# Friend or foe? Adapting to a World of Data Science and Big Data

What is happening in the data landscape?

The data landscape is changing FAST. The big data disruption is capturing the audience's interest. These changes are characterised and driven by the rapid availability of digital data. It is here and it is real! Our article gives you a deep understanding of how the data landscape is forcing market research to change.

We are living in an era where information is exploding. The industry, across sectors, is accessing and using this data alongside advanced analytics. We can't ignore this and must quickly find ways to adopt and adapt our thinking and our approaches.
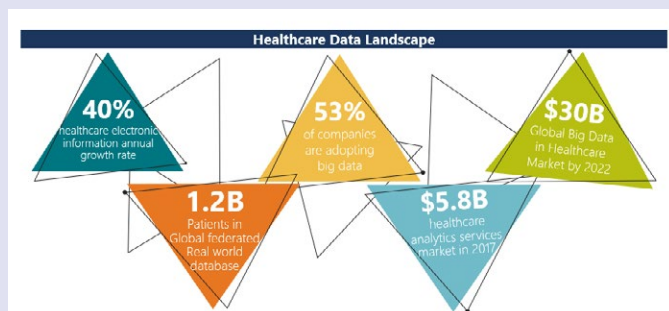
What kind of data are available now?

The healthcare information ecosystem is changing and we have a growing world of data sources that are available to us. We are "family members" with requested data, but only an "acquaintance" or even a "stranger" with unrequested data.

Even though the pharmaceutical industry is not the pioneer in taking advantage of big and multi-source data, it has awoken to the impact of this "disruptor" and recognised that it can generate value across the entire organisation.

This growth has touched different parts of the industry. The potential becomes greater if we look at the longer term as we are only at the investment stage, or at the 'R&D' stage if we were thinking about a product's lifecycle.

What are the opportunities in other data sources?

Multisource data open up new opportunities, including:
- Different sources of data, but also a more diverse range of data, e.g. text, images, videos, speech.
- Organically generated, not from memory or based on perception.
- Rare diseases, or a specific patient profile (oncology).

Despite their value, there are challenges associated with unrequested data. Some of these challenges may take years to overcome, especially in Europe.
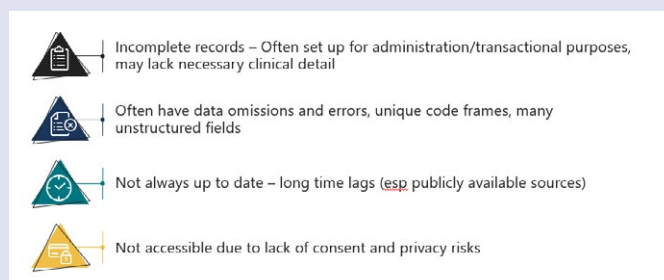
What do these changes in the data landscape and our client organisations mean to us?

We have now moved from human coding to machine coding for social listening text, pictures and videos. Do these changes pose as disruptors, or even threats? The answer is 'no'. Even without considering the challenges with unrequested data, there are a number of things that make MR quite special and what we do, continues to be rather unique:
- Completeness and depth
- Flexibility and focus
- The 'softer' things
- Hypotheticals and future scenarios

A friend not a foe!

Our understanding of the customer or patient can be optimised by integrating other sources of data with MR. The message: the data revolution is here and is real, but this does not mean we need to throw away what we do the best. In fact, with the right approach, tools and skill set, and given the right circumstance, it can help us do what we do better.

The availability of different data sources is a helping hand to enhance and complement what we do. Instead of working in isolation from it, or even fearing it, we should embrace this as an opportunity for MR.

Let's get to know the friend better.
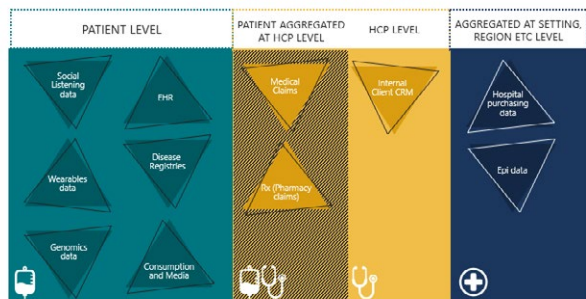
Data sources can be at a patient level, at an HCP level, both or neither (aggregate level). This will differ by country/region. Unrequested data can fall into different categories: patient, HCP and clinical setting. Needless to say, all are highly relevant for our day-to-day work and each comes with its unique characteristics, for example:

The introduction of HIIPA and GDPR means that respect of privacy and consent is crucial for access to patient level data. A lot of extensively used traditional sources like EHRs or health Insurance data are now supplemented by new types of data like Social Media, passive wearable data and genomics. Highly sensitive data like genomics are accessed via partnerships and for research purposes only.

When to be friendly and when to be aware?
We need to judge on a case by case basis, with a number of factors taken into consideration including cost and time, data quality, tools and skills, commitment and relationship and ethics and privacy. Sometimes, a straight-forward piece of custom research still offers the most effective solution.

However, be aware of some false promises and expectations:

Our 4 guiding principles:

1) Plan for integrated insight
2) Start experimenting with multi source data
3) Build your skill set and competency
4) Invest in 'beyond AI' skills

Big data and AI do not automatically lead to useful insight and the human interaction is still key, leading on empathy, context and creativity.

As always, never lose sight of the original business question asked. With our expertise and skills, we are still best positioned to take advantage of all these different data sources and turn them into insightful answers to our client's business questions.

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