

# RAMAGEDDON 4855



Business Plan



# Team 4855 - Ramageddon

## Business Plan

**Mission:** We will impact our students and community by encouraging STEAM growth in our team while collaborating in a safe and inclusive environment.

### **Team History and Growth**

Founded in 2013, Team 4855 - Ramageddon, is based out of South Haven High School, located in South Haven, MI. The rookie team consisted of 14 students, two coaches, and two mentors. Since then, Ramageddon experienced steady growth in students (Figure 1), mentors, sponsors, fans, and revenue. That growth hit a slight roadblock when the worldwide pandemic of COVID-19 hit our lives; however, since then, our team has rebounded. Our current team consists of 2 coaches, 12 mentors, 16 students, and countless fans affectionately known as "Fanageddons".

With seniors graduating most years, the team places a strong emphasis on recruiting new members. Fortunately, we have no seniors on the team this year, meaning that we will not lose that valuable knowledge next year. We recruit students by word-of-mouth, giving presentations in all of our schools, hosting an annual recruitment event, hosting an annual summer skills camp, and giving demonstrations at community events and schools. Our efforts have been successful and as a result, we added seven (7) new students to the team this year. With all of these rookies, we rely heavily on our veteran team members to pass along their knowledge in order to carry on the Ramageddon legacy. We have also worked diligently the past few years to form FIRST Lego League (FLL) and FIRST Tech Challenge (FTC) teams in our community to promote STEAM to younger children and in hopes that one day they will join Team 4855 Ramageddon.

As we enter our twelfth season of competing in the FIRST Robotics Competitions (FRC), our knowledge of technology has greatly improved. During our first few years, the team's robots were low-tech: built with plywood, and held together with duct tape and a prayer. In 2018, the team incorporated pneumatics and a swerve drive to complement our growing skill set in programming, coding, and CAD. Last year, our programming team moved to command-based programming to allow us to reuse simple codes year-to-year. Combining all of these skills has allowed the team to build robots that are able to compete at a more competitive level.

In 2020, we won the Chairman's Award but unfortunately, we were unable to attend the Michigan Championship due to COVID-19. In 2022, we won the District Engineering Inspiration Award at the Muskegon District Competition which allowed us to take a handful of students to the Michigan State Championship in 2022. In 2023, we won a blue banner due to our first ever district competition win (at Grand Valley State University), and we also won the Sustainability Award and Team Spirit Award in 2023.

We developed a designated safety team to focus on our safety initiatives. The safety team created a safety manual, injury log, safety posters, and they hold annual safety training for team members.

## **Organizational Structure**

Team 4855 is divided into two main teams, Business and Build, and those teams are broken down into several subteams (Figure 2). Regardless of their subteam, all members of Ramageddon are provided real-world experience with technology and team building. Our team follows the motto, "Student led, mentor guided", meaning that our mentors are there to guide, allowing the students to do the hands-on work themselves, even if it means the students make mistakes along the way. The students are encouraged to reach past what they believe to be possible and try something new every day. This is our mantra of "Fearless Thinking". Being on the team is hard work for all involved, but thanks to effective communication such as daily huddles and team building activities such as a lock-in or a visit to a local rage room, Team 4855 has become a stronger and more close-knit team.

To ensure a sustainable future for the team, we engage elementary and middle school students as part of our recruitment program. One way we do this is by volunteering at local elementary programs such as "Hour of Code" and "Not-So-Silent Night", or by inviting the local "Kids' STEM Club" to visit our team. At these events, we showcase our robot as well as our augmented reality sandboxes which gets kids excited about learning the topography of the Earth. We also incite excitement among younger South Haven Public School students by mentoring our local FLL and FTC teams, Lambageddon and GOATageddon. The new Lambageddon coach has fallen in love with FIRST and she is now working on recruiting some of her coworkers (SHPS teachers) and our Ramageddon students to form a new FLL team at one or both of our lower-level schools. That new team(s) will be called Kidageddon.

The manufacturing industry within South Haven may not be as large as our neighboring communities, but that is where Ramageddon has been given the opportunity to be innovative in our outreach by diversifying to other industries, such as hospitality, retail, real estate, and other small businesses. We reach out to these businesses by using a four-step process: 1) team members deliver sponsorship packets to returning and potential sponsors, 2) if asked, the team gives a presentation to further explain our mission, 3) we recognize sponsors publicly for their donation, and 4) all sponsors are invited to our annual Ramageddon Robot Reveal and competitions. This process, along with additional fundraising, has given Team 4855 the opportunity to maintain strong relations with sponsors, allowing us to grow financially.

