible to be ready for competition in December 1992. The time constraints were extremely tight. In any case there would be little time for tuning the boat and tuning and training the crew. It would be necessary to plan for aborting the project at any point if time constraints became unachievable.

There was a significant risk of potential embarrassment through failure to achieve project objectives.

Review Alternative Approaches

A possible alternative which was considered was the replacement of the current boat with a really good IOR boat to be campaigned in the 1992 Asia Pacific series, then sold and replaced by a purpose built IMS boat once the IMS rules had settled down and IMS racing was well established.

Although this alternative avoided risks involved in making a commitment to IMS before its future was settled, and the possibility of running out of time for the 1992 series, it was rejected because:

- The sale price of IOR boats was plummeting (eg one 4 year old IOR yacht had cost \$600,000 to build and had recently been sold for \$80,000), and “the competitive nature of IOR design quickly rendered them obsolete for international competition”(9)
- The project initiator/manager considered IMS boats more sensible in design and more pleasurable to sail than IOR boats. Sailing pleasure was a need of the initiator.

Scope Management - Project Definition

The project initiator clearly recognised both the risks and the opportunities. His career to date had been characterised by successes based on identifying, dealing with and taking well calculated risks. His withdrawal from corporate life had been based on timely risk identification and effective risk management. With full recognition of the risks involved, he was attracted by:

- The opportunity to be FIRST winner in a new IMS handicap division in the Asia Pacific Championships and Sydney to Hobart Yacht Race - a position in history
- The opportunity to enjoy sailing a state of the art ocean racer
- The opportunity to be a leader - and winner - an irresistible combination.
- The opportunity to attract a first rate crew inherent in having a leading edge boat

The overall objective by which successful conclusion of the project would be judged was therefore defined as:

- **To win the 1992 Asia Pacific Championships in the IMS division.**

Project scope would include:

- acquisition of a boat purpose built for racing under IMS handicap rules
- establishment and training of a crew to race the boat
- competition in the 1992 Asia Pacific Championships, commencing in December 1992, under IMS handicap rules
- preparedness to abort the project at any stage if it became evident that the objectives could not be achieved

Time Management: Time was of the essence. The race series would begin on 18th December 1992. No extensions would be possible.

Quality Management: Winning the race series in the IMS division would be dependent upon satisfying quality objectives. Choice and fitout of boat, selection of crew would be driven by the need for highest quality in order to achieve the overall project objective. Sailing pleasure was a quality objective.

Cost Management: Due to the financial resources available to the project initiator, cost was subsidiary in importance to time and quality objectives in achievement of the overall project objective. In deciding on a purpose built IMS boat as against IOR, cost management had already been exercised to some extent as purpose built IMS boats cost significantly less than top of the range IOR boats.

Phase 2: Development

Project Team

The primary decision maker was the project

initiator/manager/potential owner and captain. He was assisted and advised at all stages by the crew of his current boat - "The Pink Boat" - and he had, over the years, established an expert advisory panel of experienced sailors, crew members, sail makers, boat designers and builders.

The initial Project Team established comprised the project initiator and a long time colleague and crew member of his current boat - seven times world champion in different boats, sought after as a crew member in ocean racing. The third and vital member was the owner of one of Sydney's top sail lofts.

The role of the initial project team was the selection of the boat and the rest of the crew.

An important and delicate issue of human resource management in projects the decision as to which members of the crew of the current boat would be involved in the project team and crew for this particular project.

Boat

The primary activity in the development stage of this project was the selection of the boat. This required considerable and extensive research.

A study of all IMS events around the world, and specifically the winners, indicated that Bruce Farr 44 foot designs were dominant. The 44 foot Farr designed "Gaucho", a yacht designed specifically to compete under IMS rules, had beaten all other IMS boats so soundly that it had lead the establishment of a new breed of boat on the international sailing scene in what had become known as the "Gaucho Revolution". The project initiator/manager spent time with Bruce Farr and sailed on Gaucho in March 1993.

On the basis of race performance it would have been reasonable to follow the Gaucho lead and decide on a proven 44 foot Farr design. Farr had designed a 40 foot IMS boat but at this stage it had not been built or raced. Examination of empirical data from previous races and advice from experts suggested that for the distance and weather conditions of the 630 mile Sydney - Hobart race a 40 foot boat was an optimum size in terms of performance, comfort and ability to withstand varying weather conditions.

