Social Innovation in Industry 4.0

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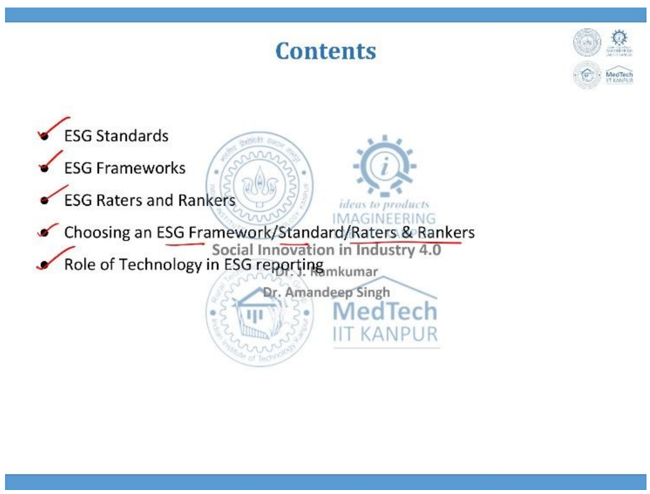
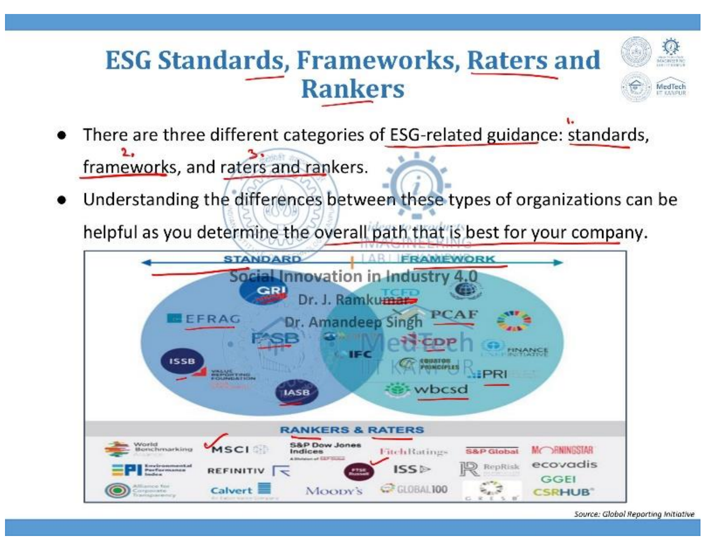
Lecture 47

Choosing the Right ESG Framework

Welcome to the second lecture of week 11. We are discussing the ESG frameworks in this week. That is an Environmental, Social and Governance framework. We will try to pick the right framework and try to see which are the different kinds of the ESG frameworks available.



So, we will talk about ESG Standards, ESG Frameworks, and ESG Raters and Rankers. Choosing an ESG Framework or Standard or Raters and Rankers would be taken next. Then, the Role of Technology in ESG Reporting would also be put some light on.



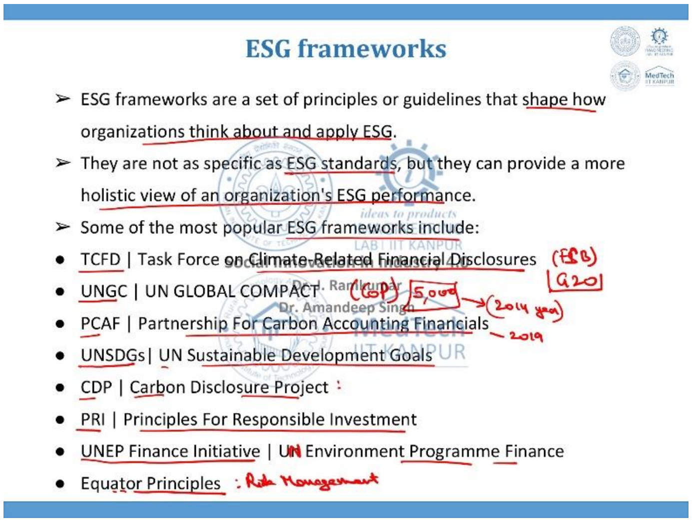
When we talk about ESG Standards, Frameworks, and Raters and Rankers, there are three different kinds of categories of ESG rated guidance, that is standards, frameworks and raters and rankers. Understanding the differences between these types of organizations can be helpful as you determine the overall path that is best for your company. So, there are standards, there are frameworks. The frameworks, which I mentioned in the last lecture, such as DCFD I mentioned, SASB I mentioned. I mentioned GRI.

