



FRC Team 2659 - RoboWarriors
Bishop Alemany High School
Mission Hills, California

2018 Business Plan

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Section 1: Executive Summary

1.1 Mission

The mission of *FIRST* (*For Inspiration and Recognition in Science and Technology*) and the Bishop Alemany High School Robotics Program is to inspire young people to be involved in science and technology. By engaging students in exciting mentor-based programs that build science, engineering, and technology based skills, the Bishop Alemany Robotics Team will develop well-rounded team members that value teamwork, innovation, leadership, and their faith.

1.2 Core Values

At the heart of the mission, student and mentor team members collaborate to inspire interest, knowledge and application of *STEM* and business skills. The RoboWarrior's Core Values: teamwork, communication, leadership, and faith, serve to bond the team members—students and mentors alike— and provide a focus for all that the RoboWarriors do. The team uses these values to energize themselves to sustain team success and contribute to the goal of spreading the word of *FIRST*.



1.3 Overview of Business Plan

The Business Plan has been created to document the team's approach to achieve their mission in a sustainable manner. The RoboWarriors strive to fight for their cause in a way that attracts, enthuses, and empowers future team members as well as other FIRST teams both in Alemany's community and beyond.

Overview of Business Plan	
Section 1: Executive Summary	Team Mission, Core Values and Overview of Business Plan
Section 2: Team Overview	Team Summary, Demographics, Member Benefits, Core Values Explained
Section 3: Organization Plan and Team Management	Team Structure, Student Involvement, Location, Off-Season Events
Section 4: Team Impact and Outreach Plan	Community Outreach, Mentoring Other Teams
Section 5: Operational Plan	Tasks, Scheduling, Communication, Project Management, EDGE Teaching Method
Section 6: Marketing Plan	Target Audience, Marketing Mediums
Section 7: Financial Plan	Sponsors, Member Contributions, Proposed Budget for 2018
Section 8: Strategic Plan	Team Strategies, Strategic Planning Process, Key Performance Indicators, SWOT Analysis, Action Plans and Risk Mitigation

Section 2: Team Overview

2.1 Team Summary

Based out of Bishop Alemany High School in Mission Hills, California, the RoboWarriors joined the FIRST Robotics Competition in 2008 with a small team of approximately fifteen students and mentors. During their first 2 years of competing, the team finished second in the Los Angeles Regional in 2008 and improved on that season to win the regional in 2009. After the 2009 build season, support from the school and administration decreased until the team was forced to disband after the 2014 build season. However, with the appointment of a new principal and renewed interest and support from the school, the RoboWarriors began competing again in 2016. To date the largest sponsor of the team is Boeing. From the very start of the program, the RoboWarriors have reinforced the values of teamwork, leadership, innovation, and faith. Now, the team is working diligently in order for the Bishop Alemany Robotics Program to compete with the elite schools and teams across the world. The ultimate goal of the team is to build a world championship organization.

2.2 Team and School Demographics

School Affiliation	Bishop Alemany High School
Location	Mission Hills, California
School Enrollment	1338
Team Number and Name	2659 RoboWarriors
Team's Rookie Year	2008
Student Information	20+ Team Members 12 Men and 2 Women (Current) 7 Seniors 2 Juniors 5 Sophomores 5+ Freshmen (Estimated)
Mentors	6 Technical Mentors 4 Technical Professionals 2 College Students 2 Business Mentors 1 Teacher 1 Entrepreneur
Current Sponsors	Boeing Cali Paint
Website	To Be Determined

2.3 Member Benefits for Students, Mentors, School and Sponsors

For Students:

- Develop a competitive & advanced robot while building technical skills
- Grow in faith and confidence by improving communication, leadership, and non-technical skills
- Represent the Bishop Alemany High School High School Community
- Provide others service through community outreach
- Expand upon multiple opportunities to earn scholarships
- Gain further exposure to STEM fields in high school
- Collaborate with mentors who have professional experience in STEM and business fields

For Mentors:

- Assist students in accomplishing engineering and business tasks by lending their expertise
- Represent the Bishop Alemany High School High School Community
- Provide others service through community outreach
- Provide real-world learning experiences that are taught through the FIRST Robotics program

For School:

