Dare to Share

When data sharing and exchange make strategic sense

Data sharing and data exchange are among the key enablers of the digital economy. Which strategic opportunities do they offer and is your business ready to seize them?

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Introduction

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The recent rise of platforms and the emergence of cross-business ecosystems attract attention of companies from even more industries, as well as regulators. Businesses are attracted by the competitive advantages offered by economies of scope, network externalities, and potentially exorbitant returns to scale of the digital economy. Regulators are concerned with anti-competitive strategies that this transformation enables, such as unfair competitive barriers and incumbency advantages.

The true power and strength of the digital economy lie in how it allows redefining business models and enriching existing processes and value chains with the help of technology and cross-industry collaboration that was expensive or impossible previously.

One of the key enablers of the digital economy is external data sharing and exchange.[1] Similar to how internal data sharing allows getting rid of organizational siloes, external data sharing (also called data pooling) allows to raise collaboration to a new level, make value chains transparent and even increase market transparency that yields benefits for both producers and consumers. The pooling of auxiliary data resources may enable companies to develop new or better products or services or to train machine learning algorithms on a more meaningful basis. The total value that companies can create by harnessing data sharing only in manufacturing is estimated to be more than $100 billion, focusing on operational improvements alone.[2]

The capacity of data sharing and exchange to release innovation potential is further corroborated by the open data movement. Its goals and philosophy are similar to other open (-source) movements but with respect to data. The movement originally covered scientific data and open government data, including public data of all sorts, but has eventually reached the corporate world promising substantial innovation potential. An example is Microsoft that has recently launched an Open Data Campaign with an intention to "help organizations of all sizes to realize the benefits of data and the new technologies it powers".[3]

> In this paper, we explore when data sharing and exchange make the most sense. Then we look at the criteria that help you determine if you are in a good position to make it part of your business. And, finally, we explore the requirements that your technology needs to meet in order to share and exchange data with external parties securely and efficiently.

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[1] Even though there are subtle differences between the terms data sharing and data exchange, we use both interchangeably in this paper. Both also imply that the process can be two-way: a company can expose data, consume data, or both.

[2] The whitepaper Share to Gain: Unlocking Data Value in Manufacturing by World Economic Forum provides a good overview of the most common data sharing areas in manufacturing, discusses collaboration patterns, adoption barriers, and success factors.

[3] https://blogs.microsoft.com/on-the-issues/2020/04/21/open-data-campaign-divide/

When data sharing and exchange make strategic sense

Data sharing or exchange makes sense in multiple cases, all of which fall nicely into various strategy models, be it, for example, the seminal model of competitive advantage of Porter[4], the more recent model of digital strategies of Weill and Woerner[5], or the likes. Employing opportunities that are revealed by treating certain data as a sharable asset can trigger innovation in your business domain, help your business diversify, penetrate a new market, grow vertically or horizontally, and even create a new market.

Here are some of the examples when data sharing and exchange are real enablers of competitive advantage or innovation boost.

When vertical integration is impossible (e.g. due to regulation), undesirable or strategically inappropriate (e.g. due to market diversity), or expensive (e.g. due to concentration)

Examples: multi-sided platforms supporting value chains with multiple players: global trade, logistics, etc.

Vertical integration is a common strategy where a company acquires business operations within the same production vertical to control its value or supply chain. If vertical acquisition is impossible or suboptimal, building a digital ecosystem supported by a multi-sided platform is an option. One example is TradeLens, a global platform and interconnected ecosystem of supply chain partners developed by Maersk and IBM.[6]

When it is strategically attractive to offer add-on or bundled services that are not core to the business (but may become)

Examples: add-on point-of-sale financial and insurance services in e-commerce, bundled

road assist and maintenance services in auto insurance, etc.

Look at this through the lens of the BCG growth share matrix.[7] An incumbent's core business is typically a "cash cow" with high market share but low growth.

The bundled hybrid services are "question marks" (yet low market share but high growth) that have the potential to become "stars" (high market share and high growth). In the digital economy, the most promising stars are the ones offered via ecosystems and, thus, strategic data pooling becomes key.

When auxiliary data offer better insights into individual cases or in the market in general yielding benefits for all involved parties

Examples: more precise risk pricing in insurance, predictive maintenance based on real-time equipment performance data in manufacturing, etc.

One of the superpowers that AI brings to virtually any industry is the possibility to enhance data-driven decision processes with auxiliary data from non-core (or secondary) sources. A good example is the insurance industry. Sharing claims data and certain performance benchmarks within the industry can improve risk modeling, pricing, and underwriting efficiency. Proxy data from auxiliary sources can be used to insure new risk categories and improve specialized risk coverage with high claim cost volatility or extra-long time to claim. The innovative application of auxiliary data in traditional use cases will become the competitive differentiator in many industries, and data exchange across and within ecosystems will facilitate this trend.

