Alithya

Is a data-driven strategy the right strategy for your organization ?

Guillaume Paquin, B.Ing., MBA,
Director, BI-AI Practice
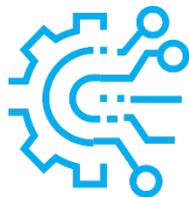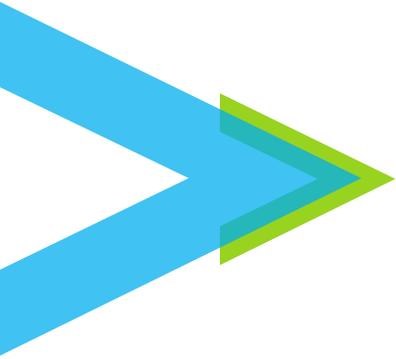
Introduction

Over the past 10 years, the volume and types of data has increased quasi exponentially, whether it be transactional or non-transactional data, and whether the data is generated by machines, sensors, or social media.

Analytics provide valuable support to decision-makers by giving meaning to this mass of disparate data, and by providing information that can be used to create value.

Businesses are therefore encouraged to be "data-driven", or to exploit their data intelligently, in order to make informed decisions. However, is it necessary to eliminate human intuition and talent from the decision-making process?

BEING « DATA-DRIVEN », OR MAKING DECISIONS BASED SOLELY ON DATA

« DATA DRIVEN » SUCCESSES: WHEN DATA SPEAKS

By covering a larger volume of data and previously undeveloped domains, computerized, systematic, and accelerated data processing makes it possible to highlight information that would otherwise go unnoticed.

It also helps to mitigate risks, control costs, and improve the functioning of an organization, which translates into increased service quality and greater customer satisfaction.

Access to information through data facilitates better strategic, tactical, and operational decisions.

It is this data-centric view, and the resulting competitive advantage, that Michael Lewis conveys in his book, *Money Ball* (2004), adapted for film in 2011.

THE *MONEY BALL* EXAMPLE

The narrative, based on a true story, highlights decisions made by the general manager of the Oakland A's baseball team.

Aided by a statistician, he selected a lineup of atypical, little known players, but whose results were deemed to be **statistically the best**.

The strategy proved successful, and he was able to lead his team to the playoffs.

CLICK ON THE LINK TO WATCH A CLIP FROM THE FILM

The example shows how decisions based on statistics can yield effective results. However, sometimes data alone isn't sufficient.

« DATA DRIVEN » LIMITATIONS: WHEN DATA ONLY PARTIALLY REFLECTS REALITY

THE *ACADEMIC SUCCESS* EXAMPLE

Academic success is often considered, particularly by universities, as a measure for predicting professional success.

In Quebec, universities use a school performance rating (R rating) as a key indicator of professional success.

They select the best students based on their belief that, once the students graduate, their successes will reflect upon the institution that developed them.
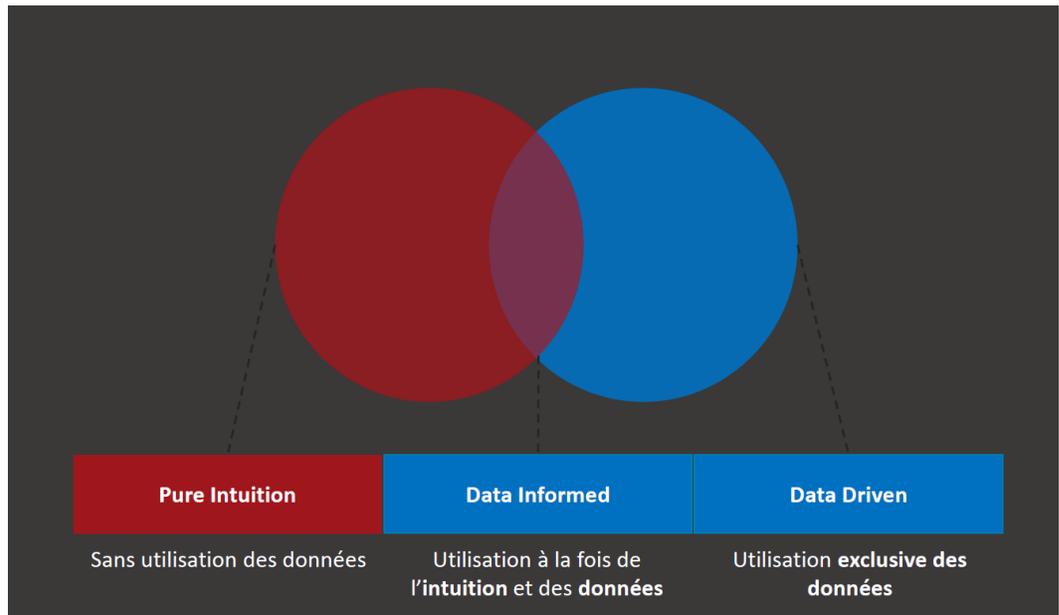
However, the R rating is not a reliable indicator of professional success. Additional factors, including socio-cultural background, interpersonal skills, and emotional intelligence also play key roles.

