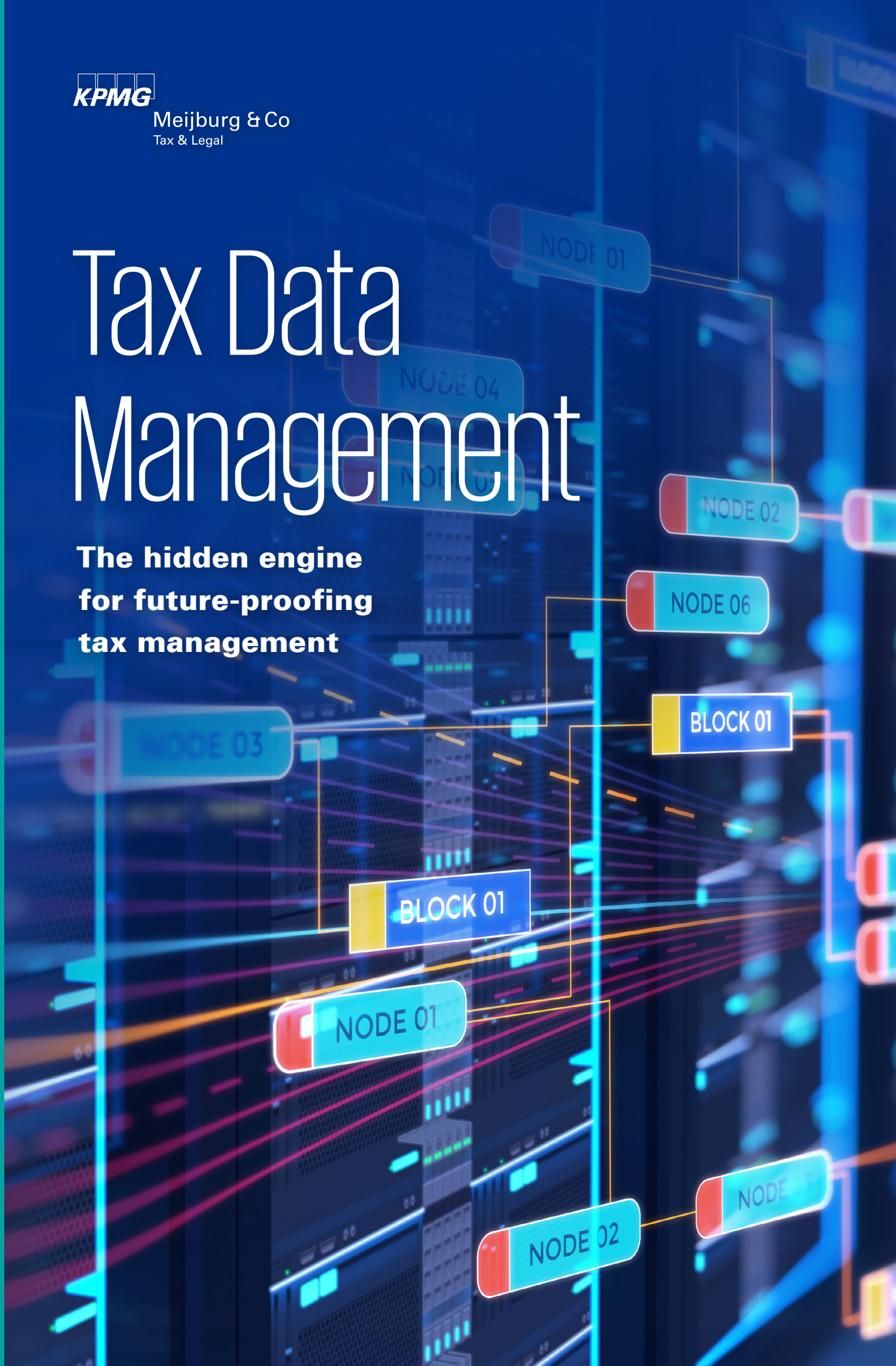
KPMG Meijburg & Co
Tax & Legal

Tax Data Management

The hidden engine for future-proofing tax management



Global tax reporting and technology trends

'Without data, you're just another person with an opinion' – a famous quote from W. Edwards Denning (US, statistician) that we tended to use five years ago to describe the importance of using data in our work or daily life activities. This was at a time when data and analytics or 'Big Data' was on the rise as a forward-looking trend by means of which we could really distinguish ourselves from others. Now, in 2021, we would rather rephrase this quote as *'Without trust in your data, you're just another person that consumes data'*. This illustrates how the use of data and analytics has been commoditized and has shifted from 'nice to have' to 'must have'. In today's data society, we produce, consume and rely so heavily on data and algorithms that it's becoming more important that we feel comfortable that this data is trustworthy and transparent in order to drive real-time decision-making processes. The world of tax has been lagging in terms of investment in, and adoption of, data and technology in a broader sense.

This is a bit odd, since if there's one area where data is really an important driving force to support decision making, it may well be tax. Every single tax calculation, irrespective of the type of tax (e.g. corporate tax, indirect tax or transfer pricing), is based on data which is produced somewhere or is being mulled over in someone's mind; something that does not happen on a year-by-year basis, but daily, every minute, in real-time. This is not new for organizations (taxpayers), but we've seen some interesting developments within tax administrations around the world and in technology (digital transformation), which together produce new opportunities and challenges in the data area: this is referred to as tax data management.

Let us begin by describing what we see happening at tax authorities worldwide in terms of compliance obligations and reporting requirements towards taxpayers.

Indirect tax

In the area of indirect tax, we see two main trends in tax reporting which are having a major impact on the organization of existing compliance processes, supported by technology solutions.

1. More frequent reporting of transactional data

Various tax authorities – mainly in Europe – require companies to report full details of transactional level information, often also containing broader information than solely for tax purposes. Often these types of reporting obligations are referred to as 'real-time reporting', although the term may be slightly confusing since there's no direct push of information from corporate IT systems to the tax authorities. It is based on the principle of running a report (after the fact) and submitting lists of transactions to the authorities (for example via API's). The frequency of submission is increasing from monthly to weekly to sometimes close to real-time. Current examples of these reporting requirements are Spain (SII) and Hungary (real-time reporting), but also includes countries where a Standard Audit File for Tax (SAF-T) has been introduced, for example Poland, Portugal, Norway, Austria.