Here, GRI is more of a standard now. And also, we have other standards, such as FASB, ISSB, EF, RAG, IASB and so on. Also, we have CDP, PCAF, PRI, WBCSD. This goes more towards the frameworks and we have rankers and raters. One who ranks, the systems of the companies based upon their ESG framework which are MCSI, ISS, we have Fitch ratings. A lot of the data management companies or the entrepreneurs have now come up with certain standards or the rating agencies have come, those who rank and rate different kinds of the ESG frameworks and the companies. Let us try to see the difference between them.

ESG standards. ESG standards are a set of agreed upon ESG quality requirements. They provide a common language for companies to report on their ESG performance and make it easier for investors and other stakeholders to compare different companies. Some of the most popular ESG standards are GRI.

As I mentioned before as well, GRI is one of the most widely used because it provides comprehensive information on your ESC data. Then, we have EFRA, that is the European Financial Reporting Advisory which was started in 2001 and it encourages majorly the European commissions to serve their public interest. Then, we have FASB, that is Financial Accounting and Standard Board which is a private standard setting body with its basic purpose to establish and improve the generally accepted accounting principles. This is within the US, within the United States of America and EFRA is for Europe. Then, we have ISSB, that is the International Sustainability Standard Board whose purpose is to develop standards for a global baseline of sustainability disclosures, so that they meet the information needs of different companies and a global database is developed here.

Then, we have IASB, that is International Accounting Standard Boards similar to ISSP which is an International Sustainability Standard Boards. I talk about the green database as were there. The IASB which is the International Accounting Standard Boards is an independent accounting and standard setting body. International Accounting Standard Boards is connected to IFRS which is International Financial Reporting Standards. IFRS is a separate body and IASB has become its independent agency or standard setting body which became separate in the year 2001.



Then comes the ESG frameworks which are a set of principles or guidelines that shape how organizations think about and apply ESG.

They are not as specific as ESG standards because they are now frameworks. The standards are which have the specific set rules supported by the regulatory systems. These all become ESG standards. Now, ESG frameworks are not very stringent as standards. So, they can provide a more holistic view of an organization's ESG performance. Some of the most popular ESG frameworks include TCFD as I mentioned in the previous slide as well.

It was developed by the FSB, that is the Financial Stability Board. It was developed to develop recommendations around climate-related financial disclosures. The need for these recommendations was highly identified as there is nowadays, you know G20 is going on. In the G20 when the countries are talking about the international trade and everything. So, the TCSD framework is also getting a lot of focus in that, because it promotes more informed investment and a lot of other benefits that we have discussed in the previous lecture.

Then comes UNGC. that is the United Nations Global Compact. UNGC is a standard that is majorly connected to the United Nations and this is a Communication on Progress (COP). That is communication on progress standards, that is a key component of your commitment to the UN Global Compact. There are several powerful drivers of non-financial reporting that are pushing companies to act responsibly and report on their actions. So, there are many companies which are part of it. So, there are, as of now, around 5000 COPs, which have been submitted by the participants of UNGC.

