Business Plan

Part I: The team **4**
The team's vision 5
The team’s history 6
Marketing in the team 9
Organizational Structure 11
Leadership Team Operations 14
expectations from leadership team 14
Training Structure – Leadership Team 14
Project planning process 14
Status Meetings 14
External Relations 16
Alumni 16
Parents 16
Sponsors 16
Robotics Season 17
Build Season 17
Competition Season 18
Robotics year process 18
Weekly status meetings 20
Financial analysis 21
Financial Resources 21
1. Our school 21
2. Parental Payments 21
3. Sponsors 22
4. Merkez Yeshivot and Ulpanot Bnei Akiva: 22
Procurement Mechanism 24
Group-Sponsor Relationship 25
Financial Analysis 26
Part II: SWOT **27**
Strengths 29
- Supportive School 29
- File Organization 29
- Task Management 30
- Large Team 31
- Team Bonding 31
- The FLL Teams 31
Weaknesses 32
- We Don’t Work On Saturday 32

- Large Team 32
- The Workshop 32
- Trips/Exams/Matriculation Exams 32
Opportunities 34
- Strong Connection with Other Teams 34
- Our Alumni 34
- School Workspaces 35
Threats 36
- Working Long Hours May Harm Learning 36
- Youth Movements and Extracurricular Activities 36
- Departure of Group Members 36
- Unforeseen Circumstances Beyond the Group's Control 36

Part I:

The Team

The team's vision

We, Team Excalibur #6738 from Modii'n always desire to be the reason.
The reason that the team is a significant part of the team members's lives.
The reason why all members of the group, without exception, can express themselves and feel part of something big and family-like.
The reason for a change, a great impact on the environment and inspiring the coomunity out of a true belief in the importance of impact, and seeing it as more than a supreme value, but a way of life.
The reason for success and reaching technological engineering excellence, with the development and construction of new and impressive robots every year.
The reason to believe in the possibility of combining religion and technology, and proof that it is possible to achieve high achievements as a robotics group while maintaining and respecting the religious faith of the group members.

The team’s history

Even before Team Excalibur existed, our middle school had two FLL teams: .(Team 220 (Core 'n' Good) and Team 219 (RoboTorch

2017: Our team was founded by graduates of FLL teams who couldn’t come to terms with leaving FIRST as early as 9th grade. The graduates established an FRC team while also serving as mentors for the FLL teams they had just left. At the beginning, the team had only 20 members, the workshop was a small and cramped room, and the team had no budget, knowledge, or resources. All the tools used were either second-hand or brought from team members’ homes, and the aluminum for the robot was mostly found on the street. Despite the challenging starting point, the robot that year fulfilled its purpose, performing tasks minimally but efficiently. That year, we won the **Rookie All-Star Award**, were selected as the third robot in an alliance at one of the regional competitions, and advanced to the national stage of the competition.

2018: The Modi'in municipality provided us with an unused kindergarten to serve as our larger and improved workshop. However, that year, our success in the competition was only partial—we took on big challenges that, unfortunately, we couldn't overcome. We didn’t give up, learned from our mistakes, and looked forward to a more successful season next year.

2019: This year, we achieved great success in competitions, serving as alliance captains in every district event, including as the 6th alliance captain in the national competition. It was a fantastic event that ended on a bittersweet note when we lost in a tiebreaker in the finals. Due to our excellent results, we qualified for the World Championship but did not attend for religious reasons.

2020: We received a new workshop at our school along with many new tools, significantly improving our work. This was the first year we began

manufacturing parts and using precision machining. Unfortunately, the season was cut short due to the COVID-19 pandemic.

2020-2021: During the COVID-19 pandemic, all FRC competitions were canceled. Despite building an excellent robot, no competition took place. The team's progress slowed due to difficulties in reaching the workshop caused by quarantines and lockdowns, preventing us from fully realizing our potential during those years. The mentors who had been with us since the team's founding left, and working conditions were challenging.

2022: After COVID-19, we had to "rebuild ourselves." We launched the **"Excalibur Moving Forward"** initiative, aimed at transforming from a mid-level team into a leading team through a consistent process and long-term planning. Some of the changes introduced by this initiative, known within the team as **EMF**, included defining each member's commitment, structuring the leadership team, and managing external relations. Additionally, that year, we focused on expanding the team's knowledge through professional training and learning from other teams. To establish our internal processes, we consulted with several teams (such as 3339, 2231, 1577, and 5614), meeting with them to discuss their management methods. We adopted various aspects from each team, ultimately shaping our own final plan.

2023: The team's improvement was evident in the season following **EMF**. First, with the help of our school, we purchased a new **CNC machine**, which we used to manufacture most of the robot's parts throughout the season. That year, we led **Alliance 7** to victory as alliance captains in a regional competition. Our success in robotics continued into the **Off-Season** competition, where we won the championship. We also achieved remarkable success in community outreach, as the judges recognized our efforts and awarded us the **Engineering Inspiration Award** at the regional competitions.

2024: The momentum from 2023 continued, and we decided to focus on building a **simple robot** that met clear strategic objectives. This year, the robot performed well on the field, earning **three robot awards** in various competitions. Naturally, our community outreach also continued to grow, with **over 20 projects** throughout the year!

Since the team's founding until today (2025), we have nearly tripled our number of members. We have achieved numerous accomplishments and won various awards in both community outreach and robotics, all while never forgetting to enjoy the process and keep learning.