2. Government-controlled invoicing systems

This is the predominant trend in Asia and now also increasingly in Latin America. The principle is that each seller's issued invoice requires a 'stamp' from the tax authorities before it can be submitted to the buyer. This is a powerful way to combat potential tax fraud in respect of deductible input VAT credits.

In Mainland China this is implemented via the 'Golden Tax' system. More recent examples of

countries which are implementing this concept are India, Brazil, Mexico and most other countries in South America.

More recently, countries have been referring to this concept as Electronic Invoicing. Very often e-invoicing is associated with exchanging information between buyer and seller directly (e.g. via XML) but in a tax context, the main idea being that information (invoices) is shared with the tax authorities as an intermediary party for verification and approval purposes.

Corporate tax

In the area of corporate taxes there has traditionally been less need to access transactional data to calculate taxable income and applicable tax adjustments. However, driven by tax challenges arising from the digitalization of the economy, new taxes and reporting requirements have been introduced. These reporting obligations require more detailed, widespread and complex data elements for tax calculation purposes. Examples are the introduction of Digital Services Taxes (DST (e.g. Austria, UK, Turkey), BEPS 2.0 Pillar 1 and Foreign-Derived Intangible Income (FDII) in the US.

Changing data needs

We are also increasingly seeing companies adopt a more centralized approach to global tax compliance, not just in management activities but also in data collection and compliance input.

All these compliance reporting trends have a few aspects in common, which expose companies to an increased need for tax data management solutions:

Data needs to be accessible – *from a single trusted source*

Data needs to be accurate *(preferably right first time)*

Data needs to be complete and ready for reporting

Technology as an enabler

On the other hand, the significant uptake of technology is fueling the digital transformation agenda of companies. Technology solutions to automate manual processes and provide support with smart decision-making processes are taking over human-led activities; something not thought possible five years ago. Data and technology applications are facilitating the provision of pre-built data infrastructures to develop and roll-out data-driven applications.