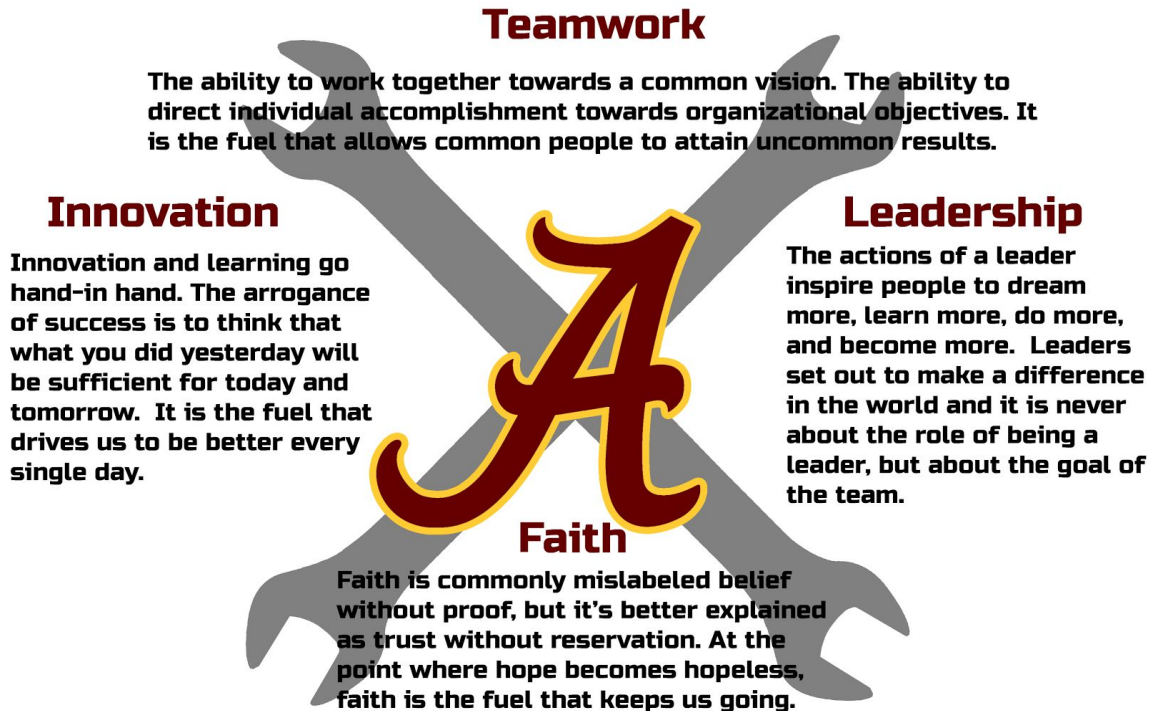
- Development of an enriched curriculum through robotics program to aid student development
- Recognition as an institution for developing outstanding students
- Securing professional volunteers to aid student development

For Sponsors:

- Provide an opportunity to market company to a variety of others
- Allow for exposure to the community in a positive way
- Develop future engineers and prospective employees

2.4 RoboWarrior's Core Values

Students and mentors work together to define Core Values which the team believes are the keys to the success and sustainability in order to become a role model team.