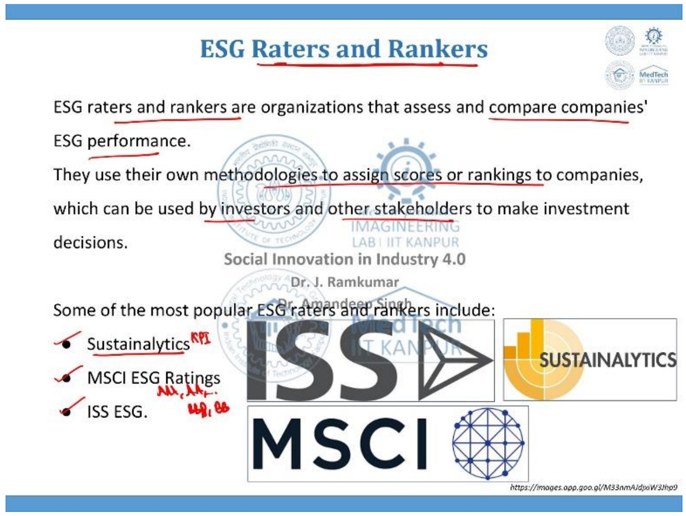
This is the report that I am talking about the year 2014. Then comes PCAF. PCAF is a Partnership for Carbon Accounting Financials. So, this is an insurance associated with the business, in which the standards are set, so that the financial accounting for the carbon emissions which are made is taken into account. So, this was set in the year 2019 to have a good control over GHG emissions.

So, in 2020, the first version of the global GHG accounting and reporting standard for the financial industry was launched where PCAF data was used. Then comes UNSDGs, that is the United Nations Sustainable Development Goals. This we will talk about at the end of this week. Then comes CDP, that is the Carbon Disclosure Project. CDP is also one of the frameworks that talk about the environmental practices and performance which are to be reported on different topics of ESG.

In order to shed some clarity on CDP particularities, it is worth exploring certain definitions of the CDP. So, CDP talks about climate change, water management, deforestation and so on. Then comes PRI, which is Principles for Responsible Investment. PRI is also one of the frameworks which talk about the ESG data. The certain principles which are mentioned for responsible investment given by PRI, such as principle 1 is, one has to incorporate ESG issues into investment.

Principle 2 is, one has to have an active owner and incorporate ESG issues into the ownership policies. Principle 3 is, the company should seek appropriate disclosure on ESG. Principle 4 is, promote acceptance and implementation., so on, certain principles are there which are set by this framework. Then, we have the UNEP Finance Initiative, that is United Nations Environmental Program Finance.

So, UNEP Finance has a framework that is connected to the environmental program and the financial accounting of that as well. Then, we have the Equator Principle. The Equator Principle is also a framework that is based upon risk management. It is a risk management framework which is adopted by many financial institutions for assessing and determining and managing their ESG status. It is basically intended to provide at least a minimum standard for due diligence and for monitoring to support responsible risk decision-making.

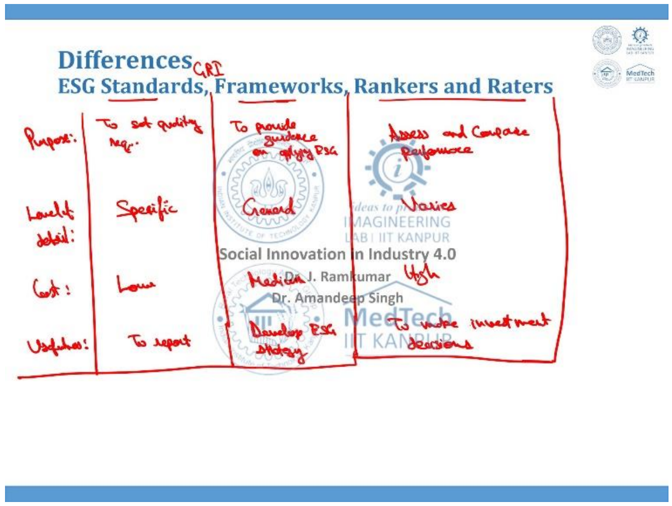


Next comes ESG Raters and Rankers. Raters and Rankers are organizations that assess and compare companies' ESG performance. They use their own methodologies to assign scores or rankings to companies which can be used by investors and other stakeholders to make investment decisions. Some of the most popular ESG Raters and Rankers include Sustain Analytics, MCSA ESG ratings and ISS ESG. Sustain Analytics is a mixing of two words sustainability and analytics.

So, sustain analytics ESG is a risk rating setup for having the status of your ESG setting. So, ratings offer a clear insight into company level ESG risk by measuring the size of an organization's unmanaged ESG risk. So, this is measured by a unique set of the key indicators or we call it KPI key performance indicators and many companies have also taken into their account maybe more than 15,000 companies have now used sustain analytics to get their rating and ranking in the terms of ESG. Then, we have MSCI ESG ratings. When I say MSCI ratings, these measure the management of financially relevant ESG risk and opportunities.