These infrastructures – supported by advanced data processing technologies, such as in-memory computing – are an important enabler in making the concept of real-time data management a reality. The increased data volumes that companies are producing and which are required to access and be transformed to reportable data outputs are no longer the show-stopper for data management, which they were five years ago when traditional data warehousing solutions were in place as a solution to run time-consuming reports. These were extremely inflexible and did not allow for quick changes to existing reports to align them with external and internal stakeholder requirements.

This recent uptake in data technologies is a great opportunity for organizations to start outlining the solution framework to cover to the beforementioned tax data needs.

In the next sections we will introduce tax data management as the overall solution concept to deal with the increasing data-driven nature of management of taxes.

Why is tax data management important?

How does future-proof tax data management look like?

How to make tax data management work for you?

PART 2

Tax Data Management – why is it important?

As outlined in the previous section, there is increasing pressure on companies to report information to tax authorities at a very detailed level and within a short time frame.

There are two key challenges accompanying these trends:

1. Companies are not sure about the quality of the tax calculations. The tax authorities can challenge the outcomes due to the detailed level of information available in the reports.

2. Most of the required data is not available in standard reports produced by, for example, the ERP system. The required data may come from different modules or even different data sources. In combination with the increased frequency of reporting requirements – for example Hungary where the tax authorities require data to be submitted within one day after the invoice has been issued – this puts data accessibility high on the agenda of clients.

This is where tax data management comes into play.

Tax data management refers to the strategy, technologies and available intelligent data models to extract, ingest, clean, transform, harmonize data from its source (where it's created) all the way to data outputs which can feed directly into tax applications used by tax teams. Obviously, tax data management is not new; every organization is already dealing with it in some way or other. However, in most situations many of the activities surrounding data management reside with tax teams, which are reverting to the most commonly used tax technology solution globally: Microsoft Excel.

Traditionally, there may be communication challenges between tax and/or finance teams and the IT organization of companies, which has sometimes led to bad experiences with IT as a trustworthy partner to quickly deliver the reports required for tax management purposes. Therefore, tax teams have to plough their way through the available data in the organization, using existing reports which usually come in various formats and with limited interconnectivity. But what if reports need to be updated due to a tax change in a country? How would tax teams know whether and where the required data is available, how to obtain it and how to go about updating the Excel models to incorporate this change?

Various technical reconciliations are usually performed as an important control to ensure the completeness of the data before and after transformation. This is mostly all done manually and is therefore very time-consuming and will add limited value to the end-to-end process.

Since tax compliance delivery and usage of data analytics solutions is heavily reliant on data from many different sources, amassed via different (Excel) reports, it's not uncommon for tax (compliance) teams to sometimes spend more than 70% of their time on data-related activities and 30% or less on the actual compliance delivery. The time and effort needed before being able to perform checks on the data to ensure its quality, will become too all-encompassing if compliance requirements increase in terms of the details required, but even more importantly in terms of the increased frequency of submission.

These challenges are not unique, and most companies are dealing with them in some way or other.

In summary, we can group the (tax) data challenges into the following six categories:

1. Limited access to data
2. Required data scattered all over the place (including unambiguous definitions)
3. Poor quality data
4. Lack of tax-friendly technologies for data management
5. Increased data volumes
6. Inability to unlock value from data

One might expect challenges to be specific to various tax types, such as corporate tax or indirect tax. However, in our experience in all areas we often see a reactive approach to data management, which leads to a situation where data issues resulting from the aforementioned six categories are detected after the fact. We are also increasingly seeing more common data requirements arising across different taxes (from summarized data to detailed reports), for which tax teams face common challenges in dealing with this.

So how can data management help to overcome these challenges?

Reporting requirements must be complied with and tax teams require information in order to effectively manage end-to-end processes and make prudent decisions based on facts. The problem is that tax teams seem to feel most comfortable with the traditional – often Excel-based – methodology, but this is not sustainable, especially in light of the increased reporting pressure from tax authorities and other stakeholders. In the next section we will outline what a 'future-proof' data management concept looks like.

PART 3

Future-proof tax data management

In the previous sections we outlined typical data challenges and examples of how the traditional, Excel-based, approach is not able to provide a solution. We also discussed how new compliance obligations and reporting requirements may increase these current challenges in the near future. Fortunately, the same technology disruption which is used by tax authorities to introduce these new obligations can also be used by taxpayers to deal with these challenges.

