Julia Sack

ZeroHungerRun Challenge 2025

ZeroHungerRun Challenge 2025 in Düsseldorf for a world without a hunger

On May, 22 2025 we in Ctq GmbH have taken part in ZeroHungerRun Challenge 2025.

That was our pleasure to support this run with lots of fun, motivation and great moments during this challenge.

Thank you also to everyone for taking part and for support of this action committed to the world without hunger.
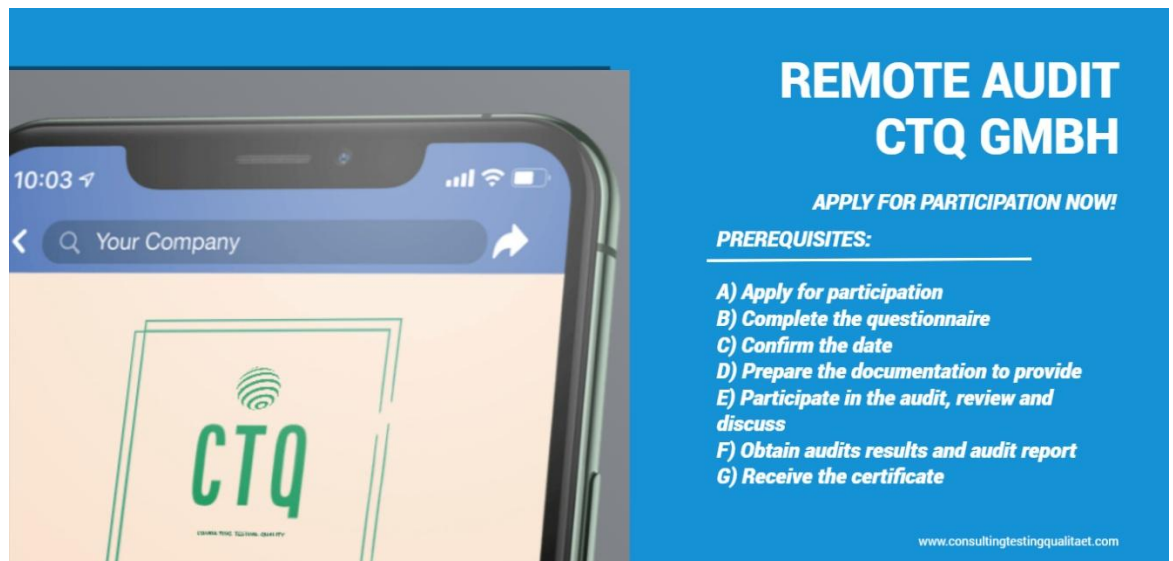
Ctq GmbH updated Audit Program 2025

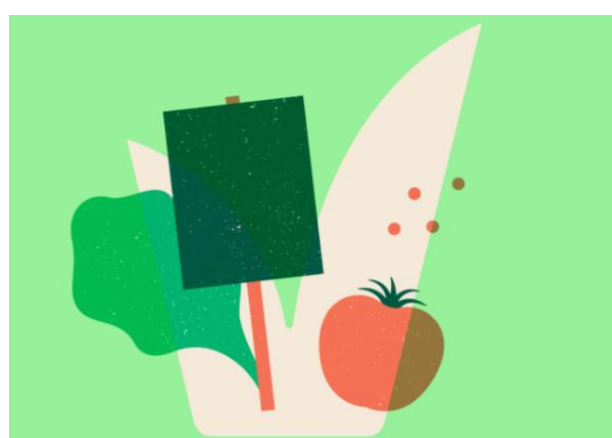Ctq GmbH on ZeroHungerRun 2025

Ctq Remote Audits Program updated

We in Ctq are pleased to announce the update of Remote Audit Program for 2025.

This year we support you on the areas:
- Quality Management System ISO 9001:2015,
- Environmental Management System ISO 14001:2015,
- Compliance Management System ISO 37301:2021 and
- Corporate Sustainability Reporting Directive (CSRD).

For details on sessions please contact us or follow our newsletters in socials.

This year on Ctq webinars we already highlighted several topics for implementation of standards and norms requirements.
On May, 30 2025 we invite you to join our webinar for the topic Implementation of internal audit program.

Ctq GmbH Veggie Society membership

In May Ctq GmbH obtained Veggie Society membership

We hope, our membership in Veggie Society will help to go veggie.

Eating veggie and vegan food is one of the best things you can do to tackle the most important issue facing us all today: climate change. With our donation and membership, we hope to empower people to create a more sustainable world for future generations.

