

HOW TO DO EFFECTIVE DATA ANALYSIS

A GUIDE FOR BUDDING
DATA ANALYSTS WHO WANT
TO BREAK INTO THE DATA SPACE.

BY  Onyx Data.

TABLE OF CONTENTS

- INTRO
- KNOW YOUR NEEDS
- ESTABLISH QUESTIONS
- SET YOUR KPI'S
- MORE DATA DOESN'T MEAN GOOD DATA
- VISUALIZE YOUR DATA

INTRO

LIVING IN THE 2020S, ONE THING IS FOR SURE;

NOBODY HAS A LACK OF DATA NO MATTER HOW SMALL OF AN ORGANIZATION THEY ARE. UNLIKE THE LAST DECADE, DATA IS NO MORE THE LIMITING FACTOR STOPPING US FROM EFFECTIVE DATA ANALYSIS.

THERE ARE AROUND 2.5 QUINTILLION BYTES OF DATA CREATED EACH DAY, AND THIS TREND ONLY KEEPS GROWING.

SO TODAY, WE'LL BE GOING THROUGH THE 5 MOST EFFECTIVE DATA ANALYSIS PRACTICES YOU COULD USE TO TAKE YOUR ANALYTICS SKILLS SKY-HIGH.

SO MAKE SURE YOU GIVE IT A THOROUGH READ.

LET'S START!

1. KNOW YOUR NEEDS



FIRST THINGS FIRST; NO PLANT COULD BECOME A GREAT TREE IF IT'S NOT SOWN IN THE RIGHT SOIL. NO MATTER HOW MUCH CARE YOU PROVIDE IT. JUST LIKE THAT, IF THE ANALYTICS TEAM FAILS TO IDENTIFY THE NEEDS OF THE PROJECT, THEY CANNOT ACHIEVE WHAT THEY WANT, EVEN IF THEY'RE AS SKILLED AS ONE COULD GET.

SO, ALWAYS MAKE SURE THAT THE WHOLE TEAM SITS DOWN COMFORTABLY WITH WHOEVER THE STAKEHOLDERS ARE, AND MAKES SURE EVERYTHING IN THE REQUIREMENTS SECTION IS CRYSTAL CLEAR.

THE TECHNIQUES AND METHODS COME LATER, AND GATHERING THE NEEDS IS WHAT ALWAYS TAKES PRECEDENCE.

2. ESTABLISH YOUR QUESTIONS



ASKING THE RIGHT QUESTIONS BEFORE GETTING ON WITH YOUR DATA ANALYSIS IS ANOTHER CRUCIAL THING YOU NEED TO KEEP IN MIND.

ONCE YOU'VE COLLECTED YOUR NEEDS AND REQUIREMENTS, YOU HAVE TO ASK THE RIGHT THINGS TO MAKE SURE THE DATA YOU HAVE WILL WORK FOR YOU. OTHERWISE, YOU'LL BE JUST WANDERING IN THE DARK.

FOR EXAMPLE, A GREAT QUESTION COULD BE "HOW CAN WE ENSURE DATA CONSISTENCY?" OR "WHAT SPECIFIC AIM DOES THE PROJECT NEED TO FULFILL?"

YOU PROBABLY HAVE AN IDEA THAT HOW SKIPPING SUCH QUESTIONS COULD CRIPPLE YOUR DATA ANALYSIS PROJECTS.

3. SET YOUR KPI'S



AKPIS, A SHORT TERM OF KEY PERFORMANCE INDICATORS, IS A FACTOR THAT HELPS YOU DETERMINE IF YOU'RE FOLLOWING THE RIGHT PATH OR NOT.

THEY HELP YOU TRACK AND MEASURE YOUR PROGRESS IN VARIOUS KEY AREAS.

MAKE SURE TO LOOK FURTHER INTO HOW YOU COULD SET THE BEST POSSIBLE KPI'S FOR YOUR PROJECT IF YOU DON'T ALREADY SINCE IT'S OUT OF THE SCOPE OF THIS TUTORIAL.

ONCE YOU'RE DONE SETTING THE RIGHT KPI'S, YOU DON'T HAVE TO WORRY IF YOU'RE MAKING THE PROGRESS YOU WANT, SINCE THE KPI'S WILL NOT LET YOU DRIFT OFF THE CORRECT PATH.

