Project Objectives

Stakeholders - Bjorn Ericksen, Karin Knutsen, Trygve Wallvik, the crew and the Dep. of Sport.

Bjorn Eriksen is the project manager, from his perspective the project objectives are to complete the project on time, in budget and to the best of his and the team's abilities. Bjorn and direct subordinates, who are all stakeholders, agree that the main objective is to have a winning boat that will cost \$3.2 million and be completed in 45 weeks. Karen Knutsen is the chief engineer for the project, her objective is to design and build the boat as quickly and safely as possible while keeping costs in mind as her expenses are where the majority of the monetary resources are going, Trygve Wallvik is the master helmsman for the boat, his objective is to build and train a team capable of winning the Whitbread Sailboat Race, he needs to have the team selected, trained and all the equipment ordered in time with the boats completion in order to make a smooth transition from the old to new vessel. The crew have a stake in the project, as they have been hired to compete in the race and from their perspective, their objective is to win and perform to the best of their abilities. The countries department of sport who are likely funding the project also have a stake in the project as the budget is coming from them, they will be interested in seeing Bjorn's justification for his expenditure and it will be their decision if he is granted further funding. Their objective is to keep the budget under control and not allow for frivolous spending while remaining competitive.

The Critical Path of the project is the best method for determining if the project can be successful and in line with the main objectives, as these tasks are in control of the earliest week the project can be finished. This is the critical path most sensitive for the project, as delays in these tasks will greatly hinder the project's completion.

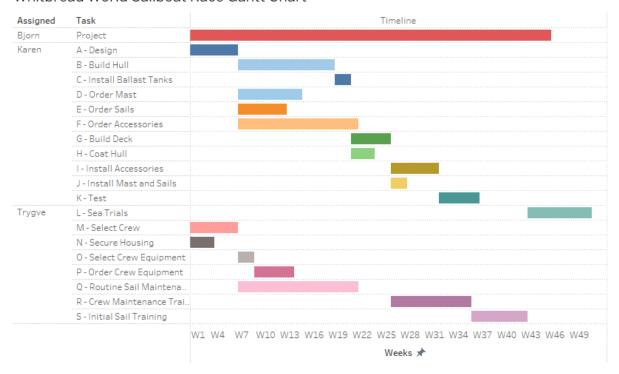
Task	Week	Duration (weeks)
A-Design	1	6
B-Build Hull	7	12
C-Install Ballast Tanks	19	2
G-Build Deck	21	5
R-Crew Maintenance	26	10
S-Initial Sail Training	36	7
L-Sea Trials	43	8

Kieta Appenah 4E1: Case Study 12 November 2017

Gantt Charts

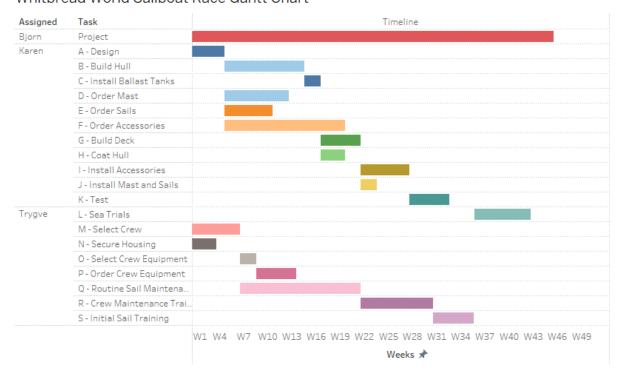
Assigned	Start	End	Task	Task Duration
Bjorn	01/01/2017	12/11/2017	Project	315
Karen	01/01/2017	12/02/2017	A - Design	42
Karen	12/02/2017	07/05/2017	B - Build Hull	84
Karen	07/05/2017	21/05/2017	C - Install Ballast Tanks	14
Karen	12/02/2017	09/04/2017	D - Order Mast	56
Karen	12/02/2017	26/03/2017	E - Order Sails	42
Karen	12/02/2017	28/05/2017	F - Order Accessories	105
Karen	21/05/2017	25/06/2017	G - Build Deck	35
Karen	21/05/2017	11/06/2017	H - Coat Hull	21
Karen	25/06/2017	06/08/2017	I - Install Accessories	42
Karen	25/06/2017	09/07/2017	J - Install Mast and Sails	14
Karen	06/08/2017	10/09/2017	K - Test	35
Trygve	22/10/2017	17/12/2017	L - Sea Trials	56
Trygve	01/01/2017	12/02/2017	M - Select Crew	42
Trygve	01/01/2017	22/01/2017	N - Secure Housing	21
Trygve	12/02/2017	26/02/2017	O - Select Crew Equipment	14
Trygve	26/02/2017	02/04/2017	P - Order Crew Equipment	35
			Q - Routine Sail	
Trygve	12/02/2017	28/05/2017	Maintenance	105
_	05/06/0047	00/00/0047	R - Crew Maintenance	=0
Trygve 	25/06/2017	03/09/2017	Training	70
Trygve	03/09/2017	22/10/2017	S - Initial Sail Training	49