So, they use a rule-based methodology. That is, they identify industry leaders and the people who are not following the industry laggards according to their exposure to the ESG risks. So, ratings are triple A rating or double A rating or so on, it could be triple B or double B, based upon how closely they are managing their risk-related to ESG. Then comes ISS rating. ISS provides the companies with the required ESG data and helps to improve the transparency relating to ESG investing. The alignment and voluntary regulation in industry centers can be challenging due to fragmentation of different requirements.

So, ISA helps us to provide a rating of the company in this direction. ISS ESG conducts periodic reviews which are scheduled to coincide with the update cycle of each regime of the ESG standard when we try to have a review and verification of the company standards as per ESG requirements. So, these were ratings and rankings.



To have a clear differentiation between standards, frameworks and rankers, let me try to have small pointers that differentiate them. So, I will just put it here standards, frameworks, and rankers and raters.

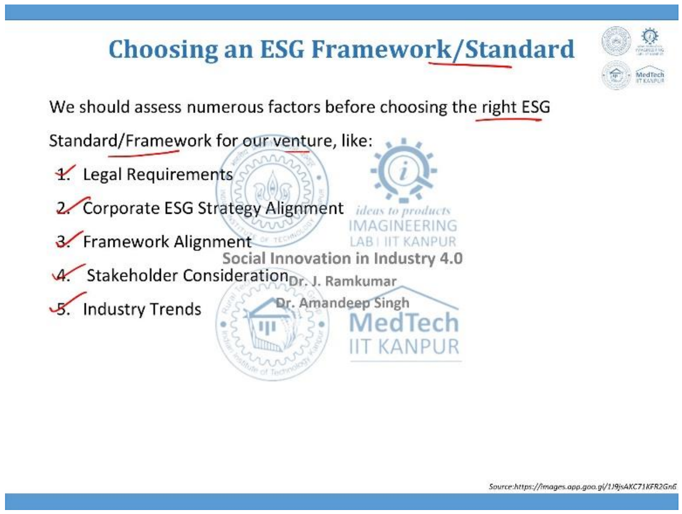
Let me try to say, what is the purpose? Purpose of the standards is to set quality requirements. This is the purpose. For the framework the purpose is to provide guidance. Guidance on what? Guidance on how to think about and how to apply ESG.

Guidance on applying ESG. Rankers and raters only help to assess and compare. Assess and compare the company's ESG performances. This is the purpose. Next comes the level of detail. If standards are there, obviously the level of detail would be specific, but specific frameworks we are trying to talk about, what we are talking about ES or G, all of them are specific out of them.

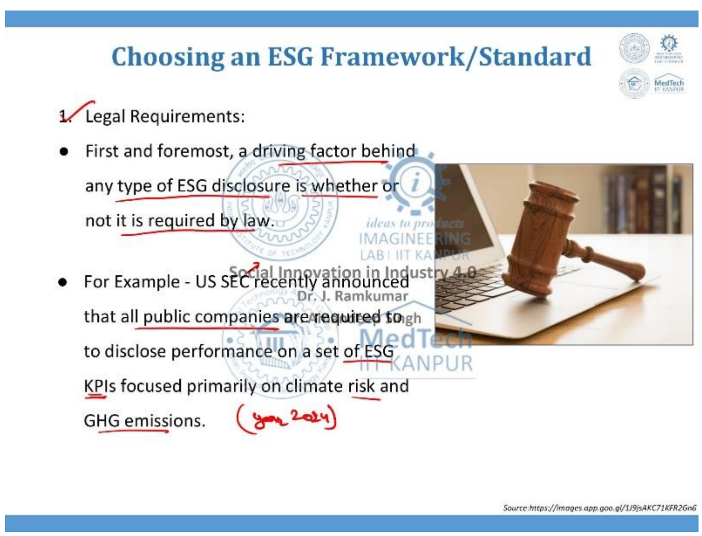
So, in the environment itself, we are only talking about the gaseous emissions, the waterways, the solar waste so the specific requirements could be there in the standards. In ESG frameworks, it is general. As we talk about the GRI framework, it is a very general thing. Though, GRI majorly talks about the standards because it also lays the standards, it also helps to guide the people. So, GSE falls in between standards and framework. So, GRI falls in between standards and frameworks. So, here raters and rankers, it depends on what data they require. So, there is a lot of variety in the data, so the level of detail is varied here.