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[4] https://hbr.org/1987/05/from-competitive-advantage-to-corporate-strategy
[5] https://sloanreview.mit.edu/article/thriving-in-an-increasingly-digital-ecosystem/
[6] https://www.maersk.com/news/articles/2019/07/02/hapag-lloyd-and-ocean-network-express-join-tradelens
[7] https://www.bcg.com/en-nor/about/our-history/growth-share-matrix.aspx

When opening data or knowledge can boost innovation, trigger early idea validation and testing, or increase demand for specific services

Examples: Tesla's release of patents, open-source movement, open-data movement, etc.

Open source movement spawned unprecedently rapid development of software and independent code quality assurance. Tesla released all its patents in 2014 for the advancement of electric vehicle technology possibly aiming to boost the development of electric vehicle technology and consequently hasten the adoption of electric vehicles among the public. Microsoft joined the open data movement for the benefit of everyone but also to increase the demand for their own data management and analytic solutions.

When data sharing is a competitive response of several smaller players to a few incumbents

Examples: virtually any -tech name blends such as fintech, insurtech, regtech, govtech, and so on.

For instance, a group of small digital-only (neo) banks may challenge a few incumbents in one or more business areas by creating a partnership and piggybacking on each other's core strengths. Likewise, several fintechs with state-of-the-art offerings in their respective domains can create a joint venture that offers a whole range of banking products under a common brand.

When data sharing is a cost optimization strategy

Examples: almost any process externalization effort that eventually yields cost optimization for several players.

A good example in this category is Invidem. Invidem a recent Nordic KYC utility joint venture, where a group of Nordic banks aims to externalize the parts of the KYC/AML processing routines, which are common to all players and do not constitute a competitive advantage. Invidem builds a platform that will provide a single point of entry for KYC/AML information for both the requesting businesses and their customers. Such a platform will make KYC process more cost-efficient, reliable, and standardized.

When transparency over a value chain, production process, or service delivery can help to achieve higher efficiencies between involved counterparties

Examples: cases in manufacturing, logistics, construction and other industries.

One example in manufacturing is a cross-enterprise digital product twin, which is a digital representation of a product, that expands upon the CAD model by adding information on actual dimensions and quality from various production steps. A digital twin offers cross-enterprise transparency of both the manufacturing process and of manufactured products. Another example is a cross-lifecycle sharing of a Building Information Model in construction. This allows all the parties involved in different phases of a construction project to follow the entire building lifecycle from architecture and design to construction, finish, quality control, sustainability certification, and even post-construction building maintenance.

When data sharing and exchange enable new ways of collaboration that give rise to new offerings and create new markets

Examples: equipment-as-a-service over cloud, servitization and pay-per-use models[8], etc.

Pay-per-use models are at the heart of the collaborative economy and are particularly suitable for industries where traditional assets and products experience limits on utilization levels. The solution is equipment-as-a-service offering which allows renting out underutilized specialized or common-purpose equipment over the cloud. For example, Transcriptic, a "robotic cloud laboratory for the life sciences", offers a Robotic Cloud Platform that provides efficient, reproducible research on demand from anywhere in the world through a single user interface over the cloud.

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[8] For more details, see the case study report Servitisation: Pay-per-use by Business Innovation Observatory of the European Commission, which gives a presentation of the trend, discusses its market potential, drivers and obstacles.

Assessing your readiness

To gain most benefit from a data sharing and exchange initiative, we recommend starting with scrutiny of your current organizational readiness. You want to start by analyzing your individual case using the following four readiness assessment dimensions.

- Alignment with business strategy
- Operational model fit
- Network maturity
- Technology and data readiness

Alignment with business strategy

First, verify and ensure that your initiative aligns with the broader business strategy and overall strategic direction of your organization. Even though this sounds like an obvious step, it is often neglected or missed. Reasons are numerous from shortsightedness and targeting quick wins to the obscurity of strategic direction and inefficient management communication across organizational silos. No matter the reason, failure to align can jeopardize all the effort. In other words, make sure you onboard the right stakeholders and secure top management support.

Operating model fit

Most data sharing and exchange initiatives pursue a more ambitious goal of product or service area enhancement, process or value chain optimization, or even business model disruption. If you have no experience of exchanging or sharing data with external counterparties at production scale, then your operating model might not be tuned for it. The operating model assessment dimension serves to analyze the required business and technology transformation to incorporate data exchange in your operating model. The aim is to identify the necessary organizational changes (from business processes to technology and culture, depending on the case) that need to be carried out. If you

discover that the existing processes are not fit, an early assessment of the amount and complexity of change effort is vital.

Network maturity

Data sharing and exchange yield the most benefit when they are done within a digital ecosystem. A digital ecosystem is an ensemble of services (some core, others complementary) connected to each other through private or public APIs which are provided or consumed by ecosystem members. Sharing data within an ecosystem (be it with your partners, suppliers, consumers, or even competitors) requires you to establish a network where each player individually and the network as a whole benefit from the shared data. Determine if you have such a network in place or what it would take to establish one. In certain cases, just giving out the data can suffice (as often done by simply exposing an open API to 3rd parties to induce them to integrate and join a network), while in other cases it should be an orchestrated effort with thorough legal support.

