

We are producing extraordinary and ever-increasing volumes of data. In addition to its benefits, this tendency consumes energy and generates garbage at unsustainable levels. To realize data's full potential, we need a paradigm shift in how we use, store, and analyze it.

According to The Economist, data has surpassed oil as the world's most valuable resource. What does this mean for your business, with 97 percent of firms utilizing data to power their business potential and 76 percent of organizations using data as a vital element of developing a business strategy?

It implies that now more than ever, being smart and safe with your data is the most important step toward earning a profit.

While we have achieved significant progress toward the UN's 17 Sustainable Development Goals (SDGs), we must collaborate much more effectively to develop and implement ideas that address global disparities while protecting our planet's valuable resources.

## The new digital horizon



But what makes data so important in a commercial setting?

Data is essentially customer information — Without a question, data provides the most indepth insight into your consumers and future customers. Ads are customized to your interests and purchasing behavior, as you've surely observed while casually perusing Facebook or Google.

Every piece of client data, whether it's where they clicked on a website, what state they reside in, how frequently they "check-in" to particular locations, or how long they spend on various

websites, provides information on what might appeal to them and what you can market to them.

In the same line, information, in the form of data, is the ideal approach to personalize the way you promote your product to the interests of a new consumer. You won't be able to customize your campaign to your next most loyal customer or partner if you don't have any information.

Data is the simplest approach to determine what the goal of your company strategy should be - If you've ever felt lost in a campaign or sales plan, it's probably because you didn't have enough data. 79 percent of marketing professionals plan to boost their marketing intelligence spend to gain a deeper understanding of their clients. Without such knowledge, you'd have no clue where to go or what to do to start making more money.

There is a huge need for tracking and supporting data — "most valuable" means "most valuable" for a reason. Data is in high demand now, more than ever, because it can do so much for both consumers and businesses.

Being laser-focused on the SDGs entails remembering the revolutionary technologies that already underlie modern civilization and will help drive solutions to these issues: the new digital frontier. This frontier is built on a single resource - data - and is supported by continual connectivity and computing's disruptive potential.

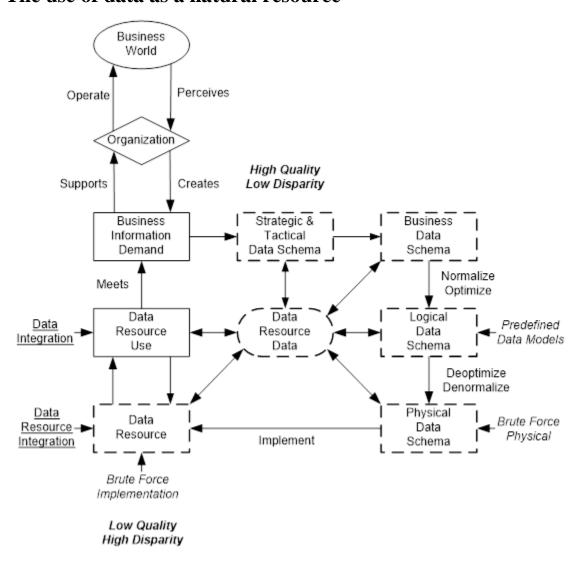


Data generation is growing, particularly at the edge; our phones, automobiles, refrigerators, factories, medical equipment, fields, and satellites are all producing unprecedented volumes of data. The new digital frontier's potential resides in our capacity to derive useful insights from this data.

Organizations may tap into vital insights that can guide faster choices – inside digital classrooms, health centers, or autonomous cars, for example – by harnessing data acquired from connected platforms and devices and processing it at the edge. Massive amounts of data contain answers to some of society's most pressing challenges, including medicine, climate change, space exploration, and the convergence of 5G, artificial intelligence (AI), the internet of things (IoT), high-performance computing, and other emerging technologies are assisting in their discovery.

We are prepared to disrupt how we solve social, economic, and environmental challenges because of the potential inherent in this convergence. How can we rethink how we handle, manage, and secure data to enhance lives, optimize resources, and use less energy while maintaining security and ethics? How can we ensure that data helps all of society in an equitable and sustainable manner? The first step, in my opinion, is to approach data as a natural resource.

## The use of data as a natural resource



Data is the world's next natural resource, released by artificial intelligence development, with the potential to provide economic prosperity, health, and social well-being.

It, like any other natural resource, must be protected. Good data stewardship must be open and done with a goal in mind. This is significant because trust is a vital component of the digital economy, and how data is gathered, maintained, and analyzed will increasingly be used to evaluate organizations.

Data extraction, like the extraction of oil, gas, and other natural resources, necessitates the use of energy. It already uses over 10% of worldwide power. As the digital frontier takes root, we must reconsider how we handle data to limit the creation of so-called data landfills.

These data landfills form when we mismanage the rising need for data by using much too much space, resources, and energy to harness and analyze it. We must develop innovative technologies that will allow organizations to realize the benefits of connectivity while minimizing data waste in a resource-constrained future.

To mitigate this risk, HPE is investing in R&D to create innovative technologies that can compute with a fraction of the energy per calculation while maintaining performance. We discovered that the present IT model cannot be applied to a future in which everything computes. To properly power a digital world, we need far too much electricity, space, cooling, human management, and money.

When we don't fully extract the value from data before laying it to rest, we create data landfills. What I hear from clients across sectors, governments, and non-governmental organizations is that they need assistance in extracting value from all their data to produce better outcomes for their customers and people.

## Convergence for the better



The capacity to respond to data-driven insights in real-time has never been more important than now. The IBM Institute for Business Value report COVID-19 and the Future of Business report discovered that 59 percent of companies have accelerated digital transformation over the last six months – companies that were semi-digital pivoted to become fully digital, while companies that were already fully digital expanded into new use cases. This is not a passing

trend or a flash in the pan; the present expectation of a completely data-driven, digital business is a long-term shift in the business environment.

We have the chance to accelerate progress on some of the world's most difficult socioeconomic concerns by understanding and investing in the next digital frontier, considering data as a natural resource, and exploiting convergence. It is, in fact, more than an opportunity; it is a duty to guarantee that we enable technology disruption and change while simultaneously improving environmental sustainability, human rights, security, and equality in all aspects of our existence.

The new digital frontier has arrived, and technological convergence is well underway; how we adapt, govern, and prepare in the face of these paradigm upheavals will decide our ability to better the world for future generations.