Annual Report 2022/2023

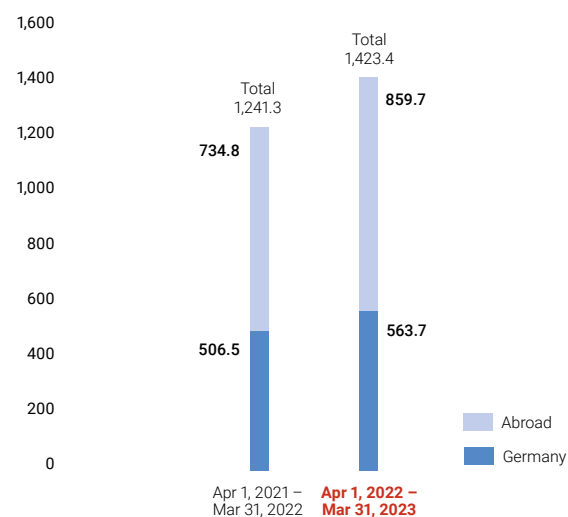# EXPAND

NTT DATA Business Solutions

○ NTT DaTa

KEY FIGURES

MEUR	IFRS Apr 1, 2022 – Mar 31, 2023	IFRS Apr 1, 2021 – Mar 31, 2022	IFRS Apr 1, 2020 – Mar 31, 2021	IFRS Jan 1, 2020 – Dez 31, 2020
Orders on hand	**1,657.0**	1,405.1	1,262.8	1,131.9
Total revenues	**1,423.4**	1,241.3	1,071.7	1,071.9
Revenues by area				
Consulting	651.6	554.7	449.6	444.5
Licenses	50.3	65.4	63.8	68.6
Cloud Subscription	90.0	57.3	38.4	36.2
Managed Services	626.1	558.0	511.4	513.0
Other	5.4	5.9	8.5	9.6
Revenues by segment				
DACH (Germany/Austria/Switzerland)	621.8	541.8	482.9	477.6
Western Europe	192.5	183.9	157.8	160.4
North and Eastern Europe (NEE)	255.3	218.8	188.3	191.9
America	251.4	193.5	149.3	176.9
Asia	95.0	93.0	85.1	57.0
Other	7.4	10.3	8.3	8.1
EBIT in MEUR	85.3	48.3	17.1	18.6
EBIT margin	6.0%	3.9%	1.6%	1.7%
EBITA in MEUR	99.2	63.5	31.0	32.0
EBITA margin	7.0%	5.1%	2.9%	3.0%
EBITDA in MEUR	142.6	107.9	75.5	77.5
EBITDA margin	10.0%	8.7%	7.0%	7.2%
Earnings IFRS	64.7	27.0	2.1	1.6
Earnings per share	1.82	0.64	-0.13	-0.13
Cashflow per share	-0.12	0.67	0.65	0.04
Return to sales	4.5%	2.2%	0.2%	0.2%
Cashflow in MEUR	-3.6	20.0	19.4	1.2
Balance sheet total in MEUR	1,047.9	971.5	905.5	900.0
Equity in MEUR	380.2	322.1	287.6	283.6
Equity ratio	36.3%	33.3%	31.8%	31.5%
ROE (Return on equity)	17.0%	8.4%	0.7%	0.6%
ROA (Return on assets)	6.2%	3.3%	1.3%	1.5%
ROCE (Return on capital employed)	9.7%	5.3%	2.2%	2.3%
Investments in MEUR	58.9	30.5	61.8	42.4
Employees as of March 31/December 31	13,530	12,176	10,601	10,267
Average	12,853	11,445	10,211	9,832
– Germany	3,883	3,570	3,423	3,427
– Abroad	9,647	8,606	7,178	6,840

REVENUE DEVELOPMENT
MEUR

Total 1,241.3	
734.8	
506.5	
Total 1,423.4	
859.7	
563.7	

1,600
1,400
1,200
1,000
800
600
400
200
0

Abroad
Germany

Apr 1, 2021 – Mar 31, 2022   **Apr 1, 2022 – Mar 31, 2023**

GROWTH IN EARNINGS
MEUR

100
90
80
70
60
50
40
30
20
10
0

5.1%
63.5

7.0%
99.2

EBITA/EBITA margin

Apr 1, 2021 – Mar 31, 2022   **Apr 1, 2022 – Mar 31, 2023**
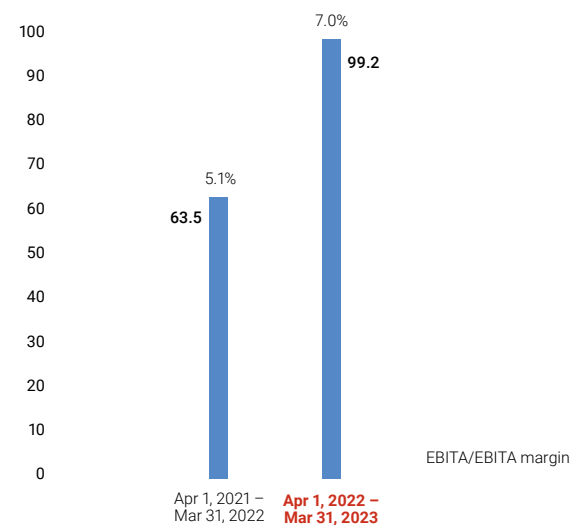
REVENUE DEVELOPMENT BY REGIONAL SEGMENT
MEUR

2022/2023
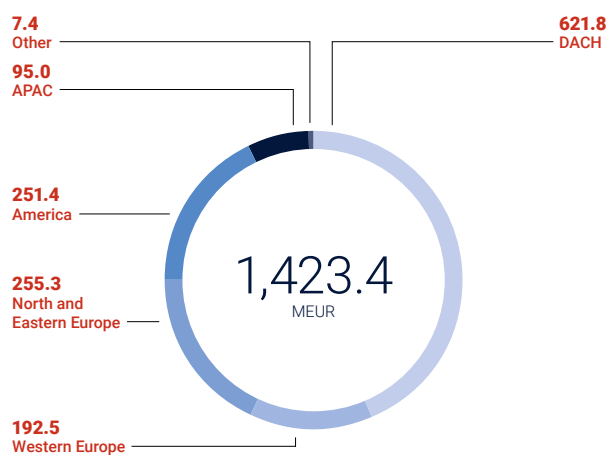
7.4 Other
95.0 APAC
251.4 America
255.3 North and Eastern Europe
192.5 Western Europe
621.8 DACH

1,423.4
MEUR

Change	+14.7%
DACH	+14.8%
Western Europe	+4.7%
North and Eastern Europe	+16.7%
America	+29.9%
APAC	+2.2%
Other	-28.2%

REVENUE DEVELOPMENT BY DIVISION
MEUR

2022/2023
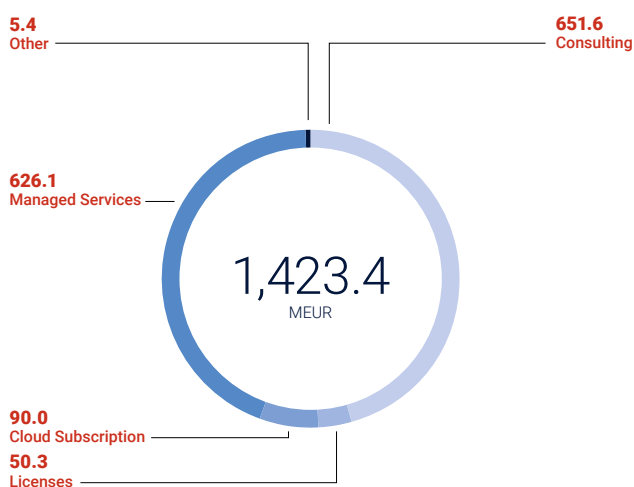
5.4 Other
626.1 Managed Services
90.0 Cloud Subscription
50.3 Licenses
651.6 Consulting

1,423.4
MEUR

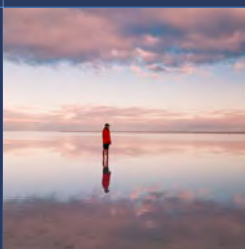| Change	+14.7%
Consulting	+17.5%
Licenses	-23.1%
Cloud Subscription	+57.1%
Managed Services	+12.2%
Other	-8.5%

EXPAND

Growth is our way of life: from individual personalities and skills as well as innovative strengths and projects to our customers and markets. We are expanding into the future.

MANAGEMENT
p.4

NEW WORK
p.26

PROJECTS
p.34

GROUP FINANCIAL REPORT
p.66

We Transform. SAP® Solutions into Value

CONTENTS

"WE WANT MORE"

Dear readers,

NTT DATA Business Solutions can look back on a very success-ful fiscal year. We achieved records in almost all areas, including the highest ever number of employees. We now have around 13,600 colleagues and rising, with the proportion of women up from 29 to 31 percent. Revenue grew by around 15 percent to a new all-time high of BEUR 1.42. Profitability also increased fur-ther. Revenue from cloud and in-house software products is now one of the strongest and most important growth drivers. At the same time, we laid important groundwork for the coming years (see Management Board interview on page 4).

Our employees all around the world can be proud of what they have achieved and their outstanding performance in a challeng-ing environment.

What also gives me a lot of confidence for the coming years is that I see no signs of the NTT DATA Business Solutions team wanting to lean back or rest on their laurels. On the contrary, several initiatives and ideas generated by our colleagues show that we want more. And this should be encouraged. I see this as one of my most important responsibilities. Our global team should enjoy their exciting tasks. A positive environment com-bined with financial strength and innovation will advance our company even further.

Our aim is to overcome technological and business challenges and take advantage of the opportunities that arise in eventful times like these. And we want to make a significant contribution to solving problems in society – for example, by investing in green IT and software innovations (information on which can be found in our sustainability report).

"LIKE OUR CUSTOMERS – AND LIKE US"

The optimism and entrepreneurial spirit at NTT DATA Business Solutions make for a pleasant contrast to the many complaints about economic uncertainty and legal requirements. Of course, the challenges are enormous, political initiatives are not always helpful, and criticism is often justified.

But beyond the important social debates, what we need is people who make things happen and advance solutions. Like many of our midmarket customers – and like us.

This entrepreneurial approach is in our DNA: We have always given our employees great freedom – while also holding them accountable. And we can see that, contrary to some prejudices, this is an approach that also appeals to many talented young people. As well as expecting maximum freedom and respectful treatment on an equal footing, a lot of applicants are willing to take on responsibility and deliver performance.

"BECOMING AN EVEN MORE ATTRACTIVE EMPLOYER"

As part of our future program eXpand, we are therefore working intensively on improving further and becoming an even more attractive employer – for example, with modernized offices and flexible remote working solutions.

We also want to give our consultants the opportunity to enjoy quieter phases after demanding projects in which they sometimes have to work hard on the customer's behalf for many weeks.

Remote working is still going well. This is partly because our employees were already used to working independently even before the coronavirus pandemic. In addition, our management staff on site have developed intelligent concepts to ensure that flexible working does not come at the cost of team spirit or employee loyalty – without imposing top-down requirements.

"INTERNATIONAL DIVISION OF LABOR
AT A NEW LEVEL"

All in all, we have laid important groundwork in the past fiscal year, and we will continue to do so with our future program eXpand. Key projects include the rollouts of our cloud-based Group-wide ERP system and the expansion of our shoring locations in India and Bulgaria.

This involves more than just cutting costs. This IT outsourcing will position us more flexibly, raise the international division of labor to a new level and, not least, give us the scope to ease the burden on our consultants.

In other words, eXpand will make NTT DATA Business Solutions not only more innovative, sustainable, and attractive for talented employees, but also more efficient and profitable. After all, only companies that are profitable and competitive can develop innovations, pay attractive salaries, and invest in green technologies.

I hope you find this report an interesting and informative read.

Yours,

Norbert Rotter

INTERVIEW "WE PROVIDE SCOPE FOR DEVELOPMENT"

The things that went particularly well in the past fiscal year, the important groundwork NTT DATA Business Solutions has laid, and what will matter most in the coming months: an interview with CEO **NORBERT ROTTER**, CFO **JÜRGEN PÜRZER**, and Supervisory Board member **CHIERI KIMURA**.

> ❝ We want to grow faster than the market and collaborate more closely with other companies in the NTT DATA Group.

Norbert Rotter
Chief Executive Officer

Mr. Rotter, before we get to the revenue and profit figures, what was the highlight of the past fiscal year for you?

NORBERT ROTTER (NR): There were several positive developments, so it's not easy to pick out an individual example. But if I had to choose, then I'd say our Americas region was particularly strong. Business in Canada, the US, and Brazil developed well. I was particularly pleased with the excellent results of our subsidiary in Brazil. The success story there is a good example of how our acquisition and integration strategy is working: though we are increasingly leveraging synergies, we still provide individual companies with plenty of scope to play to their strengths and develop. Our colleagues in Brazil made impressive use of this freedom.

The figures emphasize this: In the past fiscal year, NTT DATA Business Solutions increased its revenue by almost 15 percent to more than BEUR 1.42. Its profits also increased significantly. The CFO must be happy about that, right?

JÜRGEN PÜRZER (JP): Indeed I am. We can look back on another record year in which we improved all of the relevant key figures and significantly increased our profitability. Earnings before interest, taxes, and amortization – or EBITA for short – came to around MEUR 99.2, representing an increase of 56.2 percent. Our EBITA margin amounted to 7.0 percent. This shows that the groundwork we have laid in recent years is bearing fruit.

NR: We have certainly benefited from the fact that small and medium-sized enterprises are resolutely pressing ahead with the digital transformation and the migration to the cloud. As such, we have recorded particularly strong growth in the Cloud Subscriptions segment and have grown at well above the industry average. We have succeeded in acquiring a lot of new business, meaning that orders on hand have also developed well. The entire NTT DATA Business Solutions team can be proud of what we have achieved.

Mr. Kimura, you are Executive Vice President of NTT DATA, Inc. and CEO for the Europe, Middle East, Africa, and Latin America region. You are also a member of the Supervisory Board of NTT DATA Business Solutions. Were your expectations met?

CHIERI KIMURA (CK): The NTT DATA Business Solutions team exceeded my expectations and achieved outstanding results even in the face of a challenging environment with high energy prices and inflation. They did a great job.

MAJOR ACQUISITIONS IN GERMANY AND BULGARIA

What are the targets for NTT DATA Business Solutions over the next three years?

CK: The clearly defined target is an EBITA margin of ten percent. In addition, NTT DATA Business Solutions – like all NTT DATA Group companies – aims to grow faster than the market and collaborate more intensively with other companies in the Group. I think we are making very good progress in all three of these areas.

Mr. Rotter, you already mentioned the topic of acquisitions. Last year, NTT DATA Business Solutions acquired a majority interest in the German company Natuvion GmbH. What do you hope to gain from this transaction?

NR: This acquisition expands our leading position on the cloud migration market. Natuvion has more than 250 employees worldwide and specializes in migrating business-critical data and processes to state-of-the-art IT platforms. The company is one of the few internationally recognized SAP Data Transformation Partners and has the expertise to implement challenging transformation projects. The transaction was a very important step.

JP: We also acquired a company in the EU country of Bulgaria – BST – in the past fiscal year. This will become a significant nearshoring location for our national companies in Europe, for example in Germany, Switzerland, and the Scandinavian countries. In view of the skills shortage and rising salaries, it is important for us to make our international positioning more flexible and outsource activities to other countries – not least so that we can ease the burden on our consultants.

What does the transaction in Bulgaria mean for the other shoring locations in Turkey and India?

JP: We are not pursuing our shoring plans in Turkey any further, although Turkey's importance as a sales market and a hub for the MEA (Middle East/Africa) region will continue to rise. However, we are pursuing further dynamic growth in our shoring business in India. Our local subsidiary, which we founded ourselves, has enjoyed excellent development. The number of employees has increased from 0 to 3,000 in the space of ten years and will continue to rise significantly.

Mr. Kimura, when it comes to internationalization strategies, entrepreneurs and managers increasingly need to take account of geopolitical risks. That makes shoring strategies more complex.

CK: First of all, companies that want to stay competitive need to make increased use of shoring – there is no way around that. But it is true that increased geopolitical risks are resulting in decision-makers having to weigh up shoring and other location decisions more intensively. One of the key criteria for a service provider like NTT DATA Business Solutions is the markets in which its customers operate.

WITHDRAWAL FROM CHINA DUE TO LACK OF "CRITICAL MASS"

Mr. Rotter, NTT DATA Business Solutions withdrew from China in the past fiscal year and decided to close its subsidiary there. Was this a reaction to geopolitical risks?

NR: Geopolitical considerations certainly played a role in the decision. But the decisive factor was that we had failed to achieve the critical mass in China to play a significant role on the market.

JP: Our China business was too small to contribute to our company-wide revenue and earnings targets. We therefore decided to draw a line and accept the associated non-recurring expenses.

Speaking of non-recurring expenses, they were considerably higher than anticipated. Why was that?

JP: We took advantage of our strong performance to make the company even more future-proof. As well as withdrawing from China, we invested in making our cost structures more flexible in other regions.

> We took advantage of our strong performance to make the company even more future-proof.

Jürgen Pürzer
Chief Financial Officer

Mr. Rotter, you have recently laid some new groundwork in organizational terms, too. Could you briefly explain the main changes?

NR: We have pooled expertise and strengthened important units. For example, the new "Global Innovation & Industry Consulting" division also includes our business with innovations and software rights. We are confident that this will further reinforce our industry focus and our capacity for innovation. We have also strengthened the division with the new name "Global Business & Managed Services", in part to enable us to address multinational customers even more effectively.

"WE ARE HEADED FOR A BRIGHT FUTURE"

"Multinational customers" – that sounds like major global corporations. Are you aiming to expand into this area?

NR: Our focus is still on small and medium-sized enterprises. But we want to gain new customers in the upper midmarket segment, which has long been operating globally.

CK: NTT DATA Business Solutions is the leading SAP service provider in the NTT DATA Group and enjoys an excellent reputation, particularly in the midmarket segment. The company also has the ability to handle large projects – including at companies that no longer belong to the traditional midmarket segment. In this context, it is important to ensure closer and more frequent cooperation within the NTT DATA Group.

What exactly will that involve?

CK: All of the abilities that are required for the digital transformation are represented in our Group, from infrastructure and software to IT consulting. Acting consistently as one company therefore represents a big opportunity for us all. For example, this means more joint projects and more cross-selling, i.e. acquiring orders for affiliated companies. I am confident that we will be headed for a bright future if we leverage these and other synergies.

> **"** All of the abilities that are required for the digital transformation are represented in our Group, from infrastructure and software to IT consulting.

Chieri Kimura
Executive Vice President
NTT DATA, Inc.
CEO EMEAL (Europe, Middle East, Africa, and Latin America)

Are you hoping for impetus from Bielefeld for this development?

CK: Absolutely. In order to act as one company, we need two things: The individual regions need to know what path we are taking. And we need to know what challenges and opportunities there are locally. Norbert Rotter has been providing extremely valuable impetus in this respect for many years. We therefore appointed him to the senior leadership team of NTT DATA, Inc., which combines all of our business outside Japan, in the role of Executive Vice President this year.

Speaking of impetus: Mr. Rotter, you have announced plans to develop more in-house software solutions and increasingly implement products from providers other than SAP. Why?

NR: Our in-house developments and software solutions from other providers always have a close connection with SAP solutions. This allows us to offer our customers significant added value, which is entirely consistent with SAP's approach. Incidentally, this year's Pinnacle Awards showed how well the partnership is working: With four awards and three finalist placements, we were among the top three winners out of more than 500 SAP partners worldwide.

CK: In-house developments are crucial for improving service quality and increasing profitability. And I completely agree with Norbert as far as software from other providers is concerned: What is important is a connection to SAP and added value for customers. NTT DATA Business Solutions shouldn't try to do everything itself.

"HIGH LEVEL OF MATURITY IN CASH MANAGEMENT"

Mr. Pürzer, in recent years you have focused on cash management and standardization, among other things. Where does NTT DATA Business Solutions stand in these areas?

JP: We have achieved a high level of maturity in cash management. Now our priority is no longer radical changes, but continuous improvements. We have yet to reach the same stage in terms of standardization, but we are making significant progress. In April, we successfully completed the first rollouts for our cloud-based Group-wide ERP system in Denmark, Finland, Norway, and Sweden, and more will follow before the end of this year.

The rollouts are part of the future program eXpand that was launched in April 2022. Your aim is for this program to make NTT DATA Business Solutions not only more efficient and profitable, but also more sustainable, innovative, and attractive to talented employees, for example with a "people-first" strategy. What exactly does that mean?

NR: We are continuously working to become an even more attractive employer. In my view, one key factor is our corporate culture: We engage with each other on an equal footing and give employees plenty of freedom and scope for development. We can see that many talented young people also appreciate this and are willing to take on responsibility.

And what about work-life balance?

NR: To be perfectly honest, we are reaching our limits where consulting is concerned. Customers expect total commitment to projects; nine-to-five work days are not an option. However, we are increasingly making sure that consultants also get to enjoy some quieter phases after demanding projects. We also ensure a high

degree of freedom wherever possible, e.g. by offering flexible remote working solutions. This is proving remarkably successful.

JP: I can only agree. Hybrid working is now standard for us. We are backing remote working for the long term and intend to scale back our office space accordingly. At the same time, we want to modernize the remaining space to make our employees feel even more comfortable. So it is not just a question of cutting costs.

SUSTAINABILITY: ON THE PATH TO GREEN DATA CENTERS

Mr. Kimura, is it conceivable that companies from the NTT DATA Group could increasingly share office space?

CK: Yes, this represents an opportunity for quick synergies. But there are also many other areas where we can leverage synergies within the NTT DATA Group in terms of both costs and earnings.

MORE THAN 10,000

SATISFIED CUSTOMERS IN VARIOUS INDUSTRIES

>30

GLOBAL AVAILABILITY IN OVER 30 COUNTRIES

OVER 30,000

PROJECTS, CONSULTING AND TRAINING PER YEAR

MORE THAN 13,500

EMPLOYEES WORLDWIDE

OVER 1.4 BILLION

$ IN EARNINGS IN 2022

OVER 1,000

SAP S/4HANA PROJECTS

NTT DATA BUSINESS SOLUTIONS AT A GLANCE

Another important aspect of eXpand is sustainability. Mr. Rotter, what have you initiated in this respect?

NR: First of all, we have ensured transparency: We now know exactly where and to what extent NTT DATA Business Solutions causes greenhouse gas emissions. On this basis, we have identified and, in some cases, already implemented measures to significantly reduce our emissions. Having our own photovoltaic systems at our data centers and office buildings is one of the measures with the biggest potential impact.

JP: We have already installed a photovoltaic system in Bielefeld and more will follow shortly. We are investing a seven-digit figure from our own funds in the current fiscal year. Incidentally, this is not only good for the climate but also makes good business sense, as the systems make us less susceptible to changes in energy prices. I currently expect these investments to pay off within six to eight years.

NR: Jürgen is absolutely right to emphasize business relevance. We invest in climate-friendly technologies primarily because we see this as the right thing to do. But it also strengthens our resilience and makes us more attractive to customers and employ-

ees, who increasingly expect companies to deliver decisive sustainability initiatives.

Internal measures are one thing. But supporting your customers' green transformation would probably have a bigger impact.

NR: Yes, indeed. As a technology leader and a global company, there are some interesting growth opportunities in this area. This ultimately involves transparency, measurability, and data – and we are experts when it comes to handling data. Detailed information can be found in our sustainability report, which we are publishing this year for the first time.

TAILWIND FOR AMBITIOUS GOALS

Before we turn to the outlook for the coming months: NTT DATA Business Solutions is doing very well. The company is looking back on a successful year and has the capacity to make investments from its own resources. With this in mind, is cost discipline still important?

Top
10
global IT service providers

Over
195,000
IT professionals at your assistance

Over
25.7
billion $ in revenue per year

More than
19,000
SAP experts within the NTT DATA Group

Service in more than
50
countries

3.6
billion $ annual R&D spend within NTT Group

SOME KEY FACTS ON NTT DATA

JP: Yes, very important. There are major uncertainties, for example at a macroeconomic and geopolitical level. The tailwind we have experienced recently could easily subside or even turn into a headwind. As such, it remains essential for us not to take on any unnecessary ballast.

NR: I have to agree with Jürgen here. Revenue needs to increase at a faster rate than costs if we are to achieve our profitability targets. For many years, the market environment has allowed us to raise our consultants' daily rates. This is also urgently necessary, as staff costs are rising sharply. But ultimately, it is crucial for us to generate measurable added value for our customers in our high-end projects, which often last several years. This is the only way to enhance our reputation and raise our profile.