We continue to grow and improve as a team with each passing season, and every day of work in the workshop contributes to the development of both the team and its members.

Marketing in the team

Our team has several ways to market itself. Among them, our **five main marketing strategies** are:

1. **Social media**

   The main way we market our team is through various social media platforms. We have an **Instagram**, **Facebook**, and a **YouTube channel**, where we upload **weekly updates** during the season and **robot reveal videos**. Our YouTube channel has **over 200 subscribers** and more than **32,000 views**.

2. **Team recruitment**

   Every year, we promote our team to the entire middle school, reaching about **300 students**, through a special event called **"Excaliday."** During this event, we visit each classroom to introduce the team and then showcase our **robot in action**, aiming to recruit as many new members as possible and give more students the opportunity to experience **FIRST**. In addition to Excaliday, our school-wide marketing is extensive, including **presentations and updates** for students and their parents. This outreach has a **broad impact**, as our high school is the **largest religious high school in Israel**, with over **1,000 students**.

3. **Community projects**

   The third way our team markets itself is by organizing and executing **community projects**. When running these projects, we always wear our **team shirts** and display our **team logo** whenever possible. For example, during the **FLL mentor course** we led, we distributed branded notebooks featuring our logo. Additionally, when volunteering and engaging with communities unfamiliar with **FIRST**, we wear our **team branding** to increase awareness and introduce more people to our team.

4. **Schools across the country:**
   Over the past three years, we have been working in collaboration with **Bnei Akiva**, the largest religious public school network in Israel, to launch our **biggest project yet**. The network provides us with **funding and resources** to establish **FIRST teams** in Bnei Akiva schools across the country. So far, we have founded **six FLL teams** and **two FRC teams**: **Portal #9303** in Givat Shmuel and **Firefly #9739** in Modi'in, both of which are competing this year. We are currently working with the network to establish **two more FRC teams** next year and have already contacted potential schools. By founding new teams, we **expand our reach** and promote FIRST in new areas across Israel.

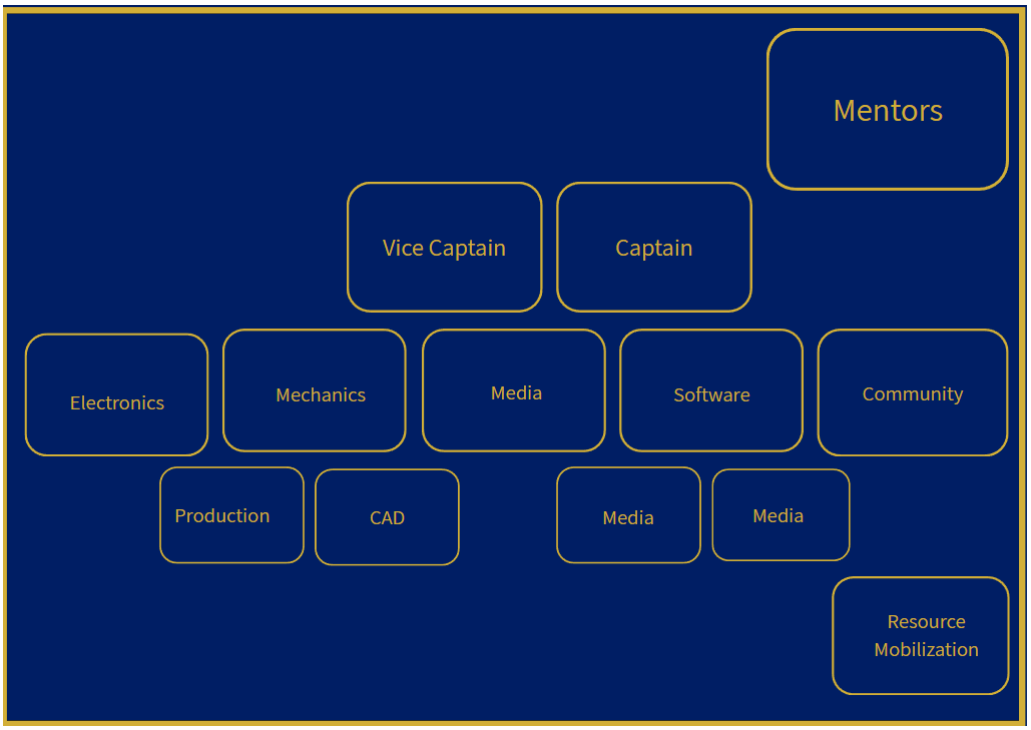
5. **Public outreach and exposure:**
   Our team utilizes **high-visibility platforms** to promote both our activities and the **FIRST organization**, reaching **hundreds of thousands of people** from diverse backgrounds across the country. We have participated in a **News 13 interview** with over **100,000 viewers**, been featured in **Israel's largest religious youth magazine** with over **50,000 subscribers**, and had articles published on the **Bnei Akiva Yeshiva network website**, reaching **20,000 students** and **hundreds of thousands of alumni**. Our reach continues to grow, allowing us to expand our influence and inspire more people.

Organizational Structure

Our team maintains a structured hierarchy for efficiency. At the top, the **captain** and **vice captain** oversee management and key decisions. Below them, **primary teams** (mechanics, outreach, software, electronics, marketing) operate year-round, while **secondary teams** (e.g., fundraising) focus on specific tasks with members chosen by the captains. Within primary teams, **sub-teams** specialize further, like **design and manufacturing** in mechanics. Each **team leader** ensures progress and motivates members.

