ethos

ETHOS STUDY 2022

CORPORATE DIGITAL RESPONSIBILITY OF SMI EXPANDED INDEX COMPANIES

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PRI Principles for Responsible Investment

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1. Introduction

In 2022, for the second consecutive year, the Ethos Foundation reviewed the digital responsibility of the largest companies listed on the Swiss stock exchange. The results of this latest study are broken up across seven themes, that map to the seven good practices identified by Ethos in relation to digitalisation and corporate digital responsibility (see p.5).

Digitalisation is one of the major challenges facing companies, and therefore their shareholders today, in the same way as climate change or the respect for human rights in supply chains. Companies can no longer ignore key issues related to cybersecurity, data protection, the impact of algorithms and artificial intelligence (AI), digital sobriety or the replacement of humans by algorithms and machines.

Given these ongoing and still evolving developments, in 2020, Ethos decided to identify the various challenges of digitalisation faced by companies. As a result, seven themes and related best practices relating to digitalisation and digital responsibility were identified and published in an "Engagement Paper" which was shared with the chairperson of the largest listed Swiss companies (the SMI Expanded) in order to raise their awareness on the topic. Ethos subsequently engaged with these companies to encourage them to adopt best practices and improve their transparency in this area.

In 2021, a first study was carried out in collaboration with EthicsGrade, a UK-based company specialising in the rating of companies ("ratings") according to their management of digital issues, to assess the practices of the largest companies listed in Switzerland. A questionnaire was sent to these companies to enable them to explain their practices. This study revealed a flagrant lack of preparation to face the challenges of digitalisation as well as a very low degree of transparency in terms of digital responsibility.

Since then, Ethos has continued its dialogue with the companies concerned in order to make them even more aware of these issues. In particular, a webinar was organised in February 2022 to discuss the results of the study but also the potential improvements that could be made to the questionnaire. The platform on which companies could respond to the questionnaire was also improved and its use made more user-friendly.

In 2022, Ethos decided to carry out a second study, still in collaboration with EthicsGrade, to measure the progress of companies. A webinar was organised in February 2022 to present and discuss the results of the previous year's study with the representatives of the companies. The companies were then able to improve the quality of their responses for the second study, completing it between July and September 2022. Ethos plans to carry out a third edition of the study in 2023 in order to assess how Swiss companies' practices have evolved over a period of three years.

REGULATION IN PROCESS

This study sits in the context of increasing regulatory requirements relating to digital issues and spanning across data, AI and how it is used.

In Switzerland, companies will have to comply with the provisions of the new Data Protection Act (LPD), which largely incorporates the European General Data Protection Regulation (GDPR), from September 1, 2023. In particular, the introduction of the principles of "privacy by design" and "privacy by default" means that all software, hardware and digital services must be configured in such a way as to protect data and respect the privacy of users. Companies processing data will also have to mention the countries to which they export data and report security breaches. Customers whose data has been used will also be given new rights, in particular the right to data portability (the right to have personal data returned to them in particular) and the right to have an individual's self-mandated decision reviewed.

In Europe and the United States, legislators are focusing on AI and its use. The European Union's regulatory proposal could apply as early as 2024 and seeks to ensure that users can trust what AI has to offer and to address undesirable outcomes that could potentially be caused by AI systems such as a threat to the security and rights of people, for example a social rating. The EU proposal also seeks to apply stricter obligations on any system identified as being high-risk, such as CV-sorting software for recruitment procedures or credit scoring denying citizens opportunity to obtain a loan.

In the United States, the growing use of technology and the increased awareness of civil society on AI-related issues will likely lead to the adoption of new laws in the near future. In New York, for example, a new law is expected to come into force in 2023 and will mandate all companies to inform candidates when recruitment software is used and, above all, to ensure that these technologies do not integrate any hiring bias.

48

Companies analysed[1]

98

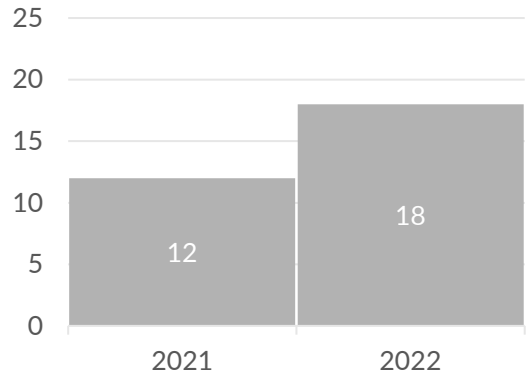
Questions

ETHOS' SEVEN PRINCIPLES ON CORPORATE DIGITAL RESPONSIBILITY

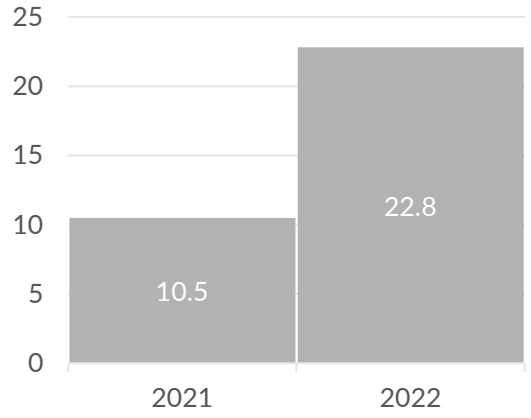
1. **Digital governance**
   Establish a digital responsibility code;
2. **Digital transparency**
   Ensure transparency with stakeholders on digital practices and footprint;
3. **Data protection**
   Comply with the highest standards of data processing and data protection;
4. **Responsible AI**
   Establish ethical principles for the use of artificial intelligence;
5. **Sensitive activities**
   Exclude sensitive activities related to digitalisation;
6. **Social impact**
   Ensure a fair and responsible social transition;
7. **Environmental impact**
   Help reduce the environmental footprint of digital technology.

- Link to the ethos Engagement Paper
- Link to the detailed results 2022
- Link to the 2021 study

PARTICIPANTS IN THE QUESTIONNAIRE



AVERAGE SCORE



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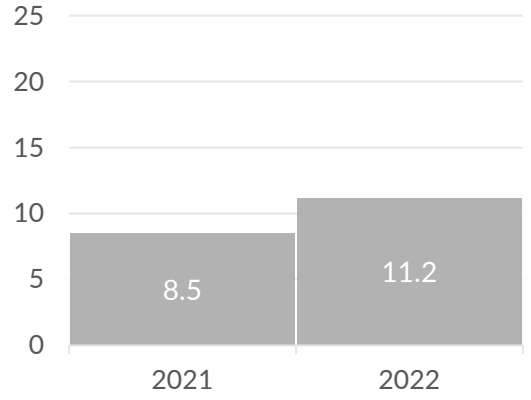


[1] SMI Expanded on 30 June 2021

2. Methodology

In July 2022, Ethos sent a letter to the chairpersons of the 48 targeted companies asking them to participate in this second study on digital responsibility. To enable a year-on-year comparison, Ethos decided to analyse the practices of the same companies as in 2021 and to not take into account the limited number of changes that had taken place in the components of the SMI Expanded since September 2021. Ethos also streamlined the 2022 questionnaire to facilitate companies' task of responding via a link to a dedicated platform.