> Steve Jobs and Albert Einstein were not great students, yet they went on to excel at their work.

Beyond the data, we must not lose sight of the capacity of people to be critical, judgemental, and talented. Hence the notion of « data-informed » decisions.

BEING « DATA-INFORMED », OR COMBINING DATA WITH HUMAN INTUITION

Being « data-informed » involves a reliance on data, but it puts it in context and complements it with common sense.
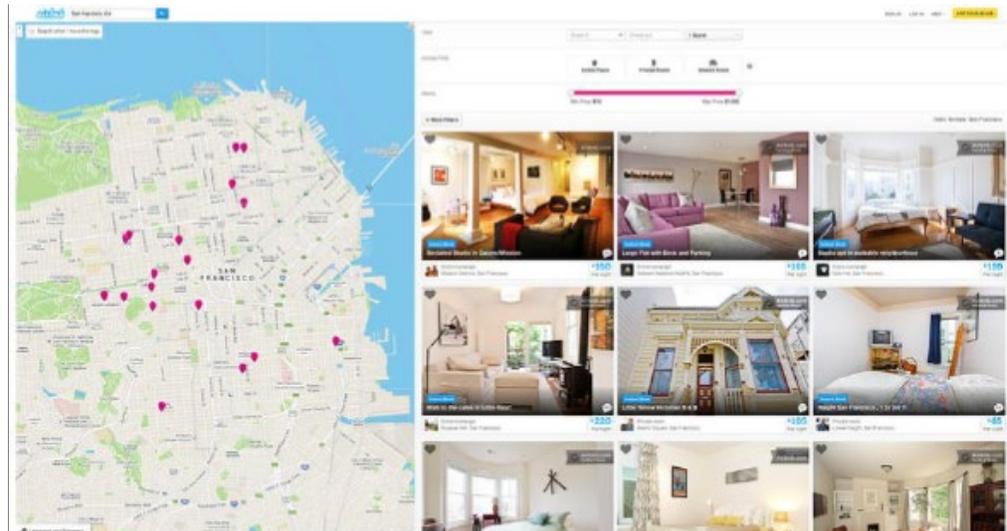

Pure Intuition	Data Informed	Data Driven
Sans utilisation des données	Utilisation à la fois de l'**intuition** et des **données**	Utilisation **exclusive des données**

