

Data treasure instead of digital graveyards.

In two years, up to 33 percent of the “digital universe” will consist of unused information, according to the IDC. Companies that run the right analyses on this hidden treasure could unleash tremendous value. Deutsche Telekom’s Data Intelligence Hub (DIH) offers a way to thread this tricky needle.

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Virtually every company, regardless of its target market, aims to leverage competitive advantages, cut costs and optimize processes. So what could be better than finding a way to analyze, interpret and harness data that could be used to drive growth or even develop innovative business models? However, many firms don’t know how to go about it. Their dilemma: how do they get access to the data and how do they use it properly to generate (shareholder) value?

Some data may be generated internally. Though easy to access, this type of data is often incomplete. External data, in contrast, is plentiful, fragmentary and available from a variety of sources – free data, data from closed ecosystems and even data from service providers and other companies that are linked together by processes. The digital universe, which is expected to hold 44 trillion gigabytes by 2020, is constantly being supplied with new data, including data generated by the 212 billion devices that the IDC expects to be online by then. But untapped data can also lay hidden in various patterns, such as the use of social media and social content or in correlations between medical information and sociological data. Only one thing is certain, though – most companies are not using these data pools intelligently.

BRINGING ORDER TO THE DATA TREASURE

The reasons are manifold, ranging from the profound to the mundane. Companies may not be aware of the interactions, appreciate how they could use the data or even know that the information exists. Plus, a lot of the data is completely unstructured. The main challenge is to integrate the new data into the corporate database and link it so that it speaks the same language. To complicate matters, companies obviously pay close attention to any competitors who may also be in line to use the data.

This is where Deutsche Telekom’s Data Intelligence Hub (DIH) comes in. It serves as an interface and marketplace – one that is sorely needed, especially for data management. DIH offers central management and a comprehensive market overview of all the data that is freely available or for sale. DIH also allows experts to connect with companies that have few internal resources or little expertise in artificial intelligence – an essential ingredient in useful data fusion and analysis – so that, together, they can leverage all the data in the marketplace to optimize their processes and close gaps in their value chains. Combining data “particles” across functions, no matter how small or widely dispersed they may be, drives genuine data fusion and ultimately helps avoid

production delays, unnecessary costs from waiting and excess inventory.

IMPARTIALITY GUARANTEED BY CUSTODIAN

Telekom's DIH serves as an impartial data custodian who observes strict security standards, protecting all the collected data and only sharing it between partners when permitted by the corresponding authorizations. Throughout this process, DIH provides the oversight, transparency and management of a decentralized and encrypted exchange without requiring Deutsche Telekom to store the data itself in the transfer process.

In logistics, for example, every freight or transport chain contains fragmentary data that can be used to forecast approximate delivery dates. However, customers – whether individuals ordering from Amazon or businesses expecting a rail consignment – expect punctuality, precision and reliability. With package deliveries, it's clear where and when the package was loaded on the truck or train and what its current approximate location is. But some data is missing from the process chain. For example, there's no intelligence on whether, when, why and where a consignment may be delayed. Having this information would allow transportation providers to intervene in real time, reduce waiting times and warehousing costs and ensure reliable planning for manufacturers.

The data is available, but is scattered across various pools in fragments. With DIH, companies can obtain the missing data, analyze it and merge it with their own data in a standardized way in order to fill in any gaps in their knowledge and take swift action as needed.

"Deutsche Telekom's DIH was developed to minimize the complexity of individual process chains for companies, transfer knowledge and provide a secure, centralized and standardized portal for optimizing data-driven value chains," said Sven Löffler, Business Development Executive Big Data & Data-Driven Business at T-Systems.

SECURITY IS MISSION-CRITICAL

DIH, which is the first product of its kind, satisfies the principles and high security standards of the International Data Spaces Association (IDSA). According to Löffler, companies benefit by having "legal constraints that are easily and precisely defined for each data interchange interface. You end up with legally watertight definitions and documentation of four key questions: Who can use the data? What can they do with it? What data can they use? And for how long? Everyone's right to informational self-determination is assured using transparent, technically suitable methods and properly documented for all process stakeholders." And that's a key issue for companies like Setlog.

212 billion devices
expected to be online by 2020





In the Data Intelligence Hub, Telekom acts as a trustee that only exchanges all project-related data decentrally, transparently, and directly between the partners in accordance with their respective rights.

Established in Bochum, Germany, in 2001, the software firm and its US subsidiaries provide cloud-based supply chain and vendor management systems for planning, managing and optimizing global production, supply and logistics chains based on early warning, dialog, analysis and data management tools. Setlog is currently using Deutsche Telekom's DIH as a platform for data fusion and analysis in order to launch a supply chain navigation system for global transport chains. The software company's anonymized freight data is merged with public data within an extensive data sharing process. It intends to make international supply chains more reliable and transparent across all modes of transportation through dynamic simulation models. "Sharing and analyzing freight data lets us eliminate costly buffers and imponderables. In the future, everyone involved will be able to safely and transparently plan complex international supply chains," said Ralf Düster, Managing Director of Setlog GmbH.

AI FOR RENT

Deutsche Telekom's Data Intelligence Hub includes a "Rental Workshop for Artificial Intelligence". It gives data scientists access to tools and open source applications for data processing and enables companies, particularly smaller and mid-sized ones, to start using AI.

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