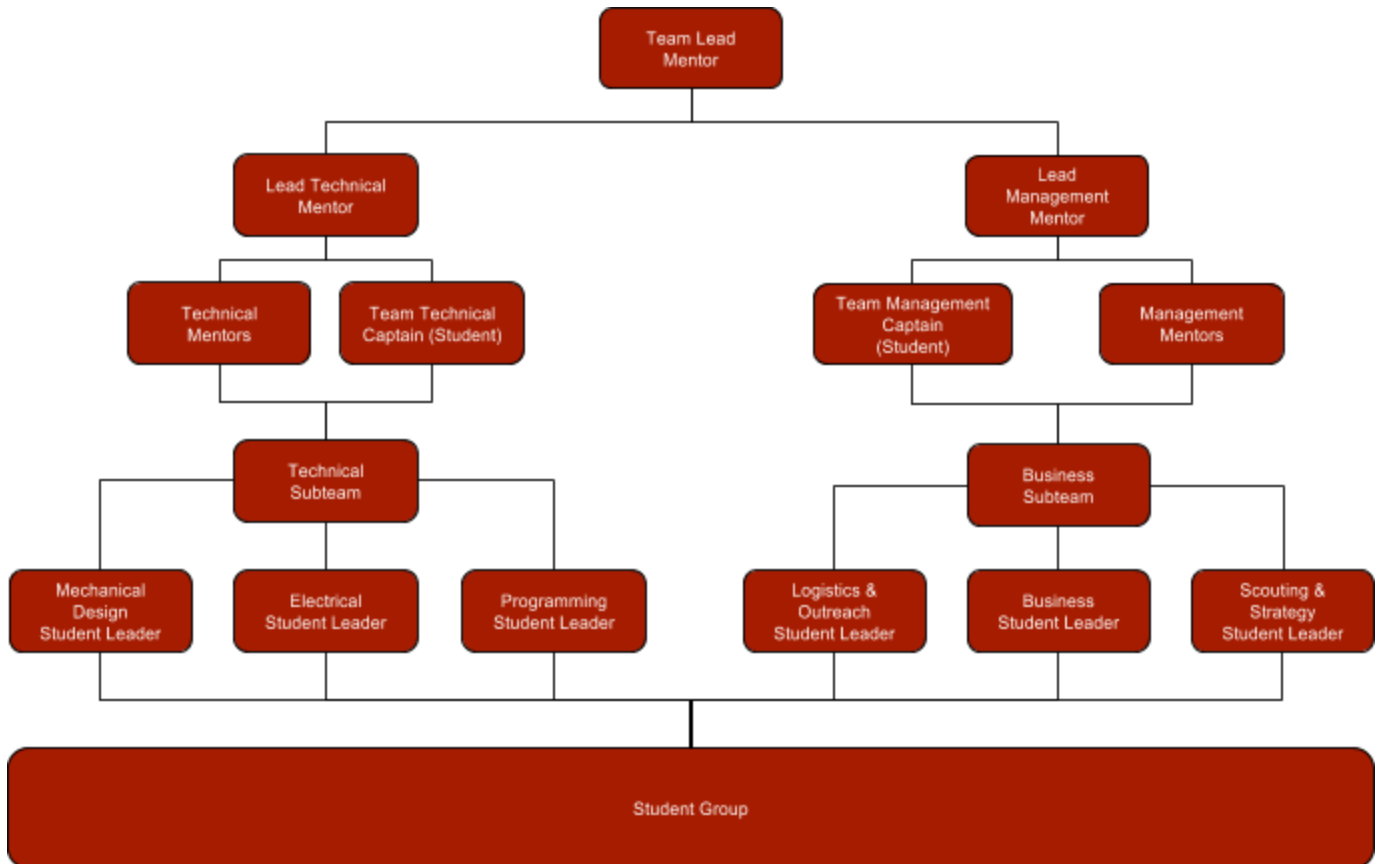


RoboWarriors

Section 3: Organizational Plan & Team Management

3.1 Team Structure

The team is organized into three technical sub-teams and three management sub-teams, each with at least one student leader and one mentor. The technical sub-teams are in charge of designing, powering, and programming the robot whereas the business sub-teams are in charge of all team logistics. The tasks assigned to the management sub-teams include: logistics and outreach, finding and communicating with sponsors, scheduling, preparing all award submissions and presentations, completing the bill of materials, and handling all purchases and finances. The professional volunteers fulfill the roles of Team Lead Mentor, Lead Technical Mentor, and Lead Management Mentor. These roles oversee team administration and travel, the development of the robot, finances, and purchases. Prior to the build season, students fill out forms nominating themselves for leadership positions. These students are interviewed by the mentors and the mentors choose the students who they believe would best fill these leadership positions.



3.2 Student Involvement

Recruitment

At the beginning of each school year the RoboWarriors start their recruiting process by hanging up posters, which give the time and place of the team's first meeting, around Alemany to promote the Robotics Club. This meeting gives an overview of the team and what the robotics season entails. Students can then decide if they want to join. The team also does recruitment of mentors during their Team Startup Meeting held on December 1st. This is a meeting that both students and parents attend in order to receive detailed information on travel, competitions, fees, and more. At the end of this meeting parents are encouraged to become mentors if they have any interest.

Training

In the fall, veteran students and mentors hold weekly workshops to train students and introduce them to tools, safety, and design concepts such as: chassis, control, electronics, and programming. These workshops prepare the new team and veteran team members for the off-season competitions. In addition, the RoboWarriors have implemented a new buddy system that ensures new team members feel like a part of the team right away. It is the veteran team members' job to keep in contact with their underclassmen counterpart to encourage them to become more involved and answering their questions.

Attendance, Participation and Behavior Expectations

It is important that students are on time to all events, matches, and meetings. If a student is unable to attend, a mentor or student leader should be made aware of his or her absence in advance. It is also important that all students regularly attend their own sub-team meetings and always let a leader know in advance if they are unable to attend. Grades are of utmost importance to the team. For a student to remain on the team, he or she must have at least C's in all classes. Students are also expected to participate in community outreach activities throughout the year. Opportunities to sign up and participate are available regularly. In addition, students are expected to exhibit gracious team spirit at competitions not only for the team, but for other teams as well. Students are also encouraged to focus on the competition and avoid playing on an electronic device or other form of entertainment. Students also must be required to represent Bishop Alemany High School in a professional manner.