What financial targets have you set yourselves for the current fiscal year and beyond?

JP: We are aiming for moderate revenue growth of between four and six percent. The EBITA margin is expected to rise to around 7.5 percent. Orders on hand of more than BEUR 1.657 at the start of the fiscal year give me particular grounds for confidence.

NR: We have certainly planned our growth conservatively. As regards our medium-term targets, our objective is for our revenue to reach the two billion euro mark within five years. The other two key targets were already mentioned by Chieri Kimura earlier: We want to grow faster than the market and collaborate more closely with other companies in the NTT DATA Group.

CK: As I also said, NTT DATA Business Solutions is making good progress in all three areas and has achieved some great things. That gives me considerable confidence that we can achieve even more – including some things that may sound very ambitious as things currently stand. Let's think big!

Thank you all for taking the time to talk to us. ■

ONE CUSTOMER,
ONE CONTRACT,
ONE COMMITMENT

NTT DATA and NTT Ltd. have consolidated their business outside Japan in NTT DATA, Inc. Taku Kawaai, who is responsible for strategic cooperation at NTT DATA Business Solutions, explains the reasons and objectives behind the transformation and the opportunities it presents.

VERY FEW PEOPLE IN THE NTT DATA GROUP understand international business and the bridges between Asia and Europe as well as Taku Kawaai. He moved from Japan to Germany to join NTT DATA Business Solutions exactly ten years ago. Prior to that, he worked for the parent company's Institute of Management Consulting on behalf of customers like Sony and Sumitomo Mitsui Banking Corporation as well as for public-sector institutions. "That was when I became interested in corporate acquisitions and post-merger integration," Kawaai recalls. "I knew that was what I wanted to focus on."

As the group expanded and evolved into a global company by making acquisitions abroad, the manager moved to the NTT DATA Global Business Sector in 2012 before joining the Finance department at itelligence. Following an interlude of several years in which he served as the COO for APAC business in Malaysia and guiding the company's expansion into new regional markets such as Indonesia, Thailand and the Philippines, Kawaai returned to Germany in September 2021. His new role for global cooperation at NTT DATA Business Solutions is one part sales, one part technology, and one part innovation – and it requires him to continuously communicate changes and mediate between different interests.

BECOMING NTT DATA, INC.

The timing was good. Less than one year after his return, the NTT Group announced that it was reorganizing its entire non-Japanese business by combining large parts of NTT Ltd. and NTT DATA to form NTT DATA, Inc. "Since this move, my responsibilities have included cooperation within the Group and the transformation from the perspective of NTT DATA Business Solutions," says Kawaai. The goal as expressed by Kazuhiro Nishihata, CEO of NTT DATA, Inc.: "Bringing everything together." After all, the two organizations have a complementary portfolio: consulting, digital transformation, applications, system integration and managed services on the one hand, and NTT's data centers, network expertise, system integration and managed services on the other. They also have a broad and diverse customer base. NTT Group is active in 190 countries.

SYNERGIES, EXPERTISE, AND STRUCTURES

The strategic developments center around leveraging synergies and increasing revenue, profit, and enterprise value. As Kawaai puts it, combining the expertise and structures of the two companies "allows us to offer a full-stack portfolio globally". It also makes things considerably easier for the two companies in terms of going to market and determining the strategic focus of innovations. "And, last but not least, it simplifies client engagement at the customer interface," Kawaai adds. "There are many different companies around the world with the NTT name, but customers expect us to act as a unified NTT Group."

BRINGING PEOPLE TOGETHER
WITH SHARED QUICK WINS

To keep this momentum going, Kawaai believes it is important for the local team members to feel the benefit in the form of quick wins. He cites the example of a multi-million euro contract with Mitsubishi Electric, a global manufacturer of household appliances. The company was a customer of NTT Ltd., including for network services. It wanted to expand its SAP environment, which is where NTT DATA Business Solutions came in. It also wanted to run SAP in an Azure cloud. "We all pulled in the same direction and succeeded in winning the deal," Kawaai explains. According to the customer, the joint initiative – "one customer, one contract, one commitment" – is what made the difference.

> **"** I feel like a part of the company, and the transformation to become NTT DATA, Inc. means we are leveling up once again.

Taku Kawaai
Executive Vice President
Global Collaboration & Sales
NTT DATA Business Solutions

NEW PARADIGMS DEMAND NEW SOLUTIONS

The combination of strengths concerns also the technical level. Hyperscalers like Amazon AWS, Microsoft Azure and Google Cloud are picking up momentum, and a growing number of customers are using them as infrastructure suppliers. They also have the advantage of using various tools for running cloud-native applications on top of the platform. "We expect the value and the provision of IT to move in this direction," says Kawaai. Customers have made it clear that they are keen to purchase IT systems that use new technologies and offer seamless service, from infrastructure right through to applications. "As such, it is becoming increasingly important for us to offer IT services and applications along with the underlying infrastructure."

ASIA AS A GROWTH MARKET

The different portfolios represent a significant opportunity for NTT DATA Business Solutions. While the application level dominates business in Europe and the Americas, NTT does "an incredible amount" of business at the infrastructure level in Asia from data centers and networks to the cloud. Kawaai's conclusion is that there is considerable scope for growth. "My personal opinion is that the strategy for Asia should involve harnessing the infrastructure, customer base and resources of NTT Ltd. to expand the application level." He adds that the APAC region is an attractive, challenging market with high growth rates and a lot of new jobs, making it an ideal environment for the Group. And each new cooperation makes the partnership stronger.

COMMUNICATION AND TRUST

In order to establish NTT Data, Inc. as a global company, various foreign companies are being integrated by harmonizing their portfolios and global assets as well as their corporate functions, including finance, corporate communication, human resources, IT, and governance. Structural and organizational consolidation is being coordinated by a Transformation Management Office, which brings together virtual teams of different nationalities from each company. For example, one of the workstreams aims to advance demand-side cooperation for customers, while another is focused on M&A activities, more efficient investments, and growth. "The most important thing is for people to communicate and trust each other when it comes to our direction of journey," says Kawaai.

NTT DATA BUSINESS SOLUTIONS' POSITION

This will ensure that organizational changes go hand in hand with new business opportunities. "It takes some time for people to get to know each other and work toward common goals," Kawaai concedes. "Once we achieve this, the way forward will be clear and everyone will begin to feel the benefit." He adds that looking for synergies is hard work because it means learning how to open up spaces, work as a team, and seize opportunities together. However, NTT DATA Business Solutions remains "an independent global business unit within the structure of NTT DATA, Inc. that is tasked with advancing our SAP and applications services globally". And the company will continue to position itself as an SAP specialist for the midmarket.

SHAPING THE FUTURE TOGETHER

After ten years of working for NTT DATA Business Solutions, Kawaai has seen a lot of changes for the better. "I feel like a part of the company, and the transformation to become NTT DATA, Inc. means we are leveling up once again." He has no concerns about the future, saying that everyone has the ability to shape

the years ahead. "Together, we won deals totaling over 75 million euros across more than 200 individual projects last year. This proves that the cooperation can bring us more business than if each company went to market separately."

Given the numerous points of contact between the national companies, the manager's wish for the future is for cooperation with no organizational barriers – "OneNTT". Although it will take some time to reach that point, the foundations for developing a global brand have now been laid. NTT DATA, Inc. is already an attractive company that can seamlessly offer all IT services globally from infrastructure to applications. "The transformation is having a positive impact. It is not about you or me, but about us as a team." ∎

Taku Kawaai joined NTT DATA Business Solutions AG (then itelligence AG) in 2013 as a Principal Manager at the company's headquarters in Germany, where he led business development through multiple M&As under CFO Norbert Rotter (today's CEO NTT DATA Business Solutions) and expanded organic business in the European market in particular. From 2016, he worked for NTT DATA Business Solutions Group in Malaysia and the APAC region as COO.

Since July 2021, Taku Kawaai has been responsible for Global Strategic Collaboration and a member of the NTT DATA Business Solutions global leadership team. He drives the medium-term development and transformation of the company by providing strategic support, communications, and implementation in line with NTT DATA's global orientation and leverages the synergies resulting from the Group's network and resources. He also heads the Japanese Multinational Large Enterprises segment, supporting these customers in their global and cross-border IT strategies and projects. From April 2023, he added his responsibility in leading the global sales operations function that supports the regions and countries.

Taku Kawaai
Executive Vice President
Global Collaboration & Sales
NTT DATA Business Solutions

HOW JUSTIN BRADING IS DRIVING EXPANSION IN WESTERN EUROPE

Justin Brading is responsible for the Western Europe region at NTT DATA Business Solutions, a market with high competitive pressure. In this interview, he talks about his goals, the levers and success factors for the coming years.

Mr. Brading, at the beginning of the year you took on the management of the Western Europe region, comprising France, Spain, and the Benelux countries as well as business in the UK and Ireland. What trends can currently be seen on the market?

JUSTIN BRADING: The economic situation in Western Europe is not easy, with high inflation and upheavals in industrial supply chains representing real challenges. Nonetheless, our business prospects are very promising, as all companies need to make themselves fit for the future. The timetable for S/ 4 HANA has been set, which secures us business with existing customers. In addition, SAP is intensively developing modern cloud applications, which in turn increases our opportunities with new customers. As such, I am optimistic. My business mantra is "double-digit/double-digit" – for organic growth and for profitability. We have achieved this in the UK, and with my extended responsibilities I also want to achieve this goal in the other countries.

In your new position, you have to accommodate different cultures. What have your initial experiences been?

I think that first and foremost the task presents us all with a big opportunity. You can feel that the national subsidiaries want to work together, nobody is cutting themselves off. Everybody is working toward the goal of improving and expanding the business. My task is to adapt our functioning UK strategy to the other regions and show what business potential is in us as a group and in the market.

Could you briefly describe your approach?

One of our success factors is the 'Engage' model that we use to focus on our customers. This takes place over three phases in the customer life cycle: At the heart of the model is our consulting, in which we develop the 'Living Roadmap' together with the customer. This is where the business requirements and the SAP technology come together – we define how the two can be ideally combined. This is followed by the deployment or implementation phase and then the run or management phase. We consistently endeavor to be best-in-class in all three stages with our experts. This aspiration has brought the UK business forward on its success track over the past ten years.

After various professional positions in the IT industry, Justin Brading entered the SAP world in 1999 as Sales and Marking Director for Catalyst. In 2008, he was appointed Managing Director of the company, which was renamed Chelford SAP Solutions Ltd. In 2010, NTT DATA Business Solutions AG (then itelligence AG) acquired the company and Brading became Managing Director of the combined business in the UK. Since January 1, 2023, Justin Brading has been part of the global leadership team of NTT DATA Business Solutions and has been responsible for the Western Europe region.

Justin Brading
Executive Vice President Western Europe
Managing Director UK and Ireland
NTT DATA Business Solutions

> ❝ If you want to grow fast in this industry, SAP is simply the logical choice.

Justin Brading
Executive Vice President Western Europe
Managing Director UK and Ireland
NTT DATA Business Solutions

There is a lot of competitive pressure in your regions. How do you set yourselves apart from the other players?

I refer to our unique selling point as the 'Goldilocks offer' – many customers are looking for 'just the right fit' of products and services. We offer the global presence of one of the biggest system integrators, but at the same time we are more agile and closer to the customers than our competitors. This is a very powerful combination. If organizations are looking for a strong partner but don't want too many regulations, we offer them a more flexible, dynamic approach. Our business also differentiates itself in structural terms: Around 80 percent of our employees are located outside India, while at our main competitors it is the other way round. As a result, we bundle high manning levels with customers locally.

The DACH region is traditionally SAP-focused. What is the situation like in Western Europe?

SAP's position on the Western European market is not comparable with Germany; there is much more competition here. The UK provides a toehold for North American software companies and serves as a springboard to the continent. But I think SAP's strong portfolio also gives us a considerable boost. No other software supplier can offer a company such comprehensive support. On top of this, there is its in-depth industry expertise with many best practices. For example, we focus on sectors such as life sciences, where most customers choose SAP. If you want to grow fast in this industry, SAP is simply the logical choice. We also have a deep and longstanding relationship with the vendor – SAP can rely on us to not have any other software suppliers up our sleeve.

In many countries, the skills shortage has become a challenge for IT companies. What is the situation at your company and what are you doing to counter this?

We are actually fighting on two fronts: Firstly, we want to increase our revenues and achieve our profitability targets and secondly it is about the people and the corporate culture. The two areas are closely interrelated and these fights cannot be won in isolation. We put a very clear focus on work-life balance: After COVID-19, many companies tried to tie people down to specific locations again. We chose the other approach, as reflected in the motto "Work where it works". We trust our employees to be where they need to be to do their work in the best possible way. In addition, we invest a lot in personal development, for example in leadership training at one of the top business schools. Our management staff can take part in extensive professional development there, lasting one or two years. This is incredibly motivating for people, as it is much more sustainable than a few days of internal training.

Speaking of sustainability, how relevant is the topic for you and your employees?

Sustainability is a key factor for individuals, organizations, and for humanity. Here we want to act both as an exemplar – what we are doing – as well as an enabler, how we are supporting our customers in their sustainability efforts with SAP technologies. With a Sustainability Board, we advance internal initiatives such as the replacement of fossil fuel drive systems with electric cars or the 'One day, one tree' program. We plant a seedling for each recorded day in UK consulting – which soon becomes enough to form a forest. And last but certainly not least is the topic of gender diversity – it is important for us to develop an inclusive and diverse workforce. We need to hire more women and have adopted guidelines for this purpose. One good example is the appointment of Monic van Aarle as Managing Director for Benelux, currently our highest-ranking female manager.

Monic van Aarle
Vice President
Managing Director Benelux
NTT DATA Business Solutions

" A year of change, new beginnings, and firsts: While the year 2022 was rather calm, we will make ourselves heard in 2023. The bottom line? We want to expand – expand our customer satisfaction by taking the lead together, expand our position in the Benelux market, and expand our leadership in the field of sustainability. Together with our customers, we will turn the need for environmental change into long-term economic success by supporting them with our expertise, products and services. Solutions that will help them embed more sustainable business models in their operations and present their sustainability impact transparently, making them stand out from their competition and allowing them to implement the planned EU Corporate Sustainability Reporting Directive (CSRD) without any problems.

The year 2022 laid the foundation for a future in which we will be able to clearly stand out in our market with our industry knowledge, our close ties in our partner network, and with our attitude that is made up of determination and the drive to break new ground as a Trusted Global Innovator.

How many employees does your organization currently comprise?

We have 450 employees in the UK and Ireland and around 400 in the other countries. In addition, there are a few hundred experts in India, who work exclusively for us in implementation and managed services. As they work in close coordination with UK customers, it is important for them to be fully focused on this. The Benelux countries are still at the beginning of this structural evolution, whereas France is a different market. But we are systematically working on near-shore and off-shore alternatives here.

What do you anticipate for the company in the medium-term future?

Over the past years, we have changed significantly – from itelligence to a truly global partner that supports major international corporations. We will ensure that this trend also continues in the future. Of course, we need to adapt to technological developments such as the cloud, but with partnerships with hyperscalers and staying close to SAP's portfolio, all doors are open to us. Moving under the umbrella of the NTT DATA brand has also facilitated dialog with larger organizations. After all, Japanese values – long-term relationships, trust, stability – are real bonuses in customer relationships. We therefore have every reason to look ahead to the coming years enthusiastically and optimistically. ■

INDIA IS
THE GLOBAL
IT HUB

India and the Asia-Pacific region are experiencing rapid development. For Sanjeev Deshpande, Head of APAC Region & Managing Director India at NTT DATA Business Solutions, the challenges are much the same as in the rest of the world: The key is to satisfy growing demand for IT services by delivering increased efficiency, productivity, and the right resources.

Mr. Deshpande, NTT DATA Business Solutions' Indian subsidiary held a big party to celebrate its 10th anniversary in November. You have been at the helm since the beginning. How has business developed since then?

SANJEEV DESHPANDE: Our journey in India began with providing remote delivery services to our US team. Then we expanded our remote delivery offerings to include UK, the Middle East, APAC and rest of the EU. In November 2022, we celebrated our 10th anniversary with a lavish party in Hyderabad attended by more than 2,500 people. The development of the national company can be summed up in one number: Our workforce has expanded to over 3,000 employees in recent years not including subcontractors. We see the demand continuing coming from various sources and would most likely add few more hundred additional IT experts in 2023. Last fall our executive board promoted me to serve our APAC region in addition to India. I am quite thankful for the opportunity and intend to make a significant impact on our business in the region over the next few quarters. And we are very thankful for the support from our colleagues worldwide and from Global Functions of NTT DATA Business Solutions.

You are also a certified SAP expert in your own right.

That is going back a while. I began my career in 1993 as a mechanical engineer and started as an SAP consultant in 1998 in the USA. Then I joined our US organization in 2002 as a project manager. After working with our US organization for 11 years in different roles, I returned to India. This is when I got the opportunity to continue my service to our great organization by establishing a subsidiary which evolved into what we see today as NTT DATA Business Solutions India. I am responsible for the business in the region, and my SAP and technology background does help me to assess and structure the various tasks and challenges that arise in my role.

What is currently your biggest challenge?

Two topics are dominating business right now: the search for the top talented employees and the impact of Generative AI. We are observing strong demand for IT services once again this year, both domestic India demand and from around the world. As a result, our shoring business within the Group is performing well. And for AI, we are currently pursuing adoption of tools like GPT4 for productivity gains. At the same time, we are actively exploring vertical AI solutions for the local market for our strategic industries.

Other parts of the world see India as the leading offshore location. What is your position in this respect?

Given the availability of the experienced talents, the number of fresh graduates coming in the workforce, the mature and large IT services eco system and highly favorable government policies I do consider India as one of the best remote delivery locations. Not only for cost arbitrage reason, but also for the brain and scale. Our group does have a very similar view. That is why today we also have a GBMS unit in India and also GIIC delivery hubs

> Two topics are dominating business right now: the search for the top talented employees and the impact of Generative AI.

Sanjeev Deshpande
Executive Vice President, Head of APAC Region
Managing Director India
NTT DATA Business Solutions

As Regional Head of APAC, Sanjeev Deshpande is responsible for NTT DATA Business Solutions' operations in Southeast Asia. In addition, he manages the IT shoring business from India. The manager is a member of the board in the group's eight APAC countries and a driving force for growth through attractive product and service offerings.

After a bachelor's degree in mechanical engineering and a postgraduate diploma in management, Sanjeev Deshpande gained around 30 years of experience in various business positions from the manufacturing industry to the IT services sector. Here he worked as an SAP consultant and SAP application manager in the US. Deshpande has served as General Manager of NTT DATA Business Solutions in India since 2013, when the national company was established.

Sanjeev Deshpande
Executive Vice President, Head of APAC Region
Managing Director India
NTT DATA Business Solutions

> For me, customer success means enabling our customers to run their businesses successfully and help them achieve their business objectives.

Sanjeev Deshpande

besides dedicated remote delivery pools. Working together with their teams I expect our overall remote delivery to grow significantly over the next 4 to 6 quarters.

Can you give us some examples of the global projects you are supporting from India?

We provide PMO, Implementation, Managed Services and Solution Development Services from India and have worked on many global accounts over the years. In fact we have engaged with more than 800 customers and been part of more than 400 implementations. Some examples of projects are SAP India where we provide Cloud services, the Open University in UK, Simpson Strong Tie in the US as well as NADEC in Saudi Arabia.

What is the unique selling point of NTT DATA Business Solutions in the APAC region?

We have three clear strengths: our presence, our portfolio, and our partnership. We are the only IT provider of our size to be present in almost every country in Asia. And we are the top SAP partner for all areas of the service portfolio from advisory and project management to implementation and managed cloud services. Finally, we are committed to close partnership. For example, this year we won the Asia Pacific Japan Award for Partner Excellence 2023 for SAP Concur Solutions.

And from a customer perspective?

For me, customer success means enabling our customers to run their businesses successfully and help them achieve their business objectives. Our colleagues are the key in this effort. It is our employees who deliver on behalf of us and serve our customers. Therefore, our high performing employees are the main drivers who ensure that our customers are using systems in the best possible way, they are getting the best results and we are able to constantly deliver incremental innovation via additional products, IP or services. This is how we create customer lifetime value – the essence of customer success.

What strategic foundations are you putting in place for your organization this year?

The first foundation that we are working on is on next Gen Talent Management. Our goals are an inspired workforce, the right experience level mix and diversity all at the right cost. The second one is industry and product expertise including SAP, ServiceNow, Advanced Analytics with Microsoft and UiPath. Then we are increasing the productivity by safely adopting Generative AI tools. And last but not least we are creating additional solutions employing AI and other modern technologies. Key is to have the right level of expertise. In addition, we are currently making considerable investments in our relationship with SAP and other OEMs to reflect the current dynamic market and ecosystem requirements.

> "The first foundation that we are working on is on next Gen Talent Management."

Sanjeev Deshpande
Executive Vice President, Head of APAC Region
Managing Director India
NTT DATA Business Solutions

What are your expectations for your organization in the medium term?

We intend to grow our business in the region by minimum two times in the next 3 years while achieving profit targets. We also want to ensure that we continue to deliver highly competent and efficient remote delivery services to the group. Working with our sister companies via joint sales pursuit teams we will be able to make a difference not only to our customers but also customers of NTT DATA Group.

And in the APAC region?

The Asia-Pacific region is the world's most dynamic and fastest growing market. The strategy mentioned above applies to the region as well. We want to be the number one SAP solutions provider in the regional ecosystem. We have great country teams and an excellent regional team. I am really looking forward to working with all of our employees, colleagues from NTT DATA Business Solutions and as well as our sister companies and partners to make the next 3 years the best 3 years ever in the region. ■

NEW WORK

NEW WORK IN NEW OFFICES

Tradespeople, technicians, and movers are currently present on many of our locations. This is because the teams there are rearranging their work environment. It is about much more than just new furniture: Together, we are developing spaces where employees can work together creatively and flexibly. And where the environment is adapted to their needs.

LUNCHTIME AT THE NTT DATA BUSINESS SOLUTIONS HEAD-QUARTERS IN BIELEFELD: A group of young employees from the junior program is gathering up the last few brightly colored notes in the design thinking room where they have been working meticulously on new ideas before they headed off to the cafeteria together. A consulting team is returning from a customer meeting and has spontaneously booked one of the multi-purpose workshop rooms for a follow-up meeting. In the team office next door, an employee from Managed Services is withdrawing to one of the sound-insulated conversation boxes to focus on working on a customer problem. The rest of his team has just finished taking a break together and is gathering in the meeting corner of the cafeteria to discuss a new project over coffee. An experienced consulting employee has taken a seat with her young colleague for a coaching discussion in the lounge area, designed with colorful seating and plenty of green plants. Together they are preparing an expert discussion for an event where customers, business partners, and employees will all meet at the NTT DATA Business Solutions conference center in Bielefeld.

A meeting point for creative as well as focused work, for teamwork, networking, and learning together. A varied and flexible work environment where you can work together on site or in hybrid settings: This is how the employees at the Bielefeld headquarters envisage the ideal office for the new world of work. Over several months, representatives from the different employee groups and the management met with business consultants and a team of architects to think about what their office needed to look like to meet all of these requirements.

Now the time has come for the conversion to begin. Janine Kerscher can hardly wait for it to get started at last: "The plans for our new offices have just been completed," enthuses the team leader in Managed Services Germany at NTT DATA Business Solutions. She was part of the planning team and represented the Managed Services employees. For her, it is about much more than just new furniture and new rooms: "Everyone is talking about 'new work' right now, everywhere you read about the major changes taking place in the world of work," says Kerscher.

This is why she thinks it is worth looking closer at what your own team really needs in order to work together well and enjoy it – in

> Everyone is talking about 'new work' right now, everywhere you read about the major changes taking place in the world of work.

Janine Kerscher

very practical terms, going beyond buzzwords and idealized new work utopias. "Planning new offices together is a great starting point for this," thinks Kerscher. After all, this quickly raises very specific questions: When and for which tasks do we actually still need an office workplace? What should our work environment be like for us to enjoy getting together there as a team? What kind of culture do we want to promote and how does our work environment contribute to this?