In addition, there are **field leaders** responsible for various domains, such as **safety, the field, awards, and bumpers**. Each field leader oversees and leads the work within their respective area. For example, the **institutional liaison leader** ensures that mentors supporting the FLL teams in schools we have partnered with continue their guidance consistently and without issues.

Some teams include **specialists** who focus on specific aspects of their field. These specialists serve as key knowledge sources and act as leading experts within their teams. For example, in the **software team**, there are specialists in areas such as **computer vision, control systems, automation, and odometry**. Below the **team leaders** and **sub-team leaders** are the rest of the team members, who contribute to daily operations and develop their skills in .their respective fields



Every second-year and above team member can participate in **leadership team elections**, which take place about a month after the season ends. The elections are conducted **democratically**, with all team members voting. Students entering **11th grade** can run for **vice captain**, while those entering **12th grade** can run for **captain**.

Excalibur Moving Forward

In 2022, we introduced our **team management program**, which has guided us ever since. The program is continuously updated based on internal evaluations and insights from other teams. It covers all aspects of team operations, detailing each phase of the robotics season and member responsibilities. Its goal is to ensure continuity, preserve knowledge, and provide incoming captains with a comprehensive guide to team management.

:The program covers the following topics

- **Member commitment**
- **Leadership team operations**
- **External relations**
- **Robotics season**
- **Year-round activities**

…And more

Commitment:

- The team prioritizes commitment as the most important factor, even above talent or knowledge. Without commitment, skills and expertise have no impact since they are not put into practice. To achieve results, members must first show up to the workshop.
- Commitment includes motivation, a willingness to contribute, dedication during work, and prioritizing robotics.
- Members are expected to invest **at least three days a week** outside the build season, while leadership members dedicate additional time.
- To maintain commitment, those unable to meet these expectations part ways with the team. These requirements are clearly outlined before acceptance to prevent mid-year departures.

Leadership Team Operations

expectations from leadership team

- A lead team member is not a worker but a manager!
- Managing people and tasks.
- Always be aware of the team's status and the next step..
- Attend weekly status meetings.
- Set a personal example for team members.
- Commitment, commitment, commitment!

Training Structure – Leadership Team

- Theoretical training consisting of six sessions.
- Handover from the outgoing leadership team.
- Planning the training of teams.
- Practical training through a summer project.

Project planning process

- Advancing the team rather than just checking a box.
- the stages:
  - ○Defining a measurable goal.
  - ○ Research and feasibility study.
  - ○ Planning
  - ○ Allocating resources and ordering equipment (if needed).
  - ○Execution and monitoring.
  - ○ Review and analysis.

Status Meetings

- Held biweekly off-season and weekly during the season.

- Follow a structured and organized format.
- Meeting topics are announced in advance.
- Summarized: what is not summed up does not exist
- Shared transparently with the team.

External Relations

Alumni

- Alumni are invited to participate in all build season days and provide informal advice and guidance.
- If there is a need for specific expertise from certain alumni, they will be personally invited to the workshop.
- Alumni will be paired with current team members.
- They will receive monthly updates throughout the year and weekly updates during the season.

Parents

-Parents will be invited to social events and tours.
- They will provide support with transportation and meals.
- Professionally, they will offer expertise as needed.
- They will receive monthly updates throughout the year, and weekly updates during the season.

Sponsors

-Sponsors will be invited to tour technical work during the season, competitions, and community events.
- A special evening will be held to thank sponsors.
- They will receive regular updates regarding activities during the season.

Robotics Season

Build Season

- Detailed timeline and milestone plan for designing and building the robot during the seven-week build season.
- The mechanical team will lead the entire design and construction process and collaborate with software and electronics teams.
- The strategy team leads the design process from a strategic perspective..
- Community, marketing and branding, field, and bumpers teams assist during the robot design phase, and then continue with their work.
-During the build season, there are milestones, representing meetings where robot design takes place:

SRR - System Requirements Review

SDR - System Design Review and Selection

PDR1 - Preliminary Design Review 1

PDR2- Complete System Review

CDR - Critical Design Review

Competition Season

- Special roles will be assigned for competitions such as scouting, strategy, field, pit, media, speakers, and cheering.

Between competitions, comprehensive analysis and repairs will occur - through debriefings and drawing conclusions.

Robotics year process

January - April:

robotics season

April:

- Debriefings and drawing conclusions.

May:

- Selection and training of new leadership team.
- Recruitment.
- General training

June - July:

- Completion of general training.
- Completion of planning and professional training.
- Distribution of areas of responsibility.

August - September:

