

# EXASOL PREDICTIONS 2022

Five ways data will  
help businesses gain  
a competitive edge  
in 2022

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# Introduction

Companies around the world have realized that data is power. It's the raw ingredient for effective digital transformation, the secret to understanding customers and the fuel for automation efforts that lead to a leaner, smarter way of working.

It's no wonder, then, that the data analytics revolution is evolving faster than ever. But what will change in the year ahead? Here are our predictions.



**Peter Jackson**  
Chief Data and Analytics Officer  
Exasol



**Mathias Golombek**  
Chief Technology Officer  
Exasol

# #1: The importance of the CDO will be more widely recognized

*Peter Jackson, Exasol's chief data and analytics officer*

"The most unstable C-suite job may be the Chief Data Officer," as a recent [article in the Harvard Business Review](#)<sup>1</sup> states. It's easy to see why. Half (50%) of the CDOs we spoke to in our recent report '[The journey to CDO: How to succeed in the most influential role of the decade](#)', said the value of the role is not yet recognized in the business world, while a further 36% believe the C-suite doesn't understand the CDO role.

But that's set to change. The COVID-19 pandemic served as a particularly loud wake up call for businesses that had not yet prioritized their data strategy. They learned that to make effective decisions, faster in an increasingly complex and uncertain world, they need to put data at the top of the agenda.

What's more, they recognized that a data strategy can't be implemented effectively without someone to spearhead it. Someone who is responsible and accountable for their data — and for delivering value and insight from it too. And they've come to realize that the CDO is the best person for the job.



**36%**

of CDOs believe the C-suite doesn't understand the CDO role.

*"Business requirements have evolved over recent years, and more data and analytics are needed," said Tony Zona, CDO Summer School participant and Director - Business Intelligence at Grant Thornton UK LLP in our [research report](#). "There is a growing appreciation that you need accountability to bring thousands of employees in different departments together — and you need a person/team responsible for data quality. Data needs to be easy for people to access, action and get value from."*

Organizations want CDOs that have a proven track record of success, and that can deliver the outcomes they need. With all this in mind, we believe that 2022 will see the CDO role grow in importance.

<sup>1</sup>Why Do Chief Data Officers Have Such Short Tenures?, Tom Davenport, Randy Bean, Josh King – Harvard Business Review, August 2021

# #2: The role of the CDO will become clearly defined

*Peter Jackson, Exasol's chief data and analytics officer*

Almost half (46%) of the Chief Data Officers we spoke to in our [recent research](#) believe an organization's expectations for the role are too high and misinformed. But a shift is on the horizon. That's why our second prediction for 2022 is that the CDO role will become more clearly defined. In fact, it's imperative if the role is to become more prominent.



# 46%

of the Chief Data Officers we spoke to in our recent research believe an organization's expectations for the role are too high and misinformed

It's essential that senior leaders are educated about what the CDO role really entails, and how they can help those in the role make a positive change in their organization.

This means recognizing the CDO as the most senior person within an organization who is accountable and responsible for data — like the CFO is for the finances of an organization. But it's not about being a gatekeeper of data — it's about liberating it.

Those organizations that set realistic expectations around this, along with achievable goals for improving data accessibility and literacy across all levels of the organization, will be better placed for success. At Exasol, based on our team's expertise and firsthand experience with many successful customers, we believe that the most effective CDOs will focus their efforts in two key areas to make the biggest impact.

*So what are these key areas?*

# #2: The role of the CDO will become clearly defined

*Peter Jackson, Exasol's chief data and analytics officer*

## Areas of focus for CDOs in 2022

### 1. Democratizing data

An important task for any CDO is to demystify data within their organization. They need to turn it into something that is used to positive effect, rather than just being available. It's no mean feat. Democratizing data is both a technical task and a 'people' task. It can include updating the technology stack as well as educating people. It's about making data accessible to key stakeholders, and promoting data use right across a business. Data storytelling is crucial — those CDOs that get this right not only better engage and influence stakeholders, but improve data literacy at all levels of an organization.

### 2. Data governance

If everyone has access to data, they need to be able to trust it. Data governance, therefore, is incredibly important. This means not only keeping up with ever-changing data protection regulations, but ensuring controls around access — both internally and externally. This needs to be done carefully so that data democratization isn't inhibited.



# #3: Data ethics will move up the business agenda

*Peter Jackson, Exasol's chief data and analytics officer*

Any organization using data and automated decision-making needs to think seriously about the potential for unintended consequences and disadvantaging, discriminating against or harming individuals or certain groups.

Unfortunately, however, a startling number of businesses have yet to make data ethics a priority. Even in those companies that use advanced AI-powered data analytics, only one-fifth (20%) actively monitor their models in production for fairness and ethics<sup>2</sup>.

This is a concern, especially when you consider our recent [‘People, Planet, Data’](#) research where four in five consumers said that a company’s credentials in ethical practices, climate change and D&I (Diversity and Inclusion) are a key factor in whether they buy from or do business with them. In fact, almost 9 in 10 (88%) consumers say ethical and sustainable business practices are a key factor.



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Clearly it's an issue that needs to be tackled. Every day, questions need to be answered such as **‘At what point is data collection and monitoring considered an invasion of privacy?’**, **‘Has the intended use of this data been made clear?’**, **‘How anonymous does anonymized data need to be, and can you prevent it from being re-identified?’** and — when you get to a point where machines are training data sets — **‘How do you prevent algorithmic bias?’**.