THE *AIRBNB* EXAMPLE

The initial Airbnb interface project, designed exclusively with data, looked like this:
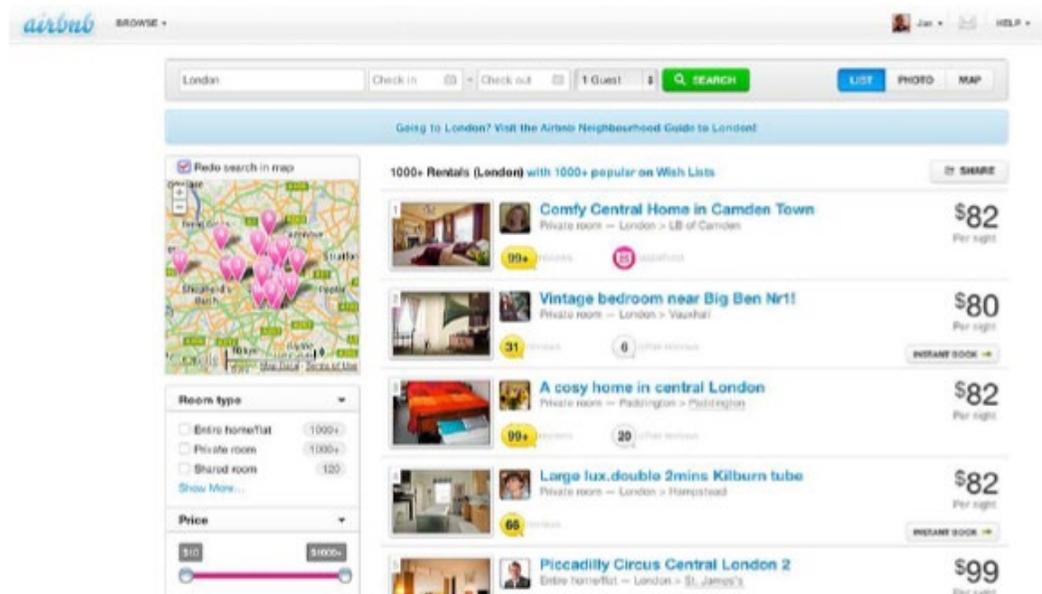
Specialists in user experiences and user interfaces subsequently made changes to the design:

Despite being more pleasing to the eye, this second interface achieved less favorable results.

While continuing to support the second interface, the determined team searched for answers as to why it was still generating such low traffic. In the end, it turned out to be a browser issue: Internet Explorer didn't support changes made to the new interface, and therefore users could no longer access all of the site's features.

Once the issue was resolved, traffic on the second interface quickly rose to much higher levels than the first.
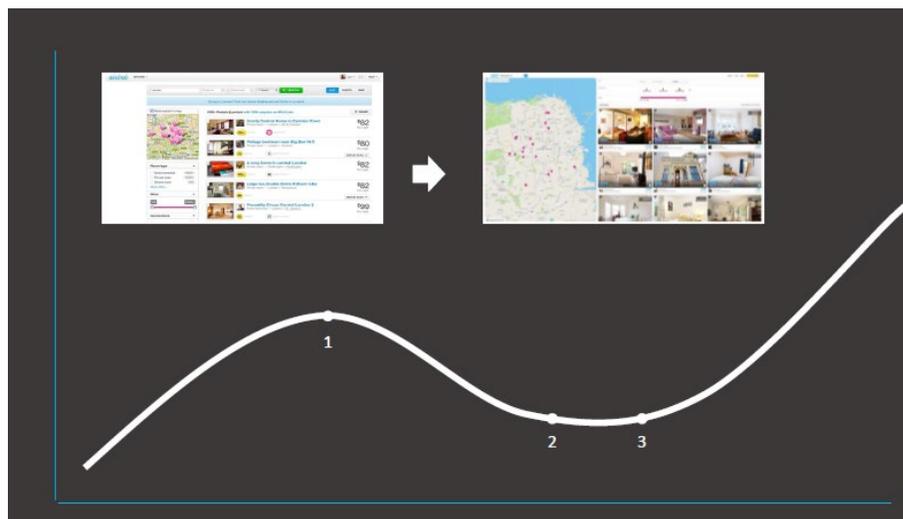
In the case of Airbnb, a « data-driven » strategy, based solely on data interpretation, would have driven decision makers back to the first interface.

Do not underestimate the power of information gained through experience, knowledge, intuition, and social intelligence. It can enrich and positively influence the decision-making process.

## DATA-DRIVEN OR DATA-INFORMED: WHICH STRATEGY SHOULD YOU ADOPT?

Here are three guiding principles for finding the right approach.