4. MORE DATA DOESN'T MEAN GOOD DATA



AMONGST THE WIDEST SPREAD MISCONCEPTIONS ABOUT DATA ANALYTICS PROJECTS, ONE OF THE TOP ONES IS THE PERCEPTION THAT IF YOU HAVE LOTS OF DATA, YOU'RE AUTOMATICALLY ON THE ROAD TO EFFECTIVE DATA ANALYSIS. HOWEVER, THIS IS WRONG AND PROVES DISASTROUS FOR MANY DATA ANALYSIS PROJECTS OUT THERE.

HERE, YOU NEED TO UNDERSTAND THE FINE LINE THAT EXISTS BETWEEN GOOD DATA AND PLENTY OF DATA. EVEN IF YOU SUCCESSFULLY COLLECT TONS OF DATA, IF IT'S NOT RELEVANT TO YOUR USE CASE, IT'S AS GOOD AS GONE.

SO, ALWAYS MAKE SURE THAT WHILE COLLECTING THE DATA, YOU LOOK AT THE RIGHT PLACES, AND DON'T JUST PULL IN WHATEVER DATA YOU COULD GET YOUR HANDS ON.

5. VISUALIZE YOUR DATA



WHILE MOST DATA ANALYSTS TODAY USE DATA VISUALIZATION TECHNIQUES TO HELP THEM ANALYZE DATA, THERE ARE STILL SOME PEOPLE WHO CLING TO OLD-SCHOOL DATA ANALYSIS TECHNIQUES.

WHILE THE OLD TECHNIQUES MIGHT STILL BE EFFECTIVE, THE VOLUME OF DATA WE HAVE TODAY MAKES IT PRACTICALLY IMPOSSIBLE TO GO THROUGH EVERYTHING IF WE DON'T USE DATA VISUALIZATION.

THE VISUALIZATION PRESENTS IMPORTANT INFORMATION IN A VERY PRECISE MANNER AND LETS ANALYSTS STUDY THE DATA WHICH WOULD OTHERWISE HAVE TAKEN MONTHS. THAT'S WHY IT PLAYS A PIVOTAL ROLE IN MODERN ANALYTICS.

SO, ALWAYS MAKE SURE YOU EMPLOY DATA VISUALIZATION TECHNIQUES EVEN IF YOU DON'T WANT TO LEAVE YOUR OLD-SCHOOL TECHNIQUES BEHIND.

6. SUMMARY



DATA ANALYSIS IS THE KEY FACTOR IN TODAY'S AGE FOR EVERY COMPANY.

NOT ONLY IT HELPS ORGANIZATIONS IMPROVE THEIR SERVICES, BUT IT ALSO LETS THEM UNDERSTAND THEIR CUSTOMERS BETTER. HOWEVER, WHILE WE HAVE MORE DATA TODAY THAN EVER, THERE ARE SOME KEY PRINCIPLES WE NEED TO UNDERSTAND IF WE NEED TO MAKE OUR DATA ANALYSIS MORE EFFECTIVE.

THROUGHOUT THE ARTICLE, WE HAVE GONE THROUGH THE TOP 5 TIPS YOU NEED TO REMEMBER IF YOU WANT YOUR DATA ANALYSIS SKILLS TO BE HIGHLY EFFECTIVE.

SO, MAKE SURE YOU DON'T SKIP ANY POINT!

Can you predict your future with data?

Onyx Data partners with organisations to improve their decision-making and resilience through the effective use of data. Together we can work to predict your company's future, so that you can make better decisions today.

[Schedule A Consultation](#)

WE'RE ONYX DATA
WE ASSEMBLE SENIOR-LEVEL,
DEDICATED TEAMS OF
DEVELOPERS TO HELP FAST-
GROWING STARTUPS AND
INNOVATIVE ENTERPRISES
DRIVE IMPACT AND ACHIEVE
THEIR GOALS.

ONYXDATA.CO.UK

**Telephone number**[+44 1296 761329](tel:+441296761329)**Mail address**contact@onyxdata.co.uk