Safety

Safety of team members is critical. Students and mentors working with the robot at school or in the pit must wear safety glasses. Safety topics are covered in all of the team's fall training workshops, and the use of power tools is supervised by experienced mentors.

3.3 Location

Bishop Alemany High School allows the RoboWarriors to work and build in the school engineering classroom. The team has equipped the workroom with the tools the team needs. When more specific machining is needed, mentors will take parts home or will work with students to machine the parts elsewhere.

3.4 Off-Season Events

The RoboWarriors are planning to participate in two off-season events: SCRFF Fall Classic and Beach Blitz. The team will participate in these competitions to allow team members to gain more experience. These competitions are held during the fall following the regular season and utilize the game played during the previous FIRST season.

Competition	Location	Description
SCRRF Fall Classic	Anaheim, California	SCRRF hosts the Fall Classic to help teams prepare for the upcoming build season and looming competitions
Beach Blitz	Huntington Beach, California	Beach Blitz is an off-season FIRST Robotics Competition hosted by Orange County Robotics Alliance

Section 4: Team Impact and Outreach Plan

4.1 Community Outreach

Children's Hospital Los Angeles

Children's Hospital Los Angeles relies on the generosity of philanthropists in the community to support compassionate patient care, leading-edge education of the caregivers of tomorrow and innovative research efforts that impact the children at the hospital. Starting in the summer of 2017 the RoboWarriors will work tirelessly to impact the lives of the patients at CHLA. A donation will be given to CHLA at the end of the calendar year and team members will volunteer at the hospital and give STEM demonstrations to the patients.

Granada Hills Holiday Parade

The Granada Hills Holiday Parade Route is 1.8 miles long and is the largest participant and spectator community parade in the San Fernando Valley. Annual parade participation is over 3000 youth participants including marching bands, drill teams civic groups, equestrian groups, and now a robotics team. By participating in the parade, the team is given a platform to spread the mission of Bishop Alemany High School, the RoboWarriors and FIRST Robotics.

Best Friends Animal Society

Everyday nearly 5500 cats and dogs are killed in shelters because they do not have a place to call home. The mission at Best Animal Society is to save them all. Best Friends is one of the largest no-kill shelters in the country and they have a location less than a quarter of a mile away from Bishop Alemany High School. RoboWarrior team members will volunteer at this location to walk, play and be companions with the animals at this location. The RoboWarriors have even outfitted their t-shirt cannon to act as a tennis ball launcher. This allows team members to play fetch with the dogs at the shelter and promote STEM simultaneously.

MEND

Meet Each Need with Dignity, MEND, opened its doors in an effort to transform the lives of the neediest residents of the San Fernando Valley. MEND's mission is to break the bonds of poverty by providing basic human needs and a pathway to self-reliance. As a team the RoboWarrior's will spend one Friday afternoon every month volunteering at MEND in order to help the organization achieve its mission. In addition, the RoboWarriors will conduct food and clothing drives during the holiday season at Bishop Alemany High School.

Exceptional Halloween Dance

For nearly three decades Bishop Alemany has hosted a very special, annual event called the Exceptional Halloween Dance. The event invites family and friends of special needs children to the campus of Bishop Alemany for a night of games, dancing and fun. Not only will the team bring its most recent robot to the dance and spread the mission of FIRST, but team members also volunteer at the dance and help plan the event.

Demonstrations

The RoboWarriors display their robot at different events including elementary school assemblies, science fairs, and at their sponsor's locations. Robot demonstrations allows the RoboWarriors to inspire students to pursue a STEM education, spread the mission of FIRST and give the sponsors a first-hand look of the benefit of the team's partnership.

De La Salle Festival

One of the largest feeder schools of Bishop Alemany is De La Salle and they host an annual festival for their families. The festival is attended by nearly every family in the school and most of the students will attend Bishop Alemany when they graduate from De La Salle. The RoboWarriors will use the festival to display their robot and generate interest in STEM education. In addition the RoboWarriors sponsor a booth to fundraise for their feeder school.

4.2 Mentoring Other Teams

The goals for the next year include helping the RoboWarrior's community. Coming from a school who is committed to Serve, the robotics team is prepared to help other schools around Mission Hills to start up new robotics teams. This will carry out the team's mission statement by inspiring young students to pursue FIRST and STEM. The students at Bishop Alemany/Santa Rosa will be assisted by the RoboWarriors in starting a FIRST Lego League.

Impact

FIRST LEGO League's positive impact on participants is gratifying and well documented. Over 87% are more interested in doing well in school, and 88% have more interest in attending college.

