BUSINESS PLAN 2019



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Mission Statement

While everyone was busy dreaming about going to the Moon, Neil Armstrong chased after his dreams, making him the first man to ever set foot there. Just like Armstrong, we weren't satisfied with "dreaming"; instead, we went out into the world in the hopes of making a difference.

Our foremost principle is not to improve solely within ourselves, but to bring people up with us while improving. We take any measure necessary like building science, engineering and technology to inspire innovation while nourishing crucial skills like curiosity, creativity, risk taking, openness, perseverance, leadership and selfconfidence.

Team History

In 2015, SPARC was started in Sainte Pulcherie French High School. The team was formed in Istanbul, Turkey and in March 2015, the team made its debut at FIRST Robotics Competition Central Illinois Regional in USA. At the competition, 5665 managed to come away with Rookie Inspiration Award. In 2016 we earned a place in semifinals and won Entrepreneurship Award in Turkish Off Season. In Orange County Regional three years ago, we got Dean's List Finalist Award (Alara Değirmenci) and Judges' Award.

We have won Excellence in Engineering in Istanbul Regional 2018 and Entrepreneurship Award in New York City Regional 2018 where we also have been one of the quarterfinalists. In 2018 Turkish Off Season we managed to be one of the finalist, plus we earned Entrepreneurship Award and for this year in Bosphorus Regional we have managed to win Gracious Professionalism Award.

Summary of Team Growth

Having started off solely with 18 students and 1 mentor in the same year, we have successfully expanded our team owing to the welcoming and accepting standpoint on science and technology here in Turkey. With this rather colossal progress, we have admitted students from all over our country and three years ago, we reached 55 students and 7 mentors. There has also been several times where we have had to contribute to our goal by spending our ever so loved pocket money.

For Power Up Season we had 26 students and a mentor. For this season we are a total of 48 students and a mentor. We also presented the FRC to the underprivileged schools around us and let the students join our team.

SPARC team includes every student with love of engineering without discriminating by gender or race. Our girl numbers in team increased every each year. In our first year we consisted of just 5 females to 13 males. In 2016 our team member number rises to %70 male and %30 female. Seeing our accomplishments our schoolmates also became interested in robotics and started to value its presence as well. In 2017 we formed a joint team with Robert College, ENKA Schools and many other schools and we reached %58 male and %42 female and 55 students in total.

We also accepted students from various cities in Turkey to show FIRST community to them. And 2018, we decided to split up because with lots of team members, every one could not find job to do in team. We formed a diverse team with 14 males and 12 females and also included students from public high schools from numerous cities in Turkey with the same purpose that we had last year. For 2019, we have 22 females and 21 males.

Team Structure

At the beginning of each season, we carefully divide our team into 4 essential divisions: Mechanics, social relations, safety and design. We also select a 'captain' for each group who then makes sure everything goes swiftly. Being students of a private school, we spend more time and manpower to find sponsors, in contrary to public school teams. After working hard and finally reaching our goal that we had determined in the beginning of the season, we plan out our expenses based on immediate needs of the team; such as equipment, transport, t-shirts, banners and accommodation. Afterwards, we put these funds to effective use.

We find sponsors by participating in numerous conferences and fairs as well. We send gratitude emails to our sponsors after the competitions in order to properly show respect to them as well as acknowledging their major support. Furthermore, we demonstrate the abilities of our robot to our school and our sponsors as well as informing them about how the competition went and the prizes we attained. Finally, at the beginning of each year we help new team members adapt to the system by making presentations about mechanics, programming, etc.

Risk Analysis

Being one of the oldest robotic teams in Turkey, our introductory years were fairly tough. But we changed this weakness into strength by working harder, devoting longer hours and gaining a lot of experience from our mistakes. Our teammates are well aware of the severity of this competition and have been working accordingly. Thanks to the mature history of our school which dates back more than 170 years, we got lots of attention both from within our community and outside. With this reputation, we believe that it's possible to deliver the FIRST's message to a large audience.

However, we are also conscious students in our everyday lives who understand the responsibility of working together and in line with our school's rules. Additional to school hours, we had to devote two weeks of our holidays to create our robot, which we have gladly done. Likewise, we have found an efficient way to prolong our work time by meeting up outside of the school property or collaborating online.

Despite all the inconvenience such as those who have been previously mentioned and several others, we have been able to get everything done assiduously before the assigned due dates. From the opportunities point of view, the robotics workshop which our sponsor Ford OTOSAN will let us use to printing materials. As a threat, we can say that being part of a private school and not a public school, we will always have the need to search for longer hours to find a sponsor.

Financials

Our sponsors are crucial to the financial state of SPARC. As previously mentioned, being students of a private school presents some difficulties concerning the search for sponsorships. Thus, at times; inscription fees, accommodation, the manufacturing process of the robot, transport, materials and printing are hard to workout.