So what should we consider when thinking about future-proofing tax data management? When looking at companies that are already working on improving their data management, we can observe four common foundational shifts:

1. From manual to automation

The biggest change in data management is going from manual data processes to a high level of automation. It is not surprising that this tops the list. Technology can very effectively eliminate tedious activities like generating reports, making standard adjustments and consolidating and reconciling data. The time saved by tax professionals – which can now be spent on dealing with tax matters – is often the biggest driver in business cases for improving tax data management.

2. From batch to real-time data

Driven by technologies like cloud and big data, the costs of real-time data and streaming capabilities have decreased significantly, paving the way for its use within tax. Having data available in real-time will help prepare organizations to deal with future tax obligations like real-time compliance. Real-time data also creates exciting opportunities for real-time monitoring, which could entirely change the day-to-day operations of a tax team shifting from reactive to proactive tax management.

3. From point-to-point to a single trusted source

Traditionally, we see data management activities incorporated into point solutions. Every tax process and every tool uses different reports, with their data management being dealt with separately. As a result, the same data is often used multiple times in different ways, creating the need for additional reconciliations. Future data management will move away from these point-to-point solutions and use a single data repository. Data from different sources can be stored centrally using a common definition and can be used for multiple purposes across tax types.

4. From fixed to flexible

Traditional technologies often work with fixed and pre-defined data formats. This is great for developers who can use this to minimize redundancy and make technology more efficient, but it also requires organizations to undergo lengthy development cycles when incorporating new data elements. This should be obvious for anyone who has requested a new or updated tax report and has had to wait months before it was ready to use. In a world where tax requirements are rapidly changing, tax data management should have this same agility.

What does future-proof data management look like?

When we look at the foundational shifts it's easy to see that the traditional – Excel-based – approach will not suffice in the future. Instead, organizations should consider a new approach that incorporates modern data technologies into a centralized solution.

A wide-range of technologies can be used as part of this future-proof tax data management solution. In recent years many data processing tools have been made available to the public, all with their own advantages and disadvantages. To avoid a long list of potential solutions, we will instead focus on the main elements that should be part of any data management solution.

- ## Infrastructure

Infrastructures are an important enabler in making the concept of real-time data management a reality. Modern architectures have all the features to ensure data is secure and governed by a global access control. These solutions are able to process and store large volumes of data quickly.

- ## Data models

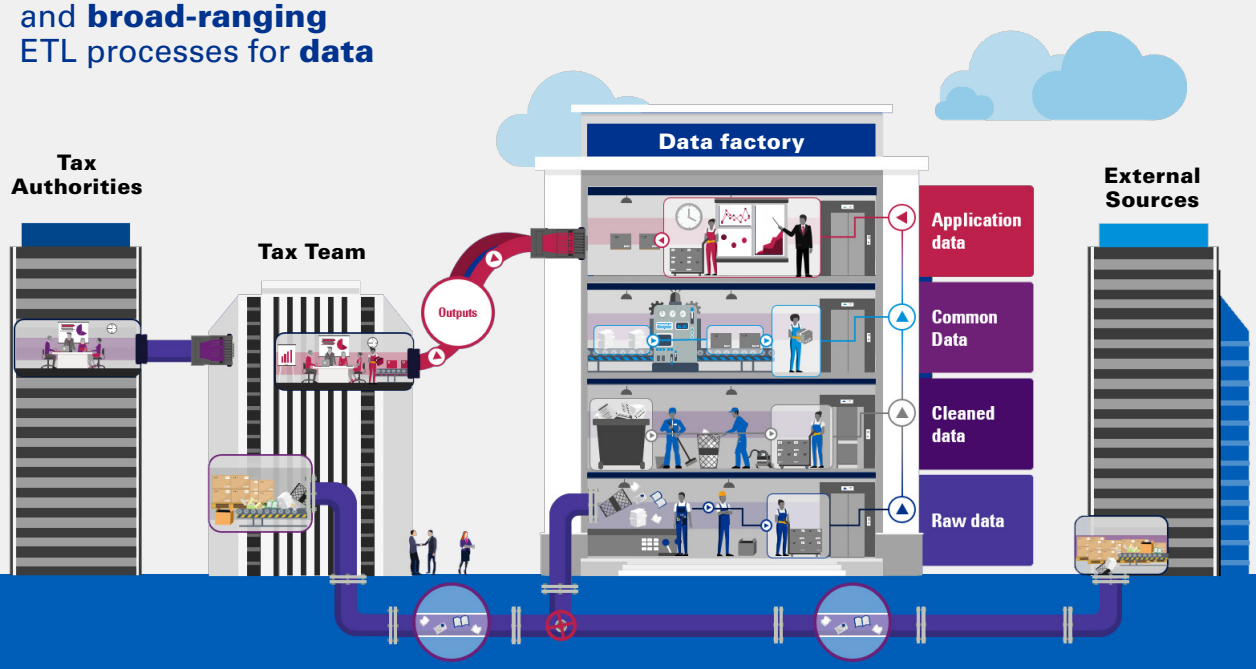
'You can have data without information, but you cannot have information without data.'
— Daniel Keys Moran