Technology and data readiness

Assessing your current technology and data readiness is a vital step as well. No matter what you have planned so far, you need to make sure you have the right and mature data exchange technology in place that is flexible, scalable and robust, and can be integrated with your existing data sources. Data readiness is also important. You need to clearly understand what data you want to share, what data you can share, and what data you may share, as failing to dissect this can lead to losing ground or even incurring regulatory fines.

Let's further take a closer look at what you need to keep in mind about technology and data.
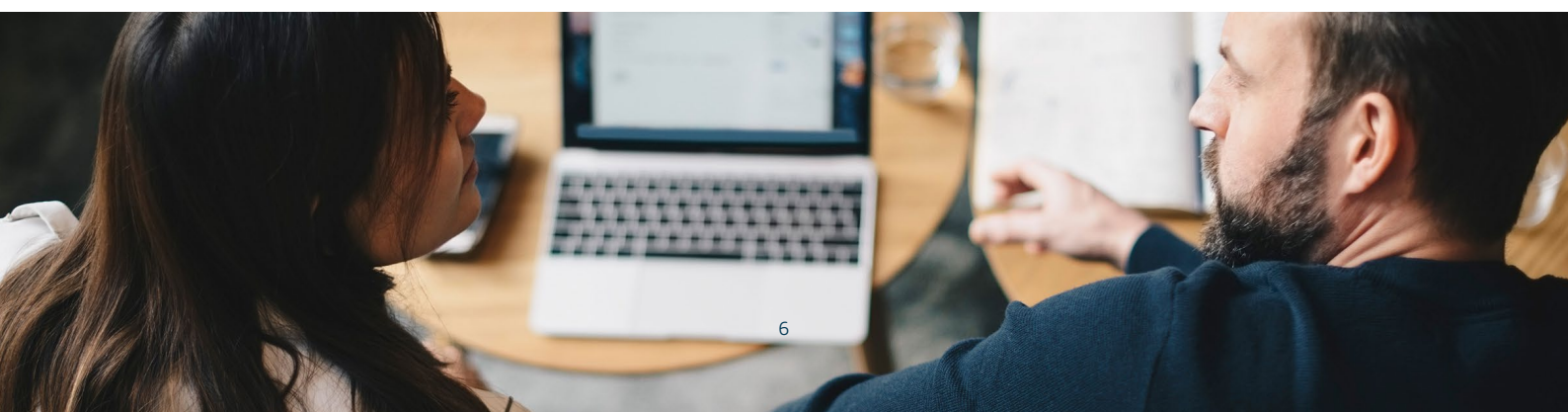
Considerations around Data: The 4D Model of Data

Which data you would like to share or exchange, and specifically how, will most often be determined by the business goals you pursue, the nature of an ecosystem you build, or a service you enhance. However, the so-called 4D model of data[9] can facilitate analysis and predict potential strategic and regulatory obstacles. This model takes into account the heterogeneity of data and its uses along several dimensions.

The 1st dimension relates to data privacy, i.e. the distinction between personal and non-personal data. The 2nd dimension relates to aggregation levels when data can be single-user, bundled (anonymized or pseudonymized), or aggregated. The 3rd dimension maintains that data can be provided voluntarily, observed, or inferred. Finally, the 4th dimension postulates that data can be accessed, traded, or shared. This dimensionality allows achieving two things. First, to build a data valuation framework that determines how valuable different data is if we were to put a price tag on it and, second, to determine if data should and can be disclosed either as required by regulation or as suggested by a business opportunity.

For example, certain observed bundled IoT data can be shared with partners to enhance the transparency of logistic chains or maintainability of equipment. This is a hot topic in manufacturing as transparency allows to cut costs and ensure quality.

Another example is when certain private, single-user, inferred data can be traded to 3rd parties by a data processor with the owner's consent or even by a data owner themselves. This is a typical case for credit scoring business or advertising. Finally, certain observed aggregated data can be shared with competitors in order to archive better market transparency.

One should always be careful about sharing data with competitors, not only because this might involve leaking business-critical information, but also because it can go against competition law. However, there are cases when data sharing can be beneficial for each player, the industry in general and consumers.

As exemplified in the EC report "Competition policy for the digital era", this is especially true for platform businesses where clients on the same platform could access aggregate data to compare the efficiency of their operations to platform benchmarks, expenses and policies to those of the market at large and so on. Such data exchange can lead to large productivity gains for the entire industry.[10] One good example is the insurance industry which can immensely benefit from claims data sharing, auxiliary data in risk modeling, and risk and premium data benchmarking.[11]

The 4D model of data does not give ready recommendations but provides a solid framework to analyze your own domain, industry, and business model. This framework may help you put your data strategy in perspective and explore potential opportunities that would give you and your partners a competitive edge and even redefine your business models. It will also help you foresee legal obstacles and work out potential solutions.