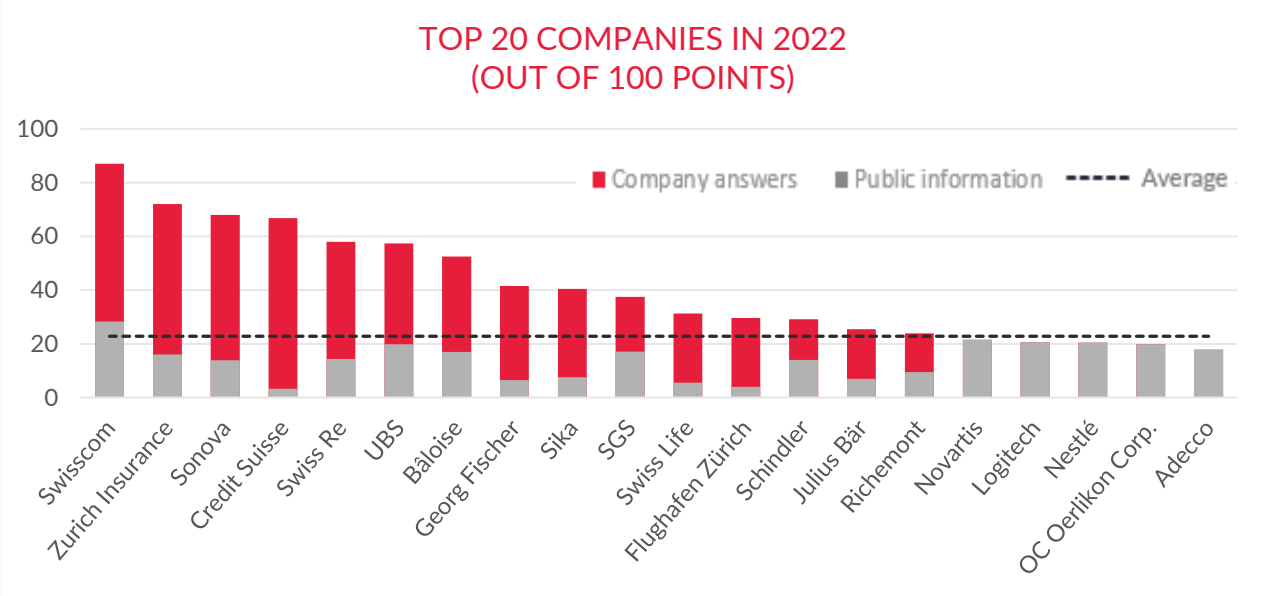
There are four parts to the methodology followed by Ethos and EthicsGrade to assess companies' digital practices:

1. A questionnaire of 98 questions was submitted to the 48 companies. As mentioned previously, this questionnaire was divided into seven themes to assess how Swiss companies manage each of them against the corporate digital principles defined by Ethos. Companies had between July and September 2022 to respond to the questionnaire;
2. In parallel, and like in 2021, the EthicsGrade team independently completed the same questionnaire on the sole basis of publicly accessible information by identifying all the relevant information published by the companies (annual reports, sustainability reports, codes of conduct, etc);
3. A comparison was carried out between the responses collected by EthicsGrade (also referenced as "public information") and the responses provided by the companies themselves ("company answers"), and a comparison score was assigned against each question : "Yes", "Yes and the information is public", "No" and "Other[2]". The companies that responded to the questionnaire also had the ability to provide additional information not publicly available but nonetheless relevant to highlight specific internal practices, strategies or documents;
4. EthicsGrade subsequently carried out an assessment of practices for each of the seven principles predefined by Ethos. Each of the 98 question was assigned a weighting ranging from 0.4 to 1.5 points to calculate an overall consolidated score, as well as a score for each of the seven categories. These final scores range from 0 to 100 points and are assigned against each company whether they responded or not to the questionnaire (see top 20 companies on page 7).

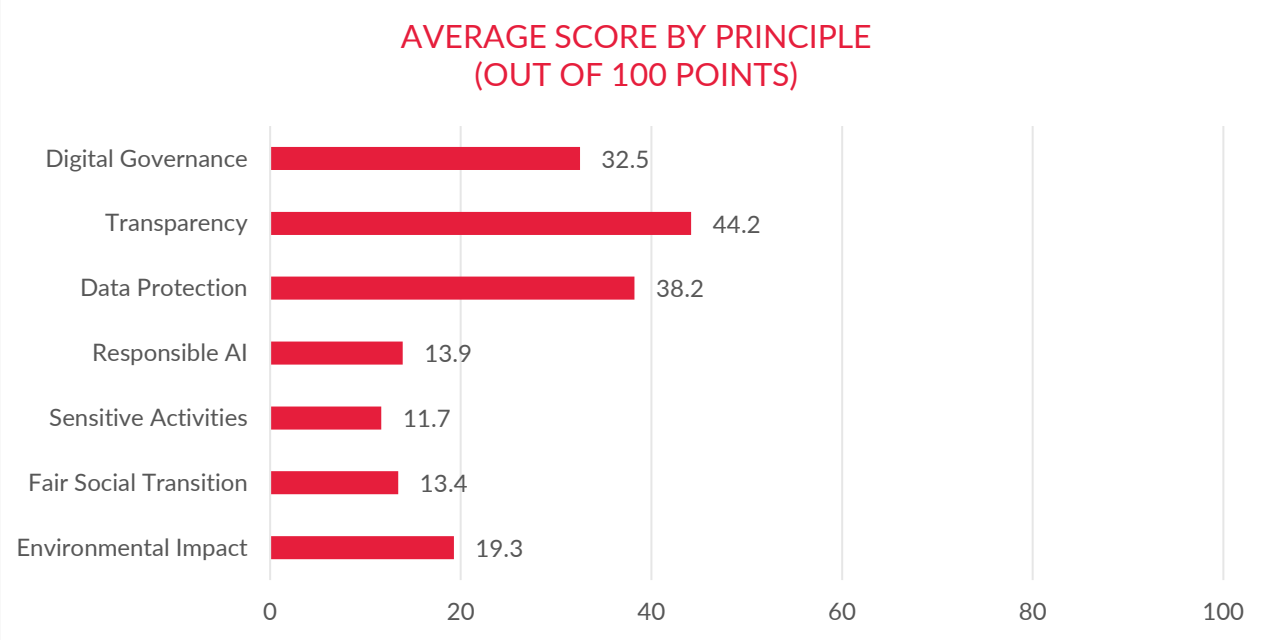
Then, Ethos and EthicsGrade reached out to companies to provide them with preliminary results of the research based on public information only and a comparison of their progress against their competitors. Companies that responded to the questionnaire also received a detailed summary dashboard allowing them to benchmark themselves against their peers for each of the seven Ethos principles. In addition, EthicsGrade also offered them the opportunity to discuss the analysis performed so that they could better understand the underlying methodology, implications of the findings and areas for improvement.

This year, Ethos has decided to publish the final scores of all companies asked to participate. Given the small amount of public information available on these different digital topics, it is not surprising that the companies who took the time to complete the questionnaire were also those that obtained the best final scores. Companies that are open to dialogue and demonstrate transparency are generally recognised by investors and other stakeholders concerned about ESG issues as being more committed to social and environmental responsibility.

[2] Among these "other" responses, companies were given the option of indicating whether an issue was not relevant to their industry, whether they preferred not to disclose it, or whether they felt that an issue needed to be discussed in greater detail. The tables on page 7 to 22 only show affirmative responses – made by companies or collected by EthicsGrade - as this study seeks to highlight good business practices.



The chart above shows the number of points obtained by the companies based on their responses to the questionnaire (in red) and public information (in grey).It can be noted that among the 18 companies that responded to the 2022 questionnaire, 15 ranked in the top 20 (out of a total of 48 companies from the SMI Expanded that were analysed). The company that scored best ranked solely on public information came in 16th position.



The chart above shows that none of the seven Ethos principles obtains an average score higher than 45 points. Artificial intelligence as well as the social and environmental impact of their digital systems are areas in which Swiss companies still communicate very little.

3. Main results

Thanks to the dialogue led by Ethos and EthicsGrade, the number of companies that agreed to participate in the study this year increased by 50%, from 12 in 2021 to 18 out of 48 in 2022. Of the 18 companies that responded, ten companies participated for the first time in 2022 (PSP Swiss Property, Richemont, Schindler, SGS, Sonova, Swisscom, Tecan, UBS, VAT Group and Zurich Insurance). Conversely, four companies that responded to the 2021 questionnaire did not wish to renew the exercise in 2022 (Cembra Money Bank[3], Helvetia, SIG Combibloc Group and Straumann). Consequently, only eight companies responded to the 2021 and 2022 questionnaires (Bâloise, Credit Suisse, Flughafen Zurich, Georg Fischer, Julius Baer, Sika, Swiss Life and Swiss Re).

Companies that did not participate mentioned a lack of time, too many separate requests to participate in sustainability-related studies, or did not provide further explanation. More worryingly, however, several companies, including some active in the technology sector, indicated that they did not feel concerned by the topic.

