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DIFFERENT TYPES OF ANALYTICS

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Hello and welcome back to the Intelligent Learning Series.

My name is Raina Cheng, and I'm part of the Insights and Intelligence Team here in Accenture Operations Philippines.
There is one important question that every person should ask before taking on a project, "What's the value?"

A lot of people picked up a project with a question in mind or a curiosity but most of them also end-up wondering aimlessly, only to ask themselves

"Why was I doing again?"

In a business setting, before we take on a project, it's important that we understand the potential value or the Business Case, to justify why we are pursuing the project.

Other questions we could ask are "What are the pain points I'm trying to address?" and "Who will benefit from this project?" It can also go the other way.

Some businesses don't even know what their pain points are. So it's up to us to help identify those issues or opportunities.

This is what we called, Exploratory Analysis.

In Accenture, one of our goals is to deliver Client Business Value. In can come in the form of process improvement, automation, analytics, and AI.

Regardless of the industry, most client more or less value the same things like, Increasing Revenue, Cost Reduction, Working Capital, End-Consumer Satisfaction, Capacity Creation, Better Accuracy Reporting, Risk & Compliance.

But how do we capture these benefits?

How do we turn something hypothetical into something real?

Data-driven Actionable Insights.

Something I like to tell my team is "Graphs that don't have actionable insights are just reports. They're nice to know but they're not very helpful. You can't do anything with them if there are no recommendations".

There are 4 general levels of Analytics maturity:

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The first level is Descriptive Analytics, it answers the question “What happened?”

Most reports are descriptive in nature telling you the multi-trends, top volume, value, top customers, and that’s pretty much it.

But if you want to know more or drill down further, and then we move on the second level. Diagnostic Analytics, which answers the question “Why it didn’t happened?” This is where root cause analysis happens.

We’re trying to understand the drivers of issues or the occurrence of something.

Not all analytics can solve problems especially Diagnostic and Descriptive Analytics. They only tell us what the opportunities are.

It still depends on better control, process improvement and automation to address this issues.

Analytics just points you in that direction.

However, there are also certain types of analytics that are solutions in themselves like predictive and prescriptive analytics.

Predictive Analytics answers the question on “What next?”.

Once you’ve got on a handle on the process, you can use the same historical data set to predict what will happen

However, take note that not everything needs to be predicted.

Sometimes, the best solution is the simplest one. But what is worth predicting?

Well, once you’ve done your root cause analysis and you’ve identified your drivers, you can segregate them between Controllable and Uncontrollable.

One more thing I’d like to tell my team is that, “Prevent what you can control. Predict what you can’t control.”

Why predict something that you can prevent from happening?

It also doesn’t help to predict a process thathasn’t stabilized.

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So let say the business has decided to implement a new policy on something on you know this will impact the process or the performance in the next few months.

Then it doesn't really make sense to predict at this point.

I think what makes better sense would be to simulate the outcome upon introducing the intervention.

And this brings us to our last level of maturity.

Prescriptive Analytics, it answers the questions on "What Now?" or "What if?".

You can answer these questions if you Operationalize your models, turning them into something "nice to know" into something "practical"

You can use your foresight to pre-empt or prevent an unfavorable situation.

Another form of Prescriptive Analytics is Optimization, or problem-solving through Linear Programming or Dynamic Programming.

In the service industry, this would be applied in the form of Resource Scheduling, Work Allocation and Task Prioritization.

At this point you might be wondering so where does data engineering fit in all these?

Well, data engineering is actually present in all levels. But the complexity and scale increases to further up we go in the chain.

Up next we'll talk about the different Tools, Technologies and Techniques that we use in the Insights and Intelligence Team and how each role as value to Accenture clients