Then comes the cost. The cost of the standards are low, the cost of the frameworks are medium and when we are really trying to assess it, it becomes a little higher cost. The usefulness, that is how these are being used. So, standards are used for the companies to report on their performance, and frameworks are used for the companies to develop ESG strategy and raters and rankers are useful for investors and other stakeholders to make investment decisions. Now, we are very clear about the difference between standards, frameworks and rankers.

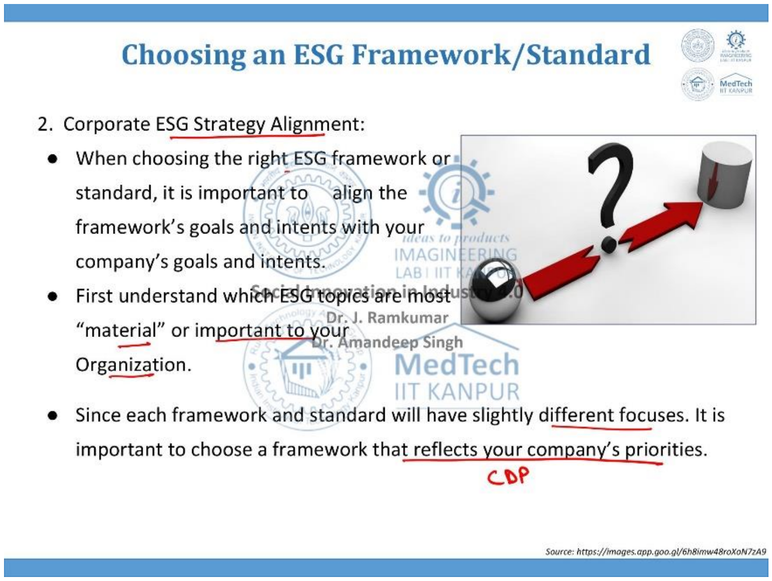
Standards are just to set the requirements of the quality that is therefore the reporting. Frameworks are there to provide guidance on how to think about applying the ESG and to assess and compare the company's performance, raters and rankers are used.



Choosing an ESG Framework or Standard. We should assess numerous factors before choosing the right ESG standard or framework for our venture, such as legal requirements, corporate ESG strategy alignment, framework alignment, stakeholder consideration and industry trends. Let us try to see all of them.



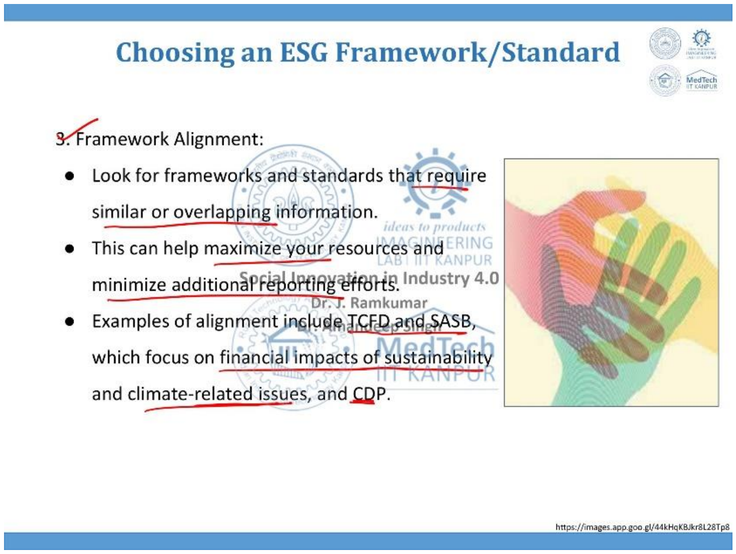
Legal requirements are the first. That is the first and the foremost driving factor behind any type of ESG disclosure that is whether or not it is required by law or not. For example, the US SEC recently announced that all public companies are required to disclose performance on a set of the ESG KPIs, the Key Performance Indicators focused primarily on climate risk and GHG emissions. So, this is a SEC, that is the Security and Exchange Commission has given an ultimatum that by year 2024 all the companies have to give a set of the KPIs which are primarily focused on the GHG emissions. So, this is a legal requirement.