## **Financials**

Between 2014 and 2016, we raised an average of \$8,240 each year. In 2017, the finance team revamped our sponsorship levels and applied our four-step process for recruiting sponsors which resulted in a 60% jump in revenue from the previous year, bringing us to \$15,650. In 2018, we raised \$24,500 and when the community learned that there was a chance we would not be able to attend the FIRST Championship based on finances, they came together to raise \$17,000 for our team within 72 hours allowing us to compete globally. In 2022, we raised over \$29,197 and so far this year, we have raised \$24,328 (Figure 3) and we are expecting to receive additional donations within the next few months. Several current sponsors have indicated that they will donate additional money in the event that we advance to the Michigan Championship and/or the FRC Championship. Sponsorships are our greatest source of revenue but we also rely on fundraisers to help offset our financial needs. All members are required to participate in at least one fundraiser such as reaching out to sponsors, selling fudge, selling yard signs, or participating in a pop can drive. Figure 4 shows our annual budget which is based on district events and the State Championship.

## **Risk Analysis**

Each year, our team members conduct a SWOT analysis (Figure 5) to understand our current strengths, weaknesses, opportunities, and threats. For the purpose of the business plan, we have identified what we believe to be the most important aspect of the SWOT.

- Ramageddon's most prominent strength is our name recognition in the community, thanks to our recent success. In the early years when our team visited potential sponsors, we had to explain who we were but now people know immediately who we are and they are excited to support us. Another strength is the business team's Gantt chart which helps the business team stay on track of their various projects.
- A weakness that our team faces is our town's economic structure. South Haven is a tourist town with few manufacturing or technological businesses. While living on the lake is beautiful, it also means that we have no businesses to the west who can sponsor us.
- The greatest opportunities for our team are our FTC and FLL teams. Having younger students involved in FIRST is a feeder program for our team. Recently our FTC team partnered with St. Basil's Catholic School. That resulted in St. Basil's forming a FTC team and two (2) FLL teams. We also work with our own FTC and FLL teams by volunteering at events.
- One of the biggest threats to our team was the closure of Palisades Nuclear Power Plant, which was one of our team's largest sponsors; however, Palisades is in the process of reopening their plant which will hopefully result in us regaining them as a sponsor. We also lost a major sponsorship from Albemarle after it was sold to a new owner who typically doesn't donate to high schools, but thankfully we have a team parent/Fanageddon who works there, and he was able to convince the new owners to donate to us this year.

## **Marketing**

We get our name out in the community by participating in year-round events and sharing our story with students from not just South Haven, but other school systems as well. So far this school year, we have achieved over 325 hours of outreach. In the fall of 2018, we spoke at an assembly at Bangor High School, inspiring their students and administrators to form Team 7809 Valhalla Nation. We mentored Team 7809 during the 2019, 2020, and 2023 seasons and we even rode together on a bus to the 2019 Michigan State Championship. This season, we mentored Covert High School's new rookie team, 9549 Mechadogs, and we have trained 9549 and 2145 Hazmats on our scouting program, allowing us to form a scouting alliance.

Ramageddon members participate in the annual South Haven Cardboard Sled Race held during Ice Breakers Festival, the 4th of July Parade, and the We Care "Warm Your Heart Island Sit". Our biggest event of the year though is our annual "Ramageddon Robot Reveal" which consists of a student-led presentation, and our exciting robot reveal and demonstration.

This year we expanded our social media presence by creating a TikTok account for the team and we have been posting on our platforms more frequently. As of March 17, 2024, we have 337 TikTok followers, we follow 419 other creators, we've had 1,642 "Likes" on our posts, and over 35,000 views of our posts. In addition to TikTok, we have 668 followers on Facebook, 435 on Instagram, and 390 on X. We are posting more frequently on each of the platforms, which has helped us to grow our followers by 13.5% since the beginning of the year.