Experience

Each FIRST LEGO League season culminates with regional tournaments and championships where teams show off what they learned and invented, and compete with their robots. Some teams earn an invitation to FIRST LEGO League World Festival as part of FIRST Championship Houston or FIRST Championship Detroit, where teams from all over the world meet and compete.

Section 5: Operational Plan

5.1 Tasks

During the FIRST season, the team is tasked with completing a new robot each year within a six-week time frame. The team also completes many other important tasks. Below are the tasks the RoboWarriors work to achieve each year as a FIRST team.

Tasks
Continued Team Organization
Formation of a Strategic Plan
Design Process with the use of Solidworks
Development of Effective Programming Techniques
Building an Efficient Robot
Innovating Previous Designs and Ideas

5.2 Scheduling

Each Tuesday and Thursday after school, RoboWarriors conduct meetings that are attended by all student team members. When the FIRST robotics season starts, the day the game is announced, the RoboWarriors conduct an initial strategy development session and begin the robot design process for the build-season. Each Saturday, sub-team leaders meet to discuss deadlines and projects that involve multiple sub-teams. Each of the sub-teams meet at staggered times throughout the work week to ensure that there are not too many people in the robot build area. Sub-teams decide what schedule works best for both the students and mentors.

5.3 Communication

Communication within the team is accomplished with team meetings, sub-team meetings, email blasts, Google Documents, leader-to-member communication, and the website. The Team Manager sends emails and messages to team members and/or parents regarding events that involve the whole team. Student and mentor sub-team leaders send emails to communicate with sub-team members.

5.4 Project Management

Good project management is vital to the team's success during the FIRST build season. The team utilizes the Management Team that consists of four student leaders and two mentor leaders to help keep the team on task and on schedule. The Management Team conducts weekly meetings with sub-team leaders to review progress, manage resources, and resolve problems and a status review for the team. The Management Team also makes use of Google Calendar to review project schedules and projections throughout the year. Engineering sub-team student leaders and mentors participate in a design review meeting every Tuesday evening that is led by the Management Team. During these meetings, each Engineering sub-team presents their design using Solidworks CAD drawings. This review identifies design issues, coordinates interfaces between sub-teams, provides precise measurements, and makes the robot build status visible to everyone involved. Issues are recorded on an action item list for follow-up after the meeting.

5.5 EDGE Teaching Method

The team has started the use of the EDGE teaching method, an effective four step teaching approach borrowed from Boy Scouts of America, to teach team members new skills and concepts for their future careers. EDGE is an acronym for four teaching steps including:

- Explain – The trainer explains how something is done.
- Demonstrate – After the trainer explains, the trainer demonstrates while explaining again.
- Guide – The learner tries the skill while the trainer guides him or her through it.
- Enable – The learner works on his or her own under the watchful eye of the trainer. The trainer's role in this step is to remove any obstacles towards success, which enables the learner to succeed.

This approach will be used many times by mentors and students. For example, it might be used by a student or mentor to teach another student how to use a piece of equipment. The trainer explains how the equipment works. The trainer then demonstrates, while explaining again, by using the equipment to transform the material (drill a hole for example). The trainer then lets the student do it, but helps guide them through the steps. Finally the student does it by themselves, and these steps may be repeated until the trainer and the student are satisfied that the student has mastered the task. After that, the trainer no longer has to stand by the student when they operate the equipment to perform this task. The EDGE teaching method is similarly used to teach a wide variety of skills and concepts related to the RoboWarriors work, including any Engineering or Business sub-team task. For example, the method could also be used to show someone how to use a camera, update the website, or create items for the Business Plan.

Section 6: Marketing Plan

6.1 Target Audience

Bishop Alemany High School Administration

The RoboWarriors market themselves to the administration and faculty to ensure their strong, continued support through formal meetings and casual conversations. The team formally invites the principal and faculty to attend events hosted at home. The RoboWarriors also extend invitations to administration and faculty to attend all of the team's local competitions.

Partners (Sponsors)

Partners provide the largest financial support, as well as many of the mentors and miscellaneous donations to the team. The RoboWarriors target current and potential partners through marketing and direct communication to ensure their continued support and to gain new partners. Specific students and/or mentors are assigned to keep partners up to date, and have visited partners to thank them for their assistance.

Potential Team Members (Students and Mentors)

The team strives to recruit team members, both students and mentors, because the team members are the most important component of the team. The RoboWarriors use in-school and online marketing to get the word of the team out to students and to invite them to apply to join the team at the beginning of the year. The RoboWarriors also encourage teachers and parents to mentor and help as well. The best way the team can reach potential team members is through the various outreach and mentoring programs. There, the team can encourage interest in STEM, FIRST and the RoboWarriors.

