Soccer Player Career

By: Dempsey

Team: 393 W

Location: Legacy Magnet Academy Tustin, CA

Introduction

For my dream job I want to be a pro soccer player for the soccer club Chelsea. You might be asking yourself, "how does being a pro soccer player tie into VEX"? "How will VEX set you up for that future"? Being a pro soccer player means a lot of things, for example they have to problem solve just like we do in VEX by fixing our code or robot and when new rules are made, we must change our tactics. Also, we are challenged to be creative and in soccer creativity is key to success because you can make your own ideas to fit with your play style. I chose being a soccer player because it is my passion, and I am very ardent about soccer. Also, it is a very different career than people expect to have after VEX, soccer is also a steam job because we use all aspects of STEM. Science is used in Soccer as coaches and players must take special physiology classes as they have to stay in perfect shape for performance. Math is also used in soccer as players have to get the statistics from matches, so they can improve on special things, like passing, shooting, and defending. Engineering is important as people need to engineer new ways to track players and keep them safe when playing. Lastly is technology, soccer players use technology all the time when they wear special things on their body and cleats, to track very important things like touches per 90, shot power, etc.

The image shows the same passion the players have for the sport which is the same we have for robotics (image credit China daily.com)

Now you might be thinking about the engineering design process which is probably the most important thing in robotics. Successful teams shape their program around it! But it is also extremely important in soccer! This essay will show you how the seven steps of the EDP (engineering design process) relate to soccer. Soccer is a complicated sport just like our VEX games. The engineering design process can help us break down the games and understand how to play them better.

What is the engineering design process?

The Engineering Design Process is a critical aspect of robotics, it is the foundation of everything we do. This process is made up of a series of steps that include defining the problem, brainstorming ideas, conducting research, developing ideas, and selecting the best approach, building a prototype, evaluating it, and making improvements. Interestingly, this process is equally done in soccer.

Define the problem

When it comes to soccer, defining the problem requires a deep understanding of the game, including its rules, objectives, and the need to score more goals than the opposing team. This means that the coach and the team members must brainstorm tactics or strategies to help them achieve their goals. During this phase, the coach may conduct research to determine what tactics will work best based on the team's strengths and weaknesses.

Brainstorm

As the team continues to brainstorm, they will develop several ideas and choose the best approach that meets their goal. The next step is to build a prototype, which in this case we cannot build anything, but this would mean practicing the tactics in friendly games or training sessions. During this time, the team will test their tactics to see how effective they are. They may test it using how many goals were scored, the percentage of successful passes completed, and the number of shots on target or shots taken. To evaluate the performance of the tactic.

Build, model, and test

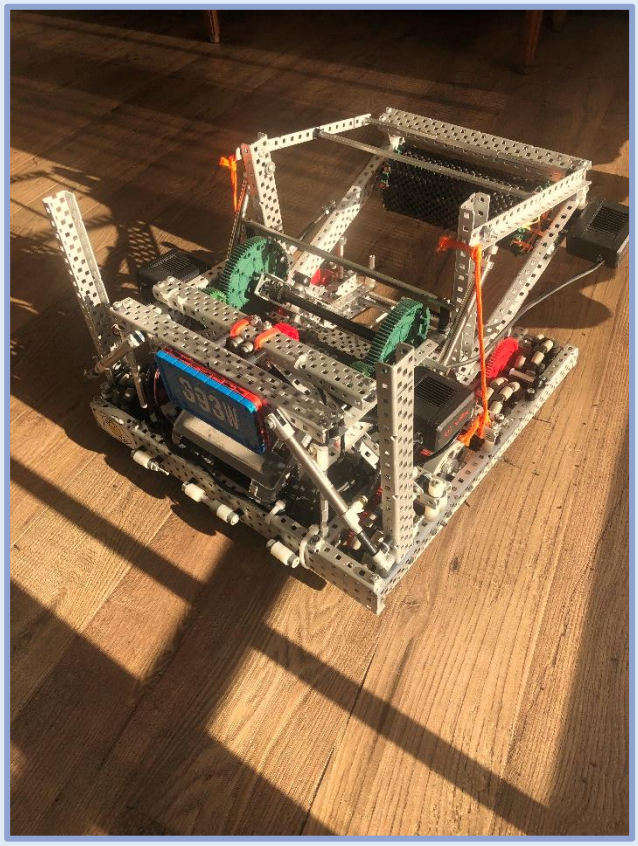
After testing the tactics, the team will analyze the results and find improvement areas. They will watch the recorded matches and practice games to see what worked well and what did not. This process of prototyping, testing, and making improvements is critical to the success of the team.

Make improvements

Nothing is perfect, you always have to improve. An example of this is when our wings on the front of the robot were not working. Our solution was moving them to the back. In soccer you can do it the same way! If one player is a striker and it did not work, try move them to defense. If it is still not working, it's okay to go back to the first step and try again!

How will it help?

In conclusion, the Engineering Design Process is an important tool that can help teams in various activities to improve their performance like soccer and robotics. For soccer teams, this process involves defining the problem, brainstorming ideas, researching, developing concepts, selecting the best approach, building a prototype, testing it, and making improvements. By following these steps, soccer teams can improve their tactics, enhance their performance, and achieve their objectives.



How will VEX set you up for a good career in soccer?

VEX can set you up for almost anything! Most importantly VEX can help set you up for being a soccer player because of the long list of skills it can provide. These skills include problem-solving, collaboration, and good strategy planning. I learned that I don't have to change my passion for VEX but I can change VEX for my passion.

Sources:

https://www.unmpress.com/9780826354648/the-science-of-soccer/#:~:text=Soccer%20is%20the%20most%20popular,few%20of%20the%20scientific%20disciplines.

https://www.khanacademy.org/partner-content/49ers-steam/49ers-geometry-statistics/49ers-statistics/a/statistics-in-football#:~:text=Every%20pass%20or%20run%20in,all%20rest%20on%20mathematical%20principles.

China daily.com


VEX
VEX
VEX
VEX