Ctq GmbH supports Veggie Society with membership
Source: https://vegsoc.org/

The Vegetarian Society Approved trademarks are symbols we see on many of products daily in shops in all over different countries.

There are two Vegetarian Society Approved trademarks – one for vegetarian products and one for vegan products.

We in Ctq GmbH support our customers in certification process of Vegetarian society marks.

Ctq training sessions

We start training sessions online as a workshop format – tailor made or on predefined topics, both is possible. Please request your proposal!

Sustainability context

We in Ctq initiate a new section in our newsletter titled Sustainability context.

Here we´ll provide you with brief overview on publications, books and sources to sustainability and ESG topics. Please have a seat and be our guest. Are you ready? Then let´s go.

Top-5 books and publications for May:
- Learn sustainability: how companies establish awareness and structures for responsible business practices by Armin Neises, Laurin Neises
- Circular economy as a strategy for the future by Alfred Muenger
- And after lunch I go home by Detlef Lohmann
- Business Consultant Journal BB 14-2025
- Reset: How companies and organizations are reinventing themselves by Jens-Uwe Meyer

Happy and sustainable reading in May!
And stay in context.

Your Ctq GmbH Team

Dr. Reinhold Kesler, Jr.-Prof.

Interview summary with Professor of Heinrich Heine University, Düsseldorf
What happens with our data in Internet?

Julia Sack

Gather round, hello and welcome to everyone in our section ´Hero of the month´ where we usually meet and greet fabulous and outstanding ´heads´ to clarify on important topics of environment, sustainability, governance and actuals.

It is always interesting to know more about this from different perspectives and points of view. Specifically, on the topics we all face in daily life.

Who is our Hero of the Month now?

This month we had a chance to know more about data and data management at the lecture of Jr.-Prof., Dr. of Heinrich Heine University Düsseldorf Reinhold Kesler.

Dr. Kesler has a science degree in the field of Economics and explained on the topic: What happens with our data in Internet?

The data builds the basics of digitalization and innovation and has an impact on our daily lives. But if what if we for example leave or send them via Internet? How will personal data be collected, analyzed and used? What happens from this point of view with data misuse or breaches? All these questions Dr. Kesler answers with these topics, including protection of personal data.

We would like to thank Dr. Kesler for this and were pleased to participate. That was interesting and informative session during that we took the notes and provide you with the summary noted during the session. What comes from this, please read here and after.

JS: Dear all, today we are speaking about what happens with our data in Internet kindly presented by Dr. Reinhold Kesler for us.

RK: I am delighted to welcome you to another edition in live format about data on the internet. I would also like to introduce myself: I am Rainer Kesler, Junior Professor of research in Economics, in particular in Rights and Economics. And I believe, today we will see that rights and economics sometimes go hand in hand in a very valuable way. Especially, in the digital area, as you will see.

And I'll just get started. When it comes to data, data and economics, there's probably no way around showing this list.
This is a list of the ten largest stock exchanges and research companies worldwide in terms of digitalization. Hopefully, you will at least recognize some of the names on the list. Most of them are referred to by the acronym GAAFAM.

Google, Apple, Amazon, Facebook, Apple are owned by Google and Microsoft makes GAAFAM. And then there are others, which I will introduce to you in a moment.

But if we go through this list, we will see that many of them are very much based on the data economy. If we take Google and Facebook as examples, we have advertising revenues of 80 and 97%, respectively, which are generated solely through advertising. And this is mostly data, which is again advertising.

So, this is also the data economy, really based on the research model. If we move on, Microsoft and Amazon might not be immediately considered data economy companies. Unlike retailers, Microsoft is like a greengrocer and software and so on.

But in fact, both are already generating revenue from the Cloud. Amazon is even the cloud market leader. And at Microsoft, cloud revenues are greater than Office and the software division combined.

Now Apple stands a little alone. And in fact, Apple has also realized that the data economy is something special, but also something different. Namely, data as a market tool.

NVIDIA, Broadcom, KSMC. I would describe them as suppliers to the cloud market leaders, because they essentially manufacture components for data centres.

Those are these five. Here are five more. Three of them may not be well known.
NVIDIA, Broadcom, KSMC. I would describe them as suppliers to the cloud market leaders, because they essentially manufacture components for data centers.