Factors considered were:

The 44 foot Gaucho design

- was proven - with an unblemished record but
- it required 12 to 14 people to sail it (heavy

- crew requirement/commitment)
 - it was more expensive than the 40 foot design

The project initiator/manager was really looking for a “sports car style” boat, fast, with plenty of sail and considered the proven 44 foot Farr design a little too big, a little too conservative and a little too expensive. He was attracted to the as yet unbuilt and untried 40 foot design. While attracted by the 40 foot Farr design, the project initiator/manager recognised the inherent risk.

He continued his research, finding out all he could about potential builders as it appeared most likely that he would have to arrange for a yacht to be built, regardless of the design chosen.

Gaucho had been built in Argentina, but this presented problems of transport and communication.

An Australian or New Zealand builder was preferred for these reasons. Research suggested that a New Zealand builder might be most attractive in cost terms as labour rates were sufficiently lower than in Australia to offset the 25% tax which would apply. Two New Zealand builders were visited and assessed.

By May/June 1992 a decision had still not been made and the project initiator/manager was considering abandoning the project - or rather modifying the objective to aim for the equivalent 1993 race series. However, while market research and evaluation had been proceeding, Mick Cookson of Cooksons in New Zealand, had decided to build himself a 40 foot Farr design. This boat, *High Five*, was finished in June 1992 and won the Kenwood Cup in July. It proved to be very much as the project initiator/manager had expected - a sports car style ocean racer, with large sail area and a challenge to sail.

Spurred on by the success of *High Five*, Cookson started building another 40 foot Farr on a speculative basis. The project initiator/manager was able to negotiate an extremely favorable fixed price to take over the boat Cookson had under construction.

The final selection of the design and procurement method or acquisition strategy were therefore decided virtually simultaneously. The decision minimised risk as far as possible. The 40 foot Farr design had been proven by the performance of *High Five*. A time advantage was achieved as the new boat was already under construction.

Phase 3: Execution

Boat: Procure boat

The agreement for procurement of the boat was signed in August 1992 and the boat completed, for the amount initially agreed, at the end of October 1993.

Boat: Fit out boat

On completion of the boat, a skeleton crew, including the project initiator/manager and his top 2 crew members, flew to New Zealand to oversee initial fitout and trial the boat, spending 3 days sailing the boat with the crew from *High Five*. Full support and assistance were given by Cooksons and the experienced crew which had sailed *High Five* successfully in the Kenwood Cup. Once it was trialled and they were happy with the set up, they marked settings, dismantled the boat and had it shipped to Australia. Training with full crew began in early November 1992. The aim was to optimise the IMS rating through adjustment of set up, trimming and weight.

Other aspects which had to be decided and arranged before the boat left the Cookson yard were the colour scheme for the boat - and most importantly - the name. Much consultation resulted in adoption of the name *Assassin* which reflected the level of opposition and depth of feeling against this bold new breed on the ocean racing scene. Public relations had become a key issue.

Project Team: Commit and Train Crew

The selection and securing of the crew were as important as selection and securing of the boat. All key crew members were committed **prior to** the commitment to the boat. The right combination of boat, crew, commitment and conditions were identified as essential to success of the project.

IMS rules provide the opportunity to choose the crew weight, and a decision was made to establish a crew of nine.

Crew, or team members were carefully selected for particular positions based on

- previous experience and track record
- motivation and commitment
- ability to work well together

Roles were clearly defined and agreed by project team members

The project initiator/manager fostered team relationships, watching the various personalities, keeping the peace, and relieving tensions when required.

Team motivation was assured by the nature of the campaign and the team members selected. All team members really liked sailing and took it seriously in career terms. The campaign was established as at the leading

edge in yachting. This would be one of the first purpose built IMS boats, and the first time that there would be an IMS handicap division winner in the Sydney to Hobart Yacht Race, one of the world's most prestigious ocean racing competitions. With a leading edge boat and top crew there was a real chance of winning. The better the boat and the crew the more fun there is in sailing. Team members had the opportunity of enjoying good sailing while improving their own skills and enhancing their yachting careers and reputation.

Administration and Control

The race entry had to be lodged correctly and prior to the official closing date of 31st October 1993.

Developments in IMS rules, their interpretation and application, both internationally and in particular, locally for the Sydney to Hobart race, had to be monitored constantly. This was not difficult due to close and active participation in the yachting community and through the boat builders who were had a vested interest in the ultimate performance of the boat. Compliance of the boat through construction and in set up and tuning, with IMS handicap rules was ensured.