Whitbread World Sailboat Race Gantt Chart



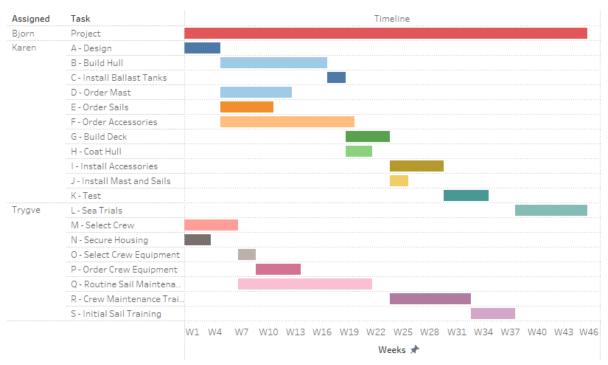
Assigned	Start	End	Task	Task Duration
Bjorn	01/01/2017	12/11/2017	Project	315
Karen	01/01/2017	29/01/2017	A - Design	28
Karen	29/01/2017	09/04/2017	B - Build Hull	70
Karen	09/04/2017	23/04/2017	C - Install Ballast Tanks	14
Karen	29/01/2017	26/03/2017	D - Order Mast	56
Karen	29/01/2017	12/03/2017	E - Order Sails	42
Karen	29/01/2017	14/05/2017	F - Order Accessories	105
Karen	23/04/2017	28/05/2017	G - Build Deck	35
Karen	23/04/2017	14/05/2017	H - Coat Hull	21
Karen	28/05/2017	09/07/2017	I - Install Accessories	42
Karen	28/05/2017	11/06/2017	J - Install Mast and Sails	14
Karen	09/07/2017	13/08/2017	K - Test	35
Trygve	04/09/2017	23/10/2017	L - Sea Trials	49
Trygve	01/01/2017	12/02/2017	M - Select Crew	42
Trygve	01/01/2017	22/01/2017	N - Secure Housing	21
Trygve	12/02/2017	26/02/2017	O - Select Crew Equipment	14
Trygve	26/02/2017	02/04/2017	P - Order Crew Equipment	35
			Q - Routine Sail	
Trygve	12/02/2017	28/05/2017	Maintenance	105
T.,	20/05/2047	20/07/2017	R - Crew Maintenance	63
Trygve	28/05/2017	30/07/2017	Training	63
Trygve	30/07/2017	03/09/2017	S - Initial Sail Training	35

Whitbread World Sailboat Race Gantt Chart



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Whitbread World Sailboat Race Gantt Chart



The schedules explore the different options to complete the project.

The first schedule and Gantt chart is an attempt at following Karen and Trygve's initial cost estimate and duration for each activity. The final figures for the project using these estimates are 50 weeks at a cost of \$2.99m activity costs and \$226,000 vessel running costs totaling \$3.216m

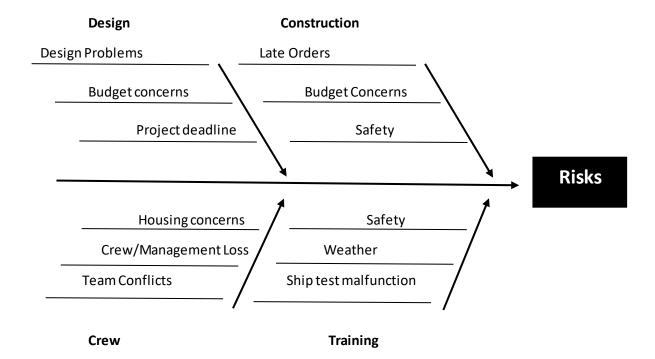
The second schedule is an attempt at completing the project as quickly as possible by making use of the crash estimates for activities on the critical path. The final figures for the project using these estimates are 42 weeks at a cost of \$4.3m activity costs and \$186,000 vessel running costs totaling \$4.86m