Next comes the corporate ESG strategy alignment. When choosing the right ESG framework or standard, it is important to align the framework's goals and intents with your company's goals and intents. So, one needs to first understand which ESG topics are most material or important to our organization.

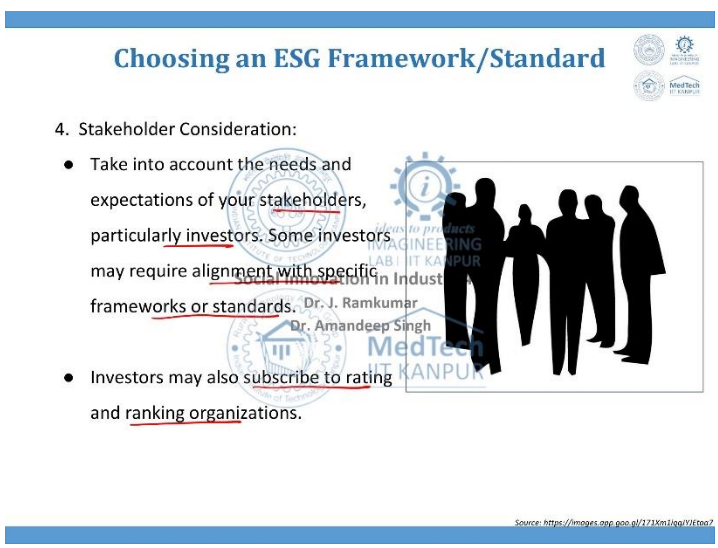
Since each framework and standard will have a slightly different focus. For example, some may have better skewness towards E, some maybe talking about social responsibility matters, some might too focus on governance. So, ESG, which of the factors of these three are more focused by the company. That is a little different, that comes under the corporate alignment towards ESG.

So, it is important to choose a framework that reflects your company's priorities. For example, if carbon footprint tracking is a top priority for the company. Then, these frameworks that could be taken, maybe CDP, that is Carbon Disclosure Project.



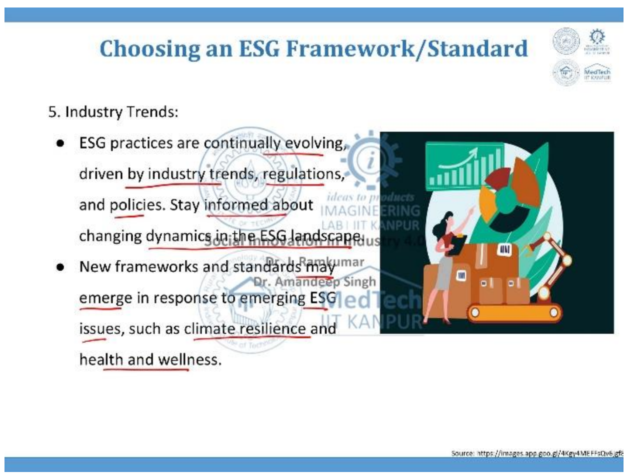
Then comes the framework alignment. Since the corporate alignment to the framework is taken care of, now framework alignment to the corporate's requirement. Look for the framework and standard that requires similar or overlapping information.

This can help to maximize your resources and minimize additional reporting efforts. Some examples of your alignment include TCFD and SSB, which focus on financial impacts of sustainability and for climate-related issues CDP is taken because CDP majorly talks about the climate viewpoint only.