You can have all the data of an entire organization at your fingertips, but without a way to convert it into information that matters to the tax team there is no point in having a data management solution. We often see that tax information is hidden in ERP and accounting systems. Having tax specific data models makes this information visible to the tax team. Having good data models also allows for consolidating data from different sources into a single repository.

- ## Consumption

Data management is pointless if you can't use the results. Especially if you have a single repository for all tax data, it's crucial that you are able to generate reports in the correct format, with the correct data, available to the right people. This also applies when connecting different technologies, like dashboards and compliance software, to the solution.

Simple, **standardized** and **broad-ranging** ETL processes for **data**



Data collection and transmission

SIDE STORY

KPMG has developed an industrialized approach to tax data management. The Tax Data Factory puts together years of experience of working with data from leading ERP systems, commonly used tax reports and state-of-the-art technology. The Tax Data Factory can be used by organizations as a service, or as an accelerator when implementing and designing their own data management solution.

The Tax Data Factory contains a pre-built highly automated data 'production line' to extract, transform, clean and reconcile data into a common data model, serving as a single trusted source for tax teams. The data outputs of the Tax Data Factory are stored in a centralized repository where tax teams can use the required data as and when needed without having to be an IT or data specialist. This allows tax teams to shift the time spent on manual data processing to analysing data and tax reporting, thus enabling them to do more in less time.

PART 4

Making data management work for you

Now that we understand what future-proof tax data management looks like, the next question is how to make this a reality. Not surprisingly, this can be a real challenge for many organizations. While many tax teams know they have a data problem, they struggle to effectively tackle it with the right blend of technology and organizational change. As a result, we often see data initiatives that either fail to use adequate technology, or initiatives that solely focus on the technology and fail to create real benefits for the tax team. To support organizations, we suggest four steps that help to balance the different aspects of building a data management solution.

1. Identify the data challenges you want to solve

Building a tax data management solution should always start with identifying the data challenges. Both data challenges that the organization is currently facing and future challenges that might be the result of new compliance and regulatory changes. It is best to have a broad vision and, for example, to look at general insights and data analysis requirements in addition to compliance requirements. The aim is to address all these requirements in a single data management solution and to achieve as many synergies as possible. You need to think big!

2. Define the data processes

Once you have the end goal in mind it's time to design the required data processes. These processes should cover your data needs and how you collect, transform, store and consume this data. Some questions to consider:

Data needs

- Which solutions do you want to source from the data process?
- What data goes currently into these solutions?
- Are there synergies/overlap with data needs from other departments?
- What information needs to be stored for each data point?

Collect

- Where does the required data come from?
- Do you also need data from external sources?
- Will you need structured data, unstructured data, or a combination of both?
- How will the data be collected?

Transform

- Do you need to clean the source data before you can use it?
- How will you validate the quality of the data?
- Is it possible to reconcile the data to prove its completeness?
- What must be done if the data is not accurate or complete?

Store

- What sort of data volumes are you working with?
- Do you need a data lake for unstructured data?
- How will you keep your data secure?
- How long do you want to store the data?