The third schedule is an attempt at completing the project on time while making use of crash estimates for activities on the critical path while also keeping an eye on budget. The final figures for the project using these estimates are 45 weeks at a cost of \$3.65m activity costs and \$200,000 vessel running costs totaling \$3.85m

Risk Analysis

Risks

There are various risks that could occur during the timespan of the project. These include:



Extended Risk Analysis

Risk	Probability	Impact	Likelihood	Preventative	Response
	of		of	actions	Actions
	Occurrence		Detection		
Design Problems	Low	Moderate	Moderate	Weekly reviews	Constant
					communication
					with Karen
Overbudget	High	Moderate	High	Proper planning	Emergency
					budget
Missing project	High	High	High	Weekly updates	Develop Crash
deadline				and reviews	Budget
Team conflicts	Moderate	Moderate	High	Accept there	Problem solve,
				will be conflicts	clear the air
Safety (fire,	Low	Moderate	High	Constant	Safety drills,
spray, storage)				vigilance, good	safety training,
				housekeeping	buildings up to
				and	code
				maintenance	
Weather	Low	Low	Low	None	None
Conditions					
Late orders	Moderate	High	High	Review orders	Crash cost to
					offset lost time
Crew	High	Moderate	Moderate	Reserves and	Hire
loss/change				replacements	replacements
					from reserves
Housing/building	Low	Moderate	High	Backup	Quick
concerns				properties for	relocation to
				the team and	reduce time
				equipment	loss
Ship	Low	High	Moderate	Careful and	Alert Karen and
test/training				proper	herteam
malfunction				design/planning	

Team Dynamic and Team Building

Team Dynamics

Bjorn Ericksen must consider several team dynamics that will rear their head during the project. Throughout the project he needs to be aware of:

- Team and Individual Motivation
- Ability
- Role Perceptions

As project manager, Bjorn must be aware of the individual behaviours of his team, he is in charge of keeping team morale up and ensuring that the team is productive. Keeping the team and individuals motivated can be accomplished by inclusivity of the projects direction, if everybody feels involved then they are more likely to persist and strive for excellence. Problems like lack of direction lead to demotivated individuals who lack interest in the goals of the project. It's unlikely that motivation will be a problem as Bjorn and Trygve Wallvik will search for a highly experienced and experienced crew for the boat who all share the desire of winning the race. In terms of motivation for the boat builders, Bjorn and Karen Knutsen will need to keep on top of their staff as any lost time or delays in the building of the boat could be disastrous.

He must also be aware of the abilities and perceptions of his team, if team members lack the ability to complete tasks this will result in poor quality work that will likely arrive late and push back the deadlines. Matching the correct people and selecting the right people for the job is very important and while Bjorn has selected Trygve for master helmsman he should remain aware of each hire and their respective jobs and abilities. An issue that can lead to power struggles and conflicts is role perception, and this also ties in to individual ability, if team members believe that they are above others this will lead to conflict as everybody will have a different view as to who is in charge and how something should be done. Resolutions to this include communicating roles and methods clearly in meetings where everybody has a chance to speak but final decisions are made by stakeholders.

Team Building

While the team dynamic is one aspect, building a high functioning team is another facet of Bjorn's job. Good teams don't simply just happen and there is a learning curve and growth over time that needs to happen. Bjorn's job as project manager is to help encourage these important features of team building

- Cohesion
- Trust
- Communication
- Conflict

Team cohesion is a result of team member compatibility and team size. It's usually suggested that teams of fewer than ten, work better and while the crew of the boat will number twelve, I doubt this will cause many problems as the member will likely share interests and have volunteered of their own accord to compete and to succeed in winning the race. The members will be together from start to finish and live together allowing for bonds to form. The competition from other teams will allow the members to pull together to beat a common enemy. Bjorn will however need to encourage this togetherness as the more comfortable the team are together the better they will perform.

Team trust will be passed down from Bjorn as the project manager, the team needs to have faith in his vision and the group he has assembled to see it through. Bjorn's experience in designing and helming racing sailboats can only help him in gaining the trust of the team as he delegates tasks. The team needs to trust that Bjorn will pick the best people to complete the tasks.

Communication is a key feature to any team, cohesion and trust can be greatly hampered or improved with simple communication. Bjorn needs to communicate his goals and objectives clearly and succinctly and offer clarification when desired. He needs to address problems as quickly as possible due to the time limit but he needs to do so carefully so as not to create even more unneeded conflict.