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[9] https://www.eylaw.be/2019/06/04/sharing-data-the-4d-competition-law-model-to-determining-data-value/

[10] More examples of benefits, rationale, as well as an in-depth discussion of the potential regulatory consequences of platforming and data sharing in a digital economy can be found in the excellent report Competition policy for the digital era by the European Commission.

[11] Thanks for sharing: can exchanging information be good for competition article by Oxera explores the benefits of information and data exchange on the example of the insurance industry. Note that while some of the practices discussed might not be yet considered as legal in the insurance business, the report convincingly explains the economic benefits obtained from certain practices that might be legal in other industries and under other business conditions (such as, for instance, multi-sided platforms for trade and logistics).

Considerations around Technology

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Finally, you need the right technology to make cross-company data pooling a success. This technology should guarantee that your exchange or share data in a way that is

• secure
• tamperproof
• traceable
• and scalable

Furthermore, it should maintain data origin, support data sovereignty[12], provide sound data management flexibility, and comply with relevant data regulations.

Developing a solution in-house by utilizing existing capabilities and resources is always tempting, but peculiarities of data regulations, as well as non-functional requirements, can make it a headache. Not even mentioning that the transition from a home-made proof-of-concept to a production-grade system is thorny. Therefore, after having carefully assessed the requirements as well as the degree of business-criticality, one inevitably faces a choice of whether to build the technology in-house or rely on a service provider.

A common recommendation is to explore what large and medium systems integrators in your industry have to offer, as well as evaluate packaged products that exist on the market. If you wish to gain more control over how you develop the technology functionality-wise but delegate development itself, as well as maintenance to a 3rd party, a systems integrator like TietoEvry is an optimal choice. With its technical expertise, it can offer an end-to-end PaaS solution with a due degree of maintenance and support all the way from infrastructure to application customization for your specific needs. However, sometimes, data exchange technology is more of a utility for your business, and in such cases, relying on a specialized PaaS provider with a packaged solution can be a good choice.

One example of a provider that offers a good product for cross-company and cross-process data exchange is an Austrian technology company Tributech. Their solution features an integrated trust layer based on the distributed ledger technology, which ensures that the data transferred is reliable and tamper-proof. Its containerized and modular architecture allows it to be integrated into any kind of platform, cloud, or on-premise system to support the technology stack of all participating stakeholders.

Moving from a proof-of-concept to a production-grade solution that is scaled across an entire customer base entails several challenges.

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[12] Data sovereignty is a term that collectively denotes specific requirements and laws of a country where data are collected, processed and stored, which often includes the requirement whether specific data must remain within the country's borders.

Each independent stakeholder needs to be convinced and onboarded

On a pure business side, this reiterates the previously mentioned network maturity aspect when having a mature network of partners, suppliers, or customers in place facilitates the process tremendously. Furthermore, the benefits of co-sharing and co-accessing data need to be crystallized and communicated in a convincing business case.

The solution should be compliant with regulations and business practices

It is necessary that the technology addresses the major concerns that the parties have. These concerns include ensuring that applicable data laws and regulations are followed, and contractual obligations are respected. Industry-grade compliance can be challenging for a DIY solution.

The solution should be scalable across systems and platforms

When scaling across a customer base it is likely that one meets a variety of infrastructures, platforms, and systems. By having a standardized gateway for the cross-company data synchronization it is possible to scale across infrastructure, platforms, and systems in a standardized and organized way cutting integration costs and increasing maintainability.

Data origin and integrity need to be verifiable

Data reliability is one of the key requirements for data-driven business models. No matter if the data is used for decision-making, in the automation of business processes or for service enhancement. Therefore, technology should enable cross-company auditability to be a reliable basis for a data sharing service.
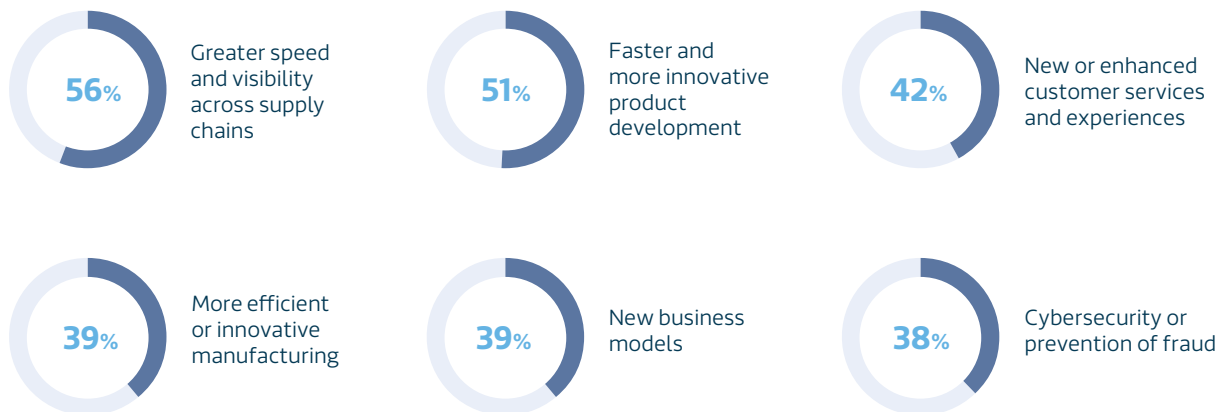
Metadata management and data granularity matter

The technical solution should support the right degree of data classification and metadata management, as well as the required granularity of data sharing (what data, whose data, shared with whom, for which purpose, on which conditions, how often, etc.)