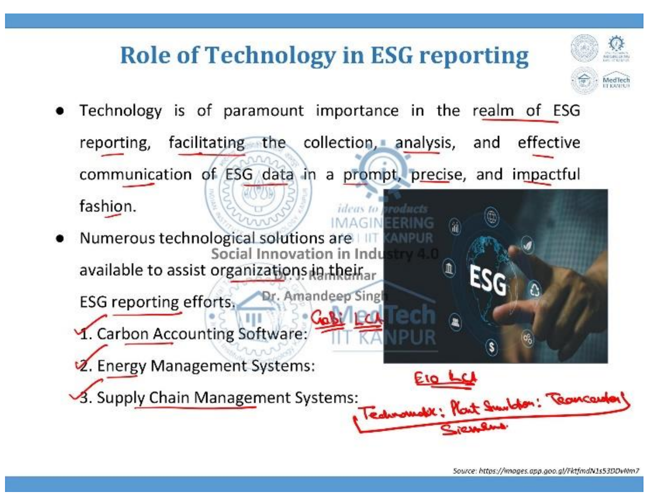


Next comes the stakeholder consideration. Take into account the needs and expectations of the stakeholders particularly the investors. Some investors may require alignment with specific framework or standards.

So, investors may also subscribe to rating and ranking organizations based upon what kind of investors they wish to attract to their company to ensure your chosen disclosure strategy aligns with the expectations of the people who are going to actually fund you or invest in your company.



Then comes industry trends. ESG practices are continually evolving, driven by industry trends, regulations and policies. So, we need to stay informed about changing dynamics in the ESG landscape. New frameworks and standards may emerge in response to emerging ESG issues, such as climate resilience and health and wellness might also push some of the other frameworks specific to the countries, specific to the areas which are required is a para. So, regulatory update to the materiality assessment and monitor market and policy changes to adapt to evolving ESG requirements is must.

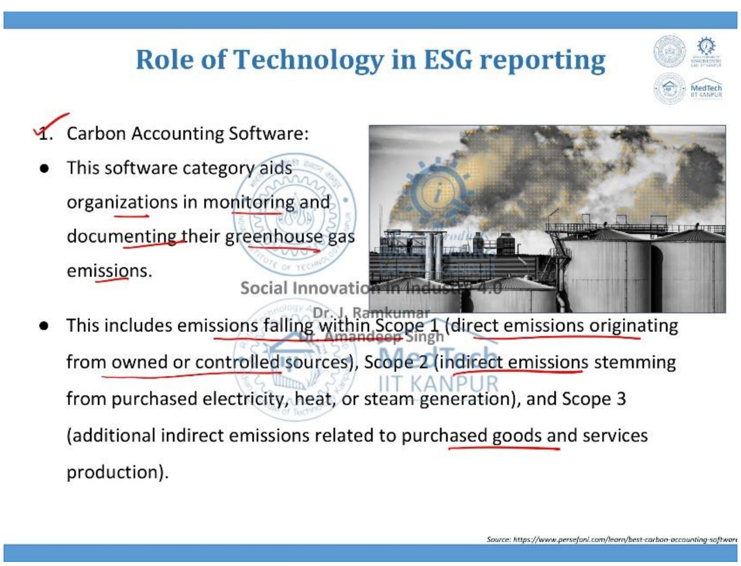


Technology is of paramount importance in the realm of ESG reporting, facilitating the collection, analysis, and effective communication of ESG data in a prompt, precise and impactful fashion. Numerous technological solutions are available to assist organizations in their ESG reporting efforts. For instance, as we are talking about this course Social Innovation in Industry 4.0.

When we are talking about Industry 4.0, all the small factors of Industry 4.0, all the elements of Industry 4.0, that is Cyber Security, the Cloud Computing, the Internet of Things, the Industrial Internet of Things, the Internet of Things. They all help us to have access to the different kinds of the rankers and data, the standards, the frameworks in any part of the world. So, different kinds of Carbon Accounting software are there. Energy Management Systems are there, Supply Chain Management Systems are there.