6.2 Marketing Mediums

Robot Demonstrations / Speaking Events

The RoboWarriors regularly participate in a wide variety of events, where they demonstrate their robot and speak to attendees about FIRST and the RoboWarriors. Events have included elementary school science fairs and assemblies, high school pep rallies, demonstrations at parent orientation, meetings with high school principals, and demonstrations to their proud sponsors.

Meet the RoboWarriors

Starting in 2018 the team will host an open house called Meet the RoboWarriors. This event is planned as a way to inform and build relationships with partners, school administration, community leaders, parents and family members by introducing them to the RoboWarriors, their projects, and their facilities. The goal of Meet the RoboWarriors event is to reach out to all their of partners, spark interest to gain new sponsors and members, and spread the message of FIRST and STEM.

Imagery: Posters, Robot Graphics, T-Shirts, Flyers, Giveaways, etc.

Team imagery is an integral part of the team's marketing, allowing them to become more recognizable and memorable within the FIRST community. The RoboWarriors strive to be cohesive in every aspect, from team shirts, documentation and presentation materials, to the website and social media channels, as well as their competition pit displays, and the robot's graphics.

Section 7: Financial Plan

The RoboWarriors focus on long-term financial sustainability to ensure the greatest success throughout the year. Financial support comes from three primary sources: sponsors, Bishop Alemany High School, and team member fees and contributions. The team has contingencies in place, such as leaving “seed” money for the following year, so that the RoboWarriors will still be in a viable financial condition in the event that the team loses a sponsor, fundraiser, or have some other event that results in a loss of funding.

7.1 Sponsors

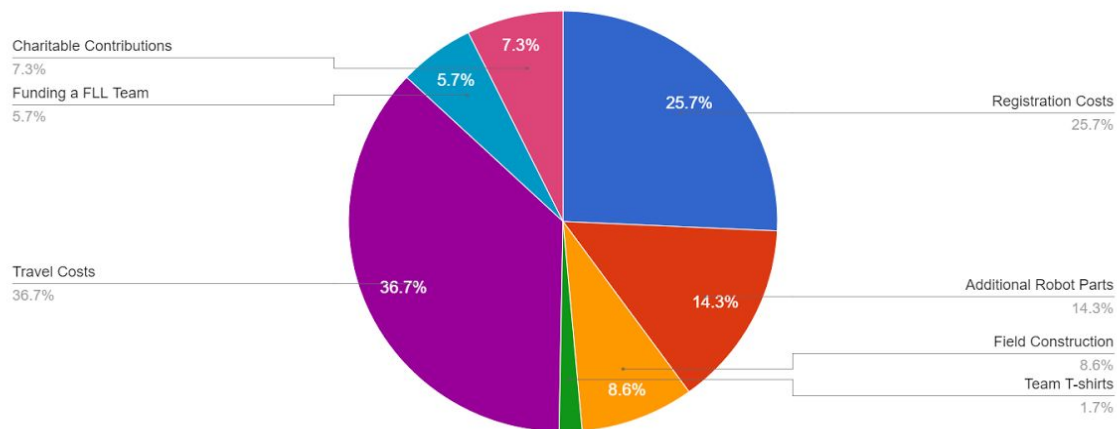
Sponsors are the primary method in which the RoboWarriors receive financial support. The team’s goal is to obtain enough funding to cover the costs of both FIRST registration fees and robot parts. Currently, the team has one sponsor, Boeing, and receive donations from several friends and family of team members. The RoboWarriors also strive to obtain more sponsors during their reconstruction period this year. This is accomplished through sponsor gratification and recognition.

7.2 Member Contribution

Students and mentors also contribute financially. Students pay annual registration fees which help pay for transportation to competitions. This includes bus transportation to the Los Angeles Regional in Long Beach and off-season competitions. When the team travels out of the area for events, students and mentors pay half of the cost of travel and lodging. Business Plan 2018: Plan for long-term sustainability, continuity, and partnership.