<sup>2</sup>The State of Responsible AI, FICO and Corinium, May 2021

With all this in mind, we predict that data ethics will follow a similar course to GDPR leading up to its implementation in 2018. In 2022 it will be discussed more widely among the data community, and will move up the business agenda, but won't break out as a serious issue within the business community until 2023 or beyond.

Pioneering businesses can, however, tackle this earlier and get a head start. Formalizing an ethics framework can be a helpful way of providing a model for how to behave ethically, offering a principles-based approach to doing business. It can lay the groundwork for underlining how data is used to inform decisions and ensure that data ethics practices are present in data touch points across the business. More importantly, it can become a guide to handling those difficult grey-area situations where ‘doing the right thing’ is difficult to assess or interpret.

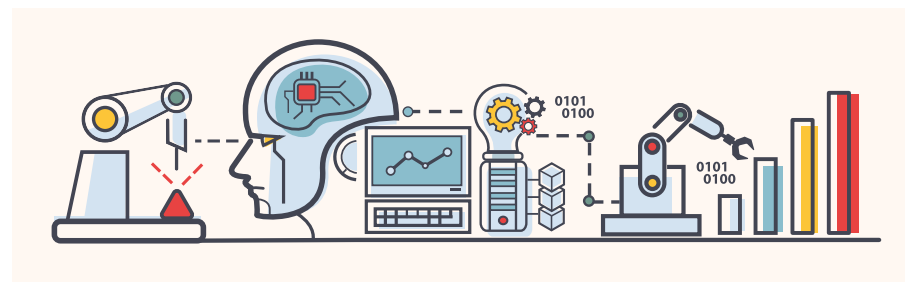
# #4: The value of hyperautomation will be realized, but only by those firms that don't lose focus

*Mathias Golombek, Exasol's chief technology officer*

Hyperautomation — automation that is data-driven, rather than process-driven thanks to a combination of artificial intelligence, machine learning, natural language programming and predictive analytics technologies — has made its way into Gartner's top 10 strategic technology trends for both [2020](#) and [2021](#) — and for good reason. It promises to improve efficiency, optimize processes and workflows, and lower operational costs.

However, it's still very early days for this phenomena. While COVID-19, and the resulting push for digital transformation, has kickstarted hyperautomation's rapid rise to fame, we need to stay on the ball and avoid slipping back into old, stagnant processes driven by more operational, tactical initiatives.

That's why our prediction for 2022 is that the value of hyperautomation will finally start to materialize, but only for the pioneers that stay focused.



Companies will need to invest a lot of time and energy in order to create long-term adoption of hyperautomation. Turning theory into action is a big challenge to take on, and preparation is key. By taking the time to understand the critical steps required before setting out on a hyperautomation journey, you will be able to stay focused and increase your chances of success.



# #5: Hyperautomation will mature to power end-to-end workflows and digital twins

*Mathias Golombek, Exasol's chief technology officer*

Much of the focus of hyperautomation today is on automating labor-intensive tasks — 'optimizing out' the repetitive time-consuming processes that are laborious and often drain productivity from people whose time would be much better spent on higher value activities.

Of course, this is incredibly valuable for many businesses, and will continue to be their area of focus, but this kind of activity isn't leveraging the full potential of hyperautomation. You see, [we believe it can do so much more](#) — which is why we're predicting that more interesting hyperautomation applications will begin to arise in 2022.

Instead of automating small tasks in isolation, digital native companies will start to understand how to automate entire end-to-end workflows. Take HR as an example. If you can digitize the whole process from selecting candidates, hiring, employee education and development, mentoring, churn prevention, and more, then you'll be able to standardize best-practice, improve efficiency and eliminate bottlenecks.

Digital twins are another interesting example. Organizations can use hyperautomation to create virtual representations of assets, systems and processes in a bid to improve performance and reliability, increase productivity and reduce risk. They are a great tool for showing what's possible. For example, by running hospital-wide simulations, healthcare leaders can work

out the impact of tweaking staffing or changing the layout of a ward, for example. They can then understand whether a tweak in one department will create a bottleneck in another without having a physical impact on patients and workers.

So, while this won't be widespread, certain digital native organizations that have always had a focus on decision-making processes along their business chain, will begin to move on from the low-hanging fruit of hyperautomation.

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# Exasol

The analytics database

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## About Exasol

Exasol was founded in 2000 with the vision to transform how organizations use data. Today, Exasol's analytics database – the fastest in the world – is trusted by the world's most ambitious organizations. With offices in several locations across the US and Europe, Exasol is committed to delivering flexible, scalable and powerful analytics solutions to customers wherever they are, in the cloud or on-premises.

Exasol – accelerating insights from the world's data.

Learn more at: <https://www.exasol.com/> and follow us on social media: LinkedIn and Twitter.

### GERMANY

Exasol AG  
Neumeyerstr. 22–26  
90411 Nuremberg  
Germany  
T: +49 911 23991-0  
F: +49 911 239 91 24  
E: [info@exasol.com](mailto:info@exasol.com)

### UNITED KINGDOM

Exasol UK Limited  
Parkshot House  
5 Kew Road  
Richmond, London  
Greater London  
TW9 2PR  
United Kingdom  
+44 20 3813 8310  
[info@exasol.com](mailto:info@exasol.com)

### USA

Exasol, INC.  
c/o WeWork  
1372 Peachtree Street  
Atlanta, GA, 30309  
USA  
T: +1 415 363 5500  
E: [info@exasol.com](mailto:info@exasol.com)