

A person is seen from behind, standing on a snow-covered mountain ridge. The person is wearing a dark jacket and a backpack. The background shows a vast, snow-covered mountain range under a clear blue sky. The overall scene is bright and clear, suggesting a high-altitude environment.

PMI Presentation Summary

**Project Everest:
Essential Steps for Successful Projects**

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Reference:
PMBOK Guide, 5th Edition. Newtown Square: Project Management Institute, Inc.

Presentation Summary

Climbing Mount Everest is considered one of humanity's greatest feats of human endurance. The two-month quest to reach the highest point on earth is a journey filled with unparalleled challenges and some of the roughest and most extreme conditions imaginable.

Alan's dynamic presentation focuses on developing leadership capacity and strengthening teams by reinforcing the professional development skills that are essential for success in any endeavour. It highlights the essential processes that are involved in planning and executing difficult projects by using the challenge of Everest as a metaphor and example of such a project. The presentation is structured around a two-month self-guided mountaineering expedition where Alan, along with his father, brother and sister set a world record on Everest after climbing through some of the most arduous and terrifying conditions imaginable.

From Alan's terrifying experience of running out of oxygen on the summit ridge to when they thought they had lost his sister Laura forever, it seemed as though every section of the climb had some terrifying difficulty to overcome. The real story isn't so much about the climb however; it is about a fairly ordinary family that set a lofty goal, pursued it as a passion, and eventually achieved success. The powerful lessons learned during the intense and many times critical situations encountered during the expedition can be applied to all walks of life.

The principal themes and key messages of *Project Everest: Essential Steps for Successful Projects* include:

- Improving Communication and Overcoming Communication Barriers
- Developing a Clear Scope and Objectives through Strategic Planning
- Establishing a Schedule and the Consequences of Schedule Deviations
- Risk Management, Mitigation and Planning Risk Responses
- Initiating, Managing and Embracing Change
- Developing a Stronger Level of Trust in Professional Relationships
- Effective Methods of Dealing with Conflict and Adversity



- Improving Team Dynamics and Collaboration

For a safe and successful expedition on Mount Everest, extensive planning is required in all management areas. The upfront planning needs to be well thought through and established while allowing for contingency measures to account for the many unknowns and factors out of the immediate control of the team.

These external and internal factors constrain and influence the project and were considered our Enterprise Environmental Factors (EEFs).

Internally, our most prevalent EEFs were the underlying nature of the team members and our family dynamics. The external EEFs also had a very significant influence on the project and included such things as the ever changing environmental conditions we were presented with, cultural differences in Nepal, political conditions and the atmosphere and situations that were in place from other climbers, expedition companies and local Sherpas.



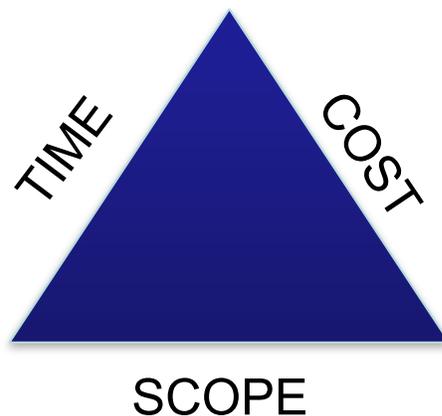
We also had Organizational Process Assets (OPAs) that effected our plan and management of the expedition. These included moral responsibilities, an understanding of transparency, and the precesses and procedures we went through in terms of equipment checks and safety assurances. Our knowledge base OPA's included the lessons learned from other expeditions we had been on, altitude and acclimatization knowledge and historical information from previous expeditions on Everest.

Having a success mentality was a crucial quality for each of us during the expedition as well and was one of the key factors that led to our success. Over 70% of climbers give up and turn back. Not being able to handle the mental challenges is one of the primary reasons.