In addition to the increased rate of participation, Ethos was pleased to note the substantial increase in companies' scores:

- Seven companies scored above 50 points in 2022 (Bâloise, Credit Suisse, Sonova, Swiss Re, Swisscom, UBS and Zurich Insurance) vs. only three companies exceeding 20 points in 2021;
- The average score for the 48 companies analysed increased to 22.8 points in 2022 from 10.5 points in 2021;
- The average score for the 18 companies that responded to the questionnaire was 42.4 points vs. 11.1 points for the 30 companies that did not respond;
- In 2022, Swisscom scored the highest with 87 points vs. 39.6 points for Bâloise last year;
- Five companies recorded a lower result than in 2021: Straumann (-18.2 points), Cembra Money Bank (-6.3 points), Clariant (-2.9 points), Partners Group (-1.1 point) and Adecco (-0.2 point).

It is important to underline that the scores higher than 30 points were all obtained by companies which responded to the questionnaire. The company with the highest score which did not participate– in this case Novartis with 21.5 points – is ranked in 16th place (see top 20 on page 7).

For one given company, the score based on the answers provided by the company vs. the score based on publicly available information identified by EthicsGrade however can vary substantially. Based on public information alone:

- The overall average would fall from 22.8 to 11.2 points (vs. 8.5 points in 2021), highlighting that there is still a great lack of transparency regarding Swiss listed companies' digital responsibility and that very few of them publish relevant or sufficient information on this subject;
- Swisscom scored the highest with a total of 28.3 points, which is significantly better than the 18 points recorded by Adecco in 2021;
- Only four companies achieved a score above 20 points: Swisscom (28.3 points), Novartis (21.5 points), Logitech (20.5 points) and Nestlé (20.4 points).

The biggest increases compared to the 2021 study are all attributable to companies that responded to the questionnaire, namely Swisscom (+66 points), Zurich Insurance (+57.2 points), Sonova (+56.2 points) and Credit Suisse (+56.1 points). Regarding the scores based on public information, the most significant increases are made by OC Oerlikon (+11 points), UBS (+10.9 points), Novartis (+9.2 points) and ABB (+8.2 points).

Looking at the companies and the sector they operate in, the insurance sector obtained, like last year, the best result with an average score of 50.2 points, far ahead of the financial sector (28.7 points). It's also worth noting that the health sector, which we would anticipate as being particularly concerned by these issues, only ranks fourth with an average of 19.3 points, behind the insurance, financial and industrial (23.1 points) sectors

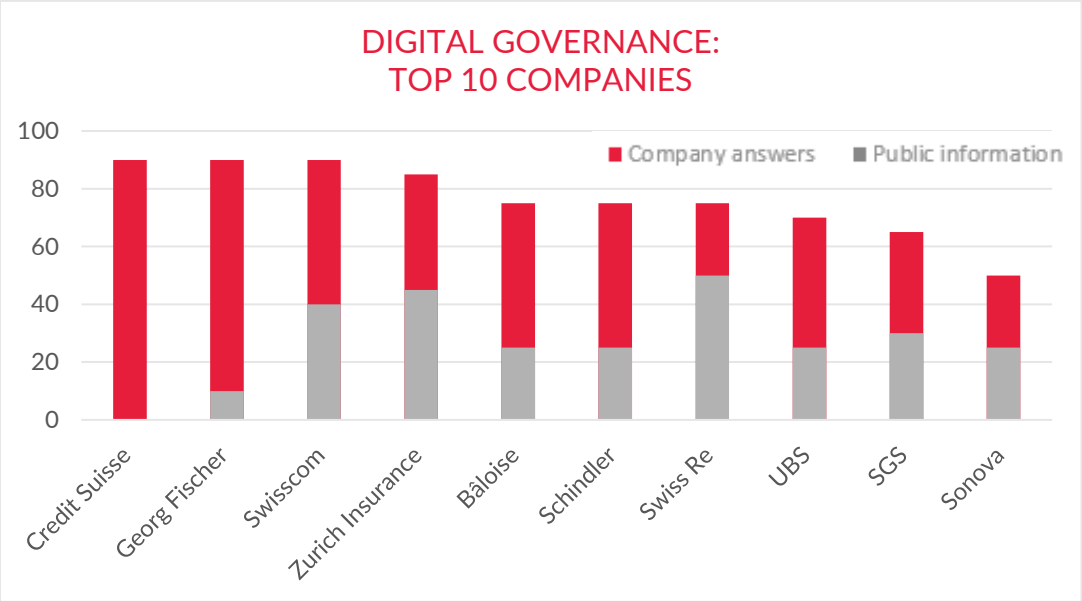
Finally, companies on average obtained more points on questions relating to transparency (44.2 points) – thanks in particular to the publication of basic documents – and data protection (38.2 points) than on questions concerning data protection. intelligence (13.9 points), so-called sensitive activities (11.7 points), as well as the social (13.4 points) and environmental impact of digitalisation (19.3 points).

[3] Having left the SMI Expanded index in September 2022, Cembra Money Bank did not wish to participate in the study again this year.

90
Maximum score

33
Average

0
Minimum score



KEY QUESTIONS	"YES" IN 2022	"YES" AND PUBLIC INFORMATION
Companies which have adopted a digital responsibility code	9 (+8)	0 (-)
Companies which have put in place a governing committee or board which oversees technology governance (separate to line management)	21 (+11)	8 (+2)
Companies which have created a "chief digital officer" position	22 (+4)	17 (+3)
Companies which have developed a cyber security strategy	34 (+18)	28 (+14)
Companies whose cybersecurity strategy is reviewed by a board of directors committee on a regular basis (monthly, quarterly, biannually)	15 (+11)	7 (+7)
Companies with a "chief information security officer" position	29 (+7)	24 (+3)
Companies which have laid down any ethical principles related to the use of artificial intelligence	8 (+5)	4 (+2)
Companies for which AI principles are a precondition for the development of AI Technologies	3 (+2)	0 (-)

Only affirmative answers - public or based on the questionnaire - are indicated in the table above. In brackets, these are the changes compared to the previous year.

4. Detailed results by principles

PRINCIPLE 1: DIGITAL GOVERNANCE

The first part of the study concerns digital governance. The role of the board of directors in this area consists of making strategic decisions to ensure that the company invests sufficiently in the field of new technologies while respecting the highest ethical, environmental and social standards. Given the complexity of the topic, the "disruptive" nature of new technologies and their rapid development, the board of directors must also ensure that it has the necessary knowledge and understanding of the various issues related to the digitalisation of the economy. Finally, it must ensure that the executive management manages these issues credibly and implements policies and procedures that respect best practices in this area.

For Ethos, good governance begins with the adoption of a digital responsibility code. This is indeed essential to ensure that the company takes into account the challenges and risks associated with digitalisation in its strategy and day-to-day activities. The way in which these issues are managed must be planned and specified in the code, as must the management of risks related to cybersecurity, privacy, data processing and the use of AI.

As such, the number of companies indicating that they have a digital responsibility code has increased significantly, from just one in 2021 (Bâloise) to nine this year. Furthermore, two companies assured in their answers to the questionnaire that they intended to adopt such a code during the next 12 months. It is therefore expected to see this number to increase in the coming years as issues related to digitalisation become more and more central and crucial for companies. Unfortunately, none of the 48 companies analysed has yet published its digital responsibility code publicly.

Another criterion taken into account to assess the digital governance of a company is the establishment of a committee or body responsible for overseeing the management of technological issues. In this respect, the number of companies having or guaranteeing to have such a body has increased from 10 in 2021 to 21 in 2022. The number of companies with a Chief Digital Officer has also increased from 18 in 2021 to 22 in 2022.

The most notable progress however concerns cybersecurity. Indeed, of the 48 companies analysed, 34 now indicate, publicly or in the context of this study, that they have established a strategy to fight cybercrime, compared to only 16 last year. The number of companies publishing information about their cybersecurity strategy has also doubled, from 14 to 28 in one year. They are also 15 companies, compared to only four in 2021, which ensure that their strategy is reviewed on a regular basis (monthly, quarterly or annually) by the board of directors or one of its committees. The number of companies with a person in charge of IT security ("Chief Information Security Officer") has increased from 22 in 2021 to 29 in 2022. The banking and insurance sectors still seem to be the best prepared since nine of the 11 companies analysed claim to have implemented such a cybersecurity strategy.