7.3 Proposed Budget for 2018

2018 Build and Competition Season Expenditures



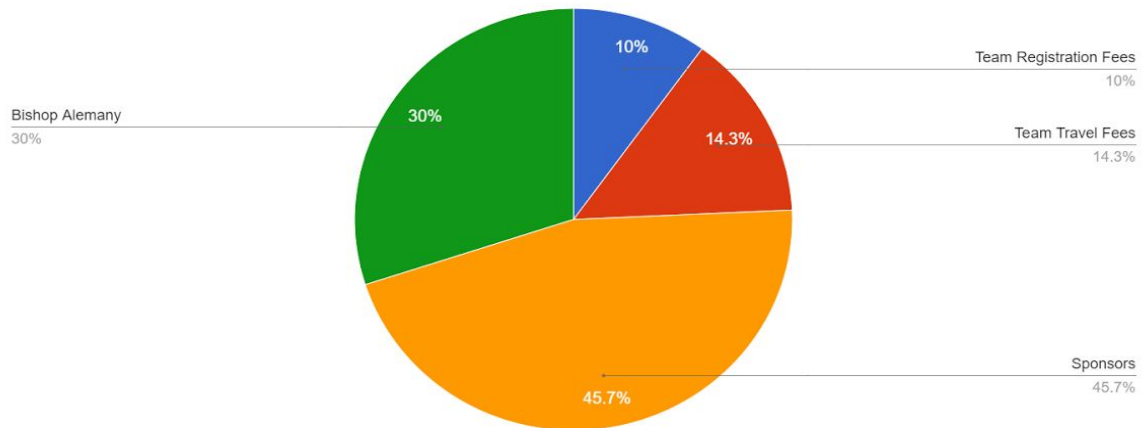
1. San Diego Regional Registration	\$5000
2. Los Angeles Regional Registration	\$4000
3. Additional Robot Parts	\$5000
4. Construction of Field Elements	\$3000

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5. Team T-Shirts	\$600
6. Travel Expenses	
a. San Diego Regional	
i. Hotel (10 rooms for 3 nights)	\$4500
ii. Gas for School Vans and Trailer	\$750
iii. Breakfast, Lunch and Dinner for 3 days (30 people)	\$4000
b. Los Angeles Regional	
i. Transportation to Regional	\$2000
ii. Lunch and Snacks for 3 days	\$1500
iii. Gas to transport robot	\$100
7. Funding and Mentoring a FIRST Lego team at Bishop Alemany/Santa Rosa	\$2000
8. Charitable Contribution to Children's Hospital	\$2550

**Estimated Expenditures for 2018 Build and Competition Season:
\$35000**

2018 Build and Competition Season



1. Team Registration Fees (\$175 per person)	\$3500
2. Team Travel Fees (\$250 per person)	\$5000
3. Sponsor Contributions	\$16000
4. Bishop Alemany Contribution	\$10500

Estimated Income for 2018 Build and Competition Season: \$35000

Section 8: Strategic Plan

8.1 Team Strategies

The RoboWarriors have a Strategic Plan that supports the team's mission statement and is used to make team improvements, manage risk, and enhance team sustainability. The Strategic Plan identifies five long-term (3-5 year) team strategies with supporting action plans.

RoboWarrior's Team Strategies
Grow a Model Team
Learn and Continuously Improve by Building a Successful Robot
Develop Strong Team Leadership
Develop Excellent Team Financing and Partner Relationships
Spread the Message of FIRST

8.2 Strategic Planning Process

The RoboWarrior's Strategic Plan was created in the spring of 2017. Students and mentors worked together and plan to review and update it two times per year (spring post-season and fall pre-season).

8.3 Key Performance Indicators

The RoboWarriors are implementing a plan for key performance indicators (KPIs) this year. The purpose is to measure changes in overall team success by examining several important factors. The team has determined Key Performance Indicators (KPI) by examining their core values and mission statement. Measurements will be taken through surveys, collected team statistics, and competition performance. The team's KPIs are:

Indicators	Measurement Methods
Teamwork	Do you and all team members feel that everyone had a role and did the team work towards a common vision?
Innovation	Do you feel that the team's work was sufficient and progressed from initial ideas?
Leadership	Do our leaders encourage team members to learn and accomplish the goal of the team?
Faith	Do you trust your team, without reservation, will make the right decision and believe RoboWarriors can accomplish their goals?

Competition Performance	Did the team move on to alliance selection and/or obtain an award
Real-world skills and STEM interest	What percent of graduates move on to STEM fields? Non-Technical fields?