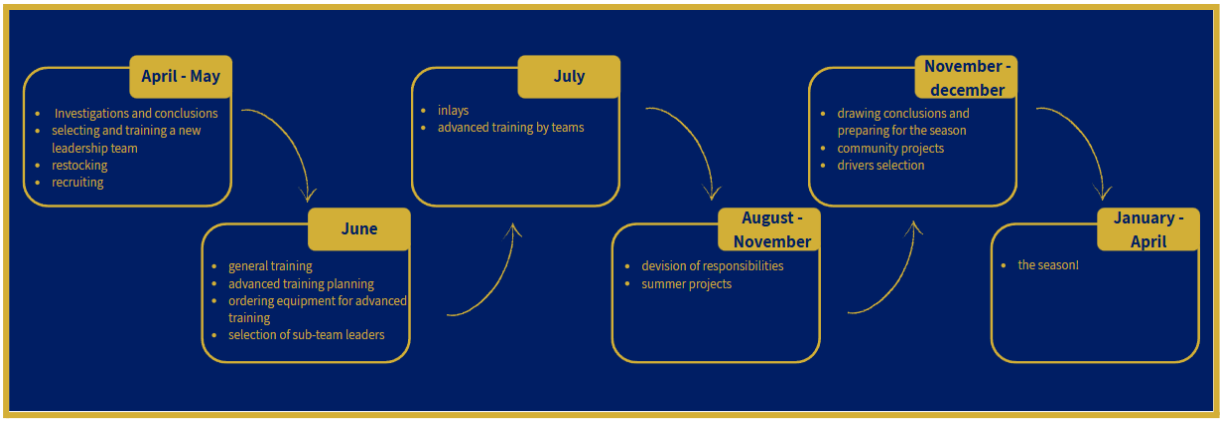
- Team assignments.
- Professional training.
- summer projects

October:

- Completion of summer projects.
- Completion of professional training.

November - December:

- Drawing conclusions.
- Preparation for the season.
- Driver selection.



Weekly status meetings

The purpose of the weekly status meetings is to ensure continuous updates on weekly activities, strengthen the cohesion of the leadership team, and prevent disconnection between sub-teams, allowing for more efficient and collaborative work. These meetings address challenges and propose solutions, discuss upcoming tasks, coordinate requests and collaborations between teams, and review the progress of different sub-teams. Additionally, separate meetings are held with the team's mentors to update them on project developments, purchases, and other relevant matters.

We make every effort to hold these meetings consistently, recognizing their importance and impact on the team's growth. They allow us to stay informed, respond quickly to developments, and ensure that nothing is overlooked.

Financial analysis

Financial Resources

As part of managing a robotics team, we must consistently plan and monitor our financial operations in an organized manner. Our funding comes from four main sources

1. **Our school**

   A significant portion of our team's budget comes from our school. After meetings with the administration and presenting our program and its impact on team members, we established a financial agreement. As part of this arrangement, the school covers our annual registration fees and competition logistics (transportation, food, shipping, etc.). In addition to providing our workshop and infrastructure, the school also funds part of our raw materials and major equipment orders.

2. **Parental Payments**

   The second largest factor in funding the group's budget is the parents. Each year, after an exposure evening where parents learn about the program and see the group's activities, they are asked to contribute a payment of NIS 1,400. This amount is primarily intended to cover basic needs such as raw materials, routine maintenance of tools, and merchandise that group members receive at no additional cost (shirts, sweaters, bracelets, etc.). Parents provide a stable financial backbone, and since funding from this source is almost entirely independent of external factors, it creates, together with school funding, a strong and stable financial foundation that ensures the group's continuity and stability over the years.

3. Sponsors

In addition to the school and the parents of the group members, we reach out to external parties to expand the group's budget and resources. Our sponsors are divided into three areas, each of which we approach in a suitable manner:

- **Category #1 - Budget:**
  These sponsors provide the group with direct financial support, allowing it to keep the money in a dedicated account and use it according to emerging needs. This flexibility enables the group to fund various expenses at its discretion, without limitation on a specific product or service. When approaching this type of sponsor, we do not specify a particular amount but rather present our annual expenses, based on which the sponsor decides on the amount of the contribution according to their considerations.
- **Category #2 - Raw Materials/Advanced Services:**
  These sponsors provide the group with physical products or advanced professional services, such as essential raw materials, component manufacturing, or 3D printing. This support allows the group to enhance its capabilities in specific areas, while significantly saving on procurement and service costs.
- **Category #3 - Significant Discounts:**
  These sponsors provide discounts on services or physical products offered by the company. Their support allows the group to reduce costs in a specific area, freeing up resources for development and improvement in other areas.

4. Merkez Yeshivot and Ulpanot Bnei Akiva:

Another significant source of funding that contributes to the group is the Merkez Yeshivot and Ulpanot Bnei Akiva. Our school is part of this organization, and the group is considered the flagship group of the network. As a result, the organization provides an annual budget to all groups in its affiliated schools, enabling the establishment of additional

FRC and FLL groups without impacting our budget. Additionally, the organization provides easy access to numerous educational institutions, making the group establishment process more efficient and rapid, allowing us to spread STEM and FIRST values to a wider target audience.

Procurement Mechanism

Whenever we need to order something as a group, we follow a simple procurement mechanism. A group member who identifies a specific need raises it to the relevant team leader (Rasha'tz). If the team leader agrees that there is a need, they add the details to the team equipment list, including price, supplier, and method of acquisition. The captains review the list, prioritize the items according to urgency, available budget, and prioritization against other orders, and then pass it on to the mentors for approval. The mentors, together with the parent committee responsible for managing funds, approve the final order.

Additionally, there is a rapid procurement mechanism, where a group member approaches their team leader (Rasha'tz) regarding an urgent purchase that needs to be made quickly. The team leader obtains approval from the captain according to the regular system of considerations, and if the equipment in question costs less than 100 shekels, approval is granted for its purchase. If the purchase item costs more than 100 shekels, approval from the mentor is also required.

This mechanism is designed for small but urgent expenses that cannot be delayed, such as zip ties for electronic work or an item for filming the impact video. Such expenses can delay work, which is why a special mechanism exists for these cases.

Group-Sponsor Relationship

To maintain a continuous relationship between us and our sponsors, we send updates during and outside the season. In addition, we organize a thank-you and appreciation evening in their honor, where we present the season's process and demonstrate the robot in action.