Dr. Reinhold Kesler, Jr.-Prof. for Economics, Heinrich Heine University Düsseldorf
Source: https://www.wiwi.hhu.de/aktuelle-meldungen/wir-freuen-uns-dass-dr-reinhold-kesler-den-ruf-auf-die-juniorprofessur-fuer-vwl-insb-recht-und-oekonomie-angenommen-hat

House of University, Düsseldorf, Germany

Here we have a cyber application, and there are four methods. One can be used if you have seen the cyber, others cannot. And the seven methods listed here are the risks of the data economy.
The one above is an inconspicuous app, there is a personality quiz, you log in and enter your details, and you can answer the personality questions on a certain scale. But this is the app that has an opportunity. By logging in with Facebook data, the app developer was also able to find out information about all of this Facebook user's contacts to the extent that they could use this data to create a profile without the other contacts of this Facebook user posting about it.

Then we have Spiegel-images, Spiegel Online, on the left, with a motto: okay, I need tracking, I need either final tracking or total tracking to extract the data in order to create online profiles. Then we have the data here, which was again money and costs, the whole premise that is being processed here in order not to create profiles, even though it has been echoed on the internet.

What happens with our data in Internet?

House of University, Düsseldorf, Germany

And here we see another example of how there is a certain imbalance with corporations, in that certain functions, such as AI and WhatsApp in this case, are simply introduced in such a way that we now have more to consider. So now we have drivers on the one hand, which is the operational side, and risks on the other. Here we have a conflict of objectives between data on the one hand, drivers, and on the other hand, risks that are introduced with the change.

And now the question is, what can we do about it? Above all, because the whole thing is rather opaque, we don't even know what happens to the data. Then the question arises, can we publish this control box for data processing and can data protection help us, so to speak, and privacy on the one hand with the principle. And today I am trying to answer this question not in financial terms, but using an example of apps, mobile applications, to address all these issues.

Whether we can do it, how we can do it, how we do it in research, what research itself says, and how we will also deal with current events and the processes of democracy building and data protection, what is happening here. Now

you may be wondering, why apps? Why is this interesting? What is your experience?

Actually, that's a good question, how many of you do that and say, if you look at it globally, at least from a media perspective, there are millions of apps, which is a huge economic factor in our image. There are 500 billion that are only available within app stores. Of course, if I include the use of required apps or no sales, when we use something, there is no sales table. It's simple, for example, that the average daily commute in Germany last year was two and a half hours, and we spend that amount of time on apps every day. Depending on the address group, this figure also increases.
Everyone can decide for themselves whether it is, low or high. This is an average value. I think the relevance speaks for itself, at least to some extent.

But the data economy also plays a special role here. Really, it is central to your business and the market, on the one hand, does not generate the majority of its revenue from prices, but advertising and marketing are very important.

Almost two-thirds of the apps that share data do so for advertising or marketing purposes important for functionality. If you think of a navigation app, for example, it would be relatively difficult to operate without knowing the user's location.

At the very least, it would be less functional and less innovative. On the other hand, it can be argued that the data that is opened up here, recorded with the other location, remains very much within the realm of privacy. If you saw earlier, these additions to the route, these elevation data, this is also a fitness app that may not have the purpose of disclosing such information, but nevertheless it is a huge problem for privacy.

And so we have this circus quite clearly here in the app market as well. Actually, people say that apps need, and I'll show you this in a moment, locations that are quite practicable from the outside. And we also have a cooperation and another Internet.

First, let's start with the data, using apps as an example to get a better idea of what it's all about and what kind of data is involved. I've been talking about location apps the whole time, but that's just one piece of information. Of course, you provide other data and permissions every day.

And possibly, as I just mentioned, both platforms – there are two major ones, either Apple or Apple territory, which are the two place-four games – have probably also introduced data sheets in the data configuration. New for some, this is like a nutritional information sheet for the data that apps are. Or a package insert, medication for apps.

And what we can do up front is take a look at these package inserts, and that's a no-brainer for many apps. Before I show the results, I just want to briefly say what these package inserts contain. There's a lot, and I think that should be shown.

Both platforms follow the same strategy. Data is classified and categorized. The goal here is to provide standardized information, and they leave it up to you to decide what kind of cinema pattern you have, but it's very simple, and here are the privacy policies, i.e. these pages of text, which are presented here in simple language. It looks like this.

Here for Apple, there are 14 data types, I can work with that, and you can also see what kind of data is collected and shared here, and you can also see that there is a certain variation in how much it invades your privacy and how sensitive it is. And for Google, you may have discussed this a little bit, we've only been there for two years, as is often the case with certain privacy issues, you have 14 data types here again, here are the typical ones, financial data, health data, Fitbit, but also things like browsing or self-history, so really information that allows for a certain amount of profiling. And what we're doing now, you can do yourself, just check your app to see what types of data are being requested. We do it a little more systematically, so you do it with 380.000 apps on Apple and 380.000 with 359.000 apps on Playstore. We go there and look at what this package insert looks like, download it and analyse it systematically.