Conclusion

Emergence is a phenomenon that occurs in complex systems when a system as whole obtains properties that are not present in its parts. These properties emerge only when the parts interact in a wider whole. Businesses and economics are complex systems on many levels, and their development all the way from street markets to globalization, from exchange of physical goods to digital real-time economy is a history of adding complexity and, with it, bringing new business opportunities to life, unimaginable before. Digital business ecosystems are the next step in this development. And data sharing and exchange are the mechanisms that make it possible.

Strategic opportunities that data pooling enables span from internal and external process efficiencies and better forecasting to completely new business models. The respondents to the recent global survey[13] conducted by MIT Technology Review Insights name the following greatest benefits of sharing data with companies in your own or adjacent industries.

56% Greater speed and visibility across supply chains

51% Faster and more innovative product development

42% New or enhanced customer services and experiences

39% More efficient or innovative manufacturing

39% New business models

38% Cybersecurity or prevention of fraud

Source: MIT Technology Review Insights survey, 2020

Evidence shows that businesses across the globe have started to realize the benefits and show appetite for data partnerships, with North American companies taking the lead. The same survey shows that data sharing and exchange are seen as strategic enablers by an increasing number of actors across all industries. In North America alone, 23% of respondents were "very willing" to share data with third parties for building new value chains, products, or services, and a further 52% described themselves as "somewhat willing." Just 20% of executives in North America said they were unwilling to share data, compared to 40% of respondents in Europe and the Middle East and Africa.

There are several things that are key to overcoming the common obstacles and joining a generation of first movers. What will help is greater regulatory clarity on data sharing, development of agreed industry standards, more orchestrated initiatives to increase data sharing, business ecosystems proliferation, development of data markets and data pooling arrangement, as well as growth in number of data sharing success stories.

TietoEvry encourages you to cooperate and unleash the potential of data together. Reach out to us to discuss new possibilities that data sharing and exchange can create for your business, the emergent business models in your domain, ecosystem co-creation, partnerships, advanced data services in our portfolio and much more.

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[13] The survey The global AI agenda was conducted in January and February 2020. The respondents were evenly distributed globally, with 20% based in each of North America, Europe, Asia, Latin America, and the Middle East and Africa.

Selected customer cases and solutions

Sustainability, Carbon footprint, Public sector

Open access to data and cross-industry collaboration to help the City of Vaasa go carbon neutral.

TietoEvry is part of a collaboration project together with City of Vaasa, Vaasan Sähkö, an energy corporation, and Wärtsilä, a global leader in smart technologies for the marine and energy markets. The project aims to build one of the world's first solutions to help a city go carbon neutral.

To be efficient in cutting down carbon emissions, one needs to be able to scrutinize the impact of different actions on emission levels. This requires bringing together information from biggest carbon emission sources, information that is often scattered across different organizations. Therefore, open access to data and collaboration between all parties is a quintessential part of this project. The companies and the city are committed to sharing information and offering access to data that has traditionally been held internally. The project is an excellent example of the operating model that builds on co-operation within an ecosystem.

In the project, TietoEvry produces a tool that will help assess, plan, and execute carbon reduction measures, as well as track their effectiveness based on data shared by different organizations.

More details: https://www.tietoevry.com/en/newsroom/all-news-and-releases/press-releases/2020/05/data-helps-the-city-of-vaasa-go-carbon-neutral/

Gathering data from local businesses helps citizens of Trondheim reduce their carbon footprint and businesses to contribute to the city's sustainability goals.

TietoEvry partners with Sparebank 1 Midnorge, the Trøndelag region's major bank, and Rema 1000, a Norwegian top tier grocery chain, to empower the citizens of Trondheim to keep track of their personal climate-related actions and effectively reduce their carbon footprint.

The solution, developed by TietoEvry, with user's consent, automatically collects data from local registries and businesses, such as banks, stores and public transportation services, and calculates the real-time carbon footprint based on individual's everyday activities and behavior patterns. In other words, the solution creates a citizen's digital carbon twin, a precise image of their actual lifestyle patterns and spending.

Combining data from separated sources makes it feasible to offer tailor-made suggestions on how to reduce individual's carbon emissions, and, at the same time, to help the city and local businesses make more informed decisions that benefit the population and the region in general. All that would have been hardy possible if data were not shared and integrated from disparate sources.