At the beginning of each year, we plan out a carefully written mail and a detailed sponsorship folder to be sent to any potential sponsors. Afterwards, we get in touch with numerous companies first through our personal contacts and then via email or simply, the phone. Certainly, we make sure to commence this process after having determined our goals according to our budget. The expenses for our projects have been met by selling cakes, organizing a lottery for Christmas and preparing food sales in our school.

As a consequence of the competitions being held in the US, just like any other foreign team, we too have had numerous amounts of problems concerning transport, accommodation and fund simultaneously. However, we have learnt over time how to properly plan out our funds which as of now, has been insufficient.

Marketing

We as the team, are very well aware that communicating the principles of FIRST to the public is crucial. We have succeeded in having our voice heard through broadcasts by 2 different TV shows, 10 different newspapers and 1 radio programme. We have demonstrated our robot, made presentations in events and by making special deals with our sponsors we have engaged many projects. These projects are devoted mainly to spreading knowledge about the world of STEM while also encouraging kids to explore better and more effectively the science they use in their daily life.

We are all aware of the current power social media holds, we've started sharing relevant scientific breakthroughs and science news and share them through our Youtube channel; which has built a following and helped our team gain more recognition. We have accounts on many other platforms such as Instagram, Facebook and Twitter in addition to our Youtube channel which we update frequently. Beside the digital world, we have our own merchandise, designed by our team members.

Our school's newcomers are welcomed through our annual presentation and seminar. If we catch their interest, they get in touch with any member and they will guide them to their preferred fields. During the 5. TAYSAD Maintenance Conference we reached many big robotics companies like ABB, Yaskawa, etc. At the start of every year, we send a manual to our potential sponsors to help us with finances.

Team Budget: Team Income, Expenditure and Non - Profit Sponsors

INCOME	
Toksan	USD 6.000
Student Families	USD 45.600
Chamber of Commerce (Istanbul Ticaret Odası)	USD 1.500
Sainte Pulcherie French High School	USD 500
Cavo Automotive	USD 1.500
TOTAL INCOME	USD 55.100

EXPANDITURE	
Participation Fees	USD 9.000
Logistics-Custom Clearance*	USD 2.000
Production Tools*	USD 1.800
Robot Construction*	USD 3.000
Means of Advertisement*	USD 800
Aire Faire & Accommodation	USD 45.600
Workshop Expenses	USD 500
TOTAL EXPENDITURE	USD 55.100

* The expenses above were financed by our non profit sponsors listed on the very next page, therefore have no relation with our own finances.

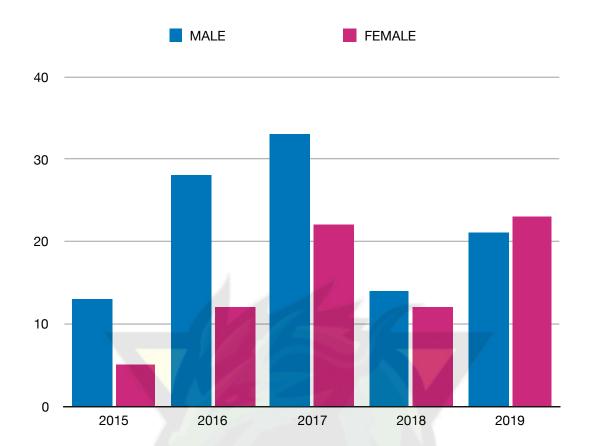
NON - PROFIT SPONSORS	
FORD Otosan	Robot Materials
SISMAK Automotive	Safety Kits
Veritas	Printing Materials
DekoArt	Printing Materials
KemiQ	3D Printer
Papa John's Pizza	Meal (in Turkey)
ABB	Internship
3M	Safety Materials
Bahçeşehir University	Uniforms
Globelink UNIMAR	Transportation Fee
BILGE ADAM	Coding Education
ASAŞ Aluminium	Robot Materials

SWOT Analysis

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 Strengths: Being one of the oldest teams Experienced team members and mentors Famous school 	 Weaknesses: The school's rules which make working on the robot more difficult School taking a huge time
Opportunities: • New sponsor that will provide new tools and a new workshop	Threats: • It takes a really long time to find sponsors because of the school having a private status

Student Team Member Chart



Team Structure: Organizational Chart

TEAM STRUCTURE

SAFETY:

- Preparation of safety manual. •
- Preparation of safety game. Collaboration with other teams. •
- •
- Gathering the necessary items.
- Preparation of safety brochures.
- Safety education

SOCIAL COMMUNICATION:

- Preparing the business plan Chairman's interview and video

MECHANICS:

- SOLID design of the • robot.
- Gathering the necessary tools and pieces.
- Building the robot. •
- Programming the robot.
- **Driver Team**

DESIGN:

- Preparing the brochures/ flags/
- banners. Designing the uniforms
- Designing the pit
- **Creating animations**