If I may show you just one packaging insert, this is the packaging insert and this is the packaging insert that you then post on Facebook and other social networks. This clearly demonstrates my initial thesis that data is important for Facebook, and we can now do this not only for Facebook, we don't want to create any danger, but we can now systematically know what data is being packaged and how. Of the 360.000 apps we had at Apple last year, which is a large number, that's 63% of all the apps here, so that's all of them, and if I add the more successful apps, these percentages increase.

Below you can see the proportion of apps from 0 to 80, and below that you can see the 14 different data types. You can also see the identifiers, which are identity features, i.e. the devices. We will see later that these play an important role in this market and are very often broken down. You probably don't understand much about them, but they are quite important, as we will see later.

Others may require a little more consideration in terms of trust, browser history and confidential data are not queried as often, but there are still a few apps and all these percentages slide to the right when I exclude apps that are less important, as they are not used as often. Commercially successful apps are always involved in data collection and there are also some data types involved. At Google, it looks a bit classy; we have 380 here, which I also refer to as the 21, 22, so just collected.

Google even tells us how many are passed on. As I said, these are just all apps, including some that are a little less important. However, the ones that are lost are still so important that they take up the system space, 50% of the collected data, which again is only the major restrictions, while RTL 100 and 80%. And again, the GB file at the top is a good identification point for me in the slides. I'll explain what the GB files are in a moment, but there is also other information, such as location, every third app service, for example, via location.

And these are not always navigational search files. So now we know about the data, but the question is, what do the apps actually do with this data? We know about data IDs and hacker information, but that doesn't matter, it's superficial. And yes, you can ask for the data again from a few notes, because they not only have the data inside, but Apple is also required to say, for every data access, why is this data bunker being removed, why is this data being used? And then, of course, we could resonate again and ask, well, what do the data in a few notes say about these purposes? So, if we now know where the location is, is it actually for app functionality or advertising or personalization?

And this is now with Apple. This is then with Google. Google is then a little friendlier and dissolves the other purposes into decision prevention and content management, but that doesn't happen very often.

And now we can go back to the package inserts. And this is Google. Now we could look at what the purpose of Google data is. Yes, data that remains on the device and is not passed on is good for the app's functionality.

On the advertising, I have a picture on it, 40% of the people on the advertising live there. It

So that's the typical thing we know, where data and images are shared and advertising becomes accessible to web developers. So now we see the purpose. These data leaflets are a great thing.

The shop owners already have a purpose. Now a question for the group. Who do you think checks these data leaflets? We want to show you Facebook's data leaflet.

And that's what it says in the leaflets. And the platform basically takes itself out of the equation and says, I haven't verified this, we're working with the currency project. So, we believe this, there's no automatic process.

That will be too frequent. And if I have now told you that certain data is very valuable when it is passed on, if you are perhaps skeptical about certain apps, why the identification or understanding is not so good, then it might not be a bad idea to discard certain things, at least. Changes do not require authorization.

But now, in our project, we ask ourselves, what are companies actually doing? And to answer that question, we look at the advertising market. We see entire technologies here. We have apps where friends advertise on one side and friends advertise on the other.

Friends who advertise are very keen to watch adverts. And what happens in this backbox? The app basically offers the amount. Here, you can switch very easily.

Advertising friends are happy to accept this. And the app may send something else along with it to make the advertising work a little better. And the advertising is a little more expensive, and then the app gets a little more.

And now we want to ask, how does it actually get the amount that is actually transferred? And normally you can't see that. But if you could see it, you could make a 2x2 matrix, like here in Schatz. What happens if no one places the form, but actually gets the transfer? Then I'm not gone.

I wasn't gone, I came. And that's exactly what we're doing now. So here we open this back box.

Let's repeat that briefly. We take the advertising market here, and I'll add a few cuts. That's really the easiest part.

There is intermediate help on both sides of this market so that the app and the advertiser don't have to deal with how to create these options, how to get started with a lot of money. After the advertising certificate, which I also simply intend to do, there was a lot in the basic sense of placing my advertising with these criteria. The app on the other side says I have so much space, maybe the customers are loyal.

And in between are the supply-side platforms, on the supply side, where the app trades in advertising, and here the demand side, demand, and the land ordinance. And what you don't like here is that when you look at one of these four parties, as it is called, you see what requests come from apps, what these offers are, resident requests, and the app asks you to please use this advertising space. And here there is only one space, in the results of the confession, and that means there are still interests, there are still locations, and some are offering them.