At first glance, it may not seem all that important whether, for example, there are a lot of plants in the office, whether there are

Janine Kerscher
Head of Team HCM/SuccessFactors
Managed Services Germany
NTT DATA Business Solutions

more spaces for quiet work or more team areas, or how communal areas are designed. But in fact, even seemingly little things like this show: "An atmosphere of well-being for everyone is our top priority," says Kerscher. "We don't want our office to be a cold, anonymous workplace where everyone just works by themselves, cut off from their colleagues."

Like the Bielefelders, teams and employees from all divisions and at all twelve German locations of NTT DATA Business Solutions are therefore redesigning their work environment. The different teams take inspiration from one another. For example, Janine Kerscher and her team have already been inspired by other locations. "While we were developing ideas for our location in workshops, we visited our colleagues in Dortmund, who have already finished their conversion," says Kerscher. "This allowed us to take a look for ourselves to see what could also work for us and what wouldn't."

Step by step, one office location after the other is therefore changing – and making it clear even in an analog work environment how much has already been set in motion at the company over the past years and how much more diverse and agile the new world of work has become at NTT DATA Business Solutions. "We now have what may be a unique opportunity to redesign our experience of work and make it even more flexible and satisfying for everyone," says Klaus Strack, Management Board for the SAP business unit in Germany. "Because one thing is for sure: Hardly anyone wants to go back to how things were in the world of work in 2019."

Work processes and methods have changed. Many employees regularly or temporarily work at different locations, on site with customers, or from home. In specially developed training courses, employees have learned how to moderate and organize teamwork optimally in a wide range of different analog, digital, and hybrid settings. "We are currently renegotiating with one another to agree on the configurations in which we will bring people together where and how," says Strack. Discussions about how to work together are also being held with customers with a new level of openness, he says: "We examine on a case-by-case basis whether it makes sense to meet on site and when we can work together more efficiently and more conveniently for everyone in hybrid or remote scenarios."

Klaus Strack
Management Board SAP Business Unit Germany
Delivery
NTT DATA Business Solutions

❝ We now have what may be a unique opportunity to redesign our experience of work and make it even more flexible and satisfying for everyone. Because one thing is for sure: Hardly anyone wants to go back to how things were in the world of work in 2019.

Klaus Strack

This entails many new freedoms and fresh agility in day-to-day work. And it changes the requirements for the company's existing office locations. "There is a lot of talk at the moment about the possibility that offices may not be required at all anymore in the new world of work," says Dieter Schoon, who is responsible for HR strategy and management as Head of HR. "But we have come to the conclusion that for us, 'new work' is about allowing as much freedom, autonomy, and flexibility as possible, while also creating new proximity in and between the teams as well as with business partners and customers."

Modern office locations that are attractive for employees and can also be reached easily and quickly on a spontaneous basis are an important factor here. "We have therefore decided not to give up any of our local offices," says Schoon. "Instead, we are now making targeted investments in the existing locations to adapt them to the changed needs of our employees." The company is currently investing in redesigning its offices. This is possible partly because the office spaces at many locations are becoming smaller and thus more cost-effective, explains

Dieter Schoon
Executive Vice President Global People
NTT DATA Business Solutions

> 🙶 For us, 'new work' is about allowing as much freedom, autonomy, and flexibility as possible, while also creating new proximity in and between the teams as well as with business partners and customers.

Dieter Schoon

Alexander Hühmer, who ensures as Head of Global Delivery for Managed Services that a large portion of the savings is efficiently reinvested.

The goal is for the offices to become smaller but also more attractive. "The experience of the past months shows that large spaces that are unused and largely empty most of the time tend to put employees off coming into the office," says Hühmer. "However, the solution cannot be to make it mandatory for teams to work in the office." Instead, the goal is now to offer all employees a nearby workplace tailored to their needs for meetings and workshops as well as for quiet, focused work.

The employees themselves are involved in deciding what exactly this workplace will be like. "It shouldn't be about jumping on board with the latest hype or trends and imposing a homogeneous new work regime on everyone," emphasizes HR boss Schoon. "One of our greatest strengths is our diversity and our local ties. Each team thinks and works differently."

The first step was therefore a large-scale employee survey to find out what employees wanted from their office workplaces. In the next step, planners and interior designers helped develop modular components and room layouts that meet the wide-ranging requirements in practice.

This gave rise to eight different modules with which the local teams can now put together their ideal work environment. These include conventional co-working areas where cross-team dialog

>> The experience of the past months shows that large spaces that are unused and largely empty most of the time tend to put employees off coming into the office.

Alexander Hühmer
Senior Vice President
Operations Management Global Managed Services
NTT DATA Business Solutions

is possible, as well as "active" formats such as design thinking rooms where creative workshops are conducted. There are also 'silent modules' allowing for quiet, focused work or discreet discussions for staff appraisals or coaching. And flexibly modifiable conference rooms for larger events and training courses.

Step by step, each of the twelve German office locations is being converted with these modules. "We deliberately did not start with the conversion of the company headquarters, but first waited to see what the teams at different locations were making of the new possibilities," reports Frank Schwabe, global Chief Procurement Officer, who is also responsible for the procurement and planning of the new furniture and conversions – and for ensuring that certain standards are adhered to as regards the quality of lighting and acoustics as well as occupational health and safety. "There is also a uniform color scheme at all locations, and they all select lamps, furniture, and room layouts from the same collection," he explains.

This ensures "that at all locations you immediately see and feel: This is an NTT DATA Business Solutions office," says Schwabe. But at the same time, each location has the opportunity to emphasize particular features of its own. "For example, there is

Alexander Hühmer
Senior Vice President
Operations Management Global Managed Services
NTT DATA Business Solutions

> 〝 We deliberately did not start with the conversion of the company headquarters, but first waited to see what the teams at different locations were making of the new possibilities.

Frank Schwabe

Frank Schwabe
Chief Procurement Officer
NTT DATA Business Solutions

a graffiti wall at the Berlin location and wallpaper with a photo of a mountain panorama in Munich," says Schwabe.

In Bielefeld, it is already clear what the future of work will be like: "It is particularly important to us that there is plenty of opportunity and space for dialog in the office," explains Kerscher. The reason: "We have a lot of new and young colleagues in our team here, and many of our junior training programs also take place here at our headquarters." Facilitating dialog between young and experienced employees is therefore particularly important to make sure that everyone settles in well at the company and can experience and understand the corporate culture. "Our culture here has always included being able to approach everyone and ask questions and that everyone is very helpful," says Kerscher. "We very much want to emphasize and strengthen this part of our corporate culture with the new rooms." So it is high time for the new furniture and the tradespeople to arrive, thinks Kerscher: "We are all very much looking forward to our new office already." ◼

PROJECTS # THE SUPREME DISCIPLINE OF IT

A project is an attempt to reconcile planning with future reality to the greatest possible extent. In IT and beyond, projects are complex because teams, tools, approaches and objectives are always in motion. That makes it all the more rewarding when customers and service providers reach the end of a long and challenging project and get to say: "Done! What's next?" After all, the next project is never far away.

RELOCATION SERVICES FOR DATA

MUTUAL TRUST, SUCCESSFUL PROJECTS

Natuvion, the new subsidiary of NTT DATA Business Solutions, specializes in international data transformation projects for enterprise software. The supply is limited, the process is complicated, and demand is growing rapidly. Data is an organization's most important IT asset nowadays. Patric Dahse and Holger Strotmann, shareholders and co-founders of Natuvion, discuss the background of the deal, the potential of the market, and the unifying effect of IFRS.

NTT DATA Business Solutions acquired a majority interest in Natuvion in 2022. How did the transaction come about?

PATRIC DAHSE (PD): When we started out in 2014, we both understood that our international growth would be a long and bumpy road. Without the right infrastructure, we knew the journey would be grueling, not least of all since we were funding it entirely from our profits. Within a few years, our rapid pace of growth had slowed a little. The various tasks in Germany and abroad were proving to be a challenge for us. So we had to make a decision: grow inorganically through acquisitions, go public, or team up with a partner. This question prompted some heated debate between the co-founders.

HOLGER STROTMANN (HS): After we launched, our first goal was to expand to 35 employees. We reached this milestone within just one year. Some of the shareholders wanted to push ahead with this positive development and continue growing. There were essentially only two options for achieving this: take on a financial investor to help us with funding or seek out a strategic partner. We had already implemented some joint projects with NTT DATA Business Solutions AG (former itelligence AG) that generated considerable success, not least of all thanks to our respectful cooperation on an equal footing. This mutual trust and our successful track record were the reasons we ultimately opted for NTT DATA Business Solutions.

But you also had extensive partner business with other consulting firms.

PD: We still work with companies including Cognizant, DXC, TCS, T-Systems and Wipro. Obviously, this was a big question mark when it came to NTT DATA Business Solutions and the transaction. But we were eager to ensure that the deal worked smoothly for all involved and that we acted fairly toward our other partners. As a result, we now have two channels in which we can generate significant growth.

HS: There were also other options, but they would not have been consistent with Natuvion's DNA. Our shareholders agreed that we needed reinforcement – a partner who trusted us and could support us in our continued development. We wanted to make the best decision for our team and one that would allow us to retain our identity as an independent boutique company.

ABOUT NATUVION

Natuvion is an internationally recognized SAP Data Transformation Partner and operates as a separate brand under the umbrella of NTT DATA Business Solutions. With its services and internally developed tools, the Walldorf-based company assists organizations in efficiently relocating business-critical data and processes to state-of-the-art IT platforms and systems. Typical "relocation services" include data migration, transformation and integration as well as data quality enhancement, retirement and protection. Natuvion is one of three companies worldwide to be a member of the SAP S/4HANA Selective Data Transition Engagement Community.

Established in 2014, Natuvion expanded internationally in the following years. It now has more than 300 employees at nine locations in Germany, Austria, Switzerland, Slovakia, the US and Australia. Natuvion and NTT DATA have already worked together as partners for a number of years, including on the implementation of high-end SAP S/4HANA transformation projects.

More information:
natuvion.com

A team of 300 met a team of 13,000. Corporate structures met a start-up mentality. What was your experience of the first few months?

HS: Despite the differences in size, as soon as people work together on a project, they consider themselves to be a team. We see eye to eye on our topics and we work together for customers at an operational level. Both companies understand the collective approach, both companies are internationally active, both companies are on a growth path. And, of course, we both have to deal with the demands of IFRS accounting – we face the same challenges irrespective of our size differences. All of these things help to unify us.

PD: What matters most is whether people are a good fit at a working level. If they were not, the value of our expertise and our brand would decline. In our two years of cooperation with NTT DATA Business Solutions prior to the transaction, we got to know and appreciate each other. During this time, our teams worked together to achieve a number of success stories in Europe and abroad.

" The deep industry expertise of NTT DATA Business Solutions allows customer processes to be optimized and the necessary applications to be integrated.

Patric Dahse
Founder and CEO of Natuvion

How do the portfolios of the two companies complement each other and where do they overlap?

PD: NTT DATA Business Solutions' consulting business works like a comprehensive service integrator. The deep industry expertise of NTT DATA Business Solutions allows customer processes to be optimized and the necessary applications to be integrated. We support companies in their transformation when it comes to typical questions relating to data. What do we want to take with us? What can we get rid of? What do we need to get rid of?

Patric Dahse, founder and CEO
Born in Berlin, Patric Dahse is a computer scientist who began his career working with SAP. He came into contact with the other Natuvion founders at a medium-sized SAP consulting firm for the energy industry.

Holger Strotmann, founder and CEO
Born in Upper Swabia, Holger Strotmann completed his commercial training with an energy supplier and moved to the same SAP consulting firm in 2006, where he and four colleagues decided to form Natuvion.

To put it in highly simplified terms, it is like a relocation. NTT DATA Business Solutions works with the customer to determine the requirements for the new house, comes up with an architectural design, builds it, and furnishes it. Our job is to make sure that the tables, chairs, glasses, pots and pans, plates and silverware – i.e., the data – are in the right place. If that sounds like two perfectly complementary business models, I am pleased to say that is exactly how it works in reality, too!

How would you describe your market environment?

PD: The core market and the provider landscape are relatively limited. It boils down to the three companies in the SAP S/4HANA Selective Data Transition Engagement Community, of which we are a member. This limited supply is accompanied by growing demand. ERP software used to be used for decades and there was a lot of in-house development. During this time, customized or internally developed ERP systems had considerable potential for setting themselves apart from the competition. By contrast, the main competitive edge in the cloud era is data. Data is what enables companies to make good business decisions. That is why the demand is so high right now. And not just among existing SAP users: 40 percent of licenses are concluded with net new customers looking to migrate a range of different solutions to SAP.

HS: Our latest transformation study found that half of all companies in the US have switched ERP as part of the modernization of their IT infrastructure. And generally speaking, the half-life of an enterprise solution has become considerably shorter. This is accompanied by a hierarchical phenomenon: It used to be IT managers who made the decisions, whereas now it is the CEO and CTO who choose what happens to a company's data. Because IT is following business rather than vice versa, this is also changing the nature of the relocation projects.

> Despite the differences in size, as soon as people work together on a project, they consider themselves to be a team.

Holger Strotmann
Founder and CEO of Natuvion

What does data relocation entail?

HS: There is no standard service for migrating from CRM systems like Salesforce to SAP in the cloud. After all, providers have no interest in making it easy for their customers to switch. That is where we come in. Like in any relocation, we go through the house and look at what needs to be moved and what can be disposed of – or put into storage. We carefully pack up the data so that it can be safety transported and unloaded in the right place. We supply the boxes, the forklifts, the trucks, and the movers.

PD: We have looked after some of our customers for a number of years. Of course, they had made various efforts to establish dedicated transformation teams, but they never fully succeeded. We have managed to establish a standard migration path that is recognized by the market. And we define the quality standards and content models for transformation. Being prepared for all eventualities is important: There are various requirements in addition to the ERP standard, such as the Special Purpose Ledger in the US or Extended Warehouse Management (EWM).

> " Providers have no interest in making it easy for their customers to switch. That is where we come in.

Holger Strotmann
Founder and CEO of Natuvion

PROCESS EXCELLENCE

GOVERNANCE & SUPPORT

DATA IDENTIFICATION & CLUSTERING

RETENTION & RETIREMENT

MIGRATION

SIMULATION & AUTOMATION

TRANSFORMATION

DATA PRIVACY & SECURITY

QUALITY & INTEGRITY

PLATFORM INTEGRATION

What does the future hold?

PD: Large-scale transformation projects open up the potential for us to establish additional service organizations. One example is the public sector, where we have won some major projects. However, this will not alter our positioning as a transformation company. After all, the market would still exist even if every company eventually migrated to S/4HANA. Then there is M&A business with its acquisitions, spin-offs and restructuring – and S/4HANA is already ten years old. A new SAP release typically comes out every 15 years.

HS: Our aspiration is to industrialize data relocation to the greatest possible extent. The Natuvion Data Conversion Server consolidates our experience from around 1,000 projects. This is helping to increase the pace of transformation. The standardization and industrialization of the Natuvion Data Conversion Server also makes it possible for us to establish transformation factories within NTT DATA Business Solutions. We are familiarizing teams in India, Turkey and Bulgaria with a standardized approach based on our specific software. This will obviously deliver significant added value for our parent company, since all of its customers also have the need for transformation.

PD: The added value for the customer is the ability to take data with them easily wherever they go. There should be no technical restrictions when it comes to choosing a new IT solution. We originally developed our System Landscape Optimization process for SAP's 500 biggest customers. Today, the top third are actively interested in it and there is huge untapped potential. The majority of greenfield customers now have exacting demands when it comes to partially historical data.

HS: If we have a narrow point of view, we are like a moving company. But if we think big, we are the people who make things happen. Software groups present their new products and roadmaps, but their customers are somewhere else entirely. We facilitate the transformation process and help organizations to follow their strategic suppliers. ■

BRINGING DATA TO LIFE

The 2022 Tour de France saw Denmark come under the spotlight, with the start and first stages taking place in the Scandinavian country, while the eventual winner was also from Denmark. Enhancing the overall experience was Marianne, a digital human that the local experts from NTT DATA Business Solutions had spent years developing.

COPENHAGUE DANEMARK
Grand Départ

vendredi 1er juillet
COPENHAGUE

VEJLE
samedi 2 juillet
ROSKILDE

dimanche 3 juillet
NYBORG

SØNDERBORG

TRANSFERT lundi 4 juillet

CALAIS
DUNKERQUE
LILLE
BELGIQUE
BINCHE
mardi 5 juillet
mercredi 6 juillet
ARENBERG
PORTE DU HAINAUT

jeudi 7 juillet
LONGWY

PARIS LA DÉFENSE ARENA
PARIS
Champs-Élysées
dimanche 24 juillet

TOMBLAINE

vendredi 8 juillet

LA SUPER PLANCHE DES BELLES FILLES

SUISSE

DOLE
samedi 9 juillet
LAUSANNE
dimanche 10 juillet
CHÂTEL
AIGLE
mardi 12 juillet
REPOS lundi 11 juillet
MORZINE
vendredi 15 juillet
MEGÈVE
ALBERTVILLE
jeudi 14 juillet
mercredi 13 juillet
SAINT-ÉTIENNE

samedi 23 juillet
LACAPELLE MARIVAL
samedi 16 juillet
ALPE D'HUEZ
COL DU GRANON
ROCAMADOUR
BOURG D'OISANS
BRIANÇON
RODEZ
MENDE

Copenhague

Paris

ON JULY 1, 2022, MANY PEOPLE IN DENMARK CHEERED AND CELEBRATED as the Tour de France, the world's biggest annual sporting event, started in Denmark for the first time in history with three of the 21 stages taking place there. Colleagues from NTT DATA Business Solutions were also among the visitors to the event – after all, the parent company NTT has been a supporter of the Tour since 2015 and has been working closely with the organizers of the race, the Amaury Sports Organisation (A.S.O.), to digitalize the event. The goal of the transformation is to keep offering the fans new experiences and exciting information about the race on digital platforms – in the "biggest connected stadium in the world".

In 2022, the technological milestones also included a "Digital Human", a female avatar named Marianne – after Marianne Martin, the first-ever winner of the women's Tour de France. The digital human worked as a visitors guide in the fan park in Copenhagen and in the NTT Big Data Truck, where she accompanied the customer journey throughout the Tour – over a total of 3,350.1 kilometers passing through the Col du Galibier (2,642 m) and ending in Paris. Marianne welcomed visitors and provided real-time information on the race, the riders, the stages, and the places on the Tour.

DIGITAL FORM, NATURAL FEEL

The challenge was to make the dialog with a digital avatar feel natural and human. As humans, we try to reflect those we interact with. If someone smiles to greet us, we want to smile back. The relationship thus begins on a positive note and an emotional connection is established. Thanks to artificial intelligence (AI) and machine learning, Marianne, the digital Tour guide, has a natural way of speaking and body language that is easy to read – or rather to feel. An emotional relationship can thus be developed using digital automation. And the user interface is much more intensive than a written statement – because we are greeted with a smile.

ON THE CUTTING EDGE OF ARTIFICIAL INTELLIGENCE

The bridge between digital and emotional was built by AI expert Thomas Nørmark. For years, the Global Head of Innovation at NTT DATA Business Solutions has been working with many experts on the company's "it.human platform". "The solution is interesting from a technical point of view, as it involves cutting-edge methods such as advanced AI technology, cognitive services, natural language processing, computer vision, a data platform, and microservices", says Nørmark. At the same time, the team had to ensure that interaction with the avatar was made easy – natural, so to speak. The conversation partner is ultimately supposed to feel convinced that the responses are coming from a human. "You can see right away that we have now succeeded in this, which is what makes the solution so appealing."

AN INTERFACE FOR COMPLEX DATA ANALYTICS

As well as the user interface, inner qualities also count, reports Per Falck Jensen, Vice President, Managing Director of NTT DATA Business Solutions in Denmark. "The Tour project was important

---

WHAT IS CONVERSATIONAL AI?

If you have ever said "OK Google" to your smartphone or asked Siri when your next meeting is, then you already know what conversational AI can do. This specific area of artificial intelligence (AI) relates to methods that enable AI to understand human statements and hold a conversation with us. The discipline of natural language processing (NLP) regulates how computers process and analyze the words that we say or write. Conversational AI is also a type of machine learning – a technology that is constantly improving because it can learn from all new information. With targeted training, different AIs can thus be prepared for specific roles and application scenarios.

More information:
nttdata-solutions.com/de/innovationen/conversational-ai/

for us in learning to prepare and make data-driven decisions in a non-SAP environment." The Tour de France went a big step further here than earlier use cases for avatars, "because there was much more unstructured data in order to support the event optimally." To bring data to life, the Digital Human was created as an interface. "In this way, the Tour organizers can make all data accessible to the visitors and thus democratize it." Jensen's data mantra: "Embrace it, work with it, bring it to life! Companies shouldn't be afraid of new technologies."

FAST PACE OF INNOVATION IN AI

After all, the trend is unstoppable, many corporations are speculating on major competitive advantages from AI, and progress is being made at incredible speed. "This year we are developing an all-round sports promoter," reports innovation director Nørmark.

"The generic persona can discuss sports such as baseball and golf, as it uses functions of large language models, which is also what ChatGPT is based on." In 2021, Nørmark's AI team had access before anyone else in Denmark to the language model GPT 3, which learns from millions of interactions with data, humans, and feedback loops by way of reinforcement learning. Then GPT 3.5 came out, and now the again considerably stronger Version 4 is on the market. "As a result of the continuous improvements, we can now offer a much broader discussion basis than we did during the 2022 Tour," says Nørmark.

The Danish AI expert feels sure that avatars are the interface of the future – the natural point of contact between technology and human beings. "You get feedback from the Digital Human's body language and see micro-expressions in its virtual face." And with a QR code, says Nørmark, you can transfer the avatar to your cellphone and take it with you "to bring the data to life everywhere".

No wonder that many of Marianne's conversation partners were impressed, because the communication was perceived as surprisingly lifelike.

USE CASES IN MANY AREAS

"With an avatar, humans can communicate with a non-human in a human form," adds Per Falck Jensen. In a few years, he says, this new interface will allow access to companies' IT landscapes and be incorporated in business processes. Exemplifying this trend is an avatar NTT DATA Business Solutions has already built on top of SAP SuccessFactors' Recruitment module along with its digital colleagues already operating in staff cafeterias or aiding in the onboarding of new employees. In addition, one of Denmark's biggest trade unions fully digitalized their reception with a digital human last year. "In the digital supply chain, in the financial sector, and in automation – we are seeing AI and data everywhere now." But Jensen anticipates the greatest potential in manufacturing, where workers will be able to interact with computers via natural language.

TRAINING PROGRAM FOR AVATARS

But how do you prepare the avatars for use at a company? With different types of data: static and dynamic, public domain and company data. "Static data can simply be fed into the conversational AI's knowledge base," reports Thomas Nørmark. Dynamic data, which change, have to be simulated in the backend. In addition, integration capabilities are needed to extract data from the SAP production system or the shop floor MIS, for example. A job for solution architects, who optimally combine all requirements and different data streams. "This is the hard part of the business," says Nørmark, "but it gives us an edge over start-ups operating in the AI environment. Although they make pretty front-ends and visualizations, it is the back-end where you can really separate the wheat from the chaff."