# Appendix

## Team 4855: Member Statistics

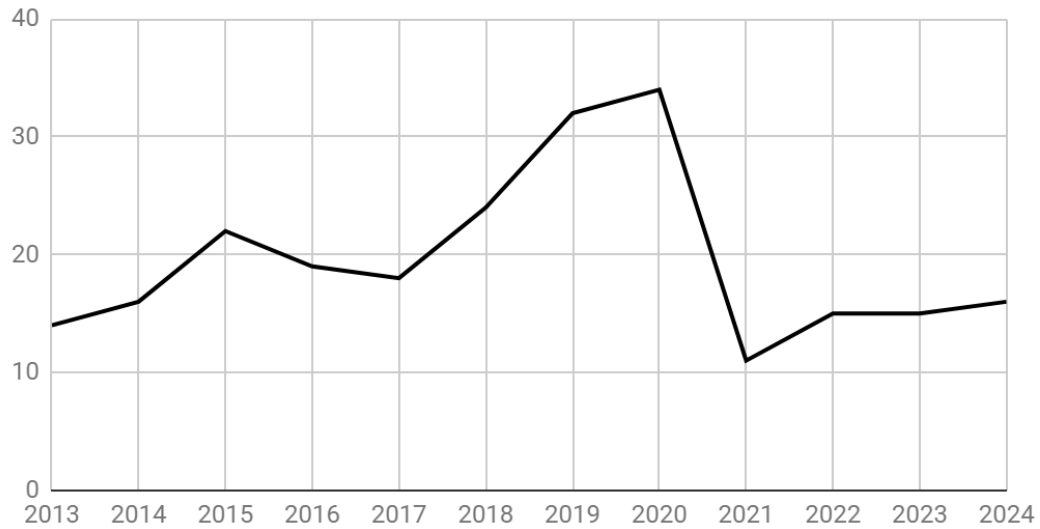


Figure 1. Team Growth: Like most teams, we experienced a decline during the COVID pandemic but we are starting to experience an increase in membership.

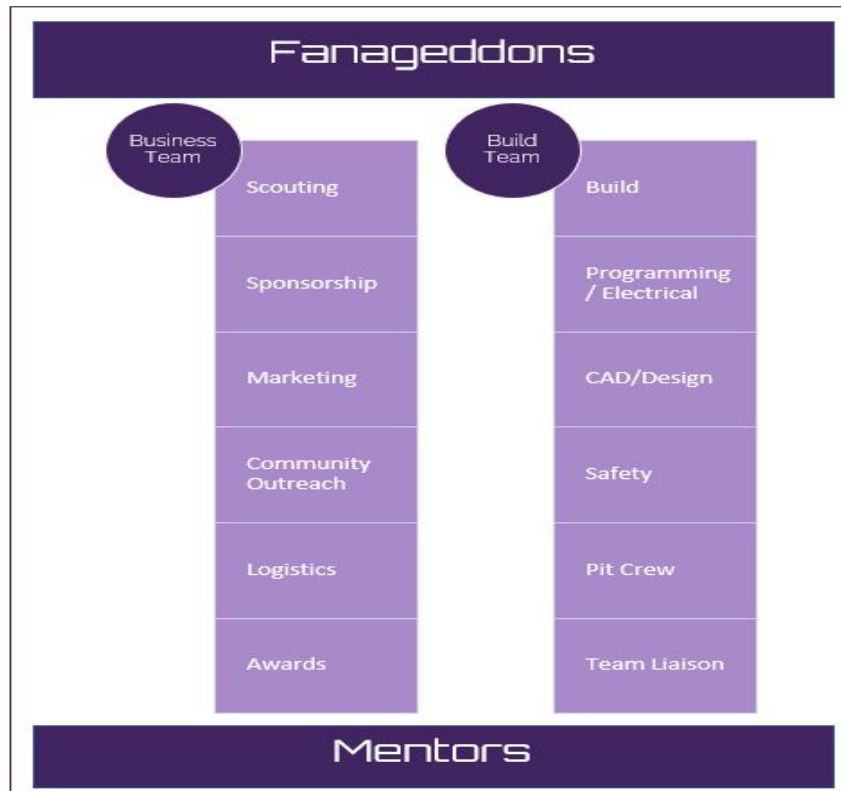


Figure 2. Organizational Structure: Veteran students, along with mentors, are responsible for mentoring and training less experienced team members.