8.4 SWOT Analysis

The RoboWarriors completed a SWOT analysis for all five strategies to identify team strengths, weaknesses, opportunities, and potential or current threats. The composite SWOT analysis chart below combines the SWOT analysis for all five strategies.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Dedicated group of students • Strategic plan • Creative ideas • Restructured team organization • Team members have technical experience through the Project Lead The Way program 	<ul style="list-style-type: none"> • Limited resources • Limited mentors • Current workspace consists of classroom and storage container • Lack of a recruitment and contingency plan
Opportunities	Threats
<ul style="list-style-type: none"> • Dedicated space for learning & machine shop • Attracting new sponsors • Finding new mentors • Expanding team • Increased support from school administration • Increased exposure in school community • Community outreach 	<ul style="list-style-type: none"> • No Set Budget • Increased Exposure of FIRST creates Sponsorship Competition • Students involvement in other extracurriculars

8.5 Action Plans and Risk Mitigation

RoboWarrior's Team Strategy: Grow a Team Model

Action Plan	Responsible	Completion
1. Model activities and characteristics of a Chairman's Award winning team	Technical and Management Teams	Annually
2. Compete in two offseason FRC competitions	Team Lead Mentor	Annually
3. Foster a welcoming environment for students of all backgrounds utilizing RoboWarrior's Core Values	Mentors and Student Group	Continuous
4. Conduct a season wrap-up and planning activity to identify, prioritize and plan future team strategies, initiatives, and risk mitigation	Mentors and Student Sub-team Leaders	Annually, review by June 1
5. Document new team strategies, initiatives and risk mitigation in RoboWarriors Business Plan	Business Sub-team	Annually, review by Jan. 15

RoboWarrior's Team Strategy: Continuously Improve by Building a Competitive Robot

Action Plan	Responsible	Completion
1. Implement methods to improve design and CAD (Computer Aided Design) processes	Mechanical Design and Technical Student Leaders	Jan. 15, 2018
2. Conduct fall workshops to incorporate hands-on learning	Technical Mentors	Annually, review by Dec. 15
3. Organizer work spaces to improve efficiency	Team Management Captain	Annually, review by Dec. 15
4. Improve purchasing and material management practices for commonly used materials	Business Student Leader	Annually
5. Monitor and improve the newly implemented Management Team	Team Lead Mentor & Lead Management Mentor	June 1, 2018
6. Mentor the a FRC team to develop independent robot build skills and monitor their progress	Team Lead Mentor and Technical Mentors	June 1, 2018
7. Identify an alternative build and meeting location in the event the current workspace is unavailable	Team Lead Mentor and Logistics & Outreach Student Leader	Ongoing
8. Identify an alternative robot transportation option	Team Lead Mentor	Ongoing

RoboWarrior's Team Strategy: Develop Strong Team Leadership

Action Plan	Responsible	Completion
1. Clarify and better communicate student leadership selection criteria and process	Team Management Captain	Dec.15, 2017
2. Improve Drive Team selection and training process	Technical Mentor and Programming Student Leader	Ongoing
3. Conduct a Leadership Boot Camp for all team members (students and mentors)	Lead Technical and Management Mentors	Annually in October
4. Continue to develop mentor and student leadership skills	Team Lead Mentors and Student Group	Ongoing
5. Continue mentor training to discuss roles, responsibilities, and how to interact with students	Lead Technical and Management Mentors	Annually in November
6. Risk Migration: Document job function of the RoboWarriors key mentor leaders with details necessary to carry out responsibilities	Business Sub-Team	June 1, 2018

RoboWarrior's Team Strategy: Develop Excellent Team Financing and Partner Relations

Action Plan	Responsible	Completion
1. RISK MITIGATION: Gain more sponsors every year	Logistics & Outreach Student Leader	End of the year
2. Improve planning and purchasing of special equipment, tools, computers and software	Business Sub-Team	End of the year
3. Contact sponsors to determine internship opportunities for RoboWarrior students	Business Student Leader	End of the year
4. Practice and improve team business, engineering, and robot presentation skills	Team Management and Technical Captains and Mentors	Feb. 15, 2018
5. Send a high quality electronic newsletter, to update all partners	Scouting & Strategy Student Leader	Annually
6. Develop a one-page team overview to market the team	Business Student Leader	March 15, 2018
7. Develop at least one new method to spread the FIRST message with sponsors, especially within Germany	Logistics and Outreach Student Leader	Annually

RoboWarrior's Team Strategy: Spread the Message of FIRST

Action Plan	Responsible	Completion
1. Establish and/or mentor FIRST LEGO League and STEM education classes each year	Management Mentor and Logistics and Outreach Student Leader	Annually
2. Conduct community service and outreach projects including: Granada Hills Holiday Parade, Best Friends Animal Society, MEND, Exceptional Halloween Dance, De La Salle Festival, and the formation of Bishop Alemany/Santa Rosa Robotics Team	Lead Management Mentor	Annually throughout year
3. Risk Mitigation: Start a "Meet the RoboWarriors" open house event for sponsors, school administration, community leaders, and parents	Team Management Captain and Scouting & Strategy Student Leader	Annually during build season
4. Risk Mitigation: Influence increased STEM curriculum in Alemany through mentor participation	Lead Technical and Management Mentors	Ongoing