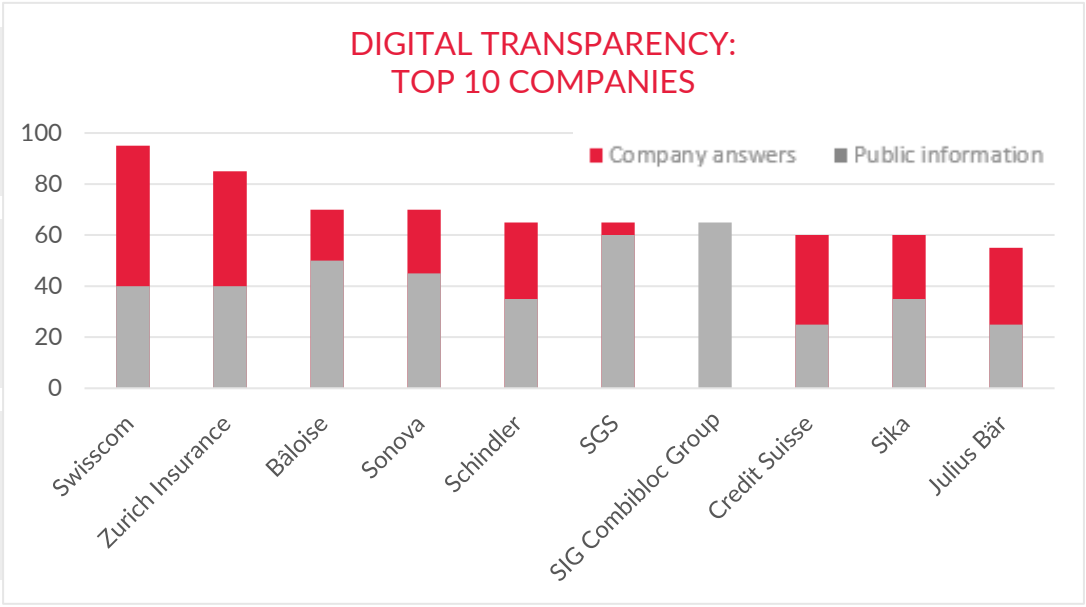
Finally, companies were asked whether they had established ethical principles regarding the use of AI. Only eight replied in the affirmative, while three confirmed that the analysis of these principles was a prerequisite for the development of any new technology. But here too, transparency is not yet there.

The average is 32.5 points for this principle – compared to 15 points in 2021 – with a best score of 90 points for Credit Suisse, Georg Fischer and Swisscom. The best results are however all based on the responses of the companies. If we had to rely solely on public information the best score would be to the credit of Swiss Re with 50 points, just ahead of Zurich Insurance Group (45 points). This shows that companies still communicate very little about their digital governance. It should also be noted that seven companies did not obtain any points for this chapter.

95
Maximum score

44
Average

15
Minimum score



KEY QUESTIONS	"YES" IN 2022	"YES" AND PUBLIC INFORMATION
Companies having necessary processes in place to respond to a data breach	21 (+11)	9 (+2)
Companies which, when data/security breaches have been reported, have published notifications on their website	10 (+6)	5 (+2)
Companies clearly communicating (e.g., tagging, highlighting) when AI is used in the decision making of a process, good or service	5 (+2)	3 (-1)
Companies whose data privacy policy is easily accessible	48 (+5)	48 (+5)
Companies which communicate externally the locations of its data storage centers	6 (+6)	6 (+6)

Only affirmative answers - public or based on the questionnaire - are indicated in the table above. In brackets, these are the changes compared to the previous year.

PRINCIPLE 2: DIGITAL TRANSPARENCY

Transparency is at the heart of the digital responsibility of companies, it concerns both data collection and the use of AI as well as the environmental and social impact of the digital technologies they use. For Ethos, companies must first inform all their stakeholders (clients and customers, staff members, suppliers, etc.) of the collection of personal information that they carry out as part of their activities. The data collected and stored should also be obtained with the free and informed consent of the persons concerned ("Opt In").

This new study shows that all the targeted companies now have a public and easily accessible policy on data confidentiality ("Data Privacy Policy"), as required by European law.

Ethos considers that it is essential for companies to implement the highest security standards in order to avoid any leakage, theft or unauthorised commercialisation of data. However, if certain data were to be used by an unauthorised third party, companies should undertake to quickly inform the relevant authorities but also all the persons concerned so that they can take steps to avoid being the victim of an attack or misuse of their personal data. As such, 21 companies – i.e. 11 more than last year – now claim to have a clear procedure to follow in the event of a cyberattack compromising data security, in particular to inform all parties concerned. Unfortunately, only nine of them, two more than in 2021, publish information about these procedures.

In addition, ten companies, compared to four a year earlier, indicated that they had published information following a data leak, or at least that they would do so if necessary. This has been publicly confirmed for half of them.

The digital transparency of companies also concerns the use of AI. Customers, staff but also civil society in general expect companies today to be not only transparent about the AI-related technologies they use but also about the use they make of it. This transparency applies to many areas, starting with human resources, health diagnostics, the allocation of credits and insurance, and the selection of service providers. However, it appears from this second study that progress in this area remains very weak from one year to the next. There are indeed only five companies which indicate when they use AI systems, whether in their decision-making processes, such as when recruiting employees, or in their products and services, for example when interacting with a conversational computer program ("chatbot") on a website.

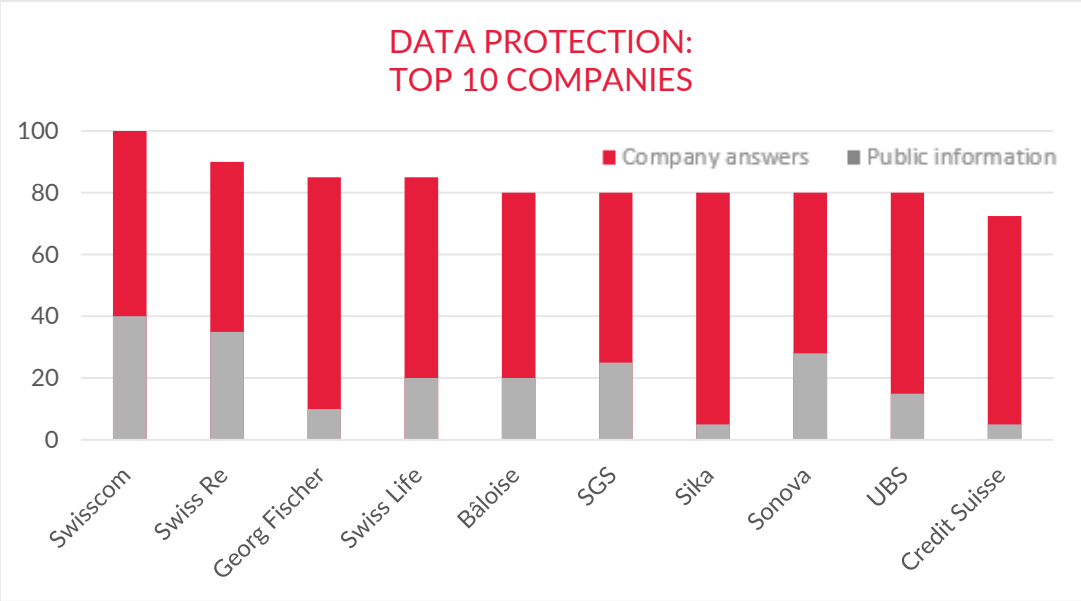
Finally, there is a slight improvement regarding the location of data storage centres since seven companies now publish this information, while none of them did in 2021.

The average score rose from 34 points in 2021 to 44.2 points this year, making this chapter the best-performing chapter for companies for the second consecutive year. Swisscom obtains the best score with 95 points, ahead of Zurich Insurance (85 points), Bâloise and Sonova (70 points each). The worst result is 15 points. It should be noted here that while this chapter deals with digital transparency, the scores also reflect and take into account the responses of companies – i.e. information that is not necessarily public. Thus, taking only public information into account, the best result would have been attributed to SIG Combibloc Group – which is moreover the only company in the top 10 for this chapter not to have answered the questionnaire – with a total 65 points, just ahead of SGS (60 points).