More details: https://www.tietoevry.com/en/newsroom/all-news-and-releases/other-news/2020/04/an-app-helps-make-trondheim-carbon-friendly/

APIs, Data Exchange, Data Monetisation

TietoEvry's Open API Exchange Marketplace to facilitate ecosystem collaboration.

As a response to the fragmented publishing of APIs in the Nordics, TietoEvry is creating an API Exchange to be the hub for business APIs in this region. There you will find both TietoEvry's and third parties' APIs ready for use in innovative solutions.

API Exchange will create an ecosystem using its existing pool of customers to create value for both API producers and consumers on a marketplace platform. One of the main values of API Exchange is the ability to access some of TietoEvry's unique data, as well as data of its partners.

API Exchange allows tracing of all types of traffic via API endpoints and data. If connected to a billing solution, it will allow partners to put a price tag on their data and monetize their data streams. As more APIs are published on the marketplace and more applications are built on top of them, sharing data across organizational boundaries will spread value across connected ecosystems.

More details: https://www.tietoevry.com/en/services/data-ai-and-analytics/integration-and-api-management/api-integrations/

AI, Data Models, Efficiency and Optimisation

Data from a range of sources help improve models' prediction accuracy and create innovative services.

TietoEvry has a track record of building best-in-class behavior simulation and prediction models for various business cases. The possibility to use co-shared data brings this capability to the next level.

One such case is a B2B payment behavior prediction model developed as part of collaboration between TietoEvry, Arvato Bertelsmann, a major financial player, and Schibsted, one of the largest publishing houses in the Nordics. The model predicts the likelihood of future invoice payments and is built on a combination of complementary datasets originating from different sources. Using data typically proprietary to each of the parties, TietoEvry was able to more accurately identify payment patterns and predict future behavior. For the customer this directly impacts their bottom line.

Another case is a client communication optimization model that predicts which communication channel and which time are optimal for delivering a specific type of message to get the highest probability of success for the desired outcome. TietoEvry's partners here are Explendo, an innovative disruptor of the retail industry, and Link Mobility, an established player in the messaging industry. Since data used in the model comes from each of the partners, TietoEvry was able to increase model's accuracy and client communication success rate.

Both projects are built on TietoEvry's Data Analytics Platform, allowing data from wildly different sources to be efficiently and securely collated, and new value to be created on top of that data.

For more details, you may reach Kim Remvik-Larsen at kim.remvik-larsen@tietoevry.com.
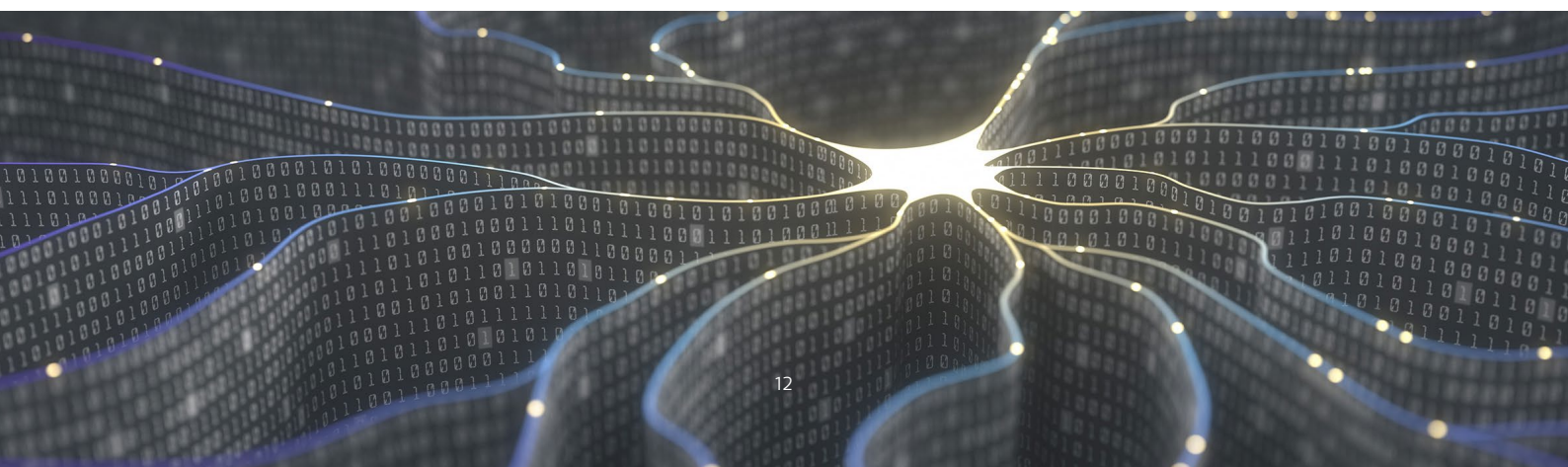
Healthcare, Social Services, Public Ecosystems

Developing preventive healthcare and medical research ecosystem through comprehensive data orchestration and analytics.

