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The Official Newsletter of the Flight Deck

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# One Term, Two Teams

Although we all worked at the Flight Deck, we got to work on two different projects on separate teams. Ahmed, Kunal and Yash spent their coop developing Maintainer, primarily working remotely. Sydney spent her four months working on Hangar, getting to work in the office at Communitech. Overall, all of us had an amazing term working with our teams and building great products!



Ahmed, Kunal, and Yash with the Maintainer team in Trenton!



Sydney with part of the Hangar team at the office!

# **Soft Skills of a Product Manager**

Sydney LeBlanc, Product Manager

A product manager (PM) plays a crucial role in the success of the team and the product at hand. Through my experience at the flight deck, I have noted several soft skills that I believe a great PM should possess to be successful.

## **Decision Making**

On a daily basis product managers have to make numerous decisions regarding the current and future state of the product. Being able to determine the correct information to analyze to provide a meaningful conclusion is crucial as a PM. Often, other team members and users rely on the PM to make quick decisions when it comes to design and feature prioritization, so PMs need to be able to pull metrics quickly to deliver data-driven decisions.

## **Leadership & Communication**

Having excellent leadership and communication skills is essential for a product manager to align the team, stakeholders, and projects with the vision of the organization. A PM needs to be able to clearly communicate the needs of the users, feature requirements, and product goals, while also motivating and providing guidance to the team.

### **Initiative**

A great product manager does not wait to be told what problem needs to be solved but takes the initiative to scope out new product opportunities and is proactive in reaching out to users and stakeholders. A PM ensures the product is delivered efficiently and effectively by taking the initiative to get updates from the team as well as feedback from stakeholders.



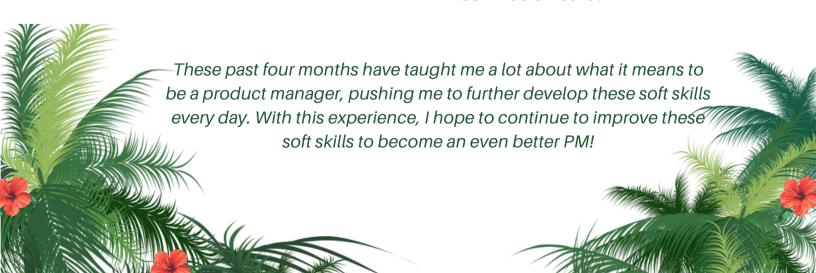
PMs need to be good problem-solvers and very analytical to come up with the appropriate solution. However, it is equally important for a PM to be an excellent problem-finder. The art of problem-finding is the willingness to think outside the box and constantly question the current processes. Often when users have an issue, they will propose a solution, but a good PM will dig deeper to find the true reason they are experiencing that problem, expanding the possibilities of solutions.



Product managers are always busy, constantly splitting their time between different projects, meetings, and priorities. Strong time management skills are crucial for PMs to juggle everything on their plate while being efficient and productive in each task.

### **Empathy**

Empathy is vital for a product manager to have because a PM must understand the concerns of all users, stakeholders, and team members and see things from their perspective. This allows the PM to create products that actually solve the problems and needs, as well as maintain a positive company culture where everyone on the team feels heard.





# Winning, Losing, and Laughing: An Early Review of 2023 Sports

Ahmed Fawzy, Full Stack Developer

**Australian Open: January 16** 



The Australian Open is the first of the four Grand Slam tournaments that take place each year, and it's known for its hot temperatures and challenging conditions. This year, Novak Djokovic emerged as the winner of the men's singles, while Ashleigh Barty took the title in the women's singles. Both players put on impressive performances throughout the tournament, and they proved once again that they're among the best in the world.

### Winter X Games: January 21



The Winter X Games are a high-octane event that showcases the best of extreme winter sports. This year's games took place in Aspen, Colorado, and they featured events like snowboarding, skiing, and snowmobiling. The Winter X Games are always a crowd-pleaser, with athletes pushing the limits of what's possible and thrilling audiences with their gravity-defying stunts.

### Super Bowl: February 12



The Kansas City Chiefs and the Philadelphia Eagles faced off in the 2023 Super Bowl . The Super Bowl is the biggest annual event in American football, and it always attracts a massive audience from around the world. This year, the Cheifs sailed to victory, thanks in part to the skill of Super Bowl MVP Patrick Mahomes. The game was a thrill to watch from start to finish, with both teams playing their hearts out until the very end.