1. REFLECT UPON THE TYPE OF DECISION THAT YOU ARE MAKING
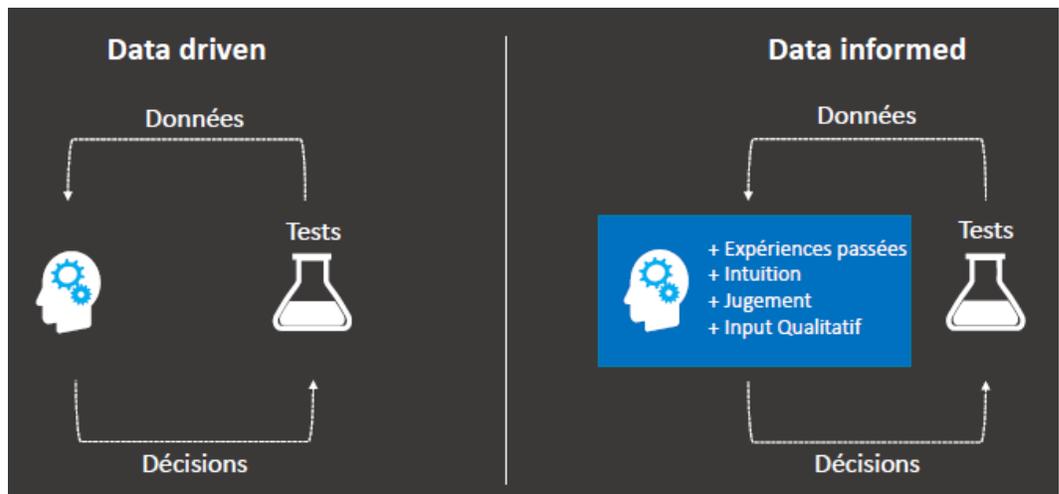
Are you making a strategic or operational decision?

A « data-driven » approach works very well when the data captures the smallest details of the context, and when the issue is both concrete and precise.

On the other hand, the more strategic a decision may be, the more you should take a step back in order to enrich your data with a human point of view.
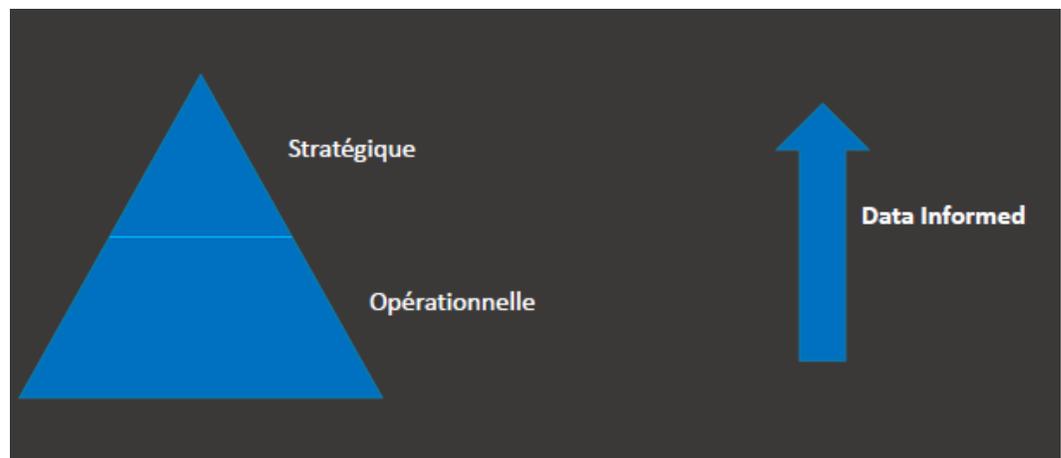
2. CONDUCT TESTS

In both cases, regular and systematic testing will allow you to validate results of decisions made, keeping in mind that the goal is not just to make decisions, but rather to make the right decisions.

Data driven

Données

Tests

Décisions

Data informed

Données

+ Expériences passées
+ Intuition
+ Jugement
+ Input Qualitatif

Tests

Décisions

3. **TAKE USER EXPERIENCES AND QUALITATIVE DATA INTO ACCOUNT**

Consult with consumer groups or users, organize workshops, conduct surveys, etc.

In using qualitative information, you can refine your product or service and add nuances that will enrich and improve it.

Conclusion

The capacity of technology and data today is immense.

Just as it is technically possible to fly an airplane automatically, without any human intervention, you could also base your decisions purely on data.

However, airlines believe that pilot expertise remains essential to a plane's operation, particularly in critical situations. You too should avoid flying your airplane exclusively on auto pilot.

Choose the « data-driven » or « data-informed » strategy best suited to the context of your decision.

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