# The Impact of AI on Accounting

# The challenge is corporate value that cannot be

## measured by accounting



**IFRS Digital Reporting Workshop extra** 

Date and time : 25th July 2019, 18:30-20:00

## Does the current accounting correspond to the AI era?

#### In a society that has reached singularity ...

When AI overtakes human judgment, the singularity has come. AI will continue to help humans in various situations. Investment is one of them. Will the current accounting continue to be used at that time? Will the role of accountants change? We discussed these issues.

In the first place, investors do not just rely on financial statements. This is because investors already make judgements about company value using not only GAAP financial statements but also other information. This is well known and the IASB has been aware of it for years and has made every effort to improve it. However, it is impossible to solve this situation only by improving current Financial statements, because the information that is not included in the financial statements becomes used. Various organizations such as IIRC are developing non-financial disclosure frameworks and KPIs. However, big asset managers are already using big data.

That's where AI comes in. If the singularity has come, AI may make judgments faster than humans. At that time, AI may search for other external information, not just financial statements, and may help asset managers and analysts to make investment decisions/analysis corporate value. Can the financial statements still hold a role, under such a situation?

Today, we discussed this issue with not only investors and information users, but also accountants, regulators, and accounting department people from the companies, together.

Special Speaker	Former IASB Executive staff
Attendees	10 Investors, 1 Investor(or Analyst) organization, 3 Sell side Analyst, 6 Information providers/Researchers, 2 Company side ( include Independent non - executive director ), 4 Auditor, 5 Regulator/Accounting setter/etc

How much can AI do by itself?

A well-known mathematician called Alan Turing said in 1950, "Someday the machine will overtake humans in a particular field, and the point is how much time will it take". He defined AI as follows: "If we can't distinguish between machine and humans, we can say that artificial intelligence exists."

Big data and machine speeds are increasing...

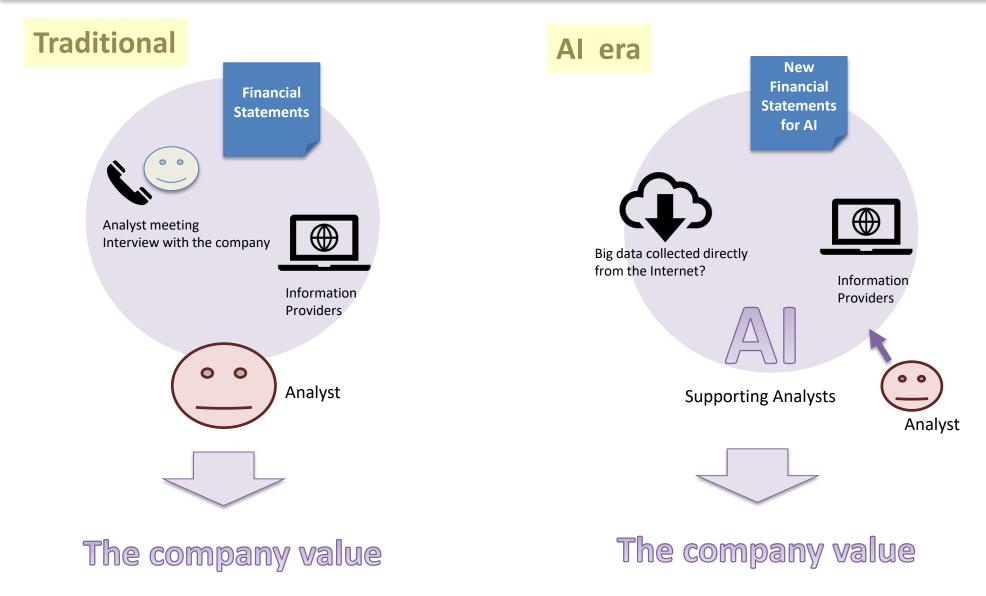
AI searches for papers much faster than humans do. In the world of accounting, machines are better suited to process large amounts of data than humans.

So, prior to producing a company annual report, real-time FV may be calculated by AI, and new technology such as blockchain may reveal the corporate value.

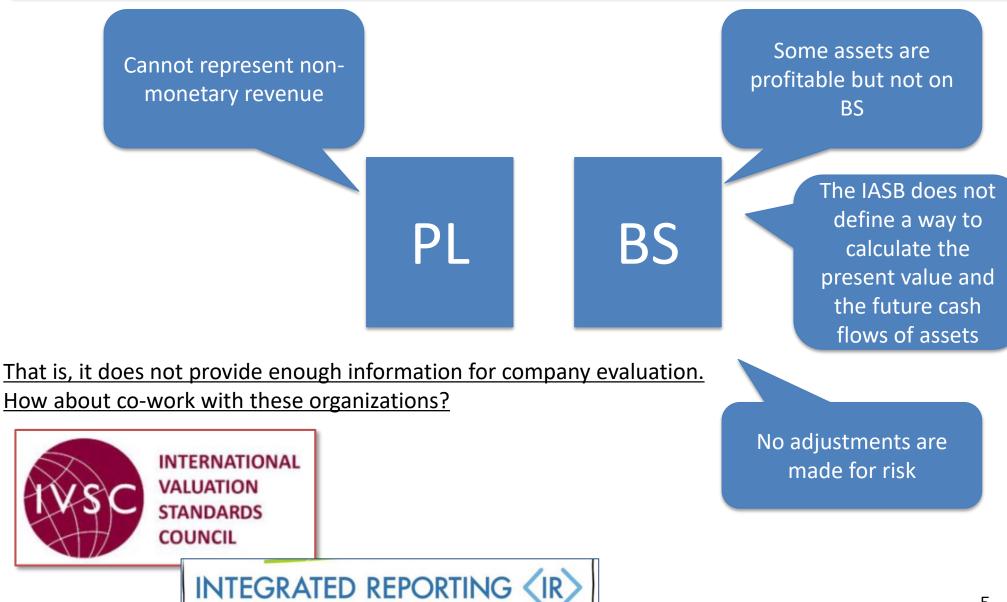
What do IFRS assets and profits represent? Intangible assets such as patents are not well represented in some cases, and companies have already announced other non-GAAP indicators.

