



## BUSINESS PLAN 2018-19



## 1: MISSION STATEMENT

*VorTX aspires to inspire the next generation of professionals through teamwork and outreach. We aim to create a world where students celebrate science and technology, and become leaders in STEM. To give everybody the opportunity to change the world, we provide all ages of students with clubs that foster STEM principles and create places for students to learn.*

## 2: HISTORY AND GROWTH

When the team was founded in 2011, it only had ten members, but over the years, people grew more interested in STEM causing our membership to grow exponentially. Most notably, the team witnessed a dramatic increase of female engineers amongst its members, steadily increasing from just 20% in 2016, to 45% in 2019. Based in Houston, one of the most culturally diverse cities in the United States, VorTX's biggest strength is its diversity, best demonstrated by having over ten different languages spoken on the team. The cultural diversity of the team is reflected in the thought-provoking conversations between team members and other FIRST teams. One of our greatest challenges was finding a permanent build location. As we have grown, our team moved to six different places. Currently, we work in a space large enough to accommodate the entire team. Our team has done many robot demonstrations within our district that serve to educate students about STEM and also recruit potential members for the team. At these robot demonstrations, we also mention FIRST and how elementary and intermediate students can participate. As more students become interested in robotics and STEM, more FIRST teams or coding clubs will be established. Eventually, those students will go into high school wanting to join VorTX. We have created a succession program where veterans teach rookies the skills they need to successfully compete in FIRST and continue to apply those skills in their daily lives.



### 3: ORGANIZATIONAL STRUCTURE

Perhaps the most unique aspect of VorTX's structure, is that the team is primarily student run. The team is divided into different subgroups that specialize in a certain area either on the robot side or the business side. Each subgroup is run by a member who oversees the tasks that need to be done in that area. Although VorTX is mainly student-lead, mentors work closely to guide the students and help them make decisions. The team has mentors suitable for both the business and robot side which ensures that each subgroup has the support they need. We reach out to parents as well, encourage them to mentor or even help organize the team.

VorTX keeps recruiting members by engaging students through district events, and hosting recruitment meetings at each of our 5 high schools in the district where we give information about the team and FIRST. During the offseason, older student leaders train younger team members to carry out the team's mission of spreading STEM. Leadership members also organize a way to teach rookies the skills needed for the coming build season. These skills include how to operate tools and safety. Before competition season starts, new members have the chance to try out different subgroups to see which they enjoy more or want to learn more about. This helps to give everyone a job that pertains to their interest for when build season starts.

The team plans on attending and organizing more outreach activities such as robot demonstrations and summer camps so the increase in robotics, STEM and FIRST encourage more students to join the team in the future. Our team stays true to FIRST values by incorporating FIRST into everything we do, including teaching the middle and elementary students at our summer camp about gracious professionalism.

### 4: RISK ANALYSIS

#### Strengths:

- Support from Klein ISD
- Support from Lone Star EMI
- Support from team parents
- 90+ members
- 20+ mentors
- Strong connections to other Houston Area FRC teams

#### Weaknesses:

- UIL Time restrictions
- Unfinished training programs
- Restrictions by Klein ISD

#### Opportunities:

- FLL teams at all elementary schools in the school district
- FTC teams at every high school
- Starting FRC Team in neighboring district
- Robotics summer camps
- District seminars

#### Threats:

- Tenant work facility - limited permanent space
- Not enough funding
- Lack of passionate district representatives/coach
- Lack of training - due to time restrictions

## 5: MARKETING

VorTX attends many outreach events which enable us to voice our mission throughout our community. We have toured around our school district giving information about our team and the FIRST program, inspiring younger students to join a robotics team or even our team in the future. We attend district events such as Pathways Summit, STEM Gems and also hold our own summer camps which helps to increase our prevalence within our district. We also participate in volunteer activities such as working with Project C.U.R.E in sorting medical supplies and also hosting a district-wide toy drive called Operation Santa Bots for Northwest Assistance Ministries. Through these different outreach activities, the name VorTX is paired with the ideas of STEM and developing the future generation of leaders.

In addition, VorTX makes use of social media to always be in contact with the community. The team uses it as a platform to communicate upcoming events and to share what its members have accomplished. Fortunately, our school district takes advantage of social media making it easy for us to reach out to our community on a larger scale.

## 6: FINANCIALS

Our sponsors play an important role in team funding. When meeting potential sponsors, we explain to them that by helping our team, they are also investing in their community because our budget is split between the robot and our business and outreach efforts. To keep them engaged, we have different levels of sponsorship recognition which motivates current sponsors to continue their support of our mission.

## APPENDIX



## BALANCE SHEET

As of February 28, 2019

	TOTAL
<b>ASSETS</b>	
Current Assets	
Bank Accounts	
BBVA	5,636.60
PayPal	8,157.17
<b>Total Bank Accounts</b>	<b>\$13,793.77</b>
<b>Total Current Assets</b>	<b>\$13,793.77</b>
<b>TOTAL ASSETS</b>	<b>\$13,793.77</b>
<b>LIABILITIES AND EQUITY</b>	
<b>Total Liabilities</b>	
Equity	
Opening Balance Equity	23,078.78
Retained Earnings	-7,539.26
Net Income	-1,745.75
<b>Total Equity</b>	<b>\$13,793.77</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>\$13,793.77</b>



## PROFIT AND LOSS

July 2018 - February 2019

	TOTAL
Income	
Discounts/Refunds Given	150.00
Donation	5,341.80
Fundraiser	351.14
Membership Dues	9,925.60
Sales	80.00
Travel Payments	1,467.11
<b>Total Income</b>	<b>\$17,315.65</b>
GROSS PROFIT	<b>\$17,315.65</b>
Expenses	
Advertising & Marketing	5.29
Contest Entry Fees	3,750.00
Meals & Entertainment	80.62
Office Supplies & Software	80.49
Rent & Lease	132.00
Robot Build Materials	14,386.54
Summer Camp	5,000.96
Team Spirit Items	1,272.99
Tools/Equipment	706.35
Travel	1,185.42
<b>Total Expenses</b>	<b>\$26,600.66</b>
NET OPERATING INCOME	<b>\$ -9,285.01</b>
NET INCOME	<b>\$ -9,285.01</b>