100
Maximum score

38
Average

0
Minimum score



KEY QUESTIONS	"YES" IN 2022	"YES" AND PUBLIC INFORMATION
Companies which have a data ethics framework	15 (+10)	5 (-)
Companies which consider the potential risks or negative consequences of using customer data	16 (-1)	7 (-2)
Companies which commit themselves to only using data with informed consent (privacy by default)	28 (+9)	18 (-)
Companies offering a clear option to request the removal of personal data (e.g., link to an email requesting more information or the removal)	29 (+9)	24 (+5)
Companies which go beyond compliance, adopting a privacy by design approach to data privacy	22 (+18)	8 (+6)
Companies which have privacy enhancing technologies (PET) in place	9 (+3)	2 (-3)
Companies whose default choice regarding cookie options/data collection points is in line with 'data minimalisation', rather than 'accept all'	27 (+3)	24 (-4)

Only affirmative answers - public or based on the questionnaire - are indicated in the table above. In brackets, these are the changes compared to the previous year.

PRINCIPLE 3: DATA PROTECTION

The third part of the questionnaire concerns data protection and in particular the policies put in place by companies to protect the data of their customers. As such, 10 more companies than last year have ensured that they have adopted an ethical framework for data processing, which demonstrates the recognition of the importance of the subject. Unfortunately, still only five of them publish information on this subject, the same number as in 2021.

The number of companies that say they consider the risks and negative consequences that could result from the misuse of personal data has fallen slightly, as has the number of companies that publish information on this subject. Regarding the exploitation of data, this new study shows that now 28 companies – compared to 19 in 2021 – claim not to collect any data without having obtained the free and informed consent of their customers. However, only 18 companies still state this clearly and publicly, according to the research from EthicsGrade. For Ethos, the personalisation of services based on the use of personal data should however be a choice and not the default option of an IT system ("Privacy by Default").

They are now 29 companies – i.e. nine more than in 2021 – to offer the possibility to users of their computer systems to expressly demand their personal data not to be used. Based on public information, however, this assertion could only be demonstrated for 24 of them.

The most significant progress concerns "Privacy by Design", which is one of the key elements of the European Union's General Data Protection Regulation (GDPR) which came into force in 2018. Indeed, there are 18 more companies than in 2021, i.e. 22 companies, which assert that they now take data protection into account from the design of a product or service and thus ensure that it respects the privacy of the user and cannot automatically use their data. Once again unfortunately the number of companies communicating publicly on this subject has increased only to a lesser extent.

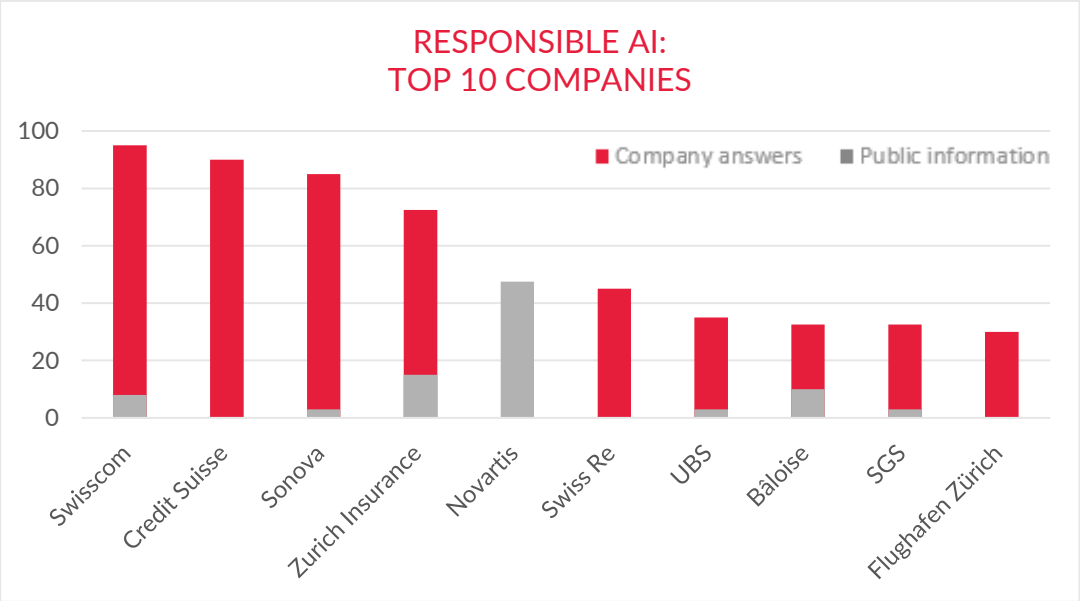
Finally, like last year, the study looked at the issue of data minimisation, or the fact of designing and developing systems with the aim of processing as little data as possible. This principle presupposes the implementation of a default configuration conducive to respect for privacy, limiting access to personal information strictly necessary to provide the desired service and implementing tools to better protect personal data (access control, encryption, etc.). The results show that only nine companies have implemented or claim to have implemented technologies to improve data privacy ("Privacy Enhancing Technologies"), compared to six a year earlier. On the other hand, 27 companies ensure that the default choice of their IT systems is to minimise data and use only "cookies" strictly necessary to make their website work. As companies are more aware of this issue, the requirements for considering that the user is sufficiently and correctly alerted to this subject have been strengthened this year, which explains a slight drop in the number of companies for which it was considered that this information was public.

For this principle, the average score increased from 21.9 points in 2021 to 38.2 points this year, with a maximum of 100 points for Swisscom and 90 points for Swiss Re. well below the results based on the responses of the companies, with a maximum of 40 points for Swisscom and Swiss Re and sometimes very significant differences between the scores based on the responses of the companies and those based on public information. Again, it is therefore not surprising that the top 10 companies answered the questionnaire. Finally, it should be noted that four companies did not obtain any points for this principle.

95
Maximum score

14
Average

0
Minimum score



KEY QUESTIONS	"YES" IN 2022	"YES" AND PUBLIC INFORMATION
Companies which have a research/working group focusing on the ethics of artificial intelligence	8 (+8)	1 (+1)
Companies which have measures in place to mitigate bias in their data	8 (+6)	4 (+1)
Companies which have implemented measures to safeguard equality when using AI systems (e.g., racial, gender, ethnic)	3 (+2)	1 (-)
Companies which have measures in place to mitigate bias in AI technologies	6 (+3)	2 (-)
Companies which can override any automated process to a "manual mode" (e.g., emergency measures to halt AI decision making)	6 (+5)	0 (-1)
Companies treating machines/AI as tools that people control and have responsibility for	9 (+6)	2 (-)
Companies which are able to trace the decision-making process of its AI systems	7 (+6)	0 (-)
Companies whose AI systems are subject to human approval before implementation	6 (+4)	1 (+1)

Only affirmative answers - public or based on the questionnaire - are indicated in the table above. In brackets, these are the changes compared to the previous year.

PRINCIPLE 4: ARTIFICIAL INTELLIGENCE

More and more companies are using AI in their activities. In fact, 37 of the 48 companies analysed in this study are using AI in one way or another, compared to 35 a year earlier. As mentioned under the principle 2, only three of them are clearly and publicly stating that they are using AI. Making a responsible, reasoned and transparent use of AI is however one of the major challenges of the digital responsibility of companies. While algorithms can prove to be very useful in certain sectors, such as health and the environment, their impact on our lives (autonomous cars, facial recognition, voice assistance, etc.) also leaves room for a wide and extensive debate on the responsibility and ethics associated with these new technologies.

However, it emerges from this study that only eight companies claim today, in their responses or even publicly for one of them, that they have set up a working or research group specially dedicated to ethical issues related to AI They are also only six, including only one in a public document (Novartis), to guarantee that their AI-based systems have been developed for the sole purpose of having a positive social impact. For Ethos however AI should represent a central element of the human response to today's major challenges, whether it be climate change, loss of biodiversity, health or social inequalities.

The operation of AI-based systems also often remains opaque and can come up against significant ethical dilemmas. The traceability of the decision-making mechanism in particular is essential to guarantee that the decision-making carried out using AI does not suffer from any bias, whether ethnic, gender or any other kind ("unbiased AI"). This neutrality must be the basis of the design of computer programs that can lead to autonomous decision-making mechanisms. If it cannot be guaranteed, then the deployment of such software should not be possible. Out of the 48 companies analysed, only eight state today, half of them in public documents, that they have implemented measures to eliminate any bias or prejudice in the processing of data. collected. Only eight also claim to have put in place measures to avoid any bias in their AI systems, including two publicly.

