

# **IRON CLAW ROBOTICS**

**LOS GATOS HIGH SCHOOL**



## **Business Plan**

2018-2019

## Mission Statement

*"To build and foster a **student-led environment** where members develop the **STEM, business, leadership, and collaborative skills** crucial to innovation in society"*

## History and Growth

Team 972 was founded in 2002 at Los Gatos High School in Los Gatos, California. After competing for six seasons and an eight-year hiatus, the *FIRST* Robotics Competition program was brought back in the fall of 2015 by a group of LGHS juniors who had been a part of Pioneer High School's Team 668.

With the new name, Iron Claw, we established ourselves with the core principles of student-leadership and hands-on engagement. The loose organization of being a school club served our purpose in this start-up season, but structure was soon needed to ensure the team's longevity. The team was unable to secure reliable access to our school metalshop and woodshop, and our mentors were mostly parents of graduating seniors.

In 2017, to help solve these problems, we established our team as a unique class held during a period in which no other classes are held. Though the core operations of the team have stayed consistent, our connection to LGHS through our robotics teacher ensures we have long-term mentor support as well as improved organization of facilities.

Since our restart in 2016, our team has grown over 100%, from 20 students to 46. Today, our team's membership consists of more women and minorities than ever before. As we head into our fourth season in 2019, we are better-equipped than ever for success both at competitions and in achieving our goals.

## Organizational Structure

### Leadership and Subteams

Technical	Operations
<ul style="list-style-type: none"><li>● Mechanical<ul style="list-style-type: none"><li>○ CAD</li><li>○ Manufacturing</li><li>○ Assembly</li><li>○ Electrical</li></ul></li><li>● Programming</li></ul>	<ul style="list-style-type: none"><li>● Finance</li><li>● Fundraising</li><li>● Communications</li><li>● Safety and Organization</li></ul>

## 2-Year Team Goals

- Improve the Engagement of Newer Members
- Build Upon Our Training Program and Curriculum
- Grow our Institutionalized Knowledge
- Expand Outreach Program to New Communities

## Tools to Measure Progress

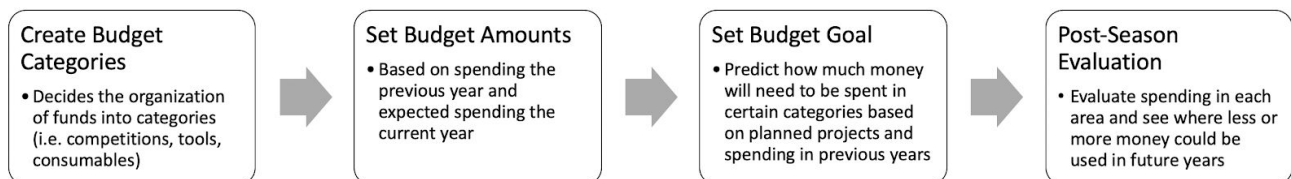
- “Five-Year Plan” Document for Review of Long-Term Goals
- “Battle Rhythm Calendar” of Annual Events
- “Build Season Calendar” for High-Level Technical Overview
- “Project Plan” for Low-Level Project Management

## Finance

### Fundraising Process



### Budget Process



## Marketing

### Recruitment

- Fisher Middle School Robot Demonstrations
- Boy Scout Demonstrations on STEM Day
- Attracting students engaged in STEM courses at school