HUS – the Hospital District of Helsinki and Uusimaa – wants to be the leading provider of world-class healthcare and preventive care services. The ability to refine and improve existing and externally gathered data plays an integral part in achieving this ambition.

The HUS data lake solution developed in collaboration with TietoEvry integrates the data scattered among different HUS data systems, ranging from patient data repositories to administrative resources. The data sources can be linked in real-time for different purposes and in various ways, which enables higher-quality healthcare while ensures even more cost-effective operations.

Finally, the HUS-DataLake solution allows to create new business opportunities. Through collaborations with IT professionals and organizations, it enables the development of healthcare-related prediction models and cutting-edge healthcare products, based on the data gathered by HUS. The data are pseudonymized and can be used directly in R&D without requiring changes in ownership of individual patient health records.

More details: https://www.tieto.com/en/success-stories/2019/hus-facilitates-clinical-data-exploitation-through-an-integrated-hus-datalake-solution/

Using auxiliary data sources to preemptively identify individuals in need of support.

TietoEvry together with the City of Espoo conducted a unique experimental project in which public sector customer data were combined and analyzed with AI.

The experiment combined the social, healthcare and early education client relationship data of the entire population of Espoo for the years 2002-2016. The data originally stored in information systems of different sectors and services, which do not share information, was combined in a data lake so that the customers and their service paths could be observed and analyzed as a whole.

The City of Espoo wanted to gain an understanding of which factors influence municipality citizens' wellbeing and improve city's decision-making processes with new knowledge. By analyzing this data mass, TietoEvry found new preventive methods for targeting social services to municipality citizens, for example to prevent social exclusion, and proved that AI can be an effective tool for social services planning.

More details: https://www.tietoevry.com/en/success-stories/2018/the-city-of-espoo-a-unique-experiment/
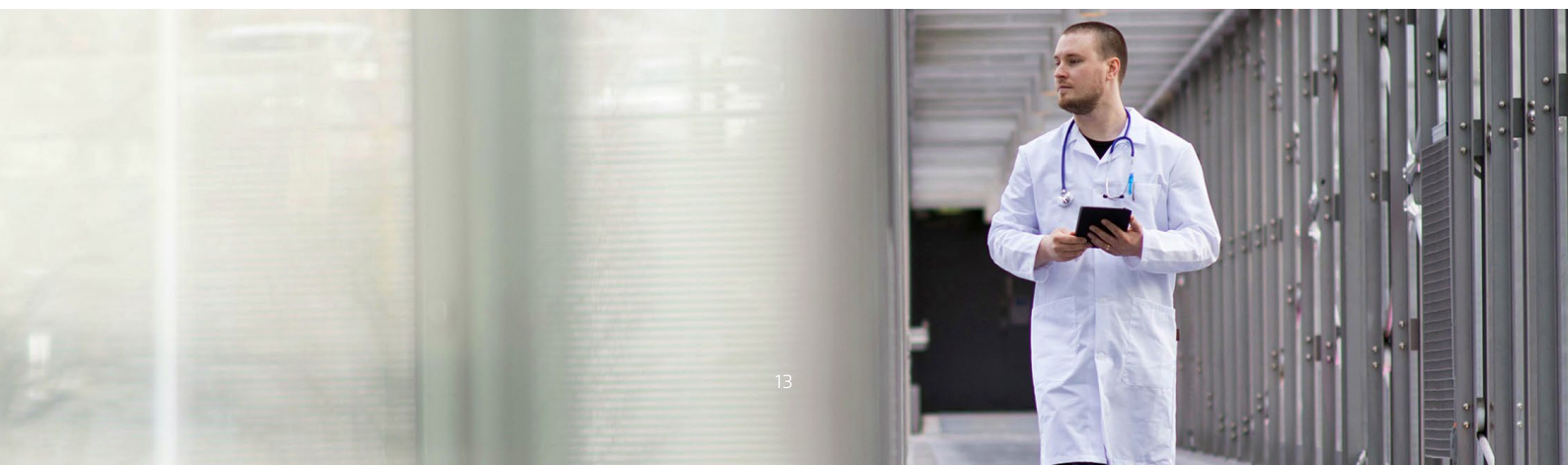
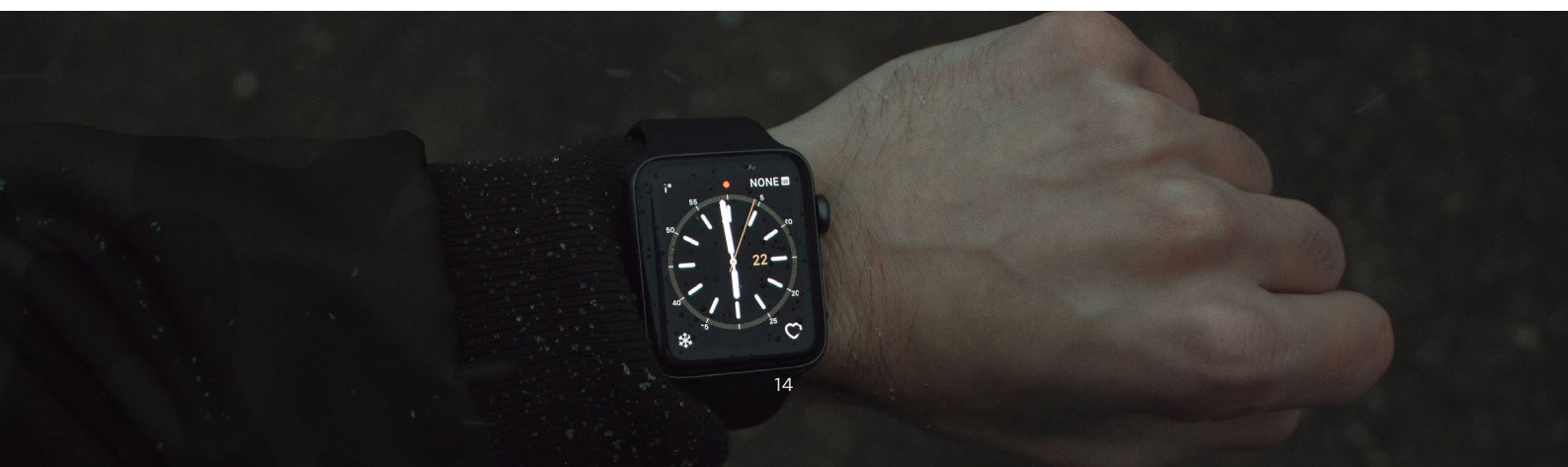## Wearables, Biometrics, Physical Wellbeing

