Oxford Commission on Sustainability Data: an opportunity to be a leader

Efforts to get companies to cut their emissions remain insufficient. A significant reason for this is the lack of accurate, auditable data. It is difficult to improve something that cannot be measured and verified accurately. The complexity of this problem cannot be overstated, as the data required covers millions of companies across hundreds of legal jurisdictions.

The Oxford Commission on Sustainability Data aims to solve this problem by creating a structure that will enable companies to provide accurate, auditable data on their emissions. Companies that embrace this will be able to prove their contribution to reducing carbon emissions. The solution is for software and services companies to give their customers the ability to automatically record key transactional events to a database of that customer's choosing, while having a fingerprint of that data recorded to an external source. This will allow companies to maintain complete control over their data, while still proving that they are not modifying their data.

1. Why we need you

The Commission is working with companies and other organisations to prototype our methodology. While the method is simple, the Commission needs to prove that transactional data can be standardized and intertwined with enough other transactional data to be self-auditing.

(The project doesn't need to prove that software and service providers can enable logging from their systems via a method that sends a company's transactional data to a database of its choosing and, at the same time, allows a company to prove it hasn't modified its data. That is known to work.)

Rather, the Commission needs to standardize the operational data from companies, and determine that the data is sufficiently intertwined with other transactional data to make it self-auditing. We are already doing this with Kellogg College's transactional data. We will not publish facts about a company. We are simply focused on leveraging the same algorithms that we create to analyze and add value to Kellogg College, to see if these work with other companies, in a repeatable fashion.

We need to analyze transactional data from a range of companies. We are focused on the standardization of the data. We are interested in the structure of the solution – not in disclosing anything about a company.

2. What will be requested of your company

The starting point for understanding a company is its financial ledger (or in the UK, its balance sheet or P&L). To illustrate: imagine an event has happened that has called into question the accuracy of every entry on a company's ledger (balance sheet), and it is that entity's responsibility to prove each entry is true. To do this, the group will create a column to record the systems that need an action to take place for that ledger entry to be true – for example, a website purchase requires a group's e-commerce system, shipping provider, and the payment processor to all record a transaction, enabling a company to

demonstrate the ledger entry for that ecommerce transaction is accurate. Additionally, money would have been deposited into the company's bank account (often via the payment processor in bulk), providing further proof that the ledger entry was real. A company would go to those (software) systems and download the related transactional data (or request that the software or service provider send it transactional data if downloading isn't possible) that would prove the specific ledger entry took place.

The Commission will work with your company to construct a database to hold the ledger data and data from the company's software systems and services providers.

There is no charge for participating, and the time and resource required of the company are modest – for example, a person in the company's finance department with access to and knowledge of the necessary accounting systems would need to assist. The company's IT department would need to set up a database (for storing the transactional data) if the company is not comfortable with the data residing in an external database set up by Oxford's Commission. Someone in the group's IT department could also run queries and algorithms if the group doesn't want to give direct access to the Commission.

We will leverage the work completed on the Kellogg College dataset to form algorithms that validate a company's data and provide it with insights.

We aim to undertake this with several companies. Once this process has been shown to be successful in demonstrating that a company's transactional data can be proved to be accurate, we will advocate for software companies to provide a box which companies can tick to enable them to automatically record their transactional records, in real time, to any database of their choosing. This would provide every company with the ability to prove its ledger (or balance sheet) is a full and accurate representation of its actions.

3. What this does

Kellogg College is the first organization to have its data analyzed for this project. An interesting outcome was that Kellogg's finance team realized that this also solves other problems, in addition to sustainability-related issues. Most companies view their organization through the software systems and services they employ. However, a downside to this is that each of those systems and services gives different answers, given that they were designed to solve for different problems. Kellogg identified how this bottom-up method provides it with an easy way to explain and correctly handle discrepancies between the data seen in different software systems.

While companies want a fast and easy way to account for their Scope 3 emissions, solving for Scope 3 emissions starts with companies evidencing their transactions (what they are buying and what they are selling) in a standardized and auditable way. In the near term, the Commission hopes to provide a way to map a company's scope 1&2 emissions to what it is selling/creating, and give it the ability to estimate its scope 3 emissions more accurately. The Commission also hopes to develop a rational method to attribute through those Scope 3 emissions. Today's consultants generally are given data from companies to perform Scope 3 emissions calculations with no proof that the data are complete. We aim to provide data that has been evidenced as being accurate and complete.

Ultimately, if every company recorded their data in the method the Commission is proposing, the concept of 'Scope 3' emissions would be redundant, with all emissions captured as Scope 1 and 2. As such, algorithms could quickly and accurately tally the emissions to end products and end consumers.

As a prototype, companies participating in this project won't be able to leverage the fact (and the data that would come from) all others having adopted this approach. At this stage, therefore, Scope 3 emissions won't be dealt with. However, participating in the project will enable a company to demonstrate its intention to report sustainability data that is accurate and auditable.

4. Conclusion

By participating in this project, your company will be helping to tackle climate change by creating a structure that provides accurate data in a standardized manner. The availability of such data should also provide companies with other benefits in terms of cost of capital, insurance, AI, supply chain optimization, compliance and market access. Participating will allow your company to understand what is possible with reliable and auditable data.