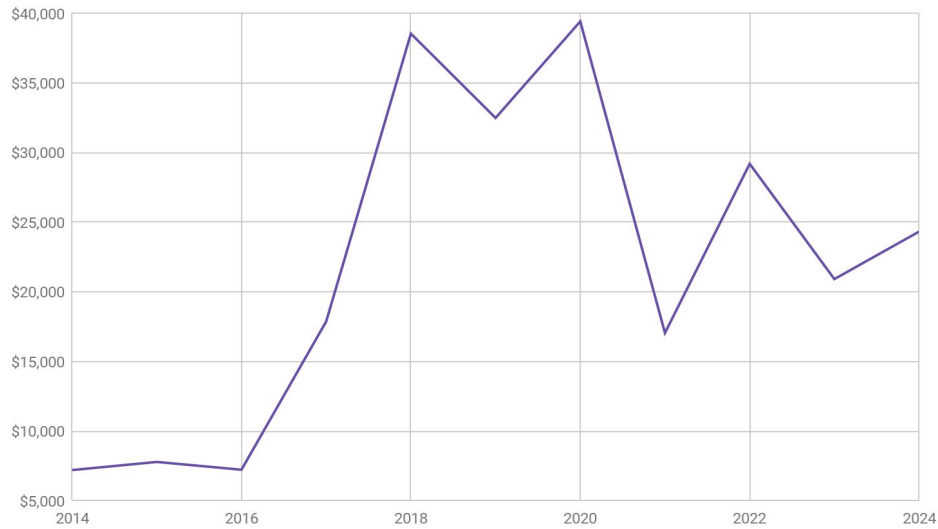


Figure 3. Funds Raised Per Year (Includes Value of In-Kind Donations): Due to the 2021 competition being virtual and because we still had funds in our account leftover from 2020, we did not have to raise as much money the last two years. Keeping a healthy fund balance allowed our team to survive financially despite the COVID-19 pandemic.

### Team 4855 - Ramageddon Annual Budget

Based on Qualifying for State Championship		
Expense	Annual Budget	Notes
<b>Build Team</b>		
Andy Mark	\$5,000.00	
Menards	\$1,000.00	
VEX Robotics	\$3,000.00	
West Coast Products	\$1,500.00	
Robot Shop	\$300.00	
<i>Subtotal</i>	<i>\$10,800.00</i>	
<b>Marketing</b>		
Team Shirts	\$725.00	
Signage	\$65.00	
Supplies	\$500.00	<i>Impact, buttons, flyers</i>
<i>Subtotal</i>	<i>\$1,290.00</i>	
<b>Competitions</b>		
FRC District Competitions	\$6,000.00	<i>St. Joe &amp; GVSU</i>
FRC State Competition	\$4,000.00	<i>SVSU</i>
Off Season Competition	\$750.00	
Food at Competitions	\$500.00	
Hotel	\$2,500.00	<i>Students help offset cost</i>
Transportation	\$0.00	<i>Carpool</i>
<i>Subtotal</i>	<i>\$13,750.00</i>	
<b>Grand Total</b>	<b>\$25,840.00</b>	

Figure 4. 2024 Budget: This budget is based on attending two district competitions and the State Championship. Our team carpools to events so transportation costs are zero.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>● Name Recognition in Community</li> <li>● "Mentor Guided, Student Driven"</li> <li>● Fan Support (aka Sea of Purple)</li> <li>● Advanced Scouting App/Alliances</li> <li>● Student Engagement</li> <li>● Business Team Gantt Chart</li> <li>● Large Group of Mentors</li> <li>● Social Media</li> </ul>	<ul style="list-style-type: none"> <li>● Lake MI- No Businesses West of Us</li> <li>● Depth of Experience in Coding</li> <li>● No Practice Facility</li> <li>● Membership Down After COVID</li> <li>● Tourist Town</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>● Alumni as Mentors</li> <li>● FTC/FLL Teams</li> <li>● Mentoring Other Teams</li> <li>● Training/Orientation Program</li> <li>● Awards</li> <li>● Team Building</li> <li>● Recruitment</li> </ul>	<ul style="list-style-type: none"> <li>● Small Build Team</li> <li>● Conflicting Clubs/Sports</li> <li>● Rebuilding Team/Program</li> <li>● Finding New Sponsors</li> <li>● Team Members Quitting</li> <li>● Burnout</li> </ul>

Figure 5. SWOT Analysis: The team members and mentors conduct a SWOT analysis each year to determine our team's strengths, weaknesses, opportunities, and threats.

### **Contact Us**

For more information on Team 4855 Ramageddon, contact us at:

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