The following are a few elements that play a major role in having a mentality for success:

- Attitude
- Integrity
- Relentlessly Pursuing Improvement
- Giving Credit where Credit is Due
- Controlling your Focus
- Searching for Solutions instead of Problems
- Having Realistic Expectations
- Good Habit Formation

As with all projects, properly managing a mountaineering expedition involves managing the interaction and balance between Time, Cost and Scope ('The Triple Constraint'). Serious consequences (often loss of life) can result from improper management of any of these constraints.



Other Constraints:

- Quality
- Resources
- Risk

Schedule management planning for the expedition began approximately one year before we departed on the expedition. The schedule planning involved extensive research and applying the knowledge and experience we had acquired from other mountaineering expeditions.

The primary tools & techniques that were used for planning the schedule management were expert judgement, based on knowledge gain during prior expeditions the team members had taken part in, historical information, analytical and estimating techniques, and organized meetings and discussions between the project team members. We had to use a simplified form of rolling wave planning due to the many unknowns of future work that we would be encountering. More detailed activities were planned as the expedition progressed.

Significant effort was allocated to estimating activity durations and sequence of activities. This was due to the fact that the weather window on Everest (the time period when a summit attempt is feasible) is very short, lasting only about two

weeks. It is crucial that climbers be in a position to make a summit attempt when this weather window presents itself (at the end of May). Analogous Estimating was the prominent tool that we used in estimating the durations of activities although we did combine this with judgement from other climbs we had completed. We were fortunate to have the historical data from other expeditions on Everest which we used extensively in our analogous estimating of activity durations. Our expedition duration estimate was largely based on a fairly informal analysis using the Critical Path Method. We also employed the Critical Chain Method by adding a duration buffer to manage the huge amount of uncertainty that we were faced with from the unpredictable environment and circumstances. We had a 3 week duration buffer in the schedule and arranged our return flights accordingly.



Once the expedition had begun, one of the biggest challenges was monitoring the status of our climb and controlling the schedule. This was an immense challenge due to all the unknowns and daily changes that were largely out of our control. We had to take corrective action at many times and had to fast-track certain activities.

The most significant change was that we had to separate the team in many instances. This was because we were all so sick that we discovered that we each needed to make our acclimatization pushes while we were healthy. Waiting for the entire team to be healthy was not feasible because by the time the sick climber felt better, the next climber would be ill and no progress could be made. We had access to medical devices which aided in our performance reviews (primarily through blood oxygen readings to determine the level of acclimatization).

For our performance reviews, we used a number of techniques, both formally and informally:

- Trend Analysis: Looking our performance over to predict future performance goals.
- Critical Path Method: Comparing our progress to our critical path activities and milestones.

- Critical Chain Method: Looking at the amount of buffer time left (of the 3 weeks we had allowed).

Our efforts to control the schedule were quite effective and we ended up reaching the summit within two days of our original schedule.

An important element of planning to succeed is being able to effectively embrace and work through change. On the mountain, it really became a matter of resilience. Almost every day, we were faced with some new dire challenge to overcome. We needed to be able to say to ourselves, “This is about as bad as it can get, but how can we work with this and continue forward”. Without this mentality, climbers talk themselves into turning back and giving up.

Managing communications before and during the expedition was a challenging but very necessary part of ensuring a successful outcome. Before the expedition there were countless communications, verbally, written and electronic, with outfitters, equipment suppliers, government agencies and with the many other project stakeholders.

Having clear communication on the mountain is a necessity and the consequences of communication errors or broken communication is often death. We had a serious and potentially deadly experience during the expedition that was a result of broken communication and faulty communication equipment.



Project procurement management was a challenge because of the logistics involved. We required a huge amount of very expensive and specialized equipment, much of which had to be ordered from other countries. The organization and tracking of these procurements was difficult and had to be coordinated between all of the team members.

Our Everest expedition involved many risks. We spent a significant amount of time and effort identifying and analyzing the many risks, both qualitatively and quantitatively.