Maybe, now we should think about how companies should disclose, to allow AI to easily derive the corporate value.

## What kind of financial statements are needed in the AI era?

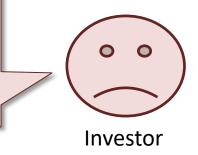


### **Problems IFRS faced**



# Discussion; AI does not make biased judgments

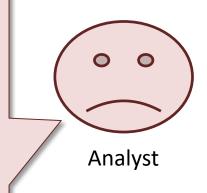
If AI can help make future forecasts better than investors or management, it will be a debate about why management doesn't use AI. Investors are not relying solely on the information disclosed by management. Also, thanks to big data based on the disclosed information, if AI helps us to predict better future cash flows, can we say that the original disclosed financial statements should be also sufficient information?





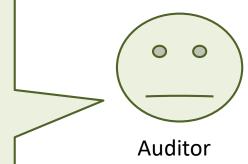
Al can make sales forecasts at a very detailed level. This is because AI can handle more data points than humans and select a focus point from the best information. So AI may do better than management. In general, management has a positive bias for the company's business. So data governance will be very important. We live in a world filled with fake news. It may be most necessary to establish good data governance.

From the perspective of users of financial statements, there is a certain benefit when AI is used more. Because IFRS makes use of FV accounting, it now includes a lot of judgments for future cash flow companies and accountants. As same as for intangible assets. And sometimes investors can't believe what management is thinking. I think AI will not take into account the concept of management's profits and losses. In other words, I think that accountants sometimes value management feelings, but AI can be very objective against them. Next, AI should have the capacity to handle macro data and anything at the same time, not just the company's financial statements. Therefore, I think that AI can calculate future cash flows better than the calculation using the human brain of the current management.



## Discussion: Can AI calculate FV better?

Al is increasingly able to accurately grasp transaction data on a cash flow basis. And Al takes into account risks and corporate value. The impact from any lawsuits can be taken into account for example. Do accountants judge the impact of lawsuits because they know the past patterns. What we can do if Al has that information? I think the machine can also judge based on evidence in the first place.





I am not an accounting expert, and I think AI is just a data mining. AI doesn't understand the meaning. Just looking statistically

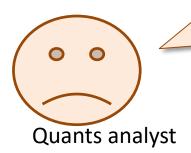
Al and human beings have different strengths. What is stronger than human beings, Machine has a very powerful and fast process. For example, Go is a game with a certain calculation. The player does not need to understand human thinking. Unless the rules are changed, the machine is strong. But we don't know whether human beings are stronger than machines or not in valuation.



# Discussion; Data is the matters

Al can perform language translation, it is easy to convert from English to German, but it is very difficult to convert from Japanese to German. Surely AI may give a better forecast of future cash flows through data mining, but humans need to check whether AI works well or not. Also, investment genius may perform better than AI

Investor



Another thing is that the data will become more important. Without data, AI does not work. For example, the translation, the past translated examples on the Internet are found and matched. However, with this method, the very first translation is not possible.

IFRS requires FV valuation for some assets and liabilities. However, sometimes calculations by the management may not be reliable. AI seems good at searching a lot of data, but it may be able to calculate FV better than management if it can process more data.

The problem is that IFRS standards should calculate FV, but IASB does not say how to do it. The standard calls for FV measurement under IFRS9. If you really want to calculate it, you need more data and AI techniques.

## Accounting in future…

- The accounting standards call for FV but do not have standard metrics. In the same way that the stock market does it, current accounting is not complex enough to seek fair value in real time.
- I. Traditional accounting may lose its relevance in order to increase the speed of generating information in real time or machine processing. 2. Accountants need to change their own position. 3. These moves mean that accountants will be more responsible for the future. 4. These are very challenging times.
- The value of corporate reporting has changed as the world has changed significantly. Since information based on accounting standards includes management estimation and some processing, it takes time to create it. As a result, investors are seeking raw data more timely. The other point is that you can no longer trust the information you have. For this reason, I think the significance of audits and guarantees from third parties is increasing. As the information in the world is becoming increasingly unreliable, audited financial statements continue to be useful as a reliable source of information. But at the same time, investors might require companies to provide raw data that has not been processed or audited. I think there will be requests for real-time provision. At that time, it may be required to guarantee that Raw Data is provided as a reliable mechanism.
- One of the megabanks recently announced that it would use big data for screening and expand its financing. Online financing for small and medium-sized enterprises, which are completed through the Internet procedure, is spreading. It seems that a wide range of management data is collected from accounting software and electronic commerce (EC) histories, and whether or not it is a growing company. Banks that are rendering by transaction data of online shopping may no longer see financial statements. In this era What kind of company evaluation will be seeing in the future?