Per Falck Jensen
Vice President
Managing Director Denmark
Head of Sales Nordic Region
NTT DATA Business Solutions

Thomas Nørmark
Director
Global Head of Innovation
NTT DATA Business Solutions

QUALITIES AS A SYSTEM INTEGRATOR REQUIRED

Their task as a system integrator is now to apply cutting-edge technology such as AI in the right context in relation to enterprise business, adds Jensen. "We know how to gather the data onto a platform, how to process it, and how to implement the results." Since July 2022, the official proof of concept has also been established: "If we can do it for the Tour de France, then we can do it anywhere." Like the Dane Jonas Vingegaard, who won the competition on the Avenue des Champs Élysées in Paris on July 24, 2022 and got to take the yellow jersey home. ■

MORE ENVIRONMENTAL PROTECTION THANKS TO ARTIFICIAL INTELLIGENCE

In a port city in southern Brazil, scientists from a wide range of disciplines are working on the future. The "Data Symbion" software aims to not only provide companies and institutions with environmental information but also to make forecasts about future events using artificial intelligence. A look under the hood of a visionary private-public partnership project.
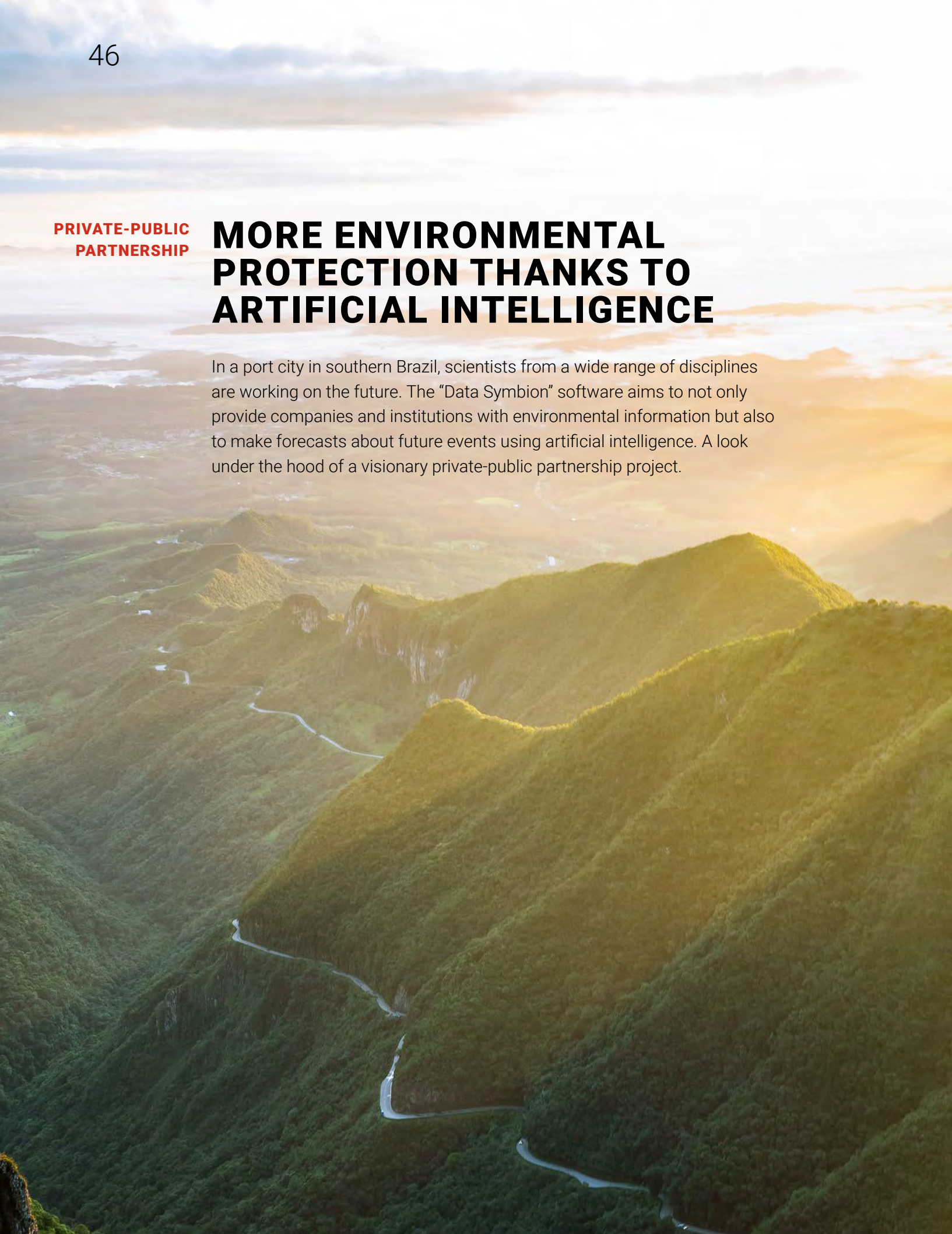
**HOW ARE SCIENTIFIC IDEAS TRANSFORMED INTO SUCCESS-
FUL BUSINESS MODELS?** In principle, it is straightforward:
Science has to find its way into the economy. Putting this into
practice is admittedly challenging – but also incredibly exciting.
Especially when it comes to a project that combines the two
big topics of our times: environmental protection and artificial
intelligence.

"Data Symbion" is one of these promising projects. More precisely,
it is a public-private partnership between the Instituto Federal do
Paraná (IFPR), which belongs to the Universidade Federal do Para-
ná in southern Brazil, and NTT DATA Business Solutions in Brazil.

At the institute, four professors and more than ten students
have been working for several years on an idea that one of the
professors, Leandro Pereira, explains as follows: "Data Symbion
helps people make the right decisions on the basis of environ-
mental data."

> A lot of information is already collected
> now, but often it is just stored and then forgot-
> ten – instead of drawing conclusions from it.

Leandro Pereira
Professor of biology at the state-owned
Instituto Federal do Paraná

What sounds simple is actually highly complex. Different profes-
sions come together in the IFPR team: environmental scientists,
programmers, statisticians, experts in machine learning and arti-
ficial intelligence. The goal is to derive connections from the large
quantity of available environmental data, to draw conclusions
regarding future events, and – very importantly – to make this
data available to decision-makers. "A lot of information is already
collected now, but often it is just stored and then forgotten –
instead of drawing conclusions from it," says Pereira, who has
been living in the port city of Paranaguá and working at the IFPR
there for twelve years. "Thanks to Data Symbion, we can bring the
data to the decision-makers, i.e. to the people who can do some-
thing with it."

DATA SYMBION

- Data Symbion is a private-public partnership between
  the Instituto Federal do Paraná in the Brazilian port
  city of Paranaguá and NTT DATA Business Solutions.

- The goal of the project is to combine environmental
  data and artificial intelligence in order to reveal con-
  nections between environmental influences and pre-
  pare forecasts.

- Current status of the project: Initial customers
  are being acquired.

More information:
datasymbion.com

Data Symbion

"Leandro Pereira is the father of Data Symbion," says Rodrigo
Kruger, who is in charge of coordinating the project on the
NTT DATA Business Solutions side. Kruger lives and works in
Curitiba, the capital of the Brazilian province Paraná, just 50 kilo-
meters from Pereira's institute. "My job at NTT Data Business
Solutions is to develop and implement projects relating to
artificial intelligence."

But what does the artificial intelligence in the Data Symbion
software do in practice? Well, it saves lives, for example.

FIRST CUSTOMERS ON BOARD

One of the first specific Data Symbion projects supports life-
guards on Brazil's beaches. "We process weather data on
currents, wind direction, and wind force to determine in which
coastal areas there is a particular risk of people drowning," says
Pereira. "The distribution of the lifeguards deployed per day is
decided on the basis of Data Symbion's forecast."

Leandro Pereira is a professor of biology and an interdisciplinary specialist in environmental studies. Pereira works at the state-owned Instituto Federal do Paraná (IFPR) in Brazil at the interface of different disciplines in the environmental field. He has extensive experience in technology projects relating to environmental management, socio-ecological innovation, and nature-based solutions to climate change. Pereira is coordinating the Data Symbion project and is constantly looking for new technological solutions for environmental challenges.

Rodrigo Kruger is a specialist in artificial intelligence. He holds the role of Delivery Manager at NTT DATA Business Solutions and works in the Brazilian provincial capital Curitiba. His job is to develop and implement projects where artificial intelligence plays a key role.

The software is now advanced enough that initial business customers are being sought and found. Such as TCP. This company operates South America's biggest container terminal in the port of Paranaguá. "Any company that wants a license to operate a port in our country has to meet environmental requirements and continuously monitor the environmental conditions," says Pereira. Although TCP had already been doing this, for example by gathering data on the water quality at the port, this data previously was not used for other purposes after monitoring. "Thanks to Data Symbion, the information is now used for forecasts and is available where it can bring added value," says Pereira.

So where does such data bring added value? "For example, when communicating companies' environmental activities in general and in ESG reporting in particular," says AI expert Kruger.

ESG stands for environmental, social, and governance and refers to an extensive framework for assessing companies' sustainable and ethical practices. There are very few companies that are not facing growing requirements not only to act in an environmentally friendly way, but also to document this and communicate it externally.

MORE THAN JUST ENVIRONMENTAL PROJECTS

This is where Kruger believes that Data Symbion's major potential lies. "The challenge for companies is to measure and document their environmental activities and make them visible." This is exactly what Data Symbion offers. Kruger explains: "The software creates transparency, it helps with organizing data, and through the inbuilt artificial intelligence it can provide answers to questions that arise in connection with preparing ESG reports."

Data Symbion is not the only project at NTT DATA Business Solutions that deals with environmental topics. "In Brazil alone, we have three other projects underway that relate to ESG," says Kruger.

But Data Symbion is undoubtedly one of the most promising. "We are currently in the process of integrating statistical models in the software and implementing data visualization," says project manager Pereira, describing the current status. "I expect that in six months' time we will have moved a big step forward and gained additional customers."

Then it may also be time for the step of looking beyond the country's borders. "Data Symbion was born in Brazil," says Pereira, and it was created for the areas of oil production, logging, and water quality, which are important environmental issues in Brazil. "But the structure of the software is one that can be equally helpful for other regions of the world."

And not just that, Kruger adds. The software is so flexible that it can be used not just for environmental topics. "With the right data set, you can even forecast the winners of an upcoming sports event."

So there are virtually no limits to the potential business ideas. Five people are currently working on the project at NTT DATA Business Solutions. And their numbers are growing. "Our part in the public-private partnership is not just to provide the necessary storage and computing capacity," says Kruger, "but above all to increase Data Symbion's reach in the future." The goal is to provide information to as many customers as possible in a way that enables them to get the most use out of it and make the best decisions. So it may well be that Data Symbion soon gains recognition beyond Brazil, too. ■

> " Our part in the public-private partnership is not just to provide the necessary storage and computing capacity, but above all to increase Data Symbion's reach in the future.

Rodrigo Kruger
Delivery Manager Consulting
NTT DATA Business Solutions

One of the first Data Symbion projects supports lifeguards on Brazil's beaches.

DATA – A DIME A THOUSAND

For three years, NTT DATA Business Solutions in Denmark has been developing a data platform for the tourism sector. The idea behind it is that data does not deliver its full benefit until it is shared in an ecosystem. The platform was recently launched as the national tourism data platform.

SOCIETY 5.0

The Japanese government coined the term "Society 5.0" as a conceptual successor to Industry 4.0. It is essentially a new model for society that is based on technology and networking, focuses on people, and comprises many smart application scenarios. "With our data platform, we are pursuing the goal of doing good for society when it comes to sustainability issues," says Per Falck Jensen, Vice President, Managing Director of NTT DATA Business Solutions Denmark. For example, one of the main challenges in the tourism sector is: How can the volume of tourists in a region be kept to a reasonable level without limiting spending? "This is about ensuring the smallest footprint from a sustainability perspective combined with the greatest financial benefit." According to Jensen, disruptive problems like overtourism could be solved with the adaptive platform.

"SAND IS A NATURALLY OCCURRING, LOOSE SEDIMENTARY ROCK consisting of individual grains measuring 0.063 to 2 millimeters." But this short definition doesn't come close to doing justice to the whole phenomenon of sand. After all, sand has many fascinating properties – it is carried along by the wind, can be used to make monuments, and gets stuck between your toes. Many people even spend their vacation on sand, for example in Denmark. The small country has around 7,300 kilometers of coastline – more than India. And a large part of this is sandy beaches: trillions of grains of sand that together create a great experience.

The same principle also applies to data – individually it is worthless, but in large quantities it gets interesting. For three years, experts at NTT DATA Business Solutions in Denmark have been working on a platform where data from economic ecosystems can be processed. It started with a pilot project on the vacation island of Rømø, recalls Per Falck Jensen, Vice President, Managing Director of NTT DATA Business Solutions in Denmark. All kinds of data were gathered here – including visitor numbers, vehicle movements, purchases, card transactions, social media posts, nationalities, and water consumption in showers. On top of this there were cameras, sensors, and card readers, which are connected to the platform via a low-frequency network, says Jensen. "Our goal was a proof of concept for how tourism in Denmark can be digitalized to facilitate data-driven decisions."

COMBINING ALL DATA SOURCES

In bulk, the data immediately provided insights into connections that we wouldn't otherwise be able to access. And because Rømø worked excellently as a "digital destination", other regions of the country also followed suit. Over the last two years a number of Danish tourist destinations have come on board including the largest destination Westcoast, with the remaining regions planned to be onboarded this year. Although Denmark is the smallest country in Scandinavia, it is the region's biggest tourist market. This comprises hotels and holiday homes, restaurants, entertainment, retail, transportation, and attractions – all of which supplied data for the analysis. "We quickly decided to continue the project and create a platform for ecosystems that can be used for several different use cases," recalls Jensen.

ONE PLATFORM FOR ALL OF DENMARK

The challenge for the sector is that national tourism initiatives such as "Visit Denmark" have a lot of data, but not many users. Meanwhile, there are thousands of small businesses in tourism, retail, and the service sector at the destinations with only limited access to information. "We have therefore created a digital ecosystem where all levels can share their data and everyone can benefit," says Jensen. In May 2023, the Danish government decided that this data platform would be used over the next four years in order to bring together all the country's tourism-related data so that the whole sector can make better decisions.

ONE PLATFORM, NUMEROUS APPLICATIONS

Some of the use cases involve precise planning, for example when forecasting anticipated visitor numbers. After all, when shops are closed during the down season, tourists find themselves outside locked doors and spend less money. "Companies can work out how many employees they need, for example, and calculate their financial outlook for the coming weeks," explains Thomas Kierkgaard, who has developed the platform as project manager over the past years. With reliable forecasts, companies can react to deviations from the platform in a timely manner, he says, since relying on handed-down experiences and gut instinct often led them to draw the wrong conclusions in the past. To take another example: On the west coast of the country, booking figures for holiday homes and hotels are used by municipalities to determine the best time for carrying out upcoming roadwork.

non-SAP technology – over the past years. There are currently 14 Danish experts working on this as well as a smaller team from India. "But our goal is to develop into an innovative data partner for several communities." One example of this is meat producers who network with breeders and farmers. "In a shared ecosystem, they can plan their production better and adjust supply and demand in a targeted way."

DATA IS MORE RELIABLE THAN ASSUMPTIONS

It is also interesting to see that although it is tourism data that is gathered, some use cases have arisen in other sectors. For example, in one region there were problems with ambulance journey times. Using data from the platform, planners can deduce how many people were actually staying in the individual areas of the destination. "There was a clear correlation here between the number of people and emergency calls – it is a large area and there were far more people there than previously thought," reports project manager Kierkgaard. For this reason, the ambulances were not able to manage their workload within the planned time.

RED WINE OR REGIONAL ORGANIC FOOD?

Using data from card payments and point-of-sale terminals, it is possible to see what effects an event has on a municipality – how much more money is spent and by whom? "We can see what visitors from Copenhagen or Germany are buying," says Kierkgaard. There are significant differences, he says. For example, Germans like to buy regional organic food. In Rømø, it came to light that ice cream parlors had reached maximum sales at 80 percent of tourist capacity, meaning that the purchasing power of the last 20 percent went to waste. After the project, one ice cream parlor immediately bought the shop next door in order to increase its capacity and expand.

Regardless of that, use cases are not limited just to tourism. Many sectors benefit from the shared use of data in the value chain. This is always done with the goal of bringing people together to share their data. According to Jensen, the technical solution has proven its worth. Many hours have been invested in the dashboard and the infrastructure – Azure, Snowflake, and

ANONYMITY AS A KEY PREMISE

The platform has one crucial restriction, however: "We are not able to identify individuals," says Kierkgaard. Whether it's cellphone SIMs or credit card use – everything is absolutely anonymous. The platform can gain insight only from flows of people, it cannot create individual spending or movement profiles. "There are also thresholds – for example, if there are only four visitors from Sweden in a certain place, data is not included in order to ensure that the results cannot be traced back to individuals."

> **"** We quickly decided to continue the project and create a platform for ecosystems that can be used for several different use cases.

Per Falck Jensen
Vice President
Managing Director Denmark
Head of Sales Nordic Region
NTT DATA Business Solutions

action." Developing dashboards and making data available is something that many providers can provide – "but for us the transition to action is equally important." This also includes advancing the platform as a co-innovation together with all players in an ecosystem.

WINDS OF CHANGE IN THE CONSULTING PORTFOLIO

For Per Falck Jensen, the platform is also a game changer from a consulting perspective. "We expect it to disrupt some traditional advisory services for tourism." Instead of laborious studies and surveys, insights will now be based on real data from the platform. "You can deliver insights quickly and in a higher quality than others within several months." What kinds of fruits and vegetables should a retailer have in its product range, where are people at different times of the day, and what do they like to buy? " Data provides real-time insights into all institutions in the value chain, not just at the top of the pyramid that hires a consultant." For this reason, NTT DATA Business Solutions offers its customers from the tourism sector experienced data analysts. "We enable companies to interpret the data and turn insights into

MORE COUNTRIES, MORE SECTORS, MORE ECOSYSTEMS

But the goals for the future are ambitious: "We are scaling to other countries and bringing the platform concept to more sectors," says Jensen. In addition, apps are planned to integrate tourists directly into the ecosystem. For example, they would be digitally nudged toward acting more sustainably or spreading out across the country - a concept known as Society 5.0 (see box). "As a result, visitors get a better customer experience, the country gets plannable utilization of its tourism capacity, and nature as well as local residents also benefit."

Getting enough data for this definitely won't be a problem – it is a dime a thousand. ■

> **"** You can deliver quickly and in a higher quality than others within several months.

Thomas Kierkgaard
Director, Innovation & Technology LoB
NTT DATA Business Solutions Nordics

HOW TO INTEGRATE AI
IN THE PRODUCTION INDUSTRY
OF THE FUTURE

Full steam ahead for innovation: NTT DATA Business Solutions is advancing
a project to bring artificial intelligence into the world of industrial production.
Experience and best practices are to help companies efficiently exploit the
potential of data-driven factories.

DIMITRI SCHWEIGERDT FROM NTT DATA BUSINESS SOLUTIONS enhances SAP systems. With small innovations that make life easier. For example, with pallets that can check themselves in and out of a high-bay warehouse without requiring an employee to enter this in the computer manually. Or with an app for tractor drivers in yard logistics that enables the GPS coordinates of a parked vehicle to be saved and sent to SAP. "Creative utilities for our customers," is what Schweigerdt calls this.

SMART FACTORIES – A COMPLEX BUILDING PROJECT

But the innovation manager's current project goes beyond the scope of an individual utility, as it is about integrating artificial intelligence (AI) in industrial production. The goal of the government-subsidized "Datenfabrik.NRW" project is the digital transformation of a real production environment, which is intended to serve as a model for companies in the German state of North Rhine-Westphalia (NRW) and beyond. To this end, the "data factory" planning, production, logistics, and business architecture of the corporations involved in the project – CLAAS (agricultural machinery) and Schmitz Cargobull (semitrailers, bodies, and trailers) – are analyzed and transformed in pilot areas. "The goal of the project is ultimately to ensure the widespread transfer of knowledge and to develop best practices and reference concepts for companies that show how a smart factory can be built," reports Schweigerdt, who has the role of project manager and lead solution designer.

DATA MAKES FACTORIES SMART

The basic assumption is that data from production is a key success factor and that a comprehensive data strategy is the crucial starting point for taking advantage of the existing potential. After all, data must be able to flow, as piecemeal application leads to a standstill. So it is no surprise that, with few exceptions, there are hardly any smart factories at present. "That's why I have to avoid stand-alone solutions and ensure technical interaction," says the project manager. Around ten experts from NTT DATA Business Solutions are working with him on the Datenfabrik project, as well as additional specialists on demand.

According to Schweigerdt, a lot of support with project management is needed, and additional management tasks increasingly have to be handled, too. "With nine project partners, the coordination required is immense, but this is our core competency." In technical terms, it is about either developing smart solutions in a network or adapting existing solutions, says Schweigerdt. "As part of the project, we raise awareness and advise the user companies on whether it would make sense, for example, to use SAP products instead of in-house developments." And of course the innovative tools and new smart solutions have to be integrated in the user companies' existing IT infrastructure.

ESSENTIALLY, IT'S ABOUT OPTIMIZING PRODUCTION

After a year, a few interim results are already on the table. "We have finished solution concepts for transport requirement forecasts and for optimizing transport bundling, for example, as well as data models for optimizing the material positioning strategy in assembly." In addition, the NTT DATA Business Solutions project

Dimitri Schweigerdt has been working in the SAP world for more than 20 years. As Smart Factory Project Lead and Principal Innovation Manager at NTT DATA Business Solutions, he works on developing useful solutions for customers based on new technologies – such as artificial intelligence, the Internet of Things, and augmented reality – that can be integrated in the customers' business processes and SAP environments.

manager says that the first prototypes have been completed, including the worker assistance system for assembly (see box). An augmented reality component is to be added here later. The interface with the logistics company for consignment tracking has also been expanded. Schweigerdt himself anticipates a steady stream of results over the coming quarters, "because the work packages were started on a staggered basis."

> " As part of the project, we raise awareness and advise the user companies on whether it would make sense, for example, to use SAP products instead of in-house developments.

Dimitri Schweigerdt
Project Lead Smart Factory
Innovation & Portfolio Management
NTT DATA Business Solutions

AI IS ALREADY IN USE

There are several examples of the useful application of AI: Pallets are currently unloaded from the truck with supplier labels, and employees in incoming goods inspect these labels and scan the information or enter it manually in the system. At one of the user companies in the project, a conveyor belt with a camera gate has therefore been installed, allowing computer vision technology to capture the labels, extract the data, and enter it automatically. The technology behind this is trained using machine learning – all components can already be obtained from the cloud. "Our job here," explains project manager Schweigerdt, "is to establish a connection with the SAP system and put together a good overall solution."

ABOUT THE PROJECT

In the project "Datenfabrik.NRW – Artificial Intelligence in the Production Industry of the Future," organizations from business and academia have joined forces. The consortium is led by the Fraunhofer Institute for Mechatronic Systems Design (Fraunhofer IEM), with CLAAS (agricultural machinery) and Schmitz Cargobull (semitrailers, bodies, and trailers) on the team as user companies with "flagship factories". It also includes three other Fraunhofer institutes, the logistics specialist Duvenbeck, the process consultancy MotionMiners, and NTT DATA Business Solutions with its strong IT expertise and in-depth industry know-how.

The three technical focus areas are factory planning and engineering, production and manufacturing, and logistics. There is also the overarching topic of IT infrastructure with the question of how the solutions developed can be integrated into customers' existing IT architecture. As well as building relationships and partnerships in the project, NTT DATA Business Solutions also benefits from its positioning as an expert in innovative technologies for the industrial sector. New solutions and consulting packages can also be developed from the use cases. As the industry is under cost pressure and depends on a short time-to-market, digitalization, automation, and process optimization in production will play a crucial role in its success.

THE WORKER ASSISTANCE SYSTEM

In assembly, workers at manual workstations are to be equipped with a mobile worker assistance system (WAS). The WAS guides employees through the assembly process step by step, for example by displaying the instructions for the current assembly order in 3D and augmented reality formats, as well as changes to the order and quality information. The vehicle to be produced moves along a driverless transportation system (DTS), whose movement is synchronized with the WAS.

DATA-DRIVEN BUSINESS MODELS

With the available data from products and production, data-driven process optimization is also possible. In one subproject, for example, data on machinery wear and tear is to be read out and compared against the SAP system for parts management. The system can also search the internet for manufacturer information in a targeted way. For example, if parts have run out, then it searches for an alternative order number. All data is to be combined in the AI, which can make forecasts for predictive maintenance and suggestions for other replacement parts.

REAL WORLD INSTEAD OF PRESENTATIONS

Project manager Schweigerdt calls the Datenfabrik research project a lucky find "because there are a lot of exciting use cases that take place not just on the office computer, but on the factory work floor." As far as he is concerned, it is clear: "The trend is toward autonomous factories; in the future, robots will be at work everywhere." Driverless transportation systems that move the machinery under construction between the different assembly stations are already controlled automatically. In the future, the finished vehicles will also be towed from the work floor to the right parking position by an autonomous tractor unit following defined routes.

For "unmanned yard logistics", you don't even need your own production. Other sectors can also benefit from best practices – such as goods logistics and retail. "We have the technologies and just need to tailor them to the respective use case," sums up Schweigerdt. His motto: "With investments in innovations, we can get even more out of the SAP backbone." ■

MORE ENERGY
IN THE LIFE CYCLE

The British company Pharmanovia wanted to consolidate its ERP solutions and transform to SAP S/4HANA. It required tailored services and rapid implementation. With its it.lifesciences industry solution, NTT DATA Business Solutions UK hit the target in both respects.

PEOPLE, CARS, BRANDS – EVERYTHING HAS A LIFE CYCLE.

