

DATA THROUGH THE EYES OF A BUSINESS-MINDED DATA SCIENTIST

There is so much talk about **data** collection and analyses nowadays, and we already know that many organisations have tons of data about their customers and employees. The knowledge gotten from any data, regardless of size and structure heavily depends on the objective laid down by the **decision makers** and the technical skills of the **data scientists**. **Domain knowledge** helps to bridge the gap between those in authority, who know **what** to look for and the data scientists, who know **how** to find it.

Often, we tend to think that having the best data scientists on board is the ultimate solution to finding those highly sought after **hidden patterns**. However, this is only as good as falling for the **accuracy** trap in performance metrics of machine learning algorithms.

In business, knowing what pattern(s) to seek, goes beyond domain knowledge, it requires **business acumen**. In other settings, we could refer to it as **creativity**. Whatever the setting may be, you will agree that that **extra factor**, makes the difference.

Imagine what happens when the decision makers have data but don't know the best patterns to look for, and the data scientists only know how to find whatever they are asked to? Therefore, **identifying opportunities** in data is fast becoming a **desirable skill** for those who are experts on data-data scientists. This is the only way to bridge the gap between **not knowing** what to look for and **finding** the **most appropriate patterns**.

Recently, I worked on two separate but related projects; one about **customer churn** – the biggest issue in the **Telecom industry**. The objective was very clear; to identify the **demographics, geographics** and **psychographics** of the churn. The second was **staff turnover** – the worst **HR** nightmare. In both cases, the objectives were met, and knowledge gained to formulate strategies to retain the customers/employees. While this approach has been successful over the years, it comes with a lot of inconveniences for both parties - an already aggrieved or dissatisfied customer/employee who has already made up his/her mind to leave and an organization trying desperately to keep an unhappy customer/employee.

Customer-centrism is a modern **data-driven** business **concept** that is meant to refine the outdated vague **customer first** notion. *So, the new thinking is starting to wonder if data is adequately analyzed.*

As the owner/CEO/decision-maker of a Telecom company, imagine if you knew at the point of activation, what would be the likely reason for the customer who has just signed up to leave

sooner or later? You would not only better tailor solutions that meet the needs of your new customer to satisfy and keep him/her longer, you would also be exposed to opportunities to target the customer with more products that meets his/her needs, thereby increasing your sales. Similarly, as the HR lead, imagine if you knew at the point of onboarding, the likely reason that the new employee is ever going to leave for? This would give you ample opportunity to implement individualized approaches to keep your staff happy and motivated, and they won't have to look elsewhere.

As you can see, this creative way of analyzing data opens the door to ***endless opportunities*** and it is how a ***business-minded data scientist*** looks at data.