There were 5 certifications required to enable entry. These were carried out a couple of weeks before the first race in order to allow time for changes if necessary. Most of the certifications were purely objective, but accommodation regulations were open to interpretation and careful lobbying was required to ensure that attempts by entrenched interests did not cause difficulties in this area.

Phase 4: Finishing

Prior to the start of the Sydney to Hobart race on 27th December 1992, *Assassin* raced successfully in the 4 lead up races of the 1992 Kodak Asia Pacific Ocean Racing Championship. At the end of the 4th race *Assassin* was leading the IMS point score in the Asia Pacific Championship. The team were feeling like winners. The boat had been well tuned. Morale and excitement were high.

The Sydney to Hobart was worth double points. A good start to the race was important for morale and *Assassin* made "a classic windward end start"(10) winning the start from other boats at that end of the line by two boat lengths, and surviving "a spirited luffing incident"(11) with another boat. Going out to sea they were well positioned in sixth place and were well ahead of boats they had to beat on handicap.

"Helmsman on *Assassin*, Bob Fraser, on his 14th Sydney-Hobart, had the best summation of the 630 nautical mile dash south: It was a windy, wet, cold, 'never do another one' sort of Hobart race(12)." The project initiator/manager's comment was that "it was a pretty tough Hobart. We had two reefs in the main and a storm jib up for probably two thirds of the race. it just went on and on and on(13)". The Farr IMS designs perform best upwind, but only 3 to 4 % of the race was to windward. The project initiator/manager claimed that it was time spent in selecting the crew and developing teamwork was well rewarded by the team's ability to achieve a winning performance "despite the fact that conditions did not suit the boat's full strength". The boat remained dry and intact throughout the race.

The strategy chosen and adhered to for the race was to sail as close as possible to the rhumb line and always sail the favoured tack or gibe rather than chase weather systems.

The Results

The project was an undisputed success.

Assassin won in the 48th Sydney to Hobart Yacht Race and with it the 1992 Kodak Asia Pacific Championship in the IMS division.

Conclusion

Project Success - Objectives Achieved

The project initiator/manager and the project team were proven right in their decision to campaign for an IMS win. In the Sydney to Hobart "the number of IMS entries (61) over IOR (34) reflected the acceptance of the new rule(16)." As it turned out, the IMS division proved far stronger than the traditional IOR division. This may well not have been the case and this possibility had been identified as a definite area of risk in the initial assessment for the project.

The decision to procure and race a boat purpose built to IMS rules was clearly justified as:

- leadership in the field made it possible to secure the best possible crew
- the combination of boat and crew made it possible to achieve an historic win in the first ever IMS division of the Sydney to Hobart.

The decision to procure a Farr designed boat was justified not only by the win of *Assassin* but by Farr designs winning all three divisions in the race.

The decision to procure a 40 ft Farr IMS design was

justified by the win of the 40 foot *Assassin* over its close rival, the Farr 50 ft IMS design, *Morning Mist III* which had secured a crew of equal calibre to *Assassin* as the first of the Farr IMS 50's to be launched.

Project Strategies for Project Success

This case study of a clearly successful project demonstrates a number of strategies which can be applied to a wide range of project types.

Characteristics vital to the success of this project were

- extensive market research prior to major decisions (selection of boat)
- extensive risk assessment at all stages including modification of the key project objective in order to reduce risk (key objective changed from winning the Sydney to Hobart to winning the 5 race Asia Pacific series)
- identifying an opportunity (taking the risk in competing on new race rules - IMS)
- securing the best possible project team (crew)
- committing key team members early and involving them in major project decisions (eg selection of boat)
- constant monitoring of the project environment (rule changes and interpretations)
- treating each of the 5 races in the Asia Pacific series as a project with project performance feedback from each race being fed back into strategy and tuning of the boat and crew for the next race (or subproject)
- motivation of the project team through project objectives and project quality (the crew were committed and motivated by the excitement of winning and by knowing that they were a top flight crew, sailing a superbly fitted leading edge boat)

Another interesting aspect of the case study is that the project initiator was prepared to abort the project at any stage rather than sacrifice quality. For instance, he was not prepared to make a decision on the boat for the campaign without extensive research as to the most suitable design. This may have meant that insufficient time remained for the achievement of the project for 1992 in which case he would have revised his objectives.

According to the project life cycle interpretation adopted, nearly 50% of the project duration was spent in the Concept and Development phases. This combined with the undoubted success of the project supports the importance of effort devoted to initial stages of projects to their ultimate

success.

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