Things rise then fall back again, like waves lapping against the shore. The concentrated energy of waves can be used for surfing or to generate electricity. The British company Pharmanovia takes a different approach: It specializes in harnessing the energy in the life cycle of medicines. Pharmanovia licenses or acquires tried-and-tested medicinal products and optimizes them for the demands of the market in order to create a new wave. This strategy benefits patients, the healthcare system, innovative pharmaceutical manufacturers – and the company itself. In the space of ten years, its portfolio has expanded to over 20 brands which it markets globally.

However, the British company required external support for a different kind of life cycle: the next wave of ERP systems. "Pharmanovia had acquired a number of brands over the previous decade, and hence also a wide range of different IT solutions for their management," explains Steve O'Gorman, Director at NTT DATA Business Solutions and Head of Delivery for the UK and Ireland. Finance, production, marketing, and management – the previous IT patchwork consisted of spreadsheets, small ERP systems and discontinued tools, mostly standalone solutions. A typical dilemma for O'Gorman: "The ecosystem had become too large, too fragmented and too complicated to control the business – the applications had reached the end of their life cycle."

SAP: THE SAFE PAIR OF HANDS

The objective was a standardized system that would fit all areas of the company and every task. "After they had narrowed down the options, the choice of SAP as the technology provider was a relatively quick one," O'Gorman reports – not least thanks to ' its reference projects and its reputation within the industry as a "safe pair of hands." The success of NTT DATA Business Solutions in the tender process largely came down to two factors: its extensive industry expertise and the meticulous nature of its bid. "We were able to point to more than ten life science implementations in the UK in the last two years alone, and we really invested a lot into the due diligence and RFP."

PHARMANOVIA

Pharmanovia calls itself "the life cycle management company." Its business focuses on the life cycle of medicines. The company acquires tried-and-tested medicinal products from pharmaceutical groups after a certain term and works to tap their full potential. The strategy involves optimizing established medicines by rediscovering, repurposing, or re-engineering iconic brands. Pharmanovia uses patient and clinician insights to identify areas of unmet need, find better approaches to marketing, and identify successful therapies and treatment options.

In addition to in-house development, Pharmanovia partners with innovative pharmaceutical groups, digital health pioneers, tech platforms, distributors, and suppliers. The company was founded in the United Kingdom in 2013 as a family business. Pharmanovia now has twelve offices, 280 employees and more than 20 brands and is active in 160 markets around the world. It is supported in its rapid growth by a financial investor.

BUSINESS IS AT THE HEART OF THE PROJECT

As O'Gorman explains, the bid was so detailed and specific because the customer was more interested in the business context of the solution than the underlying technology. According to the NTT DATA Business Solutions manager, the customer's main concern was to ensure that its business model geared toward rapid growth was supported optimally and as smoothly as possible. "For Pharmanovia, computers and IT are a commodity – the business is what counts."

LAYING THE GROUNDWORK FOR THE FUTURE

The project was completed in 15 months. Around 15 Pharmanovia employees and 25 experts from NTT DATA Business Solutions developed and implemented the complete ERP model for life science with over 100 processes across all twelve of the company's locations, including the full integration of production. "State-of-the-art business, from back office via human resources and finance through to supply chain and manufacturing," summarizes O'Gorman. "The customer was extremely satisfied with its new, stable, efficient and future-proof ERP backbone." Future brand and company acquisitions can also be added to the platform far more efficiently.

AVOIDING COMPLEXITY FOR FASTER IMPLEMENTATION

Designed in advance and preconfigured for the respective use case, the it.lifesciences model from NTT DATA Business Solutions again proved to be a guarantee for success. "The benchmark for a lean process like this is around 18 to 24 months. Our methodology and best practices enabled us to beat this by some distance." However, O'Gorman adds that this was helped by the customer's decision not to make undue modifications to the program and make things more complicated than necessary – when the business itself is not complex, there is no reason for the ERP to be. "Pharmanovia stuck to this rule rigidly and avoided changes, which made the project more straightforward."

ONE PLATFORM INSTEAD OF SILOS

The transformation has been extremely valuable for Pharmanovia. O'Gorman: "The new silo-free platform will allow the company to expand more quickly and integrate new regions, products and companies." However, the sense of achievement was also heightened by horror stories the customer's senior management had heard about ERP transformation at pharmaceutical groups that had got out of hand – so they were pleasantly surprised when everything came in on time and on budget. "It was the best ERP experience they could have hoped for." ■

IT.LIFESCIENCES

it.lifesciences is a complete ERP solution based on industry-specific best practices and a proven project methodology. It is built on the SAP S/4HANA platform, which is used for all standard financial, commercial, quality, production, and logistics processes. it.lifesciences is designed to unite all of a company's data in one place, connect to LIMS, eQMS and MES, support updates in real time, and uncover trends automatically with the power of machine learning.

Implementations are certified by SAP and include features designed specifically for pharma and life science companies for purchasing, planning and production, as well as plant maintenance, sales, management, and quality control along the entire chain. With more than 300 best practice processes that can be effectively adapted for the respective organization, this approach accelerates transformation projects.

Decades of industry experience have given rise to a library of best practice procedures in biotech, OTC, API, medtech, CDMO, blood plasma, and start- and scale-ups, all of which can be leveraged immediately to jump-start a project. All of the validation and compliance processes for computer systems are also made significantly easier, thereby unlocking space to grow.
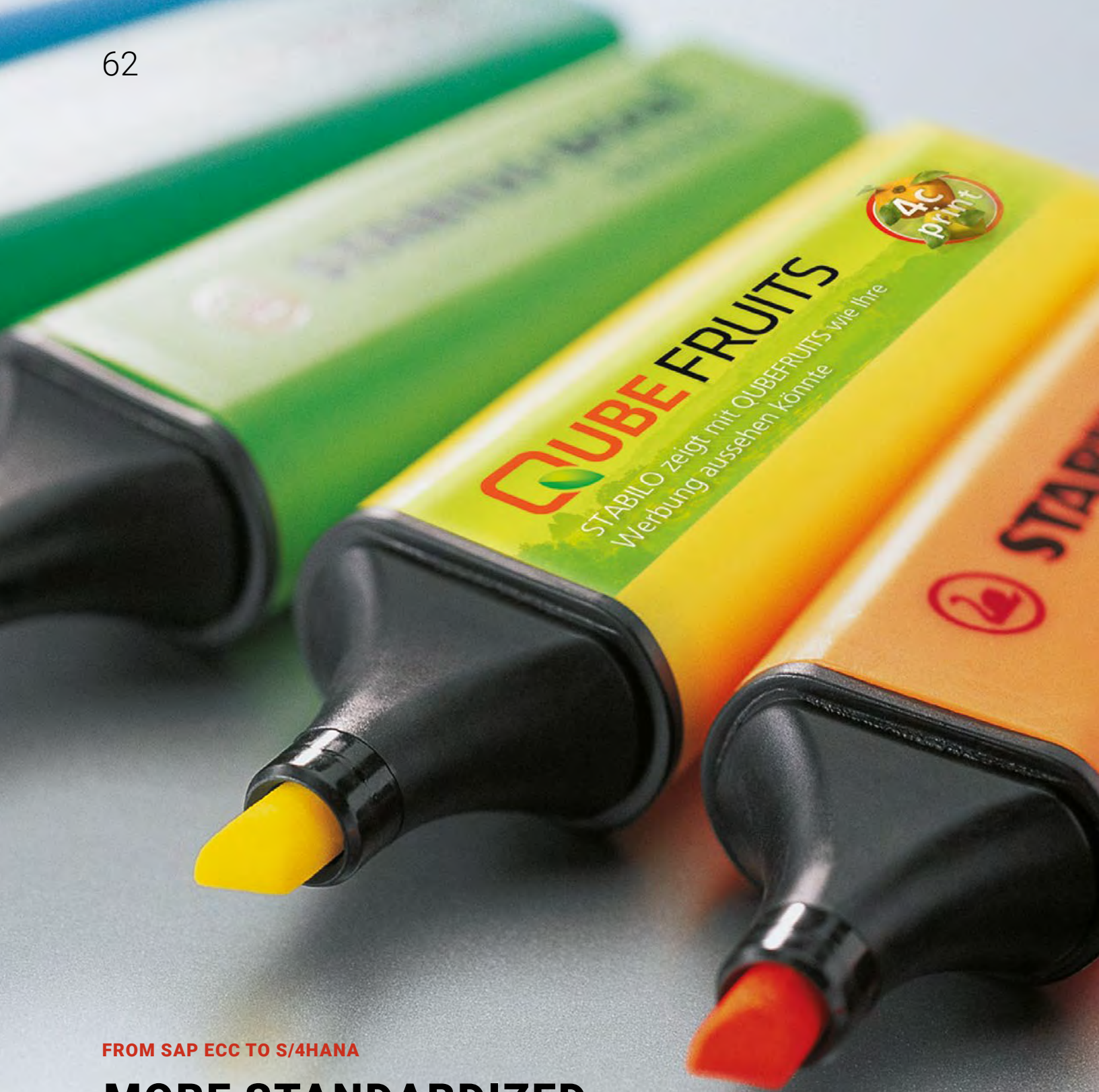

> We were able to point to more than ten life science implementations in the UK in the last two years alone, and we really invested a lot into the due diligence and RFP.

Steve O'Gorman
Director, Delivery Management UK and Ireland
NTT DATA Business Solutions

MORE STANDARDIZED, MORE FLEXIBLE, MORE FUTURE-PROOF

Many organizations are preparing to migrate to SAP S/4HANA – STABILO International has mastered the evolution. The project was no simple matter. Including preparatory work, it took more than three years to complete. But the right blend of internal and external expertise ultimately helped to make it a success.

STABILO HAS BEEN MAKING WRITING INSTRUMENTS SINCE 1855. STILL FAMILY-OWNED, THE INNOVATIVE COMPANY HAS A BROAD INTERNATIONAL PRESENCE: While its iconic fineliners and colorful highlighter pens are familiar to almost everyone in its home market of Germany, its products also are available in 180 countries. In light of the complex production and sales structures this entails, it is no surprise that SAP has been the company's ERP system of choice for the past 20 years, explains Christian Stücke, Head of Information Systems, Communications & Organization. In his role as head of IT for the stationery arm STABILO International, he was the project manager for the transformation from SAP ECC to S/4HANA – "a responsibility, a burden and a pleasure, depending on the project phase."

Stücke himself made a point of stepping back from everyday IT operations a little in order to advance the transformation from the perspective of the entire organization. STABILO is firmly SAP-minded, with well-developed processes and a lot of modules in use – but the prospect of standardization had receded into the distance over the years. The company had invested a great deal in individual development, especially in sales. Stücke summarizes the project: "The transformation cost us time and energy, but it also brought about significant changes."

FUTURE-PROOFING AND COMPLEXITY

Anette Haupt, the STABILO Board of Management member responsible for IT, HR, accounting and controlling, also knows her way around SAP. "I have been familiar with SAP for a number of years. I became a user right out of university and was involved in a transition from R/2 to R/3." The manager describes the S/4HANA transformation project as her "labor of love" – after all, she also understands the economic importance of an integrated modern system. "In addition to the prospect of eventually having to transition to S/4HANA anyway, the complexity of our landscape played an important role in the transformation." For example, structures such as company codes and country organizations no longer complied with SAP's recommendations, which would have meant more individual developments in R/3.

EVERYTHING ALL AT ONCE

As early as 2015, IT manager Stücke had conducted studies showing that the ERP landscape would need to be completely remodeled. SAP launched its new S/4HANA platform the same year. STABILO International began looking for the right approach to its transformation: a single joint project or two sequential projects, a greenfield or brownfield approach? After careful consideration, it decided to combine the projects – restructuring followed by technical migration to S/4HANA – in order to consolidate the impact on the organization. Stücke explains the rationale behind the decision: "We chose to seize the technological opportunity and begin the transition as soon as S/4HANA reached the right maturity for us." A greenfield landscape was used as the basis for building new structures with S/4HANA: clean, standardized, simpler, and more streamlined. Thanks to the coronavirus pandemic, additional developments and extensive testing, it took a total of 3.5 years for STABILO International to reach a point where it was ready to flip the switch.

THE SCHWAN-STABILO GROUP

STABILO International GmbH forms part of the Schwan-STABILO Group, which consists of three independent divisions: Cosmetics, Writing Instruments, and Outdoor.

A manufacturer of writing instruments, STABILO International was founded in Nuremberg more than 165 years ago. Today, its creative heart beats in the suburb of Heroldsberg. The products are manufactured at its production facilities in Germany, Czechia, and Malaysia. The "International" part of the company's name is no exaggeration – its products are available in over 180 countries.

Schwan Cosmetics is one of the world's leading private label manufacturers of cosmetic pencils and products. The outdoor brands Deuter, Ortovox, Maier Sports, and Gonso are renowned for their innovative strength and outstanding quality.

stabilo.com

THE TRANSFORMATION PROJECT

STABILO International GmbH transitioned its ERP system SAP ERP ECC 6.0 to SAP S/4HANA. NTT DATA Business Solutions supported the "B4CKBONE" project in the areas of

- Project management
- Project analysis, consulting, and definition
- Implementation
- Development
- Data migration
- Go-live support

The project lasted more than three years and went live in February 2023, with the big bang taking place simultaneously in 13 countries. The transformation focused on processes in the areas of planning, sales, logistics, procurement, production, accounting and controlling. "B4CKBONE was more than just a S/4HANA transformation," explains Christian Stücke, head of IT at STABILO. "It encompassed all of our core business and core processes. We also restructured our reporting and introduced two new solutions, SAP IPB and SAP EWM."

As part of the project, the top processes were re-engineered (greenfield) and largely realized using SAP standards (fit-to-standard). The objective was to increase agility and speed within the organization by making processes easier to control. "The professional team from STABILO and our experienced team worked together to sustainably improve the process landscape," says Siegfried Oehler, Senior Account Manager at NTT DATA Business Solutions. "Thanks to the greenfield approach and the new usability offered by Fiori, STABILO is now in a position to optimally support its future business on the basis of a modern SAP platform."

NTT DATA Business Solutions – then still called itelligence – won the tender for the "B4CKBONE" project. "We opted to work with a consultant with proven process expertise and industry knowledge." And it became clear that consulting is a people business – on both sides. Some subprojects had the right chemistry from the outset, whereas others needed a little longer before the experts were on the same page and expectation management at the cooperation interface achieved a steady state. As Stücke summarizes: "It was a challenging project, but everyone was working toward the same goal over the last twelve months and knew exactly what needed to be done." Right up to the cutover in February 2023, which went smoothly.

SAP EXPERTISE IS THE KEY TO SUCCESS

STABILO manager Haupt emphasizes the importance of "having in-house process expertise and being able to ensure that we can operate and enhance the systems ourselves." To cite a current example, some of the implementations scheduled for the period immediately following the go-live were largely realized by the company in its own right. "This gives our employees the confidence of knowing their way around the system and the belief that success is in their own hands." In all, around 80 people from the company were involved in the implementation – some 20 SAP specialists from the internal IT department and around 60 STABILO employees. The latter supported the transformation with process definitions and testing or as key users. "We now use SAP across the board, from procurement, production, comprehensive logistics management and sales through to finance and controlling, including reporting," Haupt explains.

REAKING DOWN SILOS WITH S/4HANA ENERGY

Along with the technical challenge, one priority was to ensure that all of the business units were on board with the change and especially the greenfield approach. After all, many of the company's solutions had been developed internally – and the cherished individual solutions that employees had optimized over the years were suddenly being scrutinized. "People had to broaden their thinking and learn to accept an overall solution that would support the change process at a company-wide level," says Haupt.

The project benefited immensely from the fact that the subproject managers took decisions jointly, which helped the individual business units to understand each other better. "The S/4 project has released energy that will carry us through the next stages of the development process, and we intend to harness this momentum to drive continued change throughout the organization."

VISIBLE IMPROVEMENTS: ANALYTICS AND FIORI

Needless to say, one of the aims of the transformation was to generate efficiencies. "We are aware that this can be achieved only gradually," IT manager Stücke concedes. But the project is already bearing fruit even as the finishing touches are still being applied: "When it comes to analytics for example, the respective departments can now access data much more quickly than before." Planning runs used to take twelve hours and had to be scheduled for overnight, whereas now this has been reduced to a good two hours. The majority of users also describe the new interface based on Fiori as more pleasant to work with. And IT itself has succeeded in replacing some of the cumbersome software and legacy solutions that were weighing it down. "I expect this to relieve the burden on IT employees and the organization in the medium term."

Anette Haupt from the Board of Management is also pleased that the decision for the S/4HANA transformation was taken at a relatively early stage and implemented systematically. "The impetus for change has resonated throughout the organization and the individual business units have come to understand each other better, which is important." Now STABILO has high hopes that the resulting flexibility will help it to satisfy the requirements of the market more quickly and easily. Only a small number of individual developments remain in use with the vast majority of requirements now being met in standardized form. Haupt sums up the project: "I still consider the transformation to be an important step for the future, because it gives our IT and our organization a degree of flexibility that was no longer possible with R/3." ■

> " The S/4 project has released energy that will carry us through the next stages of the development process, and we intend to harness this momentum to drive continued change throughout the organization.

Anette Haupt
Board of Management
STABILO International GmbH

> " The transformation cost us time and energy, but it also brought about significant changes.

Christian Stücke
Head of Informationsystems,
Communications & Organisation
STABILO International GmbH

GROUP FINANCIAL REPORT*

OTHER INFORMATION

* This publication does not take the form required by law.

REPORT OF THE SUPERVISORY BOARD

Ladies and gentlemen,
dear friends of the Company,

In its second fiscal year as NTT DATA Business Solutions AG, our Company continued on its successful path and significantly improved all of its relevant KPIs compared with the previous year, achieving extremely strong earnings growth in the process. In the fiscal year from April 1, 2022 to March 31, 2023, NTT DATA Business Solutions AG generated substantial growth in revenue of 14.7% to BEUR 1.423 after BEUR 1.241 in the previous year. EBITA amounted to MEUR 99.2, an increase of more than 50% on the record prior-year figure of MEUR 63.5. The EBITA margin climbed to 7.0% after 5.1% in the previous year.

We would like to express our particular gratitude to our 13,530 employees around the world, who made a significant contribution to this outstanding result in an environment that remained challenging. Overall, our Group can look with confidence to the new fiscal year. Our aim for the coming year is to further expand our excellent market position, which is reflected in these figures.

The Supervisory Board performed the tasks assigned to it by law, the Articles of Association and its Rules of Procedure with great diligence in the 2022/23 reporting period. It regularly advised and monitored the Management Board in its management activities and was involved in all decisions of material importance to the Company directly and at an early stage. The Supervisory Board also thoroughly examined, extensively discussed and ultimately voted on the reports and proposed resolutions of the Management Board.

In all cases, the reporting by the Management Board met the requirements in full. The Supervisory Board received detailed, timely information from the Management Board on the Group's position in both written and verbal form. The reporting focused in particular on presenting the development of the net assets, financial position, results of operations, fundamental issues of corporate planning and strategy, the financing and liquidity situation, the risk situation and risk management, compliance management and significant transactions. Above and beyond this, the Chairman of the Supervisory Board was regularly informed about current business developments, the outlook, the sustainability strategy,

and other key issues. Potential future scenarios and the future focus of the divisions were also discussed. No conflicts of interest arose within the Management Board or the Supervisory Board in the year under review.

The Supervisory Board held five meetings in fiscal 2022/23 and passed two resolutions by circulation. All the members of the Supervisory Board attended more than half of the meetings of the Supervisory Board. In some cases, Supervisory Board members were connected by video or telephone. Members unable to attend submitted their votes on resolutions in writing.

The Supervisory Board meetings regularly discussed the Company's economic position and development, the financial and liquidity situation, planned investments, the risk situation and risk management and corporate planning and strategy.

In addition, the meetings in the past fiscal year focused on the following topics and resolutions in particular:

- Examination, approval and adoption of the single-entity and consolidated financial statements for fiscal 2021/22

- Commissioning of KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, as the auditor for fiscal 2022/23

- Budget definition and budget review for fiscal 2022/23

- Annual planning for 2023/24

- Investments and planned acquisitions

- Monitoring of the early risk detection system established by the Management Board

- Management Board matters

- Oversight of projects in the Finance department and of escalation projects

In fiscal 2022/23, the Audit Committee intensively examined the single-entity and consolidated financial statements and discussed new accounting provisions and their future inclusion in the annual

and consolidated financial statements, matters relating to the planning process, risk management and compliance issues.

The Personnel Committee discussed Management Board matters, matters relating to employee development, the integration process for acquired companies, developments in the management team and the management structure, and the future objectives and programs of the people organization.

The Strategy Committee primarily discussed the Company's orientation within the NTT DATA Group, the strategies and objectives of the Company itself, investments, acquisitions and the global cost and efficiency program initiated at the Company.

The Annual General Meeting on July 15, 2022 adopted resolutions on the appropriation of the unappropriated surplus from fiscal 2021/22 and resolved on the approval of the actions of the members of the Management Board and the Supervisory Board and the election of the auditor of the single-entity and consolidated financial statements for fiscal 2022/23. A new member of the Supervisory Board was elected in July 2022: Chieri Kimura, Senior Vice President and CFO of NTT DATA, Inc. (since July 15, 2022). Chieri Kimura replaces Koji Miyajima, to whom we extend our gratitude for his work and his commitment to the Company.

The Supervisory Board again regularly addressed the adherence to and further development of corporate governance at the Company and intensively discussed the recommendations and suggestions of the German Corporate Governance Code together with the Management Board in fiscal 2022/23. The Management Board and the Supervisory Board of NTT DATA Business Solutions AG identify with the objectives of the German Corporate Governance Code, namely to promote good, trustworthy company management that is oriented towards benefiting shareholders, employees and customers. The Management Board and the Supervisory Board report on corporate governance in detail in the corporate governance report, which is published together with this annual report.

The Annual General Meeting on July 15, 2022 elected KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, as the auditor of the single-entity and consolidated financial statements for fiscal 2022/23. KPMG had previously declared to the Chairman of the Supervisory

Friedrich Fleischmann, Chairman of the Supervisory Board

Board that there were no circumstances that could compromise its independence as an auditor. KPMG consequently audited the single-entity financial statements of NTT DATA Business Solutions AG and the consolidated financial statements and the management reports of NTT DATA Business Solutions AG and the NTT DATA Business Solutions Group. As stated in its unqualified audit opinions, these examinations did not give rise to any objections. The dependent company report prepared by the Management Board was also audited and issued with an unqualified audit opinion by the auditor. The audit opinion is worded as follows:

"Following the completion of our audit in accordance with professional standards, we confirm that

a. the factual statements made in the report are correct,
b. the Company's compensation with respect to the transactions listed in the report was not inappropriately high and
c. there are no circumstances that would justify a materially different opinion of the measures listed in the report than that held by the Management Board."

At its meeting on July 17, 2023, the Audit Committee discussed the single-entity and consolidated financial statements for 2022/23 and the management reports with the Management Board and the auditors. The relevant documents, including the audit reports, were provided to all of the members of the Audit Committee and the Supervisory Board in good time prior to the meeting. The responsible auditors informed the members of the Audit Committee of the key findings of their audit and answered additional questions. The Committee concluded by recommending that the Supervisory Board approved the financial statements.

At the meeting of the Supervisory Board to adopt the financial statements on July 18, 2023, the consolidated financial statements and Group management report prepared in accordance with the International Financial Reporting Standards (IFRS), the single-entity financial statements and management report prepared in accordance with the German Commercial Code (HGB), the audit reports and the dependent company report were discussed in detail by the Supervisory Board in the presence of the Management Board and the auditor. The auditor reported on the key findings of its audit and was available to the Supervisory Board to provide additional information and answer questions as necessary.

Based on its own careful examination of the documents relating to the financial statements and the audit reports, the Supervisory Board did not raise any objections and consequently approved the findings of the audit by KPMG. The Supervisory Board approved the annual financial statements of NTT DATA Business Solutions AG prepared by the Management Board, which are thus adopted, and approved the consolidated financial statements for the year ended March 31, 2023. Following its own examination, the Supervisory Board also approved the Management Board's proposal for the appropriation of net profit. Based on its own careful examination of the dependent company report and the audit report, the Supervisory Board did not raise any objections to the declaration by the Management Board at the end of the dependent company report and approved the findings of the audit by KPMG.

As the Supervisory Board, we will continue to actively support NTT DATA Business Solutions AG's strategic focus and course of business in the future. Working with the Management Board, our aim is to make our contribution towards the sustained positive development of the Company, which now dates back more than 30 years. In particular, the Supervisory Board would like to thank the continuously growing number of employees around the world and the members of the Management Board for their high level of personal commitment and performance in a dynamic and challenging market environment.