We ensure that every sponsor receives publicity and compensation from us for their assistance, both of which are based on the extent of that sponsor's help. The more significant the sponsor's contribution, the greater the compensation from our side. Publicity can range from a logo on the back of a shirt and mentions on social media to a personal thank-you post on Instagram and appearance on the robot's plates.

In addition to publicity, the group expresses its gratitude to sponsors by inviting them to various events we hold, and sometimes even organizing dedicated events for them. For example, immediately after the season, a special activity is planned for one of the sponsors, according to their request.

Financial Analysis

	A	B	C	D	E	F	G
1		מקורות תקציביים		הוצאות		כסף שאמור להיכנס	
2	סעיף	מקור תקציבי	סכום	סעיף תקציבי	סכום	סכום	?ממי
3		סכום משנה שעברה	₪ 16,939.21	רישום לתחרות	₪ 37,180.00	₪ 7,000.00	פירספוט
4		תשלומי הורים	₪ 50,000.00	רישום לתחרות הארצית		₪ 30,000.00	ישיבה(אבל כבר ב
5	כללי	תקציב הישיבה	₪ 37,180.00	עלות ציוד, חלקים ורכש	₪ 60,835.52		
6		משרד החינוך					
7		פייבוקס ריינגולד	₪ 709.00	רישום לאוף סיזן	₪ 3,500.00		
8	ספונסרים	פיר ספוט	₪ 11,000.00	שונות			
9		גוזמא אנימציות					
10		בני עקיבא	₪ 30,000.00				
11	סך הכל	מקורות תקציב	₪145,828.21	הוצאות	₪101,515.52	₪37,000.00	
12							
13		מאזן		₪44,312.69			

ניהול ומעקב אחרי הזמנות ורכישות - כלל הפרטים הטכניים הרלוונטיים, יעודכן ע"י קפטנים ומנטורים בלבד

עלות כוללת: ₪60,835.52

מזהה הזמנה	מקור ההזמנה	תאריך הזמנה	עלות הציוד	עלות משלוח	מכס	עלות כוללת	סטטוס הזמנה	מקור תשלום	תאריך הגעה	הערות
קדם אופסיזן 01	SDS	18.06.24	₪5,632.00	₪119.53	₪0.00	₪5,751.53	התקבל	ר (לכתוב בהער	27/1/00	פייבוקס של שנה שעברה
קדם אופסיזן 02	amazon	20.07.24	₪2,850.04	₪0.00	₪0.00	₪2,850.04	התקבל	ר (לכתוב בהער	29/01/1900	פייבוקס של שנה שעברה
קדם אופסיזן 03	CTRE	20.07.24	₪3,133.93	₪623.80	₪871.19	₪4,628.92	התקבל	ר (לכתוב בהער	30/01/1900	פייבוקס של שנה שעברה
אופסיזן 01	FIRST חנות	06.10.24	₪165.55	₪0.00	₪30.00	₪195.55	התקבל	ר (לכתוב בהער	13.10.24	פייבוקס של שנה שעברה
אופסיזן 02	מוד'יעין ipro	09.10.24	₪79.00	₪0.00	₪0.00	₪79.00	התקבל	ר (לכתוב בהער	09.10.24	חבר קבוצה שילם וצריך להחזיר לו
אופסיזן 03	Saad robot	29.10.24	₪5,274.00	₪0.00	₪897.00	₪6,171.00	התקבל	ישיבה	03.11.24	PEERSPOT-ישיבה
אופסיזן 04	אביאל כהן	20.10.24	₪1,925.00	₪0.00	₪0.00	₪1,925.00	התקבל		20.10.24	
אופסיזן 05	אין אזכור	21.10.24	₪945.00	₪0.00	₪0.00	₪945.00	התקבל			
עונה 01	אליאקספרס	03.12.24	₪458.00			₪458.00	הוזמן			
עונה 02	סעד	10.12.24	₪19,142.00	₪0.00	₪3,254.00	₪22,396.00	הוזמן	ישיבה	16.12.24	לא הכל הגיע עדיין ולכן עוד לא לרשום מתקבל
עונה 03	סופר טוב	11.12.24	₪51.80	₪0.00	₪0.00	₪51.80	התקבל	ר (לכתוב בהער	11.12.24	כיס של חבר קבוצה צריך הלהחזיר
עונה 04	אמזון	24.12.24	₪264.00	₪0.00	₪0.00	₪264.00	התקבל	פייבוקס10		
עונה 05	סעד	26.12.24	₪2,530.00	₪0.00	₪0.00	₪2,530.00	התקבל		31.12.24	
עונה 06	BNTECHGO	01.01.25	₪421.00			₪421.00	התקבל			
עונה 07	DIGIKEY	02.01.25	₪546.81	₪0.00	₪0.00	₪546.81	התקבל	ר (לכתוב בהער	16.01.25	
עונה 08	סעד	04.01.25	₪240.00	₪0.00	₪0.00	₪240.00	התקבל		05.01.24	
עונה 09	4project	08.01.25	₪744.00	₪0.00	₪0.00	₪744.00	התקבל	ר (לכתוב בהער	12.01.25	
עונה 10	אליאקספרס	7.01.25	₪146.00			₪146.00	הוזמן			
עונה 11	פוליקרל		₪2,155.87	₪0.00	₪0.00	₪2,155.87	התקבל			
עונה 12	אדיב	12.02.25	₪6,311.00	₪0.00	₪0.00	₪6,311.00	הוזמן			
עונה 13	משף	12.02.25	₪115.00	₪0.00	₪0.00	₪115.00	התקבל			
עונה 14	סטוצ'י	12.02.25	₪200.00	₪0.00	₪0.00	₪200.00	התקבל			
עונה 15	סעד		₪1,710.00	₪0.00	₪0.00	₪1,710.00	התקבל			