## Outreach

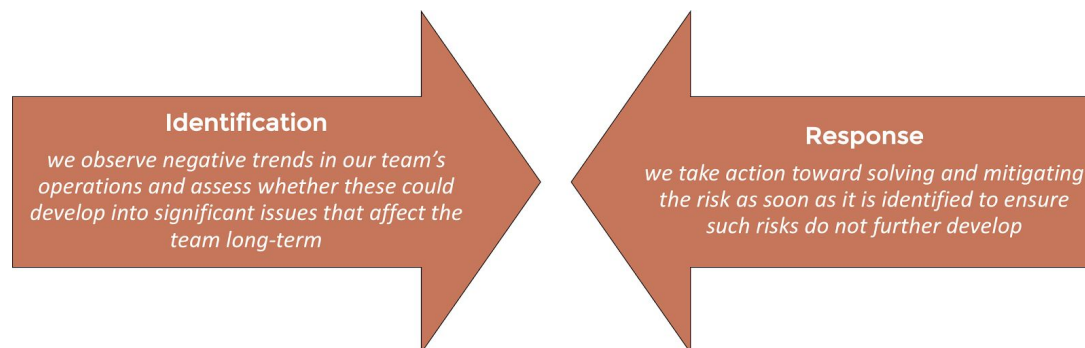


## Strategic Risk Analysis

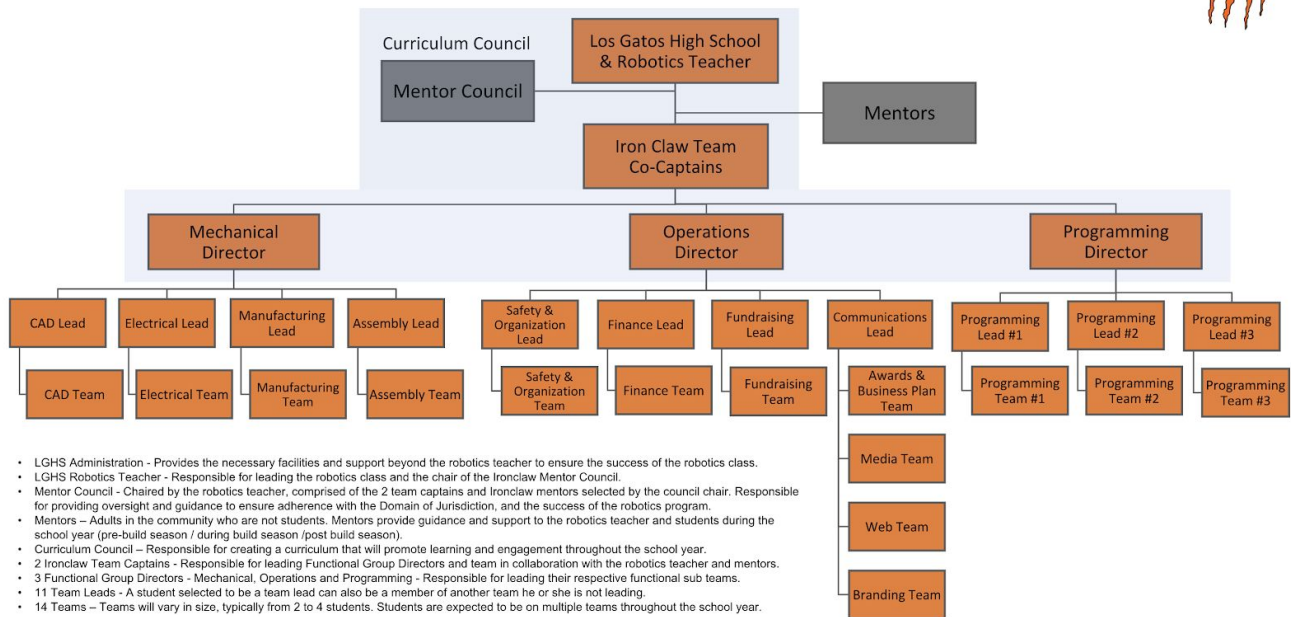
### “SWOT” Analysis

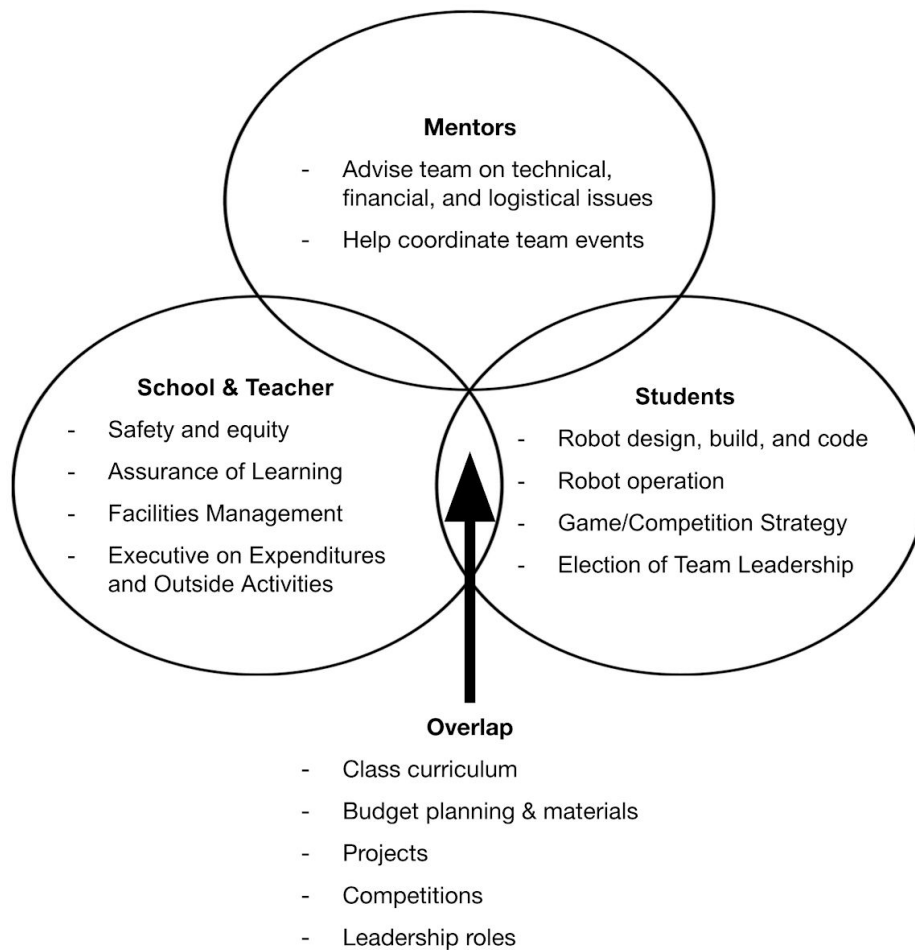
Strengths	Weaknesses
<p>Student led and taught</p> <p>Everything machined in-house</p> <p>Dedicated mentors</p> <p>Fundraising</p> <p>Access to the robotics room and metal shop</p> <p>Community outreach</p> <p>Public speaking and communication</p>	<p>Leisure time and staying on task</p> <p>Technical documentation</p> <p>Overambitious planning</p> <p>Responsibility with tools</p> <p>Commitment among some members</p> <p>Inefficiency in ordering parts and materials</p> <p>Few relationships with other teams</p>
Opportunities	Threats
<p>Supportive Administration/Class</p> <p>Growing alumni group</p> <p>Expanding community outreach program</p> <p>Robotics Summer Camp</p> <p>Fisher Middle School FTC</p> <p>Potential long-term sponsors</p> <p>Social Media Presence</p>	<p>Relationships with teachers and mentors</p> <p>Potential division between subteams</p> <p>Maximum member capacity due to facilities space</p> <p>The potential loss of student interest</p> <p>Security and storage of materials</p> <p>Lack of dedicated nontechnical members</p>

### Mitigating & Resolving Risks



# Iron Claw Robotics Organization Chart





### Sponsorship Benefits:

#### Platinum Tier (\$5,000+):

- Premier Logo on Website, Pit Display, Team Shirts, and Robot
- Recognition in official team name announced at our competitions
- Robot Demonstration at Event
- Monthly updates on mailing list
- Large Logo on Website, Pit Display, Team Shirts, and Robot
- Recognition in official team name announced at our competitions
- Monthly updates on mailing list

#### Silver Tier (\$1,000-\$2,499):

- Logo on Website, Pit Display, Team Shirts, and Robot
- Monthly updates on mailing list

#### Bronze Tier (\$500-\$999):

- Logo on Website and Pit Display
- Monthly updates on mailing list

#### Gold Tier (\$2,500-\$4,999):