While the question of equal treatment and impartiality is crucial, it does not necessarily solve all the ethical dilemmas raised by the use of AI. It is also vital that human intervention remains possible at all times, that the machines retain their status as tools and that individuals retain control and responsibility for the machines at all times. Here again, companies remain very little transparent to this day. Only six of them – none publicly – currently indicate that it is possible to replace an automated process at any time with a "manual mode" – i.e. emergency measures allowing a decision taken using AI to be suspended or stopped exist. More generally, only nine companies indicate that they consider machines and AI as simple tools that must remain under the control of human beings at all times.

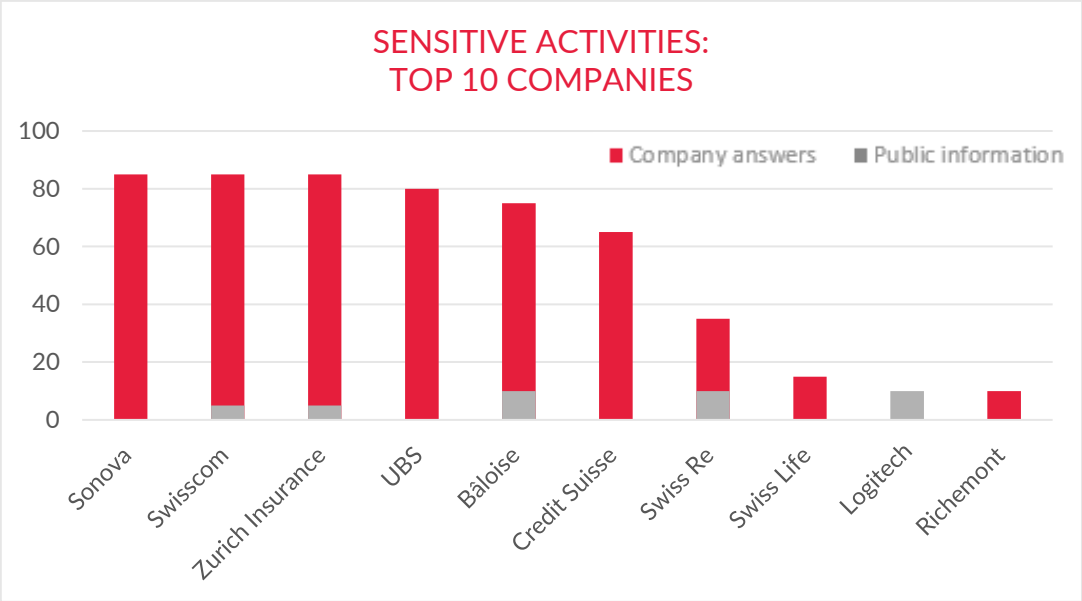
While the average score for this chapter devoted to AI increased from 3.4 points in 2021 to 13.9 points in 2022, it nevertheless remains very low for a topic that is nevertheless central to the digital responsibility of companies. They are also 19 companies to have not collected any points for this chapter.

In addition, the lack of transparency on the part of companies on this subject should be once again emphasised. Except for Novartis – the only company in the top 10 that did not respond to the questionnaire and whose score of 47.5 points therefore only reflects publicly available information – all the other companies in the top 10 would obtain a score lower than 15 points (out of a possible 100) if only public information had to be considered.

85
Maximum score

12
Average

0
Minimum score



KEY QUESTIONS	"YES" IN 2022	"YES" AND PUBLIC INFORMATION
Companies ensuring that data is not used for surveillance purposes	6 (+3)	2 (+2)
Companies whose AI team adopt "best practices" when developing new AI models to address risks of misuse and maliciousness (e.g., red teaming)	6 (+5)	0 (-)
Companies which prohibit AI-related activities that:		
• Infringe on human rights	6 (+3)	0 (-)
• Limit freedom of expression	5 (+4)	0 (-)
• Are used in autonomous weapons	0 (-)	0 (-)
• Can disseminate sensitive, racist, sexist, or illegal content or allowing access to content and activities inappropriate for minors	5 (+3)	0 (-)
• Are designed to create addictions	5 (+5)	0 (-)

Only affirmative answers - public or based on the questionnaire - are indicated in the table above. In brackets, these are the changes compared to the previous year.

PRINCIPLE 5: SENSITIVE ACTIVITIES

The use of AI is now extending to a large majority of business sectors. This rapid expansion must however be monitored to ensure that all ethical aspects regarding the purpose and method of using these new technologies are in line with the expectations of civil society. Indeed, these new technologies can be used for surveillance by facial recognition, for the development of autonomous weapons, for the promotion of sensitive or prohibited content, or even for those activities which aim to influence human behaviour in a covert way. These topics are still minimally covered by current legislation, thus giving companies an important role in setting standards in this area.

For this part of the questionnaire, companies were asked whether they always ensure that the data they collect in the course of their activities is not used for surveillance purposes. Seven companies (compared to three in 2021) answered in the affirmative or published this information in 2022. In addition, companies were also asked whether they ensure today that the technologies they develop and marketed may under no circumstances be used in activities which:

- Violate human rights;
- Limit freedom of expression;
- Are designed to create addictions;
- Are used in autonomous weapons;
- Would enable market manipulation.

Again, only seven companies answered in the affirmative and confirmed that they prohibit any use of AI in connection with one or more of these points. While we deem it unlikely that companies listed in Switzerland will use AI for ethically reprehensible purposes, Ethos nevertheless regrets a lack of transparency and the fact that no company publicly indicates that it categorically forbids it, which would contribute to reassure the various stakeholders.

Regarding the use of AI in activities that could lead to discriminatory practices, the 48 companies analysed were asked whether they had implemented measures to avoid unintentional discrimination in particular during the automatic selection process of the audiences targeted by the advertising content. Eight companies (compared to just one in 2021) claimed to have implemented such measures. Another question was whether they prohibit any activity carried out using AI that could be used to disseminate sensitive, racist, sexist or illegal content or allow access to inappropriate content and activities for minors. Only five companies confirmed that they had policies in place to avoid such practices.

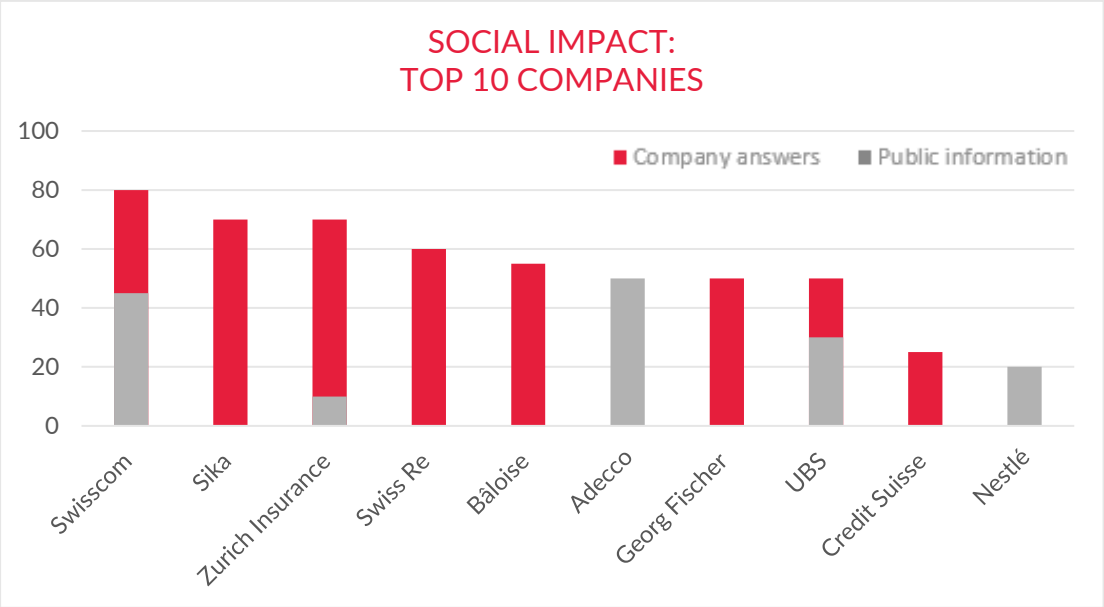
Finally, eight companies (compared to two in 2021) said they seek to include more stakeholders and experts in the discussions they lead regarding malicious or inappropriate use of the AI. The increase in the number of positive responses to this question demonstrates that the subject is taken seriously. The steps taken will thus allow the points of view of different partners to be taken into account in strategic decisions regarding the development of AI.