Consume

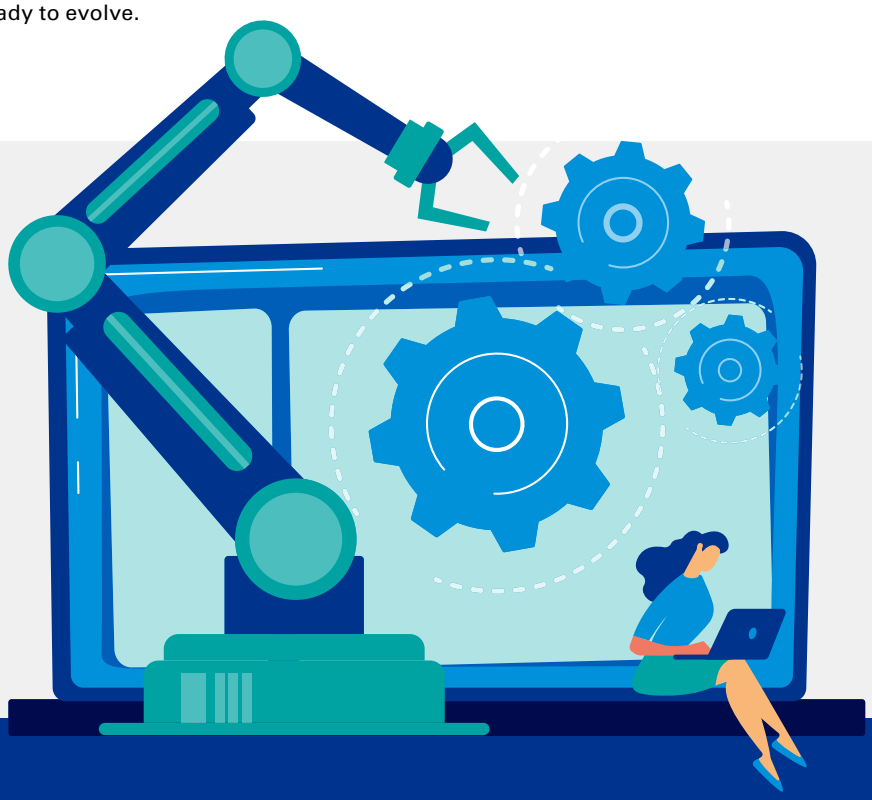
- Do you need to restrict access to the data to certain (sub-)teams?
- Is it possible to directly connect other solutions, for example compliance software, using APIs?
- How can you make access to data and analysis easier for the tax team?

3. Find the right infrastructure

Translating these tax processes into technology requirements and finding the right infrastructure can be challenging. It often requires someone with extensive knowledge of the tax challenges and the available technologies. Nevertheless, it's important to select the right tools for the job. We often see organizations choosing either to completely outsource the technology or develop something themselves. When developing a solution, it is important to align with the organization's technology roadmap and leverage solutions that are already in use. Whatever you do, make sure you don't wait for the perfect architecture for all your current and future needs. Instead, make sure the architecture is flexible and ready to evolve.

4. Start small

Sometimes the biggest challenge is getting started and not being overwhelmed by the possibilities. All change is difficult, especially when the tax team is used to the current way of working. A crucial part of getting started will be to provide the knowledge and skills your team needs to understand and work with the data. Make sure you start small, while keeping the bigger picture in mind. We often see an approach based on proof of concepts, where teams with an agile mindset start small, while keeping the end goal in mind. This helps to add value as soon as possible and to stay realistic. Technology will not (at this stage) fully automate the tax processes at the click of a button.



SIDE STORY

From Excel to fully automated data-driven corporate tax compliance automation

A global financial services organization operating in more than 100 countries was primarily using Excel and other manual approaches for its corporate tax compliance processes, with very limited standardization and harmonization across different countries. This organization was seeking to implement a more centralized approach for data collection and the preparation of compliance management in order to reduce the overall cost of compliance. By eliminating the Excel layer and directly pulling the required data from where it's created (at source) and transforming that data to a common data model, including mapping to a common chart of accounts, the organization was able to build a single trusted source from where the local teams could take the required data for compliance management purposes.