While conflict can seem as a negative aspect of team building, constructive conflict and relationship conflict are two different things, constructive conflict can be beneficial much like constructive criticism. The conflict can allow for the grievances to be aired, problems to be solved and for a better understanding between team member and management to be gained. Bjorn needs to allow team members to clear the air while remaining respectful to his right of final decision.

Team development happens naturally over time, there are stages to this development.

- Forming
- Storming
- Norming
- Performing
- Adjourning

At formation, Bjorn needs to present team members with the expectations of the team and let them evaluate each other while testing the boundaries of acceptable behaviour. This can be exhibited in little things like seeing how the team reacts to punctuality, Bjorn needs to stamp out unacceptable or undesirable behaviours before it becomes habit. The next stage, storming, is concerned with members trying to create a hierarchy and compete for team roles and conflict can occur as differing ideas and people will class, Bjorn's job here is to keep control and delegate tasks to people with the abilities to complete them. Norming occurs after this as roles and objectives are agreed upon and the team culture and norms are established. Performing is the step where the work occurs, as the tasks are delegated, communication is needed to co-ordinate the project. It's at this stage that Bjorn is needed to resolve conflicts and help the trust and co-operation to build among team members. The final stage is adjourning, where the project is finishing up and Bjorn will have to manage the relationships as the team members finish their tasks.

Professional Report

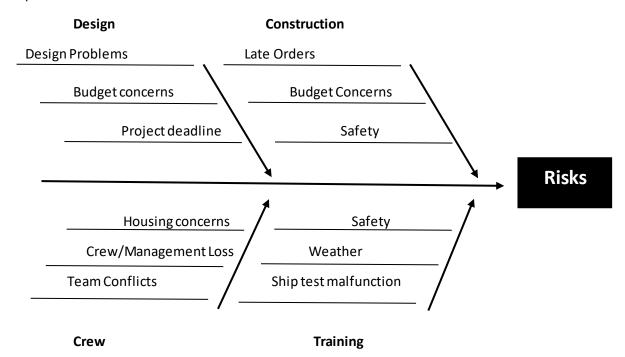
Assumption: Whitbread Team are the higher ups funding the project.

This report provides an analysis and evaluation of the project plan, the risk analysis and human resource plan of the Whitbread World Sailboat Race project managed by Bjorn Ericksen. Bjorn Ericksen was given the objective of completing a race winning boat that would cost \$3.2 million and be completed in 45 weeks. The project plan included mapping out the critical path of the project to see which tasks were sensitive and needed to be completed in order to get the earliest finish for the project and best possible budget. The project would not be completed on time according to the original estimate schedule. Therefore, various crash cost and estimates had to be implemented in order for the project to be finished on time.

Task	Week	Duration (weeks)
A-Design	1	4
B-Build Hull	7	12
C-Install Ballast Tanks	19	2
G-Build Deck	21	5
R-Crew Maintenance	26	9
S-Initial Sail Training	36	5
L-Sea Trials	43	7

While performance was to be enhanced as much as possible and time was to be constrained. There was no reason to deliver the project weeks early and way over budget when it could be delivered in 45 weeks and only slightly over budget by \$665,000. The budget costs were to be accepted but this still had to be within reason.

The risk analysis plan identifies the various risks throughout the projects lifespan that could disrupt or delay project progress. The plan goes through the risk using the extended risk analysis method and determines the Probability of Occurrence, Impact, Likelihood of Detection, Preventative Actions and Response Actions for each risk.



These are the risks that are analysed using the extended risk analysis method and it is evident some risks are more likely than others, but these are also the risks that will be detected quickly. Each risk has preventative measures and response actions to be made by either Bjorn Ericksen, the master helmsman, Trygve Wallvik, or the chief engineer, Karen Knutsen.

The human resources plan was concerned with the team building and the team dynamic. The team dynamic was concerned with the motivation, ability and role perception of the individuals and how they fit into the team. As project manager, it is Bjorn Ericksen's job to keep the team motivated and establish the team identity, this will help to keep everybody interested and engaged in roles that fit their abilities.

Team cohesion and trust will develop over time and if Bjorn manages the decision making properly and delegates tasks to the right people, this will reduce possible conflicts. When conflict does arise, it should be dealt with quickly, the team should however, be allowed to air grievances as long as they are willing to accept that the final decision is down to Bjorn. Communication is a cornerstone to any sort or team building, lack of communication is the main reason that conflict will arise and progress slow down.

Bjorn must take care during each stage of the team development as if he is negligent and allows for habits and behaviours that inhibit project progress to develop, then further conflicts will occur when he deals with these issues at this later stage.