בהזמנות עם מטבע חוץ יש להזין ידנית את ערך המטבע בתוך הפונקציה של עלות עוללת במקום "$15"

שער הדולר: 3.54615 | סך הוצאות: ₪43,508.97

פריט	קישור	תיאור/עדיפות	חנות	מק"ט	מחיר ליחידה	מטבע	כמות	עלות כוללת	אישור תקציבי	סטטוס הזמנה	מזהה הזמנה
סוורב	.com/products/mk4i-swerv		SDS		377.00	$	4	₪5,347.59	אושר	התקבל	קדם אופסיזן 01
jetson orin nano 8gb	CQjwsaqzBhDdARIsAK2	מחשב קטן ומהיר מאוד	seeed studio	110110147	600.00	$	1	₪2,127.69	אושר	התקבל	קדם אופסיזן 02
arducam B0385	9NYB6YYKBF1&dib=eyJ2	מצלמה	amazon	B0385	60.00	$	2	₪425.54	אושר	התקבל	קדם אופסיזן 02
CTRE CANCoder	/www.saad-robot.com/21	אבה אחרי מה שקרה העונ	andymark	am-4237	72.00	$	6	₪1,531.94	אושר	התקבל	קדם אופסיזן 03
CANivore	store.ctr-electronics.com/c	עם קראקנים זה מאוד מוז	ctre	21-678682	300.00	$	2	₪2,127.69	אושר	התקבל	קדם אופסיזן 03
FRC 2024 Game Piece-CRESCENDO Note			FIRST חנות		55.55	ש	3	₪166.65	אושר	התקבל	אופסיזן 01
micro SD card Disk Extreme	p_tag=se&keywords=SanDi	micro sd card	מוד'יעין ipro		79.00	ש	1	₪79.00	אושר	התקבל	אופסיזן 02
קראקנים	/www.saad-robot.com/wp		saad robot		1,025.64	ש	3	₪3,076.92	אושר	התקבל	אופסיזן 03
NEO	www.revrobotics.com/rev-2	אמור להיות בסדנא	saad robot	REV-21-1650	239.31	ש	3	₪717.93	אושר	התקבל	אופסיזן 03
SPARK MAX	www.revrobotics.com/rev-2	אמור להיות בסדנא	saad robot	REV-11-2158	376.06	ש	3	₪1,128.18	אושר	התקבל	אופסיזן 03
קונקטור לרובוריו	/www.saad-robot.com/am-		saad robot		20.51	ש	2	₪41.02	אושר	התקבל	אופסיזן 03
כבלי CAN	bot.com/product-page/22a		saad robot		58.11	ש	2	₪116.22	אושר	התקבל	אופסיזן 03
Radio Power Module	t-robot.com/product-page/rad		saad robot		196.58	ש	1	₪196.58	אושר	התקבל	אופסיזן 03
אוכל לתחרות - בנט שניצל			אביאל כהן		1,925.00	ש	1	₪1,925.00	אושר	התקבל	אופסיזן 04
אוכל לתחרות- פיצות									אושר	התקבל	אופסיזן 05
כרסומי 4	html?spm=a2g0o.order_list		אלי אקספרס	4X4DX50L-2F	3.75	ש	10.00	₪37.54	אושר	הוזמן	עונה 01
אזיקונים	80a-4003-9a66-13bb31a90	כבלים ברחבי הרובוט להי	אליאקספרס		7.00	ש	15	₪105.00	אושר	הוזמן	עונה01
קאנגר	duct_language=iw&ds_e_pi	שלח לתוך דברים קטנים כ	אליאקספרס		32.14	ש	1	₪32.14	אושר	הוזמן	עונה 01
אוגרי כבלים לפלפ	ae&aff_platform=default&sk	אוגר כבלים כמו האדום	אליאקספרס		1.93	ש	2	₪3.86	אושר	הוזמן	עונה01
אוגרי כבלים לפלפ	t?spm=a2g0o.order_list.order	מחלקים את האפורים	אליאקספרס		9.31	ש	1	₪9.31	אושר	הוזמן	עונה 01
אוגרי כבלים	t?spm=a2g0o.order_list.order	יש כרגע בסדנא לא יפים ול	אליאקספרס		2.48	ש	2	₪4.96	אושר	הוזמן	עונה01
שרירנים	pdp_npi=4%40dis%21IL5%2	ים שהולחמו כדי לשמור ע	אליאקספרס		9.50	ש	5	₪47.50	אושר	הוזמן	עונה01
אוגרי כבלים	&pdp_npi=4%40dis%21IL5%	צבע שחור- 2 מכל גודל ע	אליאקספרס		7.00	ש	6	₪42.00	אושר	הוזמן	עונה 01
כבלי אינטרנט	2e506dc3f4a131e3&gclid=E		אליאקספרס		27.00	ש	1	₪27.00	אושר	הוזמן	עונה 01
חשמל	kPDgWIxpFXWn3P-yzGe3iN9En	מקולקלים וחצי קלאץ עוב	אליאקספרס		57.66	ש	1	₪57.66	אושר	הוזמן	עונה01
limit switch	com/item/3303209107 6.html?	אין לנו מספיק בסדנא	אליאקספרס		1.93	ש	10	₪19.30	אושר	הוזמן	עונה 01
מקדח כוס	pdp_npi=3%40dis%21IL5%2	מ"מ 28	אליאקספרס	H0282103	24.52	ש	2.00	₪49.04	אושר	הוזמן	עונה01
מנור סנטימטרי ואינצ'	_npi=4%40dis%21IL5%211	מטר 5	אלי אקספרס	5m25mm	17.50	ש	6.00	₪105.00	אושר	הוזמן	עונה 01