The result of this change in data sourcing led to the following benefits:

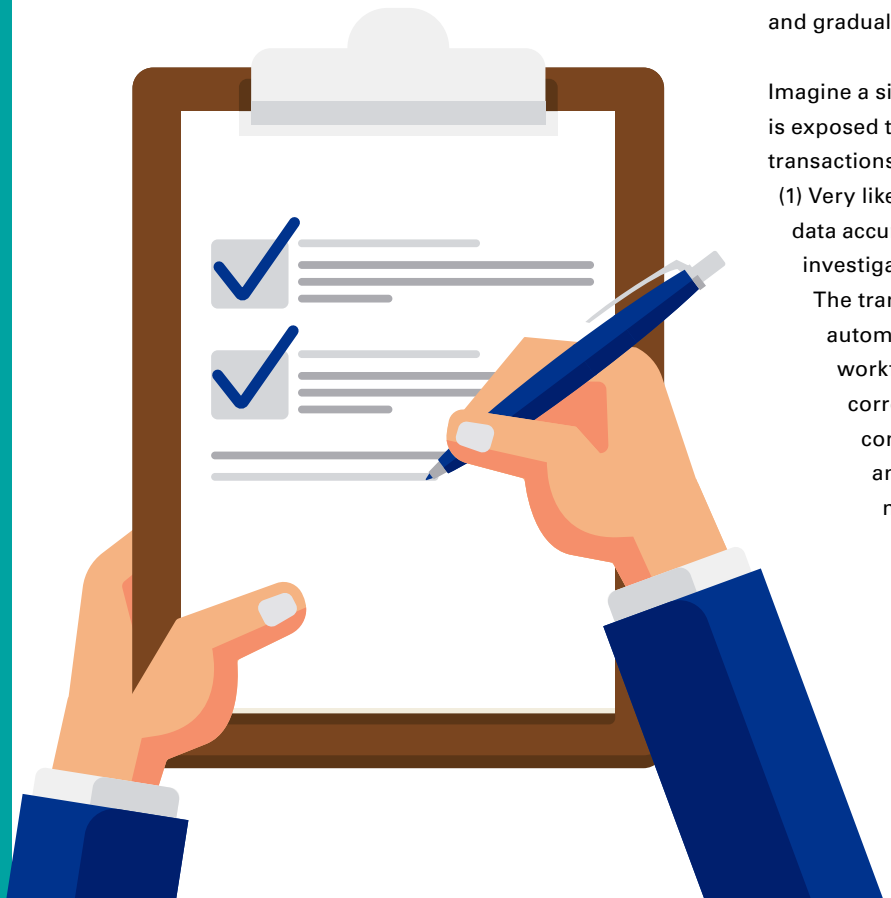
- Reduce the total effort for corporate tax compliance by 40%
- Achieve higher quality of compliance outputs due to fewer manual steps in the process
- Standardization of processes and reporting, which led to synergies in capturing process improvements across countries
- Data-driven approach leads to greater overall visibility for group tax by utilizing data analytics solutions and dashboarding on the single data.

PART 5

Data management as an enabler towards 'tax compliance by design'

Which business outcomes are we seeing at clients that have uplifted their data management foundation and how do these outcomes result in overcoming the abovementioned key challenges?

Having a single trusted source available in a 'tax data store' helps to understand where all the data is coming from and what data is readily available for end-users via the specific tax applications, such as compliance engines or data analytics dashboards. This is especially important for organizations that operate multiple ERP systems – by business, region or company – because definitions for revenue, inter-company, legal entity may differ for each system, requiring complex data mapping to ensure that data is harmonized in the data store. A data audit trail should be available to provide transparency to end-users, so they know exactly what they are looking at. This is crucial in situations where tax authorities want to see that data has been reconciled and not changed while being transformed and mapped, for example in the UK with the 'Making Tax Digital program.



First-time right. A principle that we are hearing more and more which doesn't really require further explanation in terms of benefits. But to what extent is this really realistic and at what costs?

At first glance, 'right first time' seems to be more relevant in the area of tax calculation engines or data entry solutions such as optical-character recognition (OCR), but this also has a strong relationship with data management solutions. In the context of tax, the timing of 'right first time' is mostly driven by tax reporting frequencies. It's inevitable that data may be wrongly entered, resulting in wrong tax calculations. This is something that cannot be avoided. But the quicker you can identify and correct wrong tax data, the more assured you can be about the quality of your data when you need to use it at a certain point in time, e.g. in the case of an unexpected tax audit.