Despite an improvement in scores, this section devoted to sensitive activities is the one that obtains the lowest score for the second consecutive year, with an average of only 11.7 points (compared to 3.1 points in 2021). This low result is mainly due to the lack of transparency on this subject since only 12 companies obtained points for this part, including nine which answered the questionnaire (with in particular a maximum of 85 points for Sonova, Swisscom and Zurich Insurance). It should also be noted that the best score based on the only publicly available information is 10 points (achieved in particular by Bâloise, Swiss Re and Logitech) and that there are 36 to have obtained no points for this principle dedicated on sensitive activities.

80
Maximum score

13
Average

0
Minimum score



KEY QUESTIONS	"YES" IN 2022	"YES" AND PUBLIC INFORMATION
Companies that have communicated externally the impact the transformation of economy and automation will have on their whole workforce	8 (+5)	3 (-)
Companies that have consulted with external groups to consider the long-term employability of former employees displaced by automation	5 (+5)	0 (-)
Companies which are considering reduction in working hours as a benefit of automation rather than reduction in headcount	5 (+4)	2 (+1)
Companies which provide training/retraining programmes for workers who will be displaced by AI/automation	9 (+5)	3 (-)
Companies which receive guidance on the responsible use of digital technology in HR (e.g., transparent goal-setting process, data minimisation, people decide, data quality and discrimination, and constant review)	7 (+6)	0 (-)

Only affirmative answers - public or based on the questionnaire - are indicated in the table above. In brackets, these are the changes compared to the previous year.

PRINCIPLE 6: SOCIAL IMPACT

The following topic focuses on the social impact of the digital transition, and more particularly on the impact that technological developments can have on employment and current social models. With the development of AI and the appearance of new business models, the world of work is now moving towards the automation of simple tasks, reducing the demand for unskilled labour in favour of profiles with computer development and maintenance skills. While companies and shareholders can benefit from this digital revolution, with an increase in productivity, the financial gains could however be limited in the short term if the transition were to be carried out in an irresponsible manner. The pension system, for example, could be undermined if the number of working people were to drop sharply in such a jurisdiction or if the development of the service economy ("Gig Economy") were to transform a large number of employees into self-employed ("Uberisation").

In this chapter, Ethos has therefore sought to find out to what extent companies are prepared for such a revolution. However, it appears that only eight of the 48 companies analysed claim to have assessed what the impact of the digital transition could be on their activities and, more particularly, on their workforce. Among them, only three companies (Adecco, Nestlé and UBS) have already communicated publicly on this subject. In addition, five companies (none in 2021) indicated that they had already consulted independent experts to assess the employability of former employees whose tasks had been automated.

Ethos welcomes the improvement in the results concerning this last point and considers that it is an integral part of corporate social responsibility to set up ambitious programs aimed at supporting the retraining and training of employees directly threatened by automation and AI. In this respect, however, only nine of the 48 companies analysed (compared to four in 2021) claim to offer training and retraining opportunities to employees whose tasks are threatened by automation.

Regarding the social benefits that can be drawn from the digital transition, five companies (compared to only one in 2021) indicated that they would be willing to consider a reduction in working time rather than a reduction in the workforce to cope with the automation of certain tasks. This question highlights one of the positive consequences that automation could have. Indeed, these new technologies would make it possible to maintain equal productivity while reducing the workload of staff with the aim of improving the quality of life of male and female employees and contribute therefore to a better balance between professional life and private life.

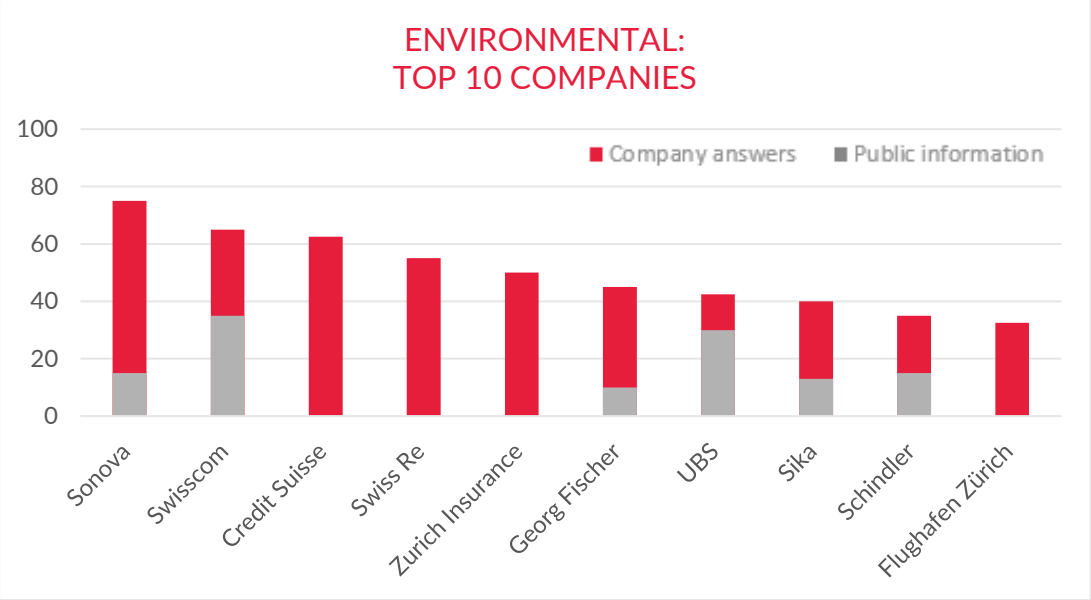
Finally, regarding the use of AI in human resources management, seven companies (compared to only one in 2021) now claim to follow ethical guidelines covering in particular planning and the review of objectives set for staff. However, only three of them allow their employees to access the methodology and data used by AI in human resources management.

While the average has increased from 6 points in 2021 to 13.4 points in 2022, this principle remains among the worst rated in this second study, which demonstrates that companies have not yet really assessed – or at least that they do not communicate – the impact that the digital transition could have on the size of their workforce or the management methods they use. It should be noted that only five companies obtained a score higher than 50 points (Bâloise, Sika, Swisscom, Swiss Re, Zurich Insurance) with a maximum of 80 points for Swisscom. They are also 26 to have obtained no points for this chapter. As for the best result based on public information alone, it is to the credit of Adecco with 50 points, just ahead of Swisscom (45 points).

75
Maximum score

19
Average

0
Minimum score



KEY QUESTIONS	"YES" IN 2022	"YES" AND PUBLIC INFORMATION
Companies that have their sustainability efforts regarding digital technology being reviewed and which provide evidence/information regarding the attainment of environmental goals	33 (+25)	25 (+17)
Companies which domicile their data center in low carbon locations	13 (+9)	3 (+1)
Companies which make efforts to minimise water usage used for the cooling of technology	19 (+15)	9 (+6)
Companies which actively seek to reduce their energy consumption of technology through code optimisation	4 (+2)	4 (+3)
Companies which choose hardware (both client and server) based on:		
• It's energy performance characteristics over the long term	13 (+5)	9 (+4)
• It's repairability re-use characteristics over the long term	8 (+5)	2 (+2)
• It's recyclability over the long term	12 (+7)	5 (+2)

Only affirmative answers - public or based on the questionnaire - are indicated in the table above. In brackets, these are the changes compared to the previous year.

PRINCIPLE 7: ENVIRONMENTAL IMPACT

The seventh and last part of the questionnaire concerns the environmental impact of the digital transition and more particularly its carbon footprint. Thanks to numerous studies carried out on this subject, we now know that digital technologies represent around 4% of greenhouse gas (GHG) emissions in the world, which is more than the air transportation sector[4]. Given the unbridled growth in the use of connected objects, computer networks and a data-centric economy, the environmental footprint of digitalisation is likely to increase sharply in the coming years and could even double by 2050.

Most of the environmental impact of digital technology takes place during the manufacturing phase of the devices. Thus, it is essential to consider the environmental impact of the digital infrastructure during its entire life cycle, which thus includes the manufacturing, use and end-of-life phases of the devices.