Giving competitive edge to top athletes through a comprehensive data infrastructure: an athlete-centric sports ecosystem.

In a joint pilot project, the Finnish Olympic Committee, Polar and TietoEvry are testing a new system for gathering and analyzing the performance data of athletes.

Finnish athletes currently lack solutions for the broad-based collection of data and its secure distribution to coaches and other support staff. Where data exists, it is held on dozens of information systems, which in isolation do not give an overarching view on athlete's conditions and training efficiency. TietoEvry and its partners are creating a pilot solution for the collection, management and distribution of top athletes' personal data with an ambitious aim to improve the performance of the country's sporting elite.

The collaborative project is part of the Sitra fair data economy IHAN project. It builds a new kind of data economy in Europe, where services can take advantage of an individual's personal data with their permission. This project is a step toward the data economy where data is shared across entire lifecycles of a service in a controllable and manageable way.

More details: https://www.tietoevry.com/en/newsroom/all-news-and-releases/press-releases/2019/06/building-the-data-infrastructure-to-give-finlands-top-athletes-the-competitive-edge/

References

World Economic Forum, "Share to Gain: Unlocking Data Value in Manufacturing", White Paper, January 2020, http://www3.weforum.org/docs/WEF_Share_to_Gain_Report.pdf

Microsoft, "Closing the data divide: the need for open data", blog post, Apr 21, 2020, https://blogs.microsoft.com/on-the-issues/2020/04/21/open-data-campaign-divide/

Michael E. Porter, "From Competitive Advantage to Corporate Strategy", Harvard Business Review, from the May 1987 Issue, https://hbr.org/1987/05/from-competitive-advantage-to-corporate-strategy

Peter Weill, Stephanie L. Woerner, "Thriving in an Increasingly Digital Ecosystem", from Summer 2015 Issue, https://sloanreview.mit.edu/article/thriving-in-an-increasingly-digital-ecosystem/

Maersk, "TradeLens blockchain-enabled digital shipping platform continues expansion with addition of major ocean carriers Hapag-Lloyd and Ocean Network Express", Press Release, 02 July 2019, https://www.maersk.com/news/articles/2019/07/02/hapag-lloyd-and-ocean-network-express-join-tradelens

BCG, "What Is the Growth Share Matrix?", https://www.bcg.com/en-nor/about/our-history/growth-share-matrix.aspx

Laurent Probst, Laurent Frideres, Benoît Cambier, Sarah Lidé, Business Innovation Observatory, European Commission, "Servitisation: Pay-per-use", case study report, April 2016, https://ec.europa.eu/docsroom/documents/16595/attachments/1/translations/en/renditions/native

Kiran Desai, "Sharing data: the 4D competition law model to determining data value", EY Law, https://www.eylaw.be/2019/06/04/sharing-data-the-4d-competition-law-model-to-determining-data-value/

Jacques Crémer, Yves-Alexandre de Montjoye, Heike Schweitzer, "Competition policy for the digital era", European Commission, final report, 2019, https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf

Oxera, "Thanks for sharing: can exchanging information be good for competition", November 2011 Issue, https://www.oxera.com/wp-content/uploads/2018/03/Sharing-information-in-insurance.pdf

MIT Technology Review Insights, "The global AI agenda", survey report, 2020, https://mittrinsights.s3.amazonaws.com/AIagenda2020/GlobalAIagenda.pdf

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