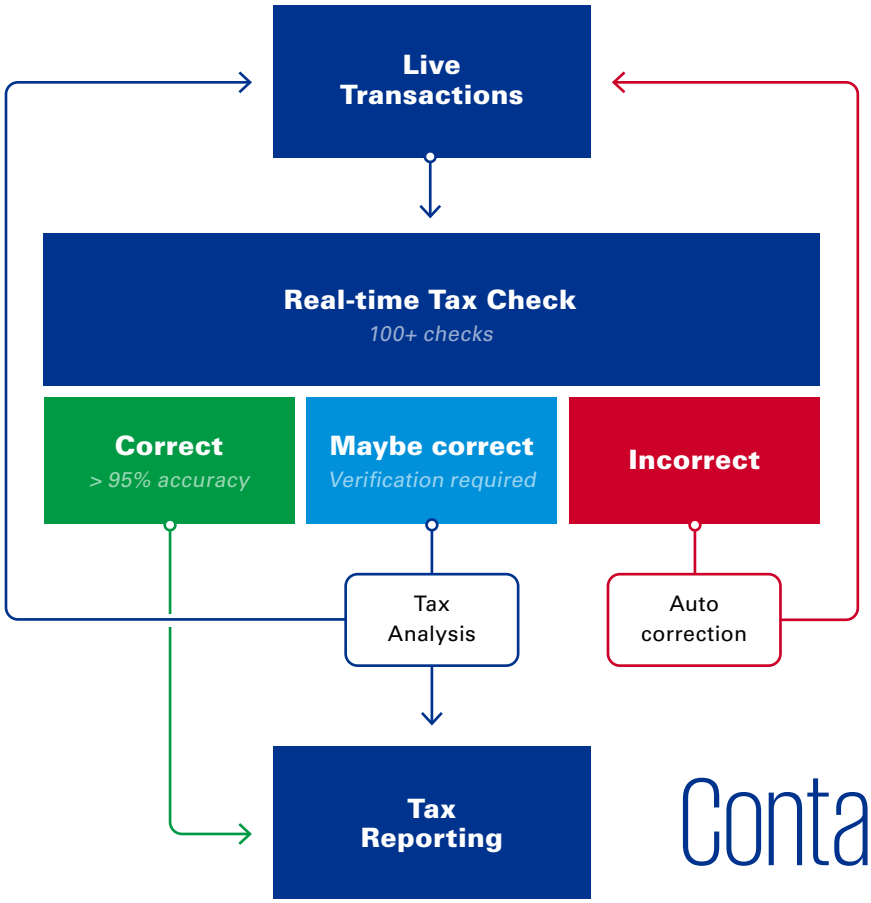
A future-proof data management concept – built on the right technology components – allows for (close to) real-time data checking at data entry – enabling you to take corrective action immediately after the fact and gradually.

Imagine a situation where every single transaction is exposed to 100 tax data quality checks, with transactions being classified into 3 buckets: (1) Very likely correct – based on a predetermined data accuracy threshold, (2) Maybe correct, but further investigation required and (3) Very likely incorrect. The transactions from categories (2) and (3) are then automatically pushed to the relevant follow-up workflow, or – one step further – automatically corrected at source. When you continuously control and monitor data, there's no longer any need for time-consuming reconciliations, manual corrections or data spot checks and this, in turn, increases the level of trust in the data among the tax teams. And it's exactly this trust in data which is one of the most important cornerstones for the future of tax compliance. Not only at taxpayers but also

at tax authorities where mutual trust between companies and governments is an important guiding principle in determining a tax administration 3.0.

We are already seeing the first (progressive) tax departments that are upscaling their investment in technology moving in this 'tax compliance by design' direction. This requires a significant change in the required skillsets (beyond core tax) within the tax department, as well as a corporate cultural shift to become a more data-driven organization. We need to remember that tax always depends on other non-tax processes, as these create the data that tax needs as a basis for its tax calculations and reporting. Therefore, it's important for tax teams to take a more strategic position in the organization and act as a business partner for logistics, sales, supply chain, finance and HR departments, rather than being the traditional reactive advisor who is sometimes perceived as a 'business delayer' as opposed to a 'business enabler'.

Tax compliance by design



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