Bielefeld, July 18, 2023

On behalf of the Supervisory Board

Friedrich Fleischmann
Chairman

CORPORATE GOVERNANCE REPORT 2022/2023

The Management Board and the Supervisory Board of NTT DATA Business Solutions AG attach great importance to corporate governance. We believe that responsible corporate governance is the only way to increase enterprise value sustainably and in the long term. Accordingly, both bodies are committed to the principles of the German Corporate Governance Code (GCGC). The implementation of these principles is intended to stabilize the trust of customers, employees and the public in the company at a high level.

The Management Board and the Supervisory Board addressed corporate governance topics on several occasions in the past fiscal year. NTT DATA Business Solutions AG's Management Board and Supervisory Board are guided by the recommendations and suggestions of the current version of the GCGC, dated April 28, 2022. While the GCGC is intended for listed companies and companies with access to the capital market, the Management Board and the Supervisory Board of NTT DATA Business Solutions AG believe that the nationally and internationally recognized standards of good, responsible corporate governance set out in the GCGC also provide a suitable framework for ensuring the quality of corporate governance at NTT DATA Business Solutions AG. As a subsidiary of the NTT DATA Group, NTT DATA Business Solutions AG's structure differs from that of a listed company, the intended subject of the GCGC, including in terms of its shareholder structure and capital market access. Nonetheless, the Management Board and the Supervisory Board of NTT DATA Business Solutions AG believe that the GCGC is a reasonable guideline for ensuring the quality of corporate governance at NTT DATA Business Solutions AG. Material deviations from the principles of the German Corporate Governance Code arise in legitimate instances only due to NTT DATA Business Solutions AG's size, structure, the fact that it is not a listed company or special considerations specific to the company.

As an NTT DATA Group company, NTT DATA Business Solutions AG also complies with the corporate governance principles of the NTT DATA Group and the NTT Group.

MANAGEMENT BOARD AND SUPERVISORY BOARD

As a German stock corporation, NTT DATA Business Solutions AG has a two-tier management and supervisory structure in the form of its Management Board and Supervisory Board. The Management Board is responsible for managing the company. The Supervisory Board advises and monitors the Management Board in its management of the company and is of the opinion that it has a sufficient number of independent members. It is responsible for appointing and dismissing Management Board members. These two bodies of NTT DATA Business Solutions AG have always worked together in a trusting and efficient manner.

In fiscal 2022/2023, the Management Board reported to the Supervisory Board regularly, promptly and comprehensively on all material aspects of planning, business development and the position of the Group by way of written and verbal reports. These reports focused in particular on the risk situation, risk management and compliance. Transactions of material importance require the approval of the Supervisory Board.

The Supervisory Board meets regularly, including without the Management Board under certain circumstances.

The Management Board of NTT DATA Business Solutions AG had two members in fiscal 2022/2023: Norbert Rotter (CEO) and Jürgen Pürzer (CFO). There were no conflicts of interest within the Management Board in fiscal 2022/2023.

Together with the Management Board, the Supervisory Board ensures long-term succession planning. Typically, members of the Management Board are initially appointed for not more than three years. As a general rule, members are then subsequently appointed for not more than five years.

As required by the German Corporate Governance Code, the members of the Supervisory Board possess the knowledge, skills and professional expertise required to properly perform their duties. The composition of the Supervisory Board takes into account the principles of diversity and appropriateness with regard to the geographical, industry-specific and other material requirements of the company. The six-person Supervisory Board of NTT DATA Business Solutions AG has two members – Mr. Friedrich Fleischmann

and Prof. Heiner Schumacher – who are independent of the company, its Management Board and NTT DATA as the controlling shareholder. Although he has been a member of the Supervisory Board for more than twelve years, the Supervisory Board considers Mr. Friedrich Fleischmann to be independent. The Supervisory Board of NTT DATA Business Solutions AG also has two shareholder representatives from NTT DATA and two employee representatives. The Supervisory Board of NTT DATA Business Solutions AG therefore has two independent shareholder representatives in accordance with the recommendations of the GCGC, even though NTT DATA Business Solutions AG has no minority shareholders in addition to NTT DATA.

The members of the Management Board and the Supervisory Board do not perform any material functions outside the Group or hold material supervisory board mandates at other external companies.

As in previous years, the Supervisory Board formed an Audit Committee, a Personnel Committee and a Strategy Committee from among its members in fiscal 2022/2023. There were no conflicts of interest within the Supervisory Board in fiscal 2022/2023.

In accordance with the recommendations of the GCGC, the Chairman of the Supervisory Board, the Chairman of the Audit Committee and the Chairman of the Personnel Committee that handles Management Board remuneration are independent of the company and its Management Board. The Chairman of the Audit Committee is independent of the controlling shareholder.

Details of the remuneration paid to the members of the Management Board and Supervisory Board can be found in the notes to the annual financial statements and in the management report. The remuneration of the members of the Management Board is disclosed individually.

Further information on the cooperation between the Management Board and the Supervisory Board and the work of the Supervisory Board and its committees can be found in the report of the Supervisory Board.

SHAREHOLDER STRUCTURE AND ANNUAL GENERAL MEETING

NTT DATA EUROPE GmbH & Co. KG is the sole shareholder of NTT DATA Business Solutions AG.

NTT DATA Business Solutions AG is incorporated into the NTT DATA Group's corporate strategy. As previously, NTT DATA Business Solutions AG operates on the market autonomously and reports on its performance autonomously and transparently. NTT DATA Business Solutions AG is managed by the Management Board and Supervisory Board of NTT DATA Business Solutions AG on their own responsibility.

ACCOUNTING AND AUDITING

The Management Board prepares consolidated financial statements as at the end of a fiscal year. Since 2021, the fiscal year has begun on April 1 and ended on March 31 of the following year. Group financial reporting is consistent with the International Financial Reporting Standards (IFRS), thereby ensuring a high degree of transparency and international comparability.

The audit for fiscal 2022/2023 was performed by the auditor elected by the Annual General Meeting at the proposal of the Supervisory Board and the recommendation of the Audit Committee, KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin. The Audit Committee has agreed with the auditor that the auditor must inform the Audit Committee without delay of any findings or incidents material to its activities of which it becomes aware in the performance of its audit of financial statements. The Audit Committee regularly assesses the quality of the audit of financial statements.

TRANSPARENCY

NTT DATA Business Solutions AG has been providing timely, comprehensive and detailed information for many years. The company's website – https://nttdata-solutions.com – is the central communication instrument and is available in various languages, reflecting the company's international activities. NTT DATA Business Solutions AG uses press releases to provide information on current events. The annual report, together with key content from the consolidated financial statements, is published on the company's website. The consolidated financial statements are also published in the Federal Gazette. .

CORPORATE GOVERNANCE REPORTING

The Management Board and the Supervisory Board report annually on corporate governance at the company. This corporate governance report is included in the annual report.

Since fiscal 2020, the Management Board and the Supervisory Board of NTT DATA Business Solutions AG have dispensed with a separate corporate governance statement in accordance with section 161 AktG, which is only a legal requirement for listed stock corporations. This does not change the fact that NTT DATA Business Solutions AG is largely guided by the recommendations and suggestions of the GCGC. The new version of the GCGC dated April 28, 2022 is also taken into account extensively in ensuring the quality of corporate governance at NTT DATA Business Solutions AG. However, the Management Board and the Supervisory Board of NTT DATA Business Solutions AG now believe that comprehensive reporting in the corporate governance report is preferable to a formal corporate governance statement, as the form and content of corporate governance statements are geared to listed companies.

GROUP MANAGEMENT REPORT OF NTT DATA BUSINESS SOLUTIONS FOR THE FISCAL YEAR FROM APRIL 1, 2022 TO MARCH 31, 2023

KEY FIGURES FOR FISCAL 2022/2023

Record year for NTT DATA Business Solutions AG: Consolidated revenue rises by 14.7% to BEUR 1.42, EBITA of MEUR 99.2 after MEUR 63.5 in previous year

- Organic growth of 10.8%
- Revenue up by 3.9% as a result of acquisitions
- Revenue distribution: 60.4% outside Germany, 39.6% within Germany

NTT DATA Business Solutions AG generated EBITA of MEUR 99.2 across 2022/2023 as a whole after MEUR 63.5 in the previous year, an increase of 56.2%. EBIT climbed by as much as 76.6% to MEUR 85.3 after MEUR 48.3 in the previous year.

- The EBITA margin thus improved to 7.0% in fiscal 2022/2023 (previous year: 5.1%).
- The EBIT margin increased to 6.0% in the past fiscal year after 3.9% in the previous year.

Cashflow from operating activities fell by MEUR 36.5 to MEUR 100.4 in the year under review.

- The main driver compared with the previous year was the change in working capital due to the bonuses paid.
- Cashflow was also impacted by taxes paid (MEUR 9.6 more than in the previous year).

Orders on hand improved:

- NTT DATA Business Solutions AG's orders on hand amounted to BEUR 1.657 as of March 31, 2023, up by 17.9% on the prior-year figure of BEUR 1.405 as of March 31, 2022.
- Non-current orders on hand amounted to MEUR 843.0 (previous year: MEUR 665.7).

The number of employees rose by 11.9% to 13,629 as of the end of the reporting period (previous year: 12,176).

- Acquisitions accounted for 346 of the total headcount increase of 1,354 employees.
- The share of women within the Group climbed to 31.1% as against 29.0% in the previous year.

Forecast for 2023/2024 as a whole:

- Further growth in revenue of 4–6% is anticipated on a like-for-like basis.
- NTT DATA Business Solutions is still aiming for organic growth and growth through acquisitions.
- The EBITA margin is forecast to improve further to around 7.5%.

PROFILE OF THE NTT DATA BUSINESS SOLUTIONS GROUP

BUSINESS ACTIVITIES

NTT DATA Business Solutions AG (until 2021: itelligence AG) was formed in 1989 as an SAP consulting company. Today, it is a leading international full-service IT provider and partner of SAP SE. As an expression of the large-scale global growth and branding initiative pursued by its parent group NTT DATA, itelligence AG was renamed NTT DATA Business Solutions AG in 2021. The new name also underlined the company's growing international significance as an SAP consulting firm.

NTT DATA Business Solutions AG's main target group is customers in the traditional and upper mid-market with a strong international presence. Today, the company operates at more than 90 locations in 30 countries, working on behalf of over 4,300 active customers. The company is focused on the sale of rights of use to SAP software solutions for the midmarket, SAP Managed Services consulting business, and solution and product business.

Extensive industry and IT expertise are used to develop and preconfigure various industry solutions for the more efficient implementation of SAP in Germany and abroad. Key sectors addressed by the Group include manufacturing and the automotive supply industry, mechanical and plant engineering, steel and non-ferrous metal companies, the wood and furniture industry, food processing, the chemistry and pharmaceutical sector, the life science sector, the service industry, retail, and expertise in the area of educational institutions. NTT DATA Business Solutions is also driving ahead digitization and the industry-specific integration of mobile and analytical solutions.

ORGANIZATION

NTT DATA Business Solutions AG is represented by subsidiaries with local sales and consulting teams in the following regions: DACH (Germany, Austria and Switzerland), Western Europe (Spain, France, Belgium, Netherlands, UK, Ireland), Northern and Eastern Europe (Denmark, Norway, Sweden, Finland, Poland, Czechia, Slovakia, Hungary, Bulgaria, Turkey, UAE), the Americas (USA, Canada, Brazil), APAC (China, Malaysia, Thailand, Australia, India, Qatar), and Other.

The Group comprises 60 subsidiaries worldwide. The largest subsidiaries are located in Germany, the US, India, Brazil, Switzerland, the UK, Denmark, and Turkey. NTT DATA Business Solutions AG is domiciled at its head office in Bielefeld. NTT DATA Business Solutions AG is a wholly owned subsidiary of NTT DATA EUROPE GmbH & Co. KG.

The company provides managed cloud and application management services for more than 4,000 customers from seven global hubs including off-shore and near-shore centers with local front-ends in over 30 countries. As one of the leading managed cloud service providers focusing on SAP, NTT DATA Business Solutions operates state-of-the-art data centers in Germany, Poland, Malaysia, Denmark

and the US, and works closely with the leading hyperscalers. This geographical and portfolio positioning is rounded off by intensive cooperation with affiliates within the NTT Group and operations as a global strategic supplier for SAP and its consumers..

GROWTH STRATEGIES (unaudited management report content)

The company's success is based on a clear strategy and its systematic implementation and continuous further development. NTT DATA Business Solutions maintains lasting partner relations with its customers and takes responsibility for the success of the IT projects it carries out for them.

NTT DATA Business Solutions' customers face intensive global competition and must constantly adapt to an extremely dynamic environment. Continuous improvements to internal structures and the value chain are therefore strategically important. NTT DATA Business Solutions sees itself as a strategic partner to SMEs and large corporations worldwide, and helps its customers to manage these challenges with innovative IT solutions and services. In particular, this includes actively shaping the relentlessly rapid advancement of digital technology and ensuring greater efficiency and transparency in workflows.

Growth strategies are the centerpiece of the company's long-term orientation and, working with the NTT DATA Group, are systematically augmented in four-year cycles. The current strategy cycle covers the fiscal years 2022 to 2025. Compared to the previous strategy cycle, NTT DATA Business Solutions is focused on continuous efficiency and margin enhancements as well as growth.

MANAGEMENT SYSTEM

To manage its operating business, the Group uses selected financial and non-financial key figures that are consolidated into key performance indicators at Group level. These are presented under II.5

ANNUAL AND MULTI-YEAR PLANNING FOR ALL REGIONS AND DIVISIONS

All management and controlling processes at NTT DATA Business Solutions are based on an established planning process. Building on strategic multi-year planning, the Management Board manages the Group's long-term focus and derives annual operating targets applying a top-down approach. The annual plans developed at the level of the national subsidiaries are then coordinated with the overall targets. Planning data is then compared against rolling forecasts each quarter to identify deviations. In addition, target and actual figures are compared each month and reported as a management tool so that deviations from the agreed targets can be identified at an early stage and corresponding measures for ensuring target achievement can be initiated in good time.

MARKET POSITIONING (UNAUDITED MANAGEMENT REPORT CONTENT)

As one of the leading international full-service IT providers for the SAP environment, NTT DATA Business Solutions is positioned mainly in the traditional and upper midmarket segment and offers its customers a coordinated range of solutions and services over the entire life cycle of an IT investment. The company's portfolio has been continuously enhanced in recent years and now consists of consulting, development and system integration in the SAP environment, the sale of SAP Licenses, Cloud Subscriptions, and Managed Services. NTT DATA Business Solutions AG offers these products and services globally thanks to its long-established market presence in Germany, Western Europe, Eastern Europe, the Americas, and Asia. In the future, NTT DATA Business Solutions will continue to expand this excellent market position through organic growth and targeted acquisitions.

ACQUISITIONS

NTT DATA Business Solutions conducted further acquisitions in fiscal 2022/2023. The Management Board of NTT DATA Business Solutions also held talks with potential future acquisition candidates. Going forward, NTT DATA Business Solutions AG will continue to grow through acquisitions. It intends to press ahead with the expansion strategy of recent years in order to expand its service portfolio in a targeted manner. With its acquisitions, NTT DATA Business Solutions is pursuing the strategic objective of being one of the leading SAP partners in each of its key sales markets and further expanding this position.

**NTT DATA acquires interest in the Natuvion Group and further expands
SAP S/4HANA transformation expertise**

NTT DATA Business Solutions acquired a majority interest in the Natuvion Group, Walldorf, in August 2022. Natuvion is an internationally recognized SAP Data Transformation Partner. Using automated processes based on proprietary software tools, the global Natuvion Group assists companies in relocating business-critical data and processes to state-of-the-art IT platforms and systems. This enables Natuvion's clients to utilize advanced, innovative IT platforms as quickly as possible. Natuvion's typical "relocation services" include data migration, transformation and integration as well as data quality enhancement, data retirement and data protection.

The two companies have already been working together as partners for several years. Since 2020, the Natuvion Group and NTT DATA Business Solutions have been bundling the knowledge and expertise necessary to implement sophisticated SAP S/4HANA transformation projects.

The Natuvion Group was established in Walldorf in 2014 and expanded internationally in the following years. It now has more than 250 employees at nine locations in Germany, Austria, Switzerland, Slovakia, the US, and Australia. The company possesses extensive know-how regarding complex, international transformation projects as well as in-depth process expertise across a wide range of industries.

PARTNERSHIPS (unaudited management report content)

Partnerships are central to NTT DATA Business Solutions AG's business model. With more than 4,300 active customers around the world, NTT DATA Business Solutions seeks long-term relationships that are trust-based and profitable for both parties. Additional long-standing partnerships also provide an important basis for the company's long-term success.

SAP partnership

NTT DATA Business Solutions AG is a partner of SAP, whose products form the core of its service portfolio along with the related services. NTT DATA Business Solutions' prominence within the SAP ecosystem is regularly demonstrated by various awards and the most important partner status titles that SAP currently confers on its strategic partners. The most significant awards include SAP Global Platinum Reseller, SAP Global Strategic Services Partner and Global SAP-Certified Provider of Hosting Operations. NTT DATA Business Solutions is also a global SAP-certified provider of SAP Business Suite Solutions Operations, S/4HANA Solutions Operations, Cloud and Infrastructure Operations, and SAP HANA Operations.

NTT DATA Business Solutions again won numerous SAP awards in 2022/2023. Highlights include the SAP Pinnacle Awards. NTT DATA Business Solutions won four of these important industry accolades in April 2023 and was a finalist in a further three categories. NTT DATA Business Solutions was again recognized by SAP for its outstanding achievements as an SAP partner in the "Sales Success – Midmarket", "Sales Success – Cross Segment", "Customer Success Management", and "Partner-Led Demand Management" categories. The global SAP consulting firm was also nominated as a finalist in the "Delivery Quality" and "Cloud Business Transformation with SAP S/4HANA Cloud, Public Edition" categories, while the entire NTT DATA Group was a finalist in the "Social Impact" category.

With the annual SAP Pinnacle Awards, SAP recognizes partners that have rendered outstanding service to the development and expansion of their collaboration with SAP and that help customers to realize their full potential. The winners and finalists of the SAP Pinnacle Awards in the 22 categories were selected on the basis of suggestions by SAP, customer feedback, and various performance criteria.

SAP presents the Pinnacle Awards to partners who are dedicated to teamwork and whose innovative concepts and outstanding expertise help customers to achieve their goals. This year, an elite group of 13 partners worldwide were honored. NTT DATA Business Solutions was a Pinnacle Award winner for the ninth year in a row.

In March 2023, NTT DATA Business Solutions received the SAP S/4HANA Cloud Partner of the Year Award 2023 in the Diamond Initiative for SAP partners. SAP uses the Diamond Initiative to recognize strong partners that demonstrate impressive performance in specific categories. In addition to the award, NTT DATA Business Solutions was named a Focus Partner in four relevant sales areas in Germany: Process & Life Sciences Industries, Discrete Manufacturing & Automotive, Digital Supply Chain, and Intelligent Spend & Business Network.

The "S/4HANA Cloud Partner of the Year 2023" award underlines the importance of NTT DATA Business Solutions' close partnership with SAP, which goes back decades. The Diamond Initiative honors partners that have been particularly effective in developing and expanding their collaboration with SAP Germany and that have advanced the digital transformation of customers with a view to the future. Launched by SAP Germany in 2019, the initiative is based on an assessment matrix developed by SAP under the name "Diamond Model", which takes five performance dimensions into consideration: innovation, expertise, solutions, demand generation, and joint partner revenue in industry-specific projects.

In March 2023, NTT DATA Business Solutions also received the SAP MEE Partner Excellence Award 2023 for Sustainable Growth. The award was presented at the Q1 MEE Partner Ecosystem Success All-Hands event. SAP presented the awards to the top-performing SAP partners in the Middle and Eastern Europe (MEE) region that have made outstanding contributions to driving digital transformation for business that use SAP solutions. In partnership with SAP, the recipients help their customers to realize innovations, achieve results rapidly, grow sustainably, and simplify their processes with SAP solutions.

Selected from SAP's large and diverse partner base, nominations for the SAP Partner Excellence Awards were based on internal SAP sales data. A committee composed of regional and global SAP representatives determine winning partners in each category according to criteria such as sales achievement and performance. Awards are presented in a variety of categories, including overall sales, innovation, technology, services, and solution-specific areas.

Microsoft business and alliance

Hyperscaler business is becoming increasingly relevant for NTT DATA Business Solutions. This development began a few years ago with the aim of providing customers with alternative options for the selection and management of their infrastructure cloud. With our "We manage your cloud" approach, NTT DATA Business Solutions offers flexible, scalable, high-quality services for hybrid cloud landscapes at our in-house data centers, in the public cloud operated by the leading hyperscalers, or at the customer's own data centers. NTT DATA Business Solutions has established global partnerships with Microsoft Azure, AWS, and GCP. In this way, NTT DATA Business Solutions is adapting and harnessing the growing trend on the market to define platform-inclusive cloud decisions as the basis for IT strategy. NTT DATA Business Solutions has all of the relevant partner certifications and statuses, e.g. Microsoft Cloud Solution Provider.

For the Microsoft environment in particular, NTT DATA Business Solutions has made the strategic decision to expand the existing partnership and the corresponding service portfolio into additional areas beyond infrastructure, such as analytics, security, platform/own IP and application modernization, without losing sight of its focus on SAP. The three-way strategic partnership between SAP, Microsoft and NTT will deliver especially robust and future-proof foundations for future developments. In this context, NTT DATA Business Solutions manages the SAP-relevant topics in the NTT/Microsoft partnership within the NTT Group.

Another important element of this three-way partnership is SAP's "RISE with SAP" program, the infrastructure for which is primarily based on hyperscaler clouds and SAP's own internal cloud. NTT DATA Business Solutions provides active support for marketing, sales, and program implementation, including in its role as a Global Strategic Supplier for SAP.

To achieve our ambitions in terms of expanding our Microsoft business, NTT DATA Business Solutions has established a dedicated Microsoft Center of Excellence with the involvement of the corresponding business development and delivery experts from the leading countries. It operates globally and on a cross-segment basis with the aim of intensifying the developments that have already been initiated. In addition to the evolution of our service offering, it focuses on innovative solutions using cloud-native tools.

NTT DATA

The long-standing partnership with the Japanese NTT DATA Group provides the strategic basis for NTT DATA Business Solutions to continue significantly expanding its own international market position. NTT DATA Business Solutions AG is a wholly owned subsidiary of NTT DATA EUROPE GmbH & Co. KG, which itself is a Group company of NTT DATA, Inc., Tokyo. This relationship under company law forms the basis for a tightly-knit partnership within the framework of a cooperation agreement. NTT DATA, Inc. was established in October 2022 with the aim of consolidating, strengthening, and further expanding the NTT DATA Group's international business.

With NTT DATA as a strong partner, NTT DATA Business Solutions intends to press ahead with its development as an international provider of IT systems and services for SAP. As a company that operates independently within the growth-oriented NTT DATA Group, the close relationship with NTT DATA will allow NTT DATA Business Solutions to steadily increase its growth potential on the international stage, particularly in Asia. NTT DATA is also a very strong partner for NTT DATA Business Solutions in terms of its financial and capital resources. A number of joint international customer projects serve to underline the successful partnership between NTT DATA and NTT DATA Business Solutions.

Within the NTT DATA Group, NTT DATA Business Solutions won four major awards in 2023. The innovative project for the Danish customer "Krifa A/S", which involved the development of a digital receptionist, and the project for the US customer "Lindt & Sprungli North America", which aims to consolidate the three North American brands, Russell Stover, Ghirardelli, and Lindt & Sprungli, on a common ERP platform, each received an NTT DATA Award. The NTT DATA Sustainability Award was presented to the Turkish e-transformation project "Strautmann, Ingrammicro, Cronimet", which facilitates quicker communication between customers and the tax authorities while also reducing paper consumption. The NTT DATA SAP MFT & GMH/GIH team received the NTT DATA Midterm Management Plan Award in recognition of having achieved the "Leader" position in the Gartner SAP S/4HANA Application Services Magic Quadrant. This leading position for S/4HANA enables us to win more business with large corporations and position the broader range offered by our other service portfolios. This was a great success driven by exemplary teamwork and excellent cooperation between fellow NTT DATA subsidiaries.