Regarding the energy used to store a growing volume of data and power digital technologies and algorithmic systems, 13 companies confirm today that they host their data centers in locations with low carbon intensity (nine more compared to last year). They are also 13 companies to ensure that the long-term energy performance characteristics of IT equipment are a relevant criterion when acquiring them, five more than a year earlier. They are nine to publish information on this subject. In a similar vein, eight companies indicated this year that the reusability and repairability of IT equipment over the long term was a criterion taken into account when purchasing equipment, compared to three last year. Finally, this second study shows that for at least 12 companies, the recyclability of IT equipment over the long term is also a purchasing criterion (five in 2021).

The large-scale use of complex algorithms also involves ever-increasing computing power and, therefore, exponential energy consumption. As such, four companies analysed publicly claim to seek to reduce their energy consumption through code optimisation. For the time being, only one (Sika) indicated that teams of engineers were responsible for monitoring the energy consumption of the algorithmic models used and another (Sonova) asserts that the carbon footprint of its technological park, and more particularly of its algorithmic models, was accurately measured.

The most significant progress concerns water consumption linked to IT equipment. There are thus 19 among the companies surveyed to indicate now that they have implemented measures which make it possible to minimise their consumption of water used for cooling technological devices – i.e. 15 more than in 2021. There are especially nine to publish information on this subject (compared to three in 2021).

Finally, of the 48 companies analysed, only 14 publish data and information relating to their environmental impact linked to digitalisation, whether in relation to the recycling of computer equipment, the average lifespan of their connected products, the energy consumed by computer systems or other relevant environmental indicators. This result is obviously disappointing given the impact of digital technology on the climate.

The average score for this chapter reaches 19.2 points against 8.3 points a year earlier. The best result is to be credited to Sonova with 75 points. On the other hand, it is only 35 points based on public information alone (Swisscom and Flughafen Zurich).

[4] https://www.greenit.fr/etude-empreinte-environnementale-du-numerique-mondial/

5. Conclusion

Issues related to the digitalisation of the economy continued to make headlines in 2022, starting with cybersecurity and the ever more frequent cyber-attacks against companies. At the end of the year, the news was marked by the launch of “ChatGPT” which opens the way to new possibilities relating to the use of AI. At the same time, legislative developments, such as the new LPD in Switzerland or the European AI framework, create new compliance risks for companies that have not sufficiently anticipated them.

It is in this context that this second study on the digital responsibility of the largest companies listed in Switzerland was carried out. If the results reveal that progress has been made and that a certain awareness seems to be taking place, they also show that we are still far from the best practices as identified and advocated by Ethos.

Among the good news, we note the growing number of companies that agreed to answer the questionnaire and the increase in the number of points collected on average. Thus, of the 48 companies analysed, seven obtained a score above 50 points this year, while none had exceeded 40 points last year. Other positive points include the fact that 34 companies now state, publicly or in the context of this study, that they have established a clear cybersecurity strategy; that there are also 33, i.e. 25 more than last year, to affirm that efforts are made to reduce the environmental impact of their digital technologies and 18 more than in 2021 to adopt a "privacy" approach by design” in connection with data confidentiality.

Although the average score has doubled since last year, it nevertheless remains very low with only 22.8 points obtained out of a total of 100 possible. The top of the ranking also remains occupied by companies that agreed to answer the questionnaire, which unfortunately shows that transparency is not yet there. If the study were based on public information alone, the average score of companies that agreed to answer the questionnaire would drop from 42.4 to 11.2 points, i.e. only 0.1 point more than the general average. This difference demonstrates that, regardless of the number of measures put in place to ensure an ethical transition to digital, most companies currently publish very little information on their practices.

Even more concerning, for some questions the result based on public information is worse than last year. While this is partly due to certain documents considered too dated were no longer taken into account in the assessment this year, it also demonstrates that Swiss companies show a certain reluctance to communicate publicly on certain subjects such as the use of AI, for example. However, this discretion should not be interpreted as a desire for concealment on the part of companies, which would certainly be their cause of harm.

As the news has shown in recent months, digital responsibility is an increasingly important topic and Swiss companies cannot afford to be lagging behind on these issues. After insiders and the media, it is the legislator's turn to seize it today and there is little doubt that companies will have to comply with more and more rules in the future, than that relates to data protection or the use of AI. Investors also have a very important role to play in encouraging them to improve now. As such, Ethos is certainly one of the precursors. Since 2020, it has been strongly committed to Swiss companies to raise their awareness of these issues and provide them with areas for improvement.

The results of this second study highlight the need to further intensify the dialogue. After three years of commitment, only positive responses in the context of a questionnaire are no longer enough and it is time for companies to be transparent. The data collected by Ethos and EthicsGrade over the past two years provides a solid basis to remind them that there is still a lot of progress to be made. Thus, during the next exchanges with the companies targeted by this study which was planned over three years, Ethos has set itself the priority of raising their awareness even more of the consideration of ethical aspects when developing their digital activities, but also to encourage them to publish information on the measures they are implementing in this regard. Indeed, this last point is key since public information is by nature more restrictive for a company vis-à-vis all its stakeholders.

ANNEX: RESULTS BY COMPANY

RANK 2022	COMPANY	SCORE 2022	+/- 2021	PARTICIPATION IN THE STUDY	PUBLIC INFORMATION
1	Swisscom	87.0	+66.0	Yes	28.3
2	Zurich Insurance	72.0	+57.2	Yes	16.0
3	Sonova	68.0	+56.2	Yes	13.9
4	Credit Suisse	66.8	+56.1	Yes	3.3
5	Swiss Re	58.0	+28.9	Yes	14.3
6	UBS	57.4	+48.5	Yes	19.8
7	Bâloise	52.5	+12.4	Yes	17.8
8	Georg Fischer	41.5	+31.6	Yes	6.5
9	Sika	40.5	+23.8	Yes	7.6
10	SGS	37.5	+23.0	Yes	18.5
11	Swiss Life	31.3	+25.4	Yes	5.5
12	Flughafen Zürich	29.6	+22.2	Yes	4.0
13	Schindler	29.1	+14.3	Yes	14.0
14	Julius Bär	25.4	+11.0	Yes	7.0
15	Richemont	23.9	+16.3	Yes	9.5
16	Novartis	21.5	+9.2	No	21.5
17	Logitech	20.5	+5.6	No	20.5
18	Nestlé	20.4	+4.1	No	20.4
19	OC Oerlikon Corporation	19.9	+11.0	No	19.9
20	Adecco	17.8	-0.2	No	17.8
21	Tecan	17.1	+9.4	Yes	8.8
22	VAT Group	16.8	+13.9	Yes	3.0
23	Lonza	16.4	+6.2	No	16.4
24	ABB	16.3	+8.2	No	16.3
25	Alcon	14.9	+4.2	No	14.9
26	Givaudan	12.8	+5.2	No	12.8
27	SIG Combibloc Group	12.5	+2.8	No	12.5
28	Galenica	11.9	+1.6	No	11.9
29	Geberit	11.5	+3.1	No	11.5
30	Roche	11.5	+4.3	No	11.5
31	Holcim	11.5	+4.2	No	11.5
32	Kühne + Nagel	11.5	+5.1	No	11.5
33	Cembra Money Bank	11.3	-6.3	No	11.3
34	Temenos	10.8	+5.4	No	10.8
35	Helvetia	8.8	+3.5	No	8.8
36	Straumann	8.5	-18.2	No	8.5
37	PSP Swiss Property	8.3	+5.8	Yes	4.8
38	Dufry	7.5	+1.6	No	7.5
39	Barry Callebaut	6.9	+1.5	No	6.9
40	Lindt & Sprüngli	6.9	+0.4	No	6.9
41	Clariant	6.5	-2.9	No	6.5
42	Swatch Group	6.3	+0.8	No	6.3
43	BB Biotech	6.0	+2.6	No	6.0
44	AMS AG	5.8	+2.5	No	5.8
45	Partners Group	5.5	-1.1	No	5.5
46	Swiss Prime Site	4.3	+1.9	No	4.3
47	EMS-Chemie	4.0	+2.7	No	4.0
48	Vifor Pharma	3.6	+1.0	No	3.6

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