### **UFC 287: April 7**



Israel Adesanya and Alex Pereira faced off in their second MMA bout, in what was a highly anticipated matchup between two elite strikers. Adesanya, the middleweight champion, got his revenge for his previous loss against Pereira and was able to defeat him in the second round via knockout. The fight was a back-and-forth affair, with both fighters landing significant shots, but Adesanya proved to be the more ready fighter!

### **NBA Playoffs: April 15**



The NBA playoffs are one of the most highly anticipated events in the world of basketball, with fans from around the globe tuning in to watch their favorite teams battle it out for the championship title. NBA playoffs are sure to be full of excitement, with some of the league's top players battling for the championship. Fans will be eagerly watching to see which team emerges as the champion this year.

As we approach the midpoint of the year, there have already been many exciting sports events that have captivated fans around the world. From the historic performances at the Super Bowl to the thrilling matches at the Australian Open and the NBA playoffs, there has been no shortage of drama, skill, and passion on display.

But the year is far from over, and there are still many more sports events to come. Fans can look forward to upcoming events like the Wimbledon tennis championships, the Tour de France, and the Ryder Cup, as well as ongoing competitions like the MLB regular season and the Champions League!



# **Dangers Of Quantum Computing**

By Kunal Varkekar, Full Stack Developer

Quantum computers are machines that manipulate the laws of quantum theory to solve complex problems that would take way too long with our current computers. Complex problems such as factoring large numbers or simulating a large number of particles to model reality are just a few examples of problems that quantum computing would be able to solve quickly.



The main danger of quantum computing stems from the fact that a lot of modern day encryption methods make use of prime factorization to help encrypt data. Two prime numbers are multiplied to form a semi-prime number which is used for the encryption. Each prime number is then a key to decrypt the data. Without the original prime number, one would have to make use of some sort of algorithm to brute force the prime numbers. This is very time consuming with our current computers due to the size of the numbers used which is what keeps our encryption safe.



However, quantum computers would be able to crack the prime factorization problem within a few days once the technology has advanced enough. Current supercomputers would need a billion billion years to achieve this. (Yes, billion squared).

The other biggest danger currently is one that we don't even know. Quantum computers could potentially be used to unlock problems that are currently thought to be intractable. This might lead to new issues that we need to deal with in the future and could open all sorts of possibilities for people with ill intentions.



In terms of dealing with the current issue of encryption, there are some ways to help us prevent quantum computers from being able to break all encryption. The National Institute of Standards and Technology has chosen 4 encryption methods that would withstand the assault of a future quantum computer. Adoption of these new encryption methods has already started as governments and corporations around the world are trying to keep their data secure.



Although any real world application of quantum computers is still decades out, we must be ready for their arrival and hopefully we get to see them change our world for the better.

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# **Remote Work - The New Norm**

By: Yash Patel, Full Stack Developer

Working at home is not foreign to us these days. Especially after the COVID pandemic, many employees have permanently switched to their home offices. Whether it be due to company policy or personal preference, employees have adapted to their new 9-5 environment.

As a co-op who has only ever had remote work terms, it definitely is a unique experience to have. I cannot give a true insight as to which option is better, but I may be able to extrapolate at least a tiny bit.





Personally, I see more benefits than losses, however there are still a few downsides. First of all, I find that remote work has saved me lots of time in terms of commuting. This can be transferred to the extra sleep I receive which in turn makes me more productive. Additionally, gas expenses are also reduced. Warm meals definitely supersede packed lunches that oftentimes go stale. Not only that, I'm able to easily go to doctor appointments and run crucial errands by simply notifying my team online.

In terms of timing, if I'm feeling a bit tired, I can always come back to work later in the day when I feel more fresh.

Since I am in my own space, I find breaks more rewarding.

For example, taking a walk or scrolling through social media for a couple minutes. Even a gym session in between definitely boosts energy! This allows me to allocate and finish work comparatively better than if I worked 8 hours straight.





Some downsides I have seen that tend to directly affect professional growth and exposure to the outside world. Not that it always has an impact, but it surely would be a good experience to partake in, at least for a while. For instance, being able to work with your team in person. This is something I have only experienced for a couple days, not on a regular basis. This would greatly improve communication skills and team collaboration.

Overall, remote work has definitely changed the standard of work for lots of employees in many industries. The pros seem to outweigh the cons, but the cons make us miss out on certain aspects of growth. It's something every individual needs to experience to improve themselves. As for me, this co-op term was nothing short of great learning and fun!