Other partnerships and awards

NTT DATA Business Solutions also maintains a number of other SAP and technology partnerships with the aim of expanding its own expertise and solutions portfolio. The objective of these partnerships is to meet the needs of existing NTT DATA Business Solutions customers even more effectively by offering additional services and complementary solutions. NTT DATA Business Solutions also seeks to acquire new customers through technology issues, SAP industry solutions, and partner recommendations.

In June 2023, NTT DATA Business Solutions participated in the Hinterland of Things 2023 start-up conference in Bielefeld, which brings together companies and investors. Attended by 1,500 selected guests, the conference is a flagship event for innovation between young businesses and established midmarket companies in the Ostwestfalen-Lippe region. NTT DATA Business Solutions AG used the conference as an opportunity to present its expertise in artificial intelligence with the it.human platform and strengthen its connections in the start-up scene. NTT DATA Business Solutions has extended its partnership with the event organizer, Founders Foundation gGmbH, for a further three years as a sign of its commitment to long-term cooperation.

EMPLOYEES

NTT DATA Business Solutions' headcount surpassed 13,500 in fiscal 2022/2023. Of our 13,530 employees as of March 31, 2023 (previous year: 12,176), only 28% worked in Germany (3,883; previous year: 3,570) while 72% worked outside Germany (9,647; previous year: 8,606). The number of employees therefore increased by 11.1% year-on-year. Acquisitions accounted for 346 of the total headcount increase of 1,354 employees.

The share of women at NTT DATA Business Solutions AG rose to 31.0% in 2022/2023 (previous year: 29.0%). The average age globally was unchanged at 36.7 years.

KEY AREAS FOR THE PEOPLE FUNCTION (unaudited management report content)

Fortunately, the impact of the coronavirus pandemic continued to recede during fiscal 2022 and everyday working life at NTT DATA Business Solutions slowly but surely returned to normal. Naturally, our attention was focused on the well-being and safety of our employees throughout the entire pandemic. With this in mind, we are extremely proud that our internal coronavirus management received a rating of "very good" in our regular internal survey.

In recruitment, the positive trend observed in recent years continued. Compared with the "pre-coronavirus year" of 2019, the number of contracts offered globally increased to 4,655 (+96% vs. 2019) even in the face of tough competition and a 9% downturn in applications. Following the initial rollout in 2021, we pressed ahead with the global implementation of our employer branding "Empowering You" and further strengthened our uniform international brand presence with a view to positioning our-

selves as the leading SAP company within the NTT DATA Group in a targeted manner. Our employer branding has created an appealing global framework that ensures a uniform image for the company while providing scope for customized implementations in the individual countries in line with local requirements. By tailoring our activities to the respective target groups, we actively approached suitable talents and worked on their development in order to retain them for the long term. The Top Employers Institute recognized NTT DATA Business Solutions Germany as a "Top Employer" for the first time, awarding NTT DATA Business Solutions an extremely good rating in the process. In 2023/2024, this employer certification is being continuously expanded in additional countries in order to support our global positioning as a top employer. Despite tough competition, 2022 was a successful year for NTT DATA Business Solutions in terms of recruitment. In particular, the appointment of over 3,000 talented individuals at the first three career levels helped us to make further progress toward our goal of a younger global organization.

Having already implemented some measures in countries including Turkey, Poland, the Netherlands, the UK, and Denmark as part of the new work approach and under the "Cool place to rock business" slogan, we are delighted to have added new flair to some of our locations in Germany in fiscal 2022. Redesigned offices like the ones in Dortmund and Cologne exemplify our commitment to becoming more appealing to current and future employees alike. The advantages of remote working and flexible work time models will be combined in a timely and cost-effective manner in state-of-the-art offices. Additional measures have either already been implemented or are being planned.

NTT DATA Business Solutions remained committed to keeping a close eye on its employees' needs in the year under review. In addition to personal talks, we conducted two MyCheck pulse surveys via our **EMPLOYEE EXPERIENCE TOOL QUALTRICS**. These are also used to continuously monitor the Employer Engagement Index (EEI) that was introduced for senior management in the previous fiscal year. This helps us to ensure the long-term success of the measures derived from the employee surveys. Thanks to our retention measures, 35% fewer talents left the first three career levels than in fiscal 2021. More than 6,500 employees are now employed at these levels.

Fiscal 2022/2023 again showed that our People department faces challenging times. The labor market is increasingly tilting in favor of employees and there is high competitive pressure for highly qualified specialists in the SAP field in particular. At the same time, the young generation is more focused on sustainability and resilience. Individualism and work-life balance are becoming increasingly important. These are exactly the challenges we are addressing with our People First Strategy, which we launched in 2021. It comprises eight global projects that represent our response to these developments, and we are proud to say they are already bearing fruit. For example, the number of our employees who say they would recommend us as an employer has increased by 19% compared with the previous survey. As we can overcome these challenges only by working together, we have further intensified the international cooperation within the People department. In addition to sharing best practices and learning from each other, monthly global think tanks help to ensure that the People department is optimally positioned for the years ahead in terms of strategy. To this end, various national and international measures have been defined that will shape the direction of our department to 2025 and beyond. We will exhaust every possibility in our efforts to continue attracting the best

talent to our company in the future. Attractive opportunities for individual career development and an increase in the global training budget of more than 30% (for both digital and in-person training) are important tools in achieving this. We want to orchestrate sustainable agility and provide efficient processes and services to fulfill our employees' needs. The full utilization of the opportunities afforded by SuccessFactors enables us to map the employee career path in a single system, thus helping us to ensure efficient global HR processes and high quality standards.

Sadly, the fiscal year was overshadowed by two tragic events, namely the war in Ukraine and the earthquake in Turkey and Syria. In both cases, we took action as a company and did our best to support our local employees both financially, i.e. by providing organizational assistance, and emotionally. The incredible solidarity and willingness to help on the part of our employees has shown us once again that we can rely on each other even in an emergency, that our corporate culture is put into practice, and that we can successfully overcome the challenges facing us only by working as a team.

MATRIX ORGANIZATION

In the past fiscal year, a program was launched with the objective of enhancing the global matrix organization and making the cooperation between the global and local units even more effective. This project was conducted with the active participation of the global teams, regions and countries involved. It resulted in the establishment of two new or expanded global areas with their own leadership teams: Global Innovation & Industry Consulting (GIIC) and Global Business & Managed Services (GBMS). These leadership teams are now adapting these decisions and defining them in greater detail in close cooperation with the core countries.

With the Global Innovation & Industry Consulting business area (GIIC), NTT DATA Business Solutions has created a future-oriented, globally active organization as part of a matrix project. The primary goal of the organization is to develop existing customer relationships and win new customers with a global reach. It develops innovative business ideas, software assets and products and rolls them out and coordinates them both globally and locally. It is also tasked with the further development of a powerful global consulting unit. In addition, a newly created business area is responsible for coordinating and driving forward the central centers of excellence (CoEs) and lines of business (LoBs), which handle promising projects and work to enhance them. Examples include the life science, consumer packaged goods (CPG) and service industries and LoBs such as human experience, master data, and supply chain management. In this way, local centers of excellence and lines of business are bundled virtually and consolidated in order to establish global expertise. The regional centers of excellence and lines of business are being replaced by this strong global network, thereby enabling the company to act more effectively and flexibly on the global market.

The Global Managed Services business unit also operates globally via a matrix organization in order to optimally serve the requirements of local and international customers with regard to a scalable, cost-efficient and innovative range of services in hybrid cloud scenarios.

The two newly created global business areas (GIIC and GBMS) are supplemented by a newly consolidated and realigned offshore unit in India. This allows shortages of specialist personnel in established markets to be addressed in a flexible and agile manner by appointing highly qualified specialists from India. Speed and the direct connection between India and the respective countries is an important factor for success. All of these global units work in close cooperation to enable a future-oriented approach to the digital challenges of increasingly global markets and their customers. The connectivity between the units ensures that the business challenges facing NTT DATA Business Solutions are covered and addressed efficiently.

ECONOMIC REPORT

GENERAL ECONOMIC SITUATION IN 2022

As a wholly owned subsidiary of NTT DATA, Inc., NTT DATA Business Solutions AG is globally positioned. It supports more than 4,300 active customers at more than 90 locations in some 30 countries around the world. Thanks to this international orientation, global economic developments and the resulting investment decisions of customers have a significant impact on the performance of NTT DATA Business Solutions AG.

According to the International Monetary Fund (IMF), the global economy grew by around 3.4% in the 2022 calendar year. The growth rate was slower than in the previous year due to the war in Ukraine, higher energy prices and inflation, weaker consumer spending, and increased shortages in individual markets.

The euro area saw economic growth of 3.5% in 2022. While the rise in GDP in Germany was relatively moderate at 1.8%, the economies of the UK and Spain enjoyed stronger growth of up to 5.5%.

NTT DATA Business Solutions AG generated 44.2% of its consolidated revenue in euro area countries in 2022/2023 after 46.0% in the previous year (2021/2022).

The US economy expanded by just 0.9% across the year as a whole (previous year: 5.7%). The reasons for this weak growth included the slowdown in consumer demand in response to rising inflation and interest rates.

NTT DATA Business Solutions generated 14.7% (previous year: 13.1%) of its consolidated revenue in the US and Canada.

Brazil saw an economic upturn that was driven in particular by high world market prices for food and infrastructure expansion funded by private investors, with GDP rising by 2.9%. Nevertheless, the Brazilian economy is suffering from high inflation and a high level of public debt.

NTT DATA Business Solutions generated 3.3% (previous year: 2.6%) of its consolidated revenue in Brazil in 2022/2023.

Economic activity in China was significantly impacted by renewed outbreaks of COVID-19 and restrictive measures to control the pandemic. With the ongoing zero-COVID policy and additional lockdowns leading to a considerable slowdown in consumer spending, the Chinese economy expanded by just 3.0% in 2022.

China accounted for only a small share of NTT DATA Business Solutions' revenue at 0.5% (previous year: 0.8%).

As a member of the NTT DATA Group, the Japanese economy is highly important to NTT DATA Business Solutions. Although it does not generate revenue directly in Japan, the company has customer relationships with Japanese corporations both directly and through affiliates. The Japanese economy continued to be impacted by the COVID-related closures in China and supply chain disruption in 2022. This was exacerbated by the highest levels of consumer price inflation for three decades. Despite this, there was a recovery in private consumer spending, especially in the service sector, leading to a growth rate of 1.1%.

Against this backdrop, exchange rates were highly volatile.

The US dollar/euro exchange rate fluctuated between 0.95 and 1.15 over the year, with the euro around 6% weaker at the end of 2022 than at the end of 2021.

SECTOR DEVELOPMENT IN 2022

According to the Gartner study from April 2023, global IT spending increased by 0.5% in the 2022 calendar year (previous year: 9.0%). The sub-markets relevant to NTT DATA Business Solutions, software and IT services, expanded by 8.8% and 3.5%, thereby significantly outpacing the IT market as a whole.

BUSINESS DEVELOPMENT AND ECONOMIC POSITION

The following table shows the changes in revenue in the segments and divisions compared with the corresponding prior-year figures and the Group's earnings development in MEUR:

MEUR	Apr 1, 2022 – Mar 31, 2023	Apr 1, 2021 – Mar 31, 2022
Total revenues	**1,423.4**	**1,241.3**
Revenue division		
Consulting	651.6	554.7
Licenses	50.3	65.4
Cloud Subscription	90.0	57.3
Managed Services	626.1	558.0
Other	5.4	5.9
Revenue segment		
Germany/Austria/Switzerland (DACH)	621.8	541.8
Western Europe	192.5	183.9
North and Eastern Europe (NEE)	255.3	218.8
America	251.4	193.5
Other APAC	95.0	93.0
Other	7.4	10.3
EBIT	85.3	48.3
EBIT margin	6.0%	3.9%
EBITA	99.2	63.5
EBITA margin	7.0%	5.1%
EBITDA	142.6	107.9
EBITDA margin	10.0%	8.7%
IFRS net profit	64.7	27.0
IFRS earnings per share in EUR/ Share of shareholders NTT DATA Business Solutions AG	1.82	0.64

REVENUE DEVELOPMENT

Revenue development
2012/2013 – 2022/2023

NTT DATA Business Solutions continued its positive revenue performance in fiscal 2022/2023. Revenue climbed by +14.7% from MEUR 1,241.3 to MEUR 1,423.4 (adjusted for currency effects: +14.2%). Average revenue growth (CAGR) for the past ten years amounts to 13.0%.

Revenues by quarter

A look at the quarter-on-quarter performance shows that NTT DATA Business Solutions significantly outperformed its prior-year revenue in every quarter of fiscal 2022/2023. The increase in revenue was +14.3% in the first quarter, while the biggest percentage rise was achieved in the second quarter at

+15.6%. The change in the third and fourth quarters was +14.4% and +14.5% respectively. The companies in Germany and Bulgaria that were acquired in 2022/2023 contributed +3.9% to revenue growth. Organic growth amounted to +10.8%, while exchange rates positively impacted revenue development to the tune of +0.4%.

NTT DATA Business Solutions breaks down revenue by both segment and division. The corresponding changes are shown in the charts on page 91.

The breakdown of revenue by segment in fiscal 2022/2023 was as follows: DACH 43.7% (previous year: 43.6%), Western Europe 13.5% (previous year: 14.8%), Northern and Eastern Europe 17.9% (previous year: 17.6%), the Americas 17.7% (previous year: 15.6%), APAC 6.7% (previous year: 7.5%), Other 0.5% (previous year: 0.8%).

The individual units generated the following revenue shares: Consulting 45.8% (previous year: 44.7%), Licenses 3.5% (previous year: 5.3%), Cloud Subscription 6.3% (previous year: 4.6%), Managed Services 44.0% (previous year: 45.0%), Other 0.4% (previous year: 0.5%). SAP SE's change in focus from selling traditional on-premise licenses to cloud subscriptions led to a notable shift in revenues between the Licenses and Cloud Subscription segments. Revenues in the Cloud Subscription segment were also boosted by commission income in connection with SAP SE's new CCP/CC Flex business model.

The development of recurring business in the individual units of Maintenance, Application Management and Managed Cloud and Cloud Subscription from fiscal years 2012/2013 to 2022/2023 is shown in the overview on page 92.

REVENUE DEVELOPMENT IN THE REGIONS

The NTT DATA Business Solutions segment with the highest revenue, which comprises the countries Germany/Austria/Switzerland **(DACH)**, increased its revenue by +14.8% from MEUR 541.8 to MEUR 621.8 (adjusted for currency effects: 12.8%). MEUR 27.5 of the growth is attributable to the acquisition of Natuvion.

The highest absolute increase in revenue in the DACH segment was achieved in Consulting, which grew by MEUR +56.7 (+26.3%) from MEUR 216.0 to MEUR 272.7. License revenue declined by 14.6% or MEUR 4.0 year-on-year, from MEUR 27.4 to MEUR 23.4. By contrast, Cloud Subscription revenue rose sharply by +39.0% or MEUR 6.0, from MEUR 15.4 to MEUR 21.4. Of this figure, MEUR 3.4 (15.9%) is attributable to the new CCP & CC Flex business model. Managed Services revenue increased by MEUR +21.8, from MEUR 279.1 to MEUR 300.9.

Revenue in the **WESTERN EUROPE SEGMENT** rose by +4.7% (adjusted for currency effects: 5.8%), from MEUR 183.9 to MEUR 192.5. Downturns in revenue in France and Benelux were more than offset by the substantial rises of MEUR +11.9 (+10.0%) in the UK and MEUR +2.1 (+39.5%) in Spain.

Consulting business in the Western Europe segment increased from MEUR 77.5 in the previous year to MEUR 82.2. This corresponds to growth of MEUR +4.7 or +6.1% (adjusted for currency effects: +6.9%).

Licenses revenue fell by MEUR -4.6, from MEUR 11.2 to MEUR 6.6. By contrast, Cloud Subscription business reported strong revenue growth of MEUR +4.6 or 28.0% to MEUR 21.0 as a result of the good performance in the UK, France and Benelux. Of this figure, MEUR 3.4 (16.2%) is attributable to CCP & CC Flex. Managed Services also achieved revenue growth of MEUR +3.9 from MEUR 78.8 to MEUR 82.7. This increase related mainly to the UK and France.

The **NORTHERN AND EASTERN EUROPE SEGMENT** generated revenue of MEUR 255.3 in the past fiscal year, outperforming the previous year by MEUR +36.5 or +16.7%. Adjusted for currency effects, revenue increased by +30.5%. This highly positive development is essentially thanks to Turkey at MEUR +11.0 and Nordics at MEUR 16.4. In addition to organic growth in Turkey, revenue development was positively influenced by high inflation and negatively impacted by exchange rate effects. Adjusted for inflation, organic growth in Turkey would have amounted to 12.2% in local currency and 17.0% on a euro basis after adjustment for currency effects.

In the Northern and Eastern Europe segment, Consulting business grew by MEUR +16.2 or +14.4% year-on-year, from MEUR 112.3 to MEUR 128.5 (adjusted for currency effects: +26.0%). The figure for Managed Services was MEUR 94.2, an increase on the prior-year figure of MEUR 80.1 of MEUR +14.1. At MEUR 7.6, license revenue was down MEUR -2.4 on the prior-year figure of MEUR 10.0. Adjusted for currency effects, revenue would have been just MEUR -0.2 lower year-on-year. By contrast, Cloud Subscription business reported a strong increase of MEUR +7.4 or 46.0% to MEUR 23.5. Of this figure, MEUR 2.2 (9.4%) is attributable to the new CCP & CC Flex business model.

In the **AMERICAS SEGMENT**, revenue climbed by +29.9% from MEUR 193.5 in the previous year to MEUR 251.4. Adjusted for currency effects, this represents an increase of +15.5%. This positive development was observed across almost all companies.

Consulting business in the Americas segment rose sharply by MEUR +25.1 year-on-year, from MEUR 92.3 to MEUR 117.4. This effect is attributable mainly to excellent revenue performance in Brazil and the US, but MSCG also made a contribution. Managed Services business climbed by MEUR +21.0, from MEUR 84.0 to MEUR 105.0. In addition to the revenue growth in Brazil (MEUR +4.2) and the US (MEUR +15.2), all of the other companies increased their revenue. License business declined slightly from MEUR 10.3 in the previous year to MEUR 9.4. However, Cloud Subscription business recorded strong growth of MEUR +13.9, from MEUR 5.3 to MEUR 19.1. Of this figure, MEUR 11.8 (61.8%) is attributable to the new CCP/CC Flex business model. The slight reduction in License revenue and the sharp rise in Cloud Subscription business serve to illustrate the shift from traditional License sales to Cloud Subscriptions.

Revenue outperformed the prior-year's level in the **APAC SEGMENT**, rising by MEUR +2.0 from MEUR 93.0 to MEUR 95.0. This represents an increase of +2.0% (adjusted for currency effects: -2.7%).

Managed Services generated revenue of MEUR 42.4, exceeding the previous year's level by MEUR +8.7 (MEUR 33.7). This more than offset the downturns in the other segments. At MEUR 45.0, revenue from Consulting business was down MEUR -4.2 on the prior-year figure of MEUR 49.2. This was primarily due to the lower level of business in China (MEUR -2.4) and lower revenue in Thailand (MEUR -1.4). By contrast, Consulting business in Australia grew by 9.7%. The Cloud Subscription segment expanded by MEUR 0.6 or +16.7%, from MEUR 3.6 to MEUR 4.2. However, this was not sufficient to offset the downturn in License revenue from MEUR 6.3 to MEUR 3.0 (MEUR -3.3).

The **OTHER SEGMENT** contains the revenue of ITC GmbH, XEGO-it, and Recruit GmbH. At MEUR 7.4, the revenue generated by these two companies was lower than the prior-year level of MEUR 10.3.

REVENUE DEVELOPMENT BY DIVISION

CONSULTING revenue rose by +17.5% year-on-year from MEUR 554.7 to MEUR 651.6. This development was due to higher capacity utilization among consultants and slightly higher daily rates. Inorganic growth from the acquisition of Natuvion also accounted for revenue growth of MEUR +25.7.

The downturn in **LICENSE** revenue was lower than forecast. License business declined by MEUR -15.1 (-23.1%), from MEUR 65.4 in the previous year to MEUR 50.3. The reduction in License revenue was more than offset by strong growth in the Cloud Subscription segment.

The highest percentage increase (+57.1%) was achieved in **CLOUD SUBSCRIPTION**, which further illustrates the pronounced shift from License to Cloud Subscription business. This segment increased by MEUR +32.7, from MEUR 57.3 in the previous year to MEUR 90.0, of which MEUR 20.1 (22.3%) is attributable to the new CCP/CC Flex business model. The increase is thanks mainly to the positive performance in the US, the UK, Germany, Turkey, and the Nordics region.

MANAGED SERVICES achieved significant growth of MEUR +68.2 from MEUR 557.9 to MEUR 626.2. This increase of 12.2% was primarily due to volume growth in the Americas, Germany, the UK, India, and the Nordics region. Inorganic growth from the acquisition of BST in Bulgaria made a further contribution to revenue growth.
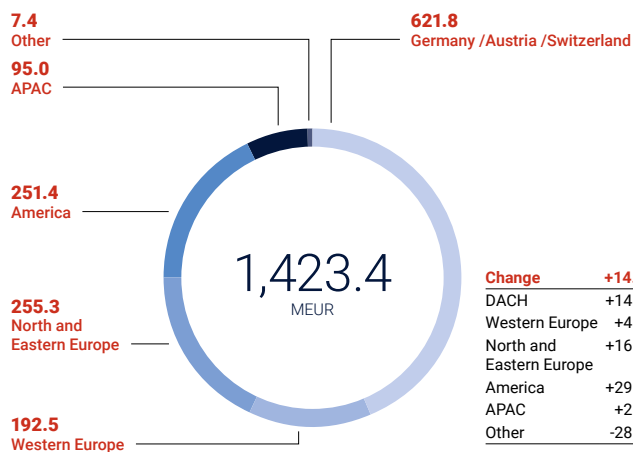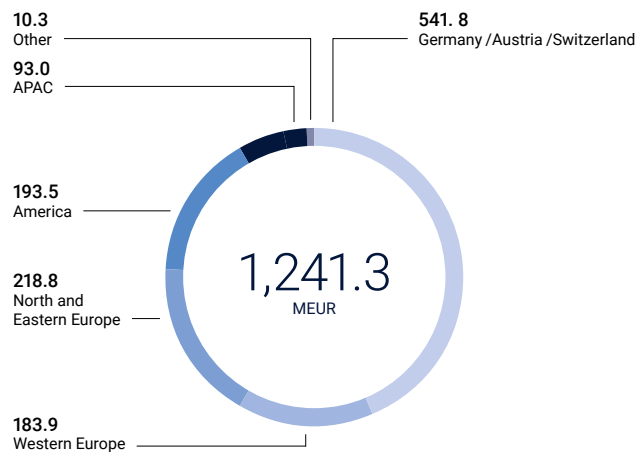
Orders on hand at NTT DATA Business Solutions increased by +17.9%, from BEUR 1.405 to BEUR 1.657 as of March 31, 2023. The book-to-bill ratio for 2022/2023 was 1.16. Non-current orders on hand amounted to MEUR 842.8, a significant increase on the previous year (previous year: MEUR 665.7).