We had many strategies and techniques for dealing with both negative and positive risks. Risk Avoidance was one response strategy that we employed. Some examples are:

- Snow blindness - always wearing our glacier glasses. I had gotten snow blindness in 2004 on Mt. Denali.
- Khumbu Icefall Exposure - We avoided exposure to the Khumbu Icefall on the first few scheduled passes by climbing other peaks in the area to gain the required altitude.
- Sickness - Many times we would avoid eating alongside the other climbers in the outfitter's group to avoid catching their sicknesses (almost everyone gets severely sick).

When possible, we also used the response strategy of Risk Transference. Some examples are:

- Permits - The risk associated with permits and the associated logistics, we were able to transfer to the outfitter we used (at a cost of course).
- Tents - The severe weather often destroys tents. This risk was transferred to our outfitter as well who took responsibility for the tents at each of the camps.
- Nourishment - The food supply associated risks were transferred to the outfitter that we used.
- Insurance - We had insurance to mitigate the financial risk, should an emergency rescue be needed.

We were able to effectively Mitigate some of the most serious risks that we encountered.

Example include:

- The Khumbu Icefall - We would go through the icefall before the sun was up to mitigate exposure to the most dangerous ice movement.
- Pulmonary and Cerebral Edema - We took a diuretic pill called Acetazolamide (Diamox) which helps speed up the acclimatization process and reduce the likelihood of edema.
- Ladders - There were two safety ropes on the sides of each ladder which we clipped in to in order to mitigate the risk of death from ladder failure (a fairly common occurrence).



- Traversing Ropes - While traversing the Lhotse Face, we had a traversing rope to mitigate the serious risks associated with a fall.
- Death while Sleeping - At Camp 4, we slept on oxygen to mitigate the risk of loss of life during sleep.
- Health Risks - Mitigated through doctor visits and advice.

There were some risks that we simply had to Accept as there was no way to mitigate, transfer or avoid them. Example include:

- Political Risks - There was a significant risk the the mountain would be closed due to the political challenges with the Chinese government
- Avalanches - Avalanches can happen at any time and in almost any place on the mountain. Other risk responses are not an option.

- Earthquakes - Although historically there have been few serious earthquakes in the Himalayas, this is a serious risk that had to be accepted.



Some risks we were faced with were of a positive nature. We tried to exploit these positive risks whenever possible. Examples included:

- Lucky weather breaks
- Different food that we were able to stomach (ie. rare baked goods at Base Camp)
- Collaboration with other climbers

When it came to Human Resource management, developing a strong and effective team was crucial. One of the most important elements was development of trust. Trust between team members gave us the following advantages:

- It allowed each of us to focus on certain tasks at times and trust the other team members to complete other tasks.
- It gave us a sense of security that others were looking out for each of us.
- We had a true interest in each other's success and safety.
- We didn't feel overly hesitant or scared about putting our lives in each other's care.

- We were able to confidently share the difficult decisions and responsibilities with each other.
- Our objectives were aligned so that we had unified goal that we were working together to achieve as a team.
- We were able to pool our knowledge to make educated decisions in spite of the low oxygen environment.

Quality was difficult to manage on the expedition. We were able to effectively manage the quality and condition of our own equipment but the ropes, anchors, condition of the tests, food quality and general quality of other factors and deliverables were largely out of our control.

In terms of cost management, the expedition was extremely costly but the management aspect only came into effect during the planning stages because all of the costs were sunk costs once the expedition had begun and were basically not effected by changes in scope, schedule or other constraints, due to the unique characteristics of the project. Other management knowledge areas were also important and are highlighted during the presentation.



The underlying message is about how we as project managers can reach new heights in the way we think and the actions we take. Alan creates a powerful and unforgettable journey for his audience by integrating his many years of innovative leadership and project management experience with captivating mountaineering and adventure stories.

"Don't be afraid to truly live by taking a step outside of your comfort zone, on a pathway where other's dare not go. Life is a fantastic journey filled with opportunities to experience the wonders of our world and to make a difference along the way in the lives of this around us. The heights we can reach in our pursuit of excellence are virtually limitless as are the rewards that come with making the investment. Anything is possible if we let ourselves dream." - Alan Mallory