And here, where you can, the resident requests, with participation, you would expect those who do not accept them to make these requests again for themselves, because all resident requests where we are the participants would say so. And we can understand that, we use one by using these networks here, which give us insight, of course aggregated, and zoologized, how much, or how high the share of the main zoologist is, with one device. And of course we can then immediately determine who has something to say here.

And if you want to imagine the nations for a moment, there are over 100 billion large requests every day that we see here, and there are over 1 billion devices that are based there. So, quite a lot. And what we then give is a random sample; we take the top 1000 from each server platform, and we also have users if they don't land so well, and of course we try to remember that there are 852 apps that are active on both platforms, the others are quite nice later on, and these are the very same apps on two platforms that represent different user groups and representatives actually represent the user parts of the main zoology.

So we see that there's really nothing to say, there are some very large ones, here we just see the shares of the apps and the installation figures. M plus stands for millions, G plus stands for billions, so we have apps here that are random samples, they go from over a billion to billions. So we also form apps that each of us needs, so to speak.

Many app developers claim not to transfer user data – but in reality, studies show that a significant proportion do so nonetheless.

Platform differences: Google apps are significantly more likely to share data than Apple apps. Apple users are more likely to reject tracking – around 80% say no when asked.

I believe, today we will see that rights and economics sometimes go hand in hand in a very valuable way. Especially, in the digital area.

Dr. Reinhold Kesler

According to the GDPR, apps must disclose what data they collect – but many do so inadequately or misleadingly.

Regulations (such as the GDPR) have led to greater awareness, but they have also had unintended consequences:

Small businesses are increasingly leaving the market due to rising data protection requirements. Market concentration is increasing – large players such as Google, Facebook and Apple are benefiting disproportionately.

Innovation could be hampered if smaller providers are slowed down. And some apps earn significantly more: they transfer more data, thereby generating higher advertising revenues and gaining an unfair competitive advantage.

For example, the average value per user (e.g. via the transfer of the device ID) is $1.44 vs. $1.00 for compliant data use.

The resulting distortions of competition have consequences for data protection and user trust.

Apple presents itself as a pioneer in data protection (e.g. App Tracking Transparency), but also benefits economically by placing more advertising in the App Store itself.

Google, on the other hand, allows extensive tracking, which leads to higher revenues but also to stronger criticism of its lack of data protection.

Particularly problematic is the use of alternative tracking methods, even without device IDs, such as email addresses, location data or analysis behavior, which in turn undermines data protection.

Data protection regulations such as the GDPR have brought progress, but have also created new challenges. The market advantages of large platforms must be viewed critically – especially when they set rules from which they themselves benefit.

House of University, Düsseldorf, Germany

There are positive developments: at the state level, there are increasing initiatives to improve the enforcement of data protection rules.

Nevertheless, there are massive advantages for large market players who have extensive data sets at their disposal – especially in the digital sector.

It is therefore important to regularly evaluate data protection requirements – not only in terms of their effectiveness, but also in terms of possible unintended effects.

The debate must not be conducted in extremes – neither with the demand to completely abolish data protection, nor with the attitude of enforcing it uncompromisingly.

Instead, there needs to be a flexible, risk-based discussion that takes current technological, economic and social developments into account.

Data protection remains relevant because data – especially in AI and software development – is a key geopolitical factor.

Much of the digital infrastructure – from AI systems to chips to software – is dominated by non-European players.

Initiatives such as Eurostack show that Europe needs to think about how to strengthen digital sovereignty, whether through its own infrastructure or strategic alliances.

Even if such projects seem ambitious or long-term, it is important to pursue these strategic considerations seriously. The call for less bureaucracy is understandable, but data protection must be reformed in a differentiated manner, not abolished across the board.

And precisely because we have such important issues to deal with, data protection is still relevant. I completely understand when people talk about reducing bureaucracy. We see it at the German level, at the EU level, and certainly at the international level.

That is precisely what reducing bureaucracy is all about. And above all, when you look at what reducing bureaucracy means, data protection comes up 25 times. And that usually means, in my opinion, bureaucratisation in this form.

I am not a complainer, there are an incredible number of unintended consequences, but both should be taken into account. And I believe that the opinion here is that you reject the GDPR, that it should now also be revised. This already has certain elements from the presentation, but I would like to see a few more suggestions in the next version of these laws.

Thank you!

JS: As you can see, data management and protection of personal data are very sensitive and important topic these days. Many thanks for interesting session and great examples on these.

Ladies and gentlemen, that was Dr. Reinhold Kesler.