Part II:

SWOT

S

STRENGTHS Supporting School FLL Teams Task Management
File Organization Large Team Team Bonding

WEAKNESSES
We Don't Work On Saturday Large Team The Workshop
Trips/Exams/Matriculation Exams

W

O

OPPORTUNITIES Strong Connection with Other Teams
Team alumni
School Workspaces

Working Long Hours May Harm Learning
Departure of Group Members Delayed Order **THREAT**
Youth Movements and Extracurricular Activities

T

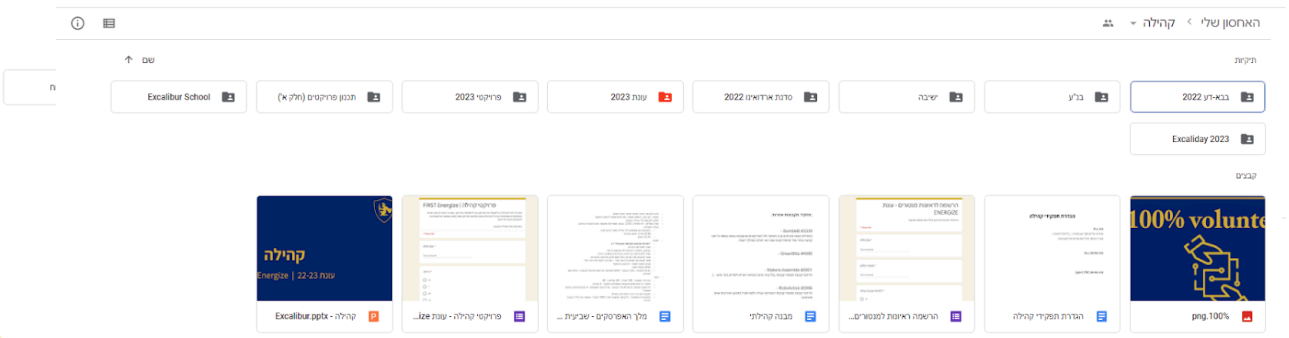
Strengths

- ## Supportive School

The high school where we study provides us with many resources and opportunities, such as a well-equipped workshop, the ability to stay late on the premises, and access to computers, communication, and food rooms. In addition, as we mentioned, the institution provides us with a budget, assists in financial management, and strengthens the connection with the high school network. Out of a desire to strengthen the group and an understanding of the program's importance, the high school funds large and important expenses for us, such as the purchase of a CNC machine and the establishment of a robotics field on school grounds, which is currently under construction. Furthermore, the school is willing to be flexible and postpone events such as exams and assignment submissions for group members participating in competitions, and even takes responsibility for logistics on these days, including transportation, food, and delivery.

- ## File Organization

Before implementing any project in the group, we write a work protocol, in which we record the project's objective, how the project will operate, and the milestones guiding its work. We store all protocols in Google Drive. The group has a very organized Drive, where we save all the group's various files in the most efficient way, allowing quick and orderly access to folders where information about each project and process in the group is stored. Additionally, we document all events, protocols, projects, and processes in the group, so that later, during the



lessons learned process, we can review them and see where we can improve in the future. The choice to use Drive specifically stemmed from the need to allow access to files from any device with the internet, including remotely. To ensure the Drive doesn't become disorganized due to the large number of users and the very convenient access, we manage permissions by folder and only grant access to relevant parties.

- **Task Management**

We use the Monday system to stay organized and ensure we meet project and group work deadlines. All group members have access to Monday, which helps track progress and task completion. To enable efficient and consistent work, the software operates with folders, divided into teams and sub-teams, with each group member having a personal space and access to relevant teams and tasks. New projects and season and robot processes are entered into Monday, with each task being assigned a deadline and a responsible person. This method allows tracking of every task, organization of every project, and prevention of delays in routine work.

0.

Task	Person	Status	Date	Priority
למדל הורדת משקל לפלטת חיזוק	AM	Done	29 Jan, 05:30 PM	HIGH
להוסיף חורים בפלטת ציר סיבוב לאינקודר	OG	Done	29 Jan, 05:30 PM	HIGH
לשבת עם מדיה על עיצובים וכו	AM	Done	29 Jan, 06:00 PM	LOW
לתקן מייטים	OP	To Do	30 Jan, 07:30 PM	MID
למדל את הפלטות פרספקס הכחולות מעל האלקטרוניקה	OP	Working on it	30 Jan	MID
לצבוע את הרובוט בצבעים הרלונטיים	AR	To Do	30 Jan	
להוריד משקל לפרופילים של הטיפוס	YG	Done	30 Jan, 10:00 PM	MID
להוריד את רוב החורים מהפלטת ספונסרים	NP	Working on it	31 Jan	LOW
לצמצם חורים בפרופילי אמצע	OP	canceled	31 Jan	LOW
להוסיף חורים למעצור מכני	OG	Done	31 Jan	HIGH
לחברת את הפלטת פולי הצדדית של הירי לירי	AM	Done	31 Jan	
+ Add task				
			29 - 31 Jan	