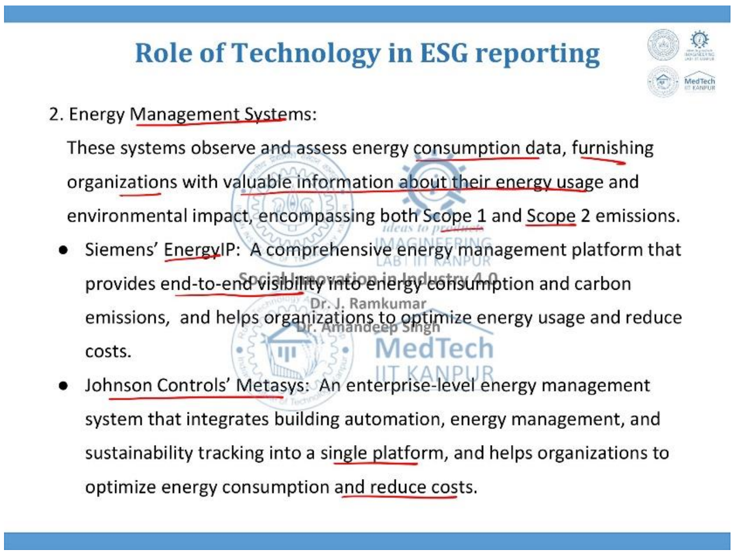
For example, there is a software known as GABI which helps you to have your LCA, it is a Life Cycle Assessment of your goods. Then, there are softwares which are Energy Management Systems, maybe which are software, such as EIO LCA is a database, that is available. So, multiple systems are there, Supply Chain Management Systems are there. For example, there is a system known as or software known as Technomatics or we have plant simulation or we have a team center.

These are the softwares which are provided by Siemens. So, this helps us to have a good track of energy, good track of Carbon Accounting, and Supply Chain Management. That is the enterprise resource management is also part of it. So, particularly concerning the emissions, particularly concerning the governance or particularly concerning the societal benefits could be tracked for different kinds of the software. That would be helpful in reporting about ESG. Let me try to see these three softwares, Carbon Accounting Software, Energy Management Systems and Supply Chain Management Systems.



Carbon Accounting Software, this software category aids organizations in monitoring and documenting their greenhouse gas emissions. This includes emissions falling with scope one, that is direct emission originating from owned or controlled sources.

Scope two, that is indirect emissions stemming from purchase electricity, heat or steam generation. And, scope three, that is additional indirect emissions-related to purchase goods, services and productions. So, total energy, if I say for a product, is known as embodied energy. So, here certain examples could be carbon thrust, South Pole, Evoca, the carbon neutral company etcetera, those who have taken or those who are using this Carbon Accounting Software.



Next comes Energy Management Systems. These systems observe and assess energy consumption data, furnishing organizations with valuable information about their energy usage and environmental impact which encompasses both scope one and scope two emissions.

So, Siemens Energy IP, a comprehensive energy management platform that provides end-to-end visibility into energy consumption and carbon emissions and helps organizations to optimize energy usage and reduce costs. Then, we have Johnson's Control Metasys, which is an enterprise level Energy Management System, that integrates building automation, energy management and sustainability tracking into a single platform. This helps organizations to optimize energy consumption and reduce costs.

Also, there are certain Supply Chain Management Systems. These systems can help organizations to track and report on the environmental and social impact of their supply chain including emissions generated by their suppliers that is the scope three emissions.

So, certain examples are there, such as SAP Ariba. SAP Ariba is an end-to-end procurement solution which helps companies manage their entire procurement process from sourcing to invoicing. Then, JDA software, which is a cloud-based Supply Chain Management solution that provides a range of tools from planning, sourcing, manufacturing, delivering, and so on. Infor SCM, this is also a comprehensive SCM solution that includes features for procurement, manufacturing, logistics, warehouse management. So, these are only three software systems that are mentioned there. On top,

there are many other software systems which are helpful to have a technological benefit of Industry 4.0 into the ESG data management.

To summarize this lecture, while there are many factors to consider when choosing an ESG framework or standard, note that not all of these factors hold equal weight. The relative weight of these factors can vary by individual company needs. By simply identifying and categorizing these factors as we have done above, you will begin to see which factors take priority over the others.

It is also important to keep in mind that no ESG framework is perfect and each has its own strengths and limitations. It is of utmost importance to stay abreast of current regulations that can impact your company on organization. We will talk about the ESG gap analysis and carbon crediting in the next lecture.

Thank you.