- **Large Team**
- This means a larger workforce and faster-paced work, enabling the completion of many projects in a limited time. There's always work in the workshop, and we welcome the participation of as many group members as possible. This creates an atmosphere of seriousness and diligence, improving the group's efficiency and productivity.
- **Team Bonding**
- We believe that team bonding among group members leads to more efficient and better work in the workshop. When work is done with fun and camaraderie, collaboration increases and outputs improve. Therefore, the group regularly holds bonding activities such as shared dinners during the season, gatherings outside the workshop, team soccer games, and more. As a result, close friendships are formed among group members, including with the new class that joins each year. This is how we maintain a positive and enjoyable atmosphere in the workshop, which allows group members to work together better and more efficiently.

- **The FLL Teams**
- Some of our group members mentor the FLL groups at our school, driven by a belief in this program and the expectation that FLL participants will join our FRC group, ensuring the group's future. In our view, FLL is the future generation of FRC.

Weaknesses

- **We Don’t Work On Saturday**
- Because we are a religious group, the workshop is not open on Saturday and Friday evenings. Therefore, there is no work on these days, and a lot of time that could have been used for work is 'wasted'. The total working time that the group loses as a result during the build season is at least a full week (!).

- **Large Team**
- Since the total number of group members is around 50, it is sometimes difficult to allow all group members to express themselves independently. Due to the large number of group members, it is sometimes difficult to give each and every one the necessary attention, and it is somewhat complicated to tailor tasks to the specific abilities and talents of each group member.

- **The Workshop**
- Our workshop is relatively small, making it difficult for multiple teams to work simultaneously. This difficulty is particularly pronounced when using noisy tools, such as the grinder, creating a challenging work environment.

- **Trips/Exams/Matriculation Exams**
- In addition to participating in the program, all group members have other commitments that partially prevent their work in the workshop. These commitments include things that cannot be moved, such as exams, trips, and matriculation exams. These events particularly affect the senior group members, many of whom serve as key personnel in the

group. For example, two weeks before the first competition, the 11th graders went on a trip to Poland lasting about a week and a half. This grade is the leading grade in the group and includes many key roles in the group, including the mechanical team leader, media team leader, electronics team leader, manufacturing sub-team leader, modeling sub-team leader, and strategy sub-team leader.

Opportunities

- **Strong Connection with Other Teams**
- The robotics community in Modi'in is very strong, and there are several FRC teams in our city, many of which are physically close to us. This proximity allows for many collaborations, whether in assisting with physical equipment, knowledge transfer, or providing mutual services. Therefore, whenever we encounter a problem, we have someone to turn to. This year, we collaborated with teams 5990, 1937, 4586, and 9739 (the city's new robotics team, in whose establishment we were a dominant partner). As part of the joint effort, we approached the municipality to obtain funding for all the teams in the city. In addition, we organized bonding activities with other teams to strengthen the local community. Examples of projects we carried out with other teams in the city include a modeling course we conducted together with team Elysium #1937 and a visit to a nursing home in the city, which was held in collaboration with all the robotics teams in Modi'in.

- **Our Alumni**
- After 9 years of the group's existence, our alumni community has grown and strengthened. The alumni are always available to help those in need, and many of them even serve as mentors for the group and the subsidiary groups we have established. They frequently visit the workshop, stay updated on the group's status, and check how they can assist. Additionally, many of them conduct training sessions on various topics, ensuring that the knowledge within the group is preserved, developed, and passed onto future generations.

- **School Workspaces**
- We have various rooms at our disposal in the school, to which we have access after school hours. These spaces provide the group with additional opportunities and significant resources. Among other things, we use empty classrooms, computer and communication rooms, the dining hall, and in the past year, the construction of a dedicated robotics field for the group has begun, which will provide the group with a larger workspace and ensure a longer future for the group. In addition, the construction of this field builds a closer relationship with the school. This allows us to hold meetings concurrently with workshop work and perform various tasks with maximum efficiency.

Threats

- **Working Long Hours May Harm Learning**
- Group members have a lot of work after school hours, such as homework and studying for exams. In addition, the older group members have matriculation exams they need to study for.

- **Youth Movements and Extracurricular Activities**
- In addition to participating in the group, most group members are active in youth movements as staff members and counselors, and participate in other extracurricular activities such as combat fitness training, clubs, and various educational programs. These commitments reduce their available time for work in the workshop and affect the distribution of their personal resources between the various areas.

- **Departure of Group Members**
- Despite the investment and contribution the group provides to each of its members, sometimes a group member leaves for various reasons. The main reason for this is the completion of high school studies, but there are cases where members leave due to lack of time or difficulty meeting the required commitment. Each member brings unique value to the group, and when they leave, the group loses their unique contribution, along with the knowledge and experience they gained during their time in it.

- **Unforeseen Circumstances Beyond the Group's Control**

To prevent bottlenecks in work due to shortages of raw materials and equipment, we make sure to order all the equipment we anticipate needing well in advance of the season. However, despite this early

preparation, delays in orders, stock shortages, or logistical problems in transportation sometimes occur, which can hinder the group's progress during the season.