REVENUE DEVELOPMENT BY REGIONAL SEGMENT
MEUR

March 31, 2022/2023

7.4 Other

95.0 APAC

621.8 Germany /Austria /Switzerland

251.4 America

255.3 North and Eastern Europe

192.5 Western Europe

1,423.4 MEUR

Change	+14.7%
DACH	+14.8%
Western Europe	+4.7%
North and Eastern Europe	+16.7%
America	+29.9%
APAC	+2.2%
Other	-28.2%

March 31, 2021/2022

10.3 Other

93.0 APAC

541. 8 Germany /Austria /Switzerland

193.5 America

218.8 North and Eastern Europe

183.9 Western Europe

1,241.3 MEUR

REVENUE DEVELOPMENT BY DIVISION
MEUR

March 31, 2022/2023

5.4 Other

626.1 Managed Services

651.6 Consulting

90.0 Cloud Subscription

50.3 Licenses

1,423.4 MEUR

Change	+14.7%
Consulting	+17.5%
Licenses	-23.1%
Cloud Subscription	+57.1%
Managed Services	+12.2%
Other	-8,5%

March 31, 2021/2022

5.9 Other

558.0 Managed Services

554.7 Consulting

57.3 Cloud Subscription

65.4 Licenses

1,241.3 MEUR

REVENUE DEVELOPMENT 2012/2013 – 2022/2023
MEUR

Year	MEUR
2012/13	420.4
2013/14	464.3
2014/15	602.6
2015/16	713.6
2016/17	806.3
2017/18	885.6
2018/19	954.5
2019/20	1,071.0
2020/21	1,071.6
2021/22	1,241.3
2022/23	1,423.4

CAGR
2012/2013 – 2022/2023
13.0%

RECURRING BUSINESS
as a proportion of total revenues in MEUR

Total Maintenance	Total Application Management
Total Managed Cloud	

REVENUES BY QUARTER
MEUR

Consulting	Licenses	Cloud Subscription
Managed Services	Other	
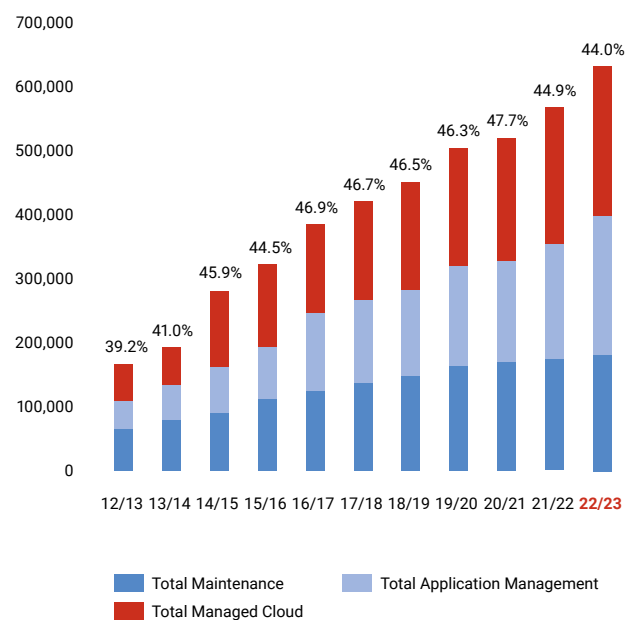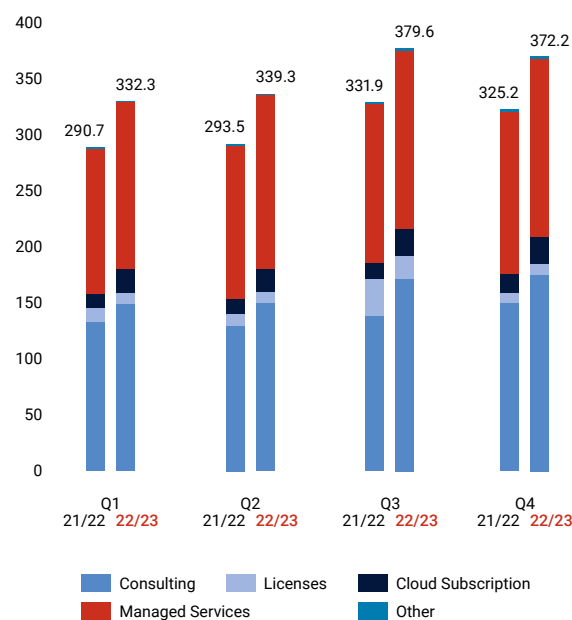
ORDERS ON HAND & REVENUES
per quarter in MEUR

Orders on hand	Revenues
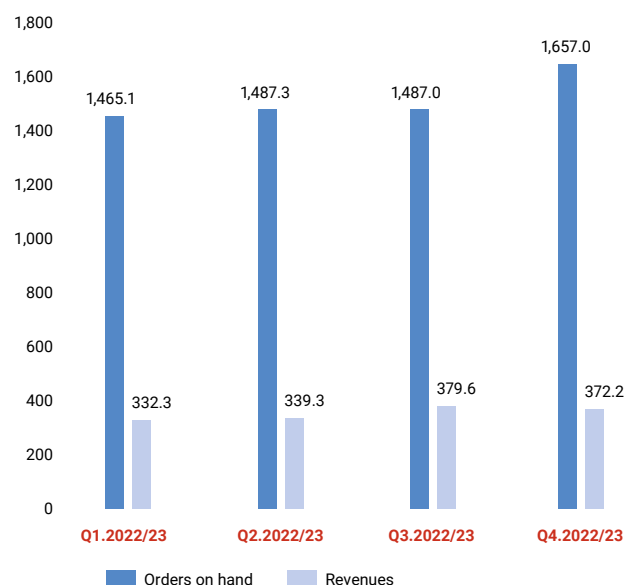
CONSOLIDATED NET PROFIT
KEUR
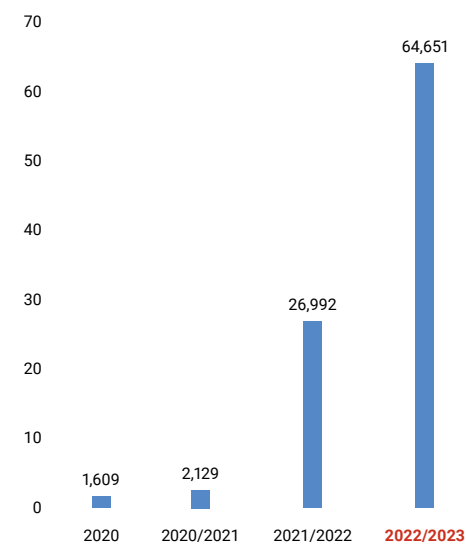
EMPLOYEES BY SEGMENT

March 31, 2023

46
Other

4,046
Germany/Austria/Switzerland

3,380
North and
Eastern Europe

3,827
APAC

891
Western Europe

1,340
America

13,530
Total

March 31,2022

46
Other

3,687
Germany/Austria/Switzerland

2,834
North and
Eastern Europe

3,568
APAC

863
Western Europe

1,178
America

12,176
Total
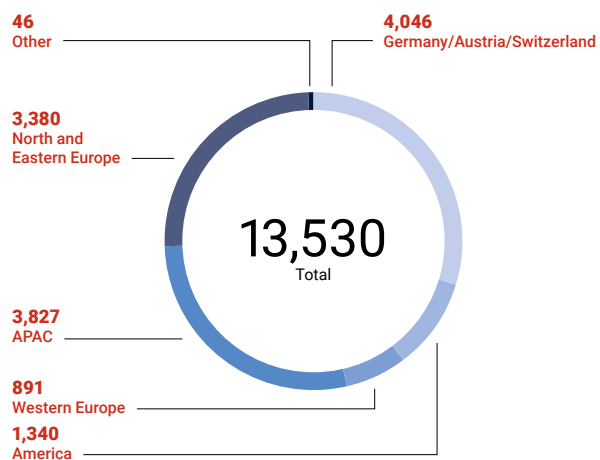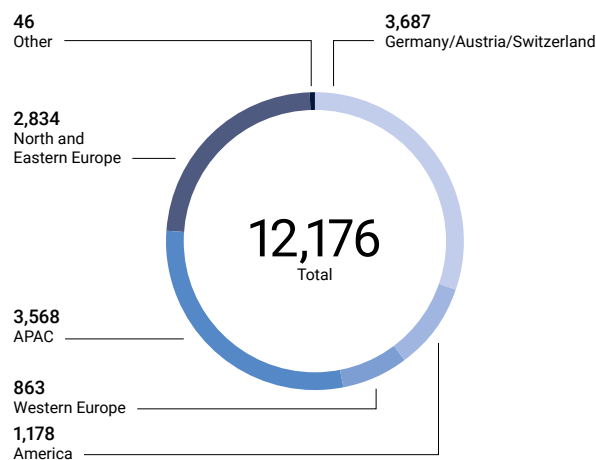
EMPLOYEE DEVELOPMENT
at the end of the month

Month	Employees
Dec 2020	10,352
Mar 2021	10,601
Jun 2021	11,134
Sep 2021	11,707
Dec 2021	11,878
Jan 2022	11,994
Mar 2022	12,176
Jun 2022	12,025
Jul 2022	12,085
Sep 2022	12,603
Oct 2022	12,744
Nov 2022	13,008
Dec 2022	13,193
Jan 2023	13,298
Feb 2023	13,443
Mar 2023	13,530

EARNINGS PER SHARE
EUR

Year	EPS
2020	(0.13)
2020/21	(0.13)
2021/22	0.64
2022/23	1.82
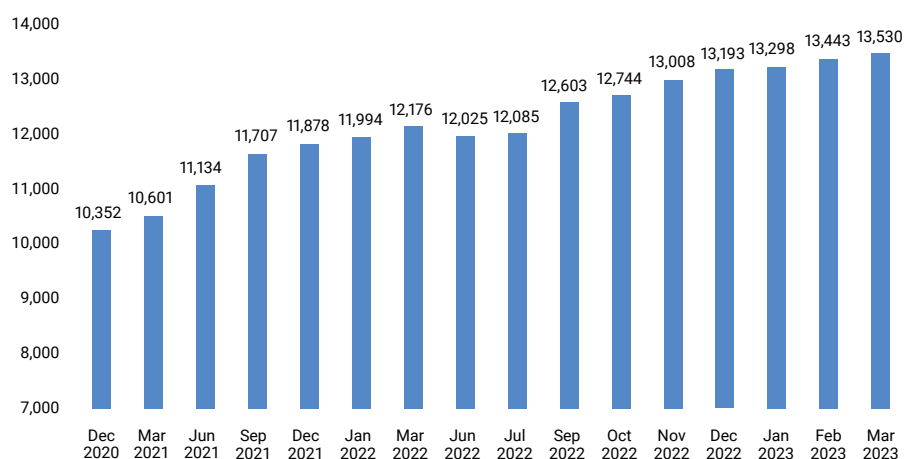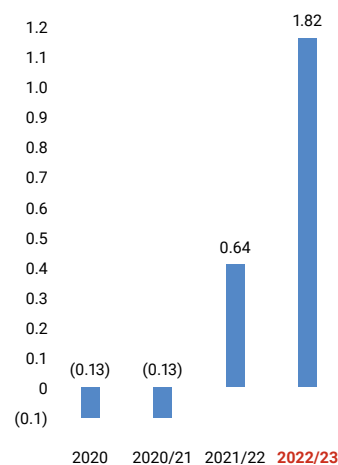
NET ASSETS, FINANCIAL POSITION, AND RESULTS OF OPERATIONS

RESULTS OF OPERATIONS

NTT DATA Business Solutions AG also enjoyed very strong and above-average growth in earnings in fiscal 2022/2023. EBITA amounted to MEUR 99.2 in the past fiscal year after MEUR 63.5 in the previous year, an increase of +56.2%. The EBITA margin thus climbed to 7.0% after 5.1% in the previous year.

The global cost and efficiency program aimed at long-term profitability enhancement continued successfully in fiscal 2022/2023. While strategic investments of MEUR 27.2 were made in the previous year, a total of MEUR 17.3 was invested in the year under review in coordination with the shareholders. Operating EBITA (EBITA before non-recurring costs, especially costs for the eXpand project) rose by MEUR +25.8 year-on-year, from MEUR 90.7 to MEUR 116.5. The operating EBITA margin therefore amounted to 8.2% (previous year: 7.3%), which was higher than the prior-year forecast of 7.2%.

EBIT amounted to MEUR 85.3 in the fiscal year, exceeding the prior-year figure of MEUR 48.3 by MEUR +37.0. The EBIT margin was therefore 6.0%, representing a year-on-year increase of 2.1 percentage points (previous year: 3.9%).

The difference of 0.9 percentage points between the EBIT margin and the EBITA margin is due to amortization of intangible assets amounting to MEUR 13.9 (previous year: MEUR 15.2). Capitalized customer relationships and orders on hand are amortized over periods that reflect the respective contractual terms.

EBITA in the **DACH SEGMENT (INCLUDING HEADQUARTERS)** amounted to MEUR 11.8 in 2022/2023, while operating EBITA amounted to MEUR 23.4 (prior-year operating EBITA: MEUR 26.8). The positive development in the operating units was curbed by increased expenditure for services at headquarters.

EBITA in the **WESTERN EUROPE SEGMENT** amounted to MEUR 17.3 in the past fiscal year, while operating EBITA amounted to MEUR 18.4 (prior-year operating EBITA: MEUR 17.8). A weak fiscal year in Belgium and the Netherlands was offset by positive performance in the other countries.

The **NORTHERN AND EASTERN EUROPE SEGMENT** generated EBITA of MEUR 21.9, while operating EBITA amounted to MEUR 22.1 (prior-year operating EBITA: MEUR 18.5). Higher profitability in the Nordics region and Czechia and positive performance in Turkey meant that earnings improved significantly.

EBITA in the **AMERICAS SEGMENT** amounted to MEUR 35.4, while operating EBITA totaled MEUR 38.0 (prior-year operating EBITA: MEUR 24.9). This significant improvement in earnings was due to the strong revenue growth and increased productivity in the US and Brazil. This development was supported by positive exchange rate effects in both countries. Business performance in Canada remained at a high level.

The **APAC SEGMENT** generated EBITA of MEUR 12.5 and operating EBITA of MEUR 16.7 (prior-year EBITA: MEUR +2.4). The strong growth in the region was driven by improved profitability in India and Australia.

The **OTHER SEGMENT** made an EBITA contribution of MEUR 0.3, up MEUR 0.6 on the prior-year figure of MEUR -0.3.

NET FINANCE COSTS

Net finance costs improved to MEUR -0.1 in the past fiscal year after MEUR -4.5 in the previous year. This figure includes finance income from short-term investments of MEUR 4.6 (previous year: MEUR 0.9) and finance costs of MEUR 6.7 (previous year: MEUR 6.9). Net finance costs also include income and expenses from the remeasurement of derivatives and the exercise of options. In total, the past fiscal year saw income of MEUR 1.7 (previous year: MEUR 0.8). Overall, this resulted in earnings before taxes (EBT) of MEUR 85.2 after MEUR 43.9 in the previous year, an increase of 94.2%.

TAX EXPENSE

The tax expense amounted to MEUR 20.5 in fiscal 2022/2023 after MEUR 16.9 in the previous year. At 24.1%, the consolidated tax rate was down significantly on the prior-year figure of 38.5%. The year-on-year reduction in the tax rate essentially resulted from the use of loss carryforwards. Further information on income taxes can be found in note (9) of the notes to the consolidated financial statements.

CONSOLIDATED NET PROFIT AND EARNINGS PER SHARE

Consolidated net profit
Page 91

Earnings per share
Page 92

NTT DATA Business Solutions AG's consolidated net profit rose to MEUR 64.7 in the year under review, up MEUR 37.7 or 139.6% on the prior-year figure of MEUR 27.0.

The share of consolidated net profit attributable to the shareholders of NTT DATA Business Solutions AG increased from MEUR 19.2 in the previous year to MEUR 54.5 in the past fiscal year. Accordingly, earnings per share improved by EUR 1.18 year-on-year, from EUR 0.64 to EUR 1.82. Earnings per share were calculated on the basis of 30,014,838 shares.

NET ASSETS

Reflecting the Group's growth, total consolidated assets rose by MEUR 76.5 or around 7.9% in the past fiscal year.

ASSETS MEUR	Mar 31, 2023	Mar 31, 2022	Change
Intangible assets	359.7	317.2	42.5
Property, plant and equipment	154.9	157.9	-3.0
Non-current receivables and other assets	21.8	24.1	-2.3
Non-current assets	536.4	499.2	37.2
Current receivables and other assets	388.9	343.4	45.5
Cash and cash equivalents	122.7	128.9	-6.2
Current assets	511.6	472.3	39.3
Total assets	1,048.0	971.5	76.5

EQUITY AND LIABILITIES MEUR	Mar 31, 2023	Mar 31, 2022	Change
Equity (including non-controlling interests)	380.2	322.1	58.1
Financial liabilities	227.5	203.5	24.0
Provisions for pensions and other provisions	10.6	14.6	-4.0
Other non-current liabilities	21.1	22.7	-1.6
Non-current liabilities	259.2	240.8	18.4
Trade payables	176.0	167.4	8.6
Financial liabilities	44.0	55.4	-11.4
Other current liabilities and provisions	188.6	185.8	2.8
Current liabilities	408.6	408.6	0.0
Total equity and liabilities	1,048.0	971.5	76.5

At MEUR 536.4 in the year under review, non-current assets increased by 7.5% on the prior-year figure of MEUR 499.2. Non-current assets accounted for 51.2% of total assets as of the end of the reporting period (previous year: 51.4%). The main items under non-current assets are goodwill amounting to MEUR 287.0 (previous year: MEUR 245.2) and property, plant and equipment of MEUR 154.9 (previous year: MEUR 157.9). The acquisition of the 51% majority interest in the Walldorf-based Natuvion Group increased goodwill by MEUR 51.1. Currency translation effects led to a reduction in goodwill of MEUR 1.1. The remeasurement of goodwill in Turkey in accordance with IAS 29 resulted in an increase of MEUR 2.9. The reclassification of orders on hand and customer relationships reduced goodwill by MEUR -11.1.

Current assets rose to MEUR 511.6 as of the end of the reporting period compared with MEUR 472.3 in the previous year. They thus accounted for 48.8% of total assets (previous year: 48.6%). The most

significant increase related to other financial assets, particularly as a result of international cash pooling accounts with the NTT DATA Corporation. Trade receivables increased year-on-year from MEUR 203.9 to MEUR 229.4 as a result of higher growth in revenue. The average days sales outstanding – defined as the average number of days from the start of performance to receipt of payment from the customer – was unchanged year-on-year at 46 days. Cash and cash equivalents declined to MEUR 122.7 after MEUR 128.9 in the previous year. Assets held for sale amounted to MEUR 9.0 (previous year: MEUR 19.3). These are assets that can be sold in their current state and whose disposal is highly likely. A property and data center equipment in the US were reported as held for sale in the past fiscal year. The intention is to sell the building, including the land and equipment, in the coming months. In addition to the property in the US, the prior-period figure included the reclassification of the assets of the subsidiaries in Russia, Ukraine and Qatar and ICS GmbH. Further information on assets and liabilities held for sale can be found in note (29) of the notes to the consolidated financial statements.

On the liabilities side of the consolidated statement of financial position, equity increased by MEUR 64.7 mainly as a result of consolidated net profit and by MEUR 21.3 as a result of capital increases. The MEUR 27.2 reduction in other equity was due to negative exchange rate effects of MEUR 5.4 and the effects of put/call options in conjunction with acquisitions in the amount of MEUR -23.2, which were partially offset by the effects of actuarial losses amounting to MEUR 1.4. The reported net accumulated profit attributable to the shareholders of NTT DATA Business Solutions AG rose to MEUR 10.1. Overall, equity increased by MEUR 380.2 to MEUR 58.1 (previous year: MEUR 322.1). The equity ratio, which describes equity as a share of total assets, climbed from 33.2% in the previous year to 36.3%.

Non-current liabilities accounted for 24.7% of the Group's total equity and liabilities as of March 31, 2023, thereby remaining unchanged against the prior-year level of 24.8%. Generally, the non-current financial liabilities predominantly relate to the financing of the data centers in Germany and abroad and to the Group's acquisition activities.

NTT DATA Business Solutions' current liabilities were unchanged year-on-year at MEUR 408.6. A reduction in financial liabilities was caused mainly by the full repayment of international cash pooling accounts with the NTT DATA Corporation. In previous years, the funds utilized served to finance short-term working capital requirements in Germany and abroad. Further information on financial liabilities can be found in note (23) of the notes to the consolidated financial statements.

The increase in other non-financial liabilities is linked mainly to the rise in provisions. This mostly results from higher warranty provisions for work still to be performed under maintenance contracts and additional work performed free of charge in customer projects. In the previous year, this item also included reclassifications of liabilities in the amount of MEUR 4.2 in connection with the subsidiaries reported as held for sale.

At 39.0%, the ratio of current liabilities to total assets was down on the prior-year figure of 42.1%.

FINANCIAL POSITION

CASHFLOW MEUR	Mar 31, 2023	Mar 31, 2022	Change
Cashflow from operating activities	100.4	136.9	-36.5
Cashflow from investing activities	-58.9	-30.5	-28.4
Cashflow from financing activities	-45.0	-86.4	41.4
Change in liquidity	-3.6	20.0	-23.6

In the past fiscal year, cashflow from operating activities fell by MEUR 36.5 to MEUR 100.4. This development was driven mainly by the change in working capital compared with the previous year due to the bonuses paid for fiscal 2021/2022. Cashflow was also impacted by taxes paid (MEUR 9.6 more than in the previous year). Despite the business growth, DSO (days sales outstanding) remained unchanged year-on-year at 46 days.

The cashflow from investing activities was MEUR 58.9, a significant increase on the prior-year figure of MEUR 30.5. This includes purchase price payments for the acquisition of new companies and additional shares in existing equity investments (less cash and cash equivalents acquired) in the amount of MEUR 27.1 (previous year: MEUR 5.2) and investments in intangible assets and property, plant and equipment less investment subsidies and grants in the amount of MEUR 32.4 in the reporting period (previous year: MEUR 26.0). As in previous years, investments in property, plant and equipment focused on the expansion of data center capacity in Germany and abroad.

Investments including finance leases amounted to MEUR 32.4 (previous year: MEUR 26.0), of which MEUR 13.7 was attributable to the DACH segment (previous year: MEUR: 17.6), MEUR 11.6 to Northern and Eastern Europe (previous year: MEUR: 4.5), and MEUR 4.0 to the Americas (previous year: MEUR 1.5).

The cashflow from financing activities amounted to MEUR -45.0 in total (previous year: outflow of MEUR 86.4). The Group raised financial liabilities of MEUR 14.4 in fiscal 2022 and generated funds of MEUR 21.3 from a capital increase. This was offset by repayments of financial liabilities of MEUR 15.2, payments for put and call options of MEUR 19.0, MEUR 7.5 in dividend payments to non-controlling interests, and repayments of finance lease agreements in the amount of MEUR 32.0.

The interest rates for non-current financial liabilities range from 1-month Euribor at 0.25% to 3-month Euribor at 2.25%. With regard to future growth finance, a change in interest rates would affect the Group's financial position and net interest income. Details on the nature, maturity and interest rate structure of the liabilities can be found in note (23) "Financial liabilities" in the notes to the consolidated financial statements.

Cash funds declined by MEUR 6.1 to MEUR 122.7 as of the end of the reporting period (previous year: MEUR 128.9). Cash of MEUR 26.9 was held in the euro area and was not subject to exchange rate effects. Cash funds held outside the euro area amounting to MEUR 95.8 were invested and recog-

nized in the currencies of the appropriate countries. They were translated at the closing rate as of the end of the year. The consolidated financial statements will continue to be subject to currency translation effects in the future. The Group's liquidity reserves were invested solely in short-term investments, meaning that NTT DATA Business Solutions' net interest income is affected by interest rate fluctuations for such investments on the money and capital markets.

In order to increase financial flexibility, additional credit facilities of MEUR 27.0 were agreed in Germany. In the year under review, these were utilized for guarantees and loans in the amount of MEUR 1.4. In addition to credit facilities in Germany, subsidiaries also utilized credit facilities abroad. These credit facilities with a total volume of MEUR 14.7 were agreed in the respective local currencies and were partially guaranteed by NTT DATA Business Solutions AG. The utilization of these credit facilities by subsidiaries amounted to MEUR 4.2 as of the end of the reporting period.

The Management Board of NTT DATA Business Solutions AG expects the cash funds of MEUR 122.7, in conjunction with financial reserves in the form of various unutilized credit facilities, to be sufficient to cover its operating capital requirements and – together with the expected cashflow from operating activities – the scheduled debt repayments and other planned short-term and medium-term investments.

The partnership with NTT DATA also ensures the Group's financial flexibility.

OVERALL ASSESSMENT OF THE ECONOMIC POSITION

NTT DATA Business Solutions significantly outperformed its growth targets in fiscal 2022/2023. Having aimed for revenue of BEUR 1.330 to BEUR 1.350 (+7.3% to +8.9%), it actually achieved growth of 14.7% to BEUR 1.423. Organic revenue increased by a strong 10.8%, while revenue growth of +3.9% was achieved through acquisitions.

The biggest increases in revenue were achieved in the Cloud Subscription and Consulting segments and in our European core markets and the US.

The equity ratio rose significantly by 3.0 percentage points to 36.3% in the reporting year (previous year: 33.3%). While equity increased by MEUR 58.1, total assets rose by MEUR 76.4 to MEUR 1,047.9. Cash funds declined by MEUR 6.1 to MEUR 122.7. Cashflow from operating activities fell by MEUR 36.5 to MEUR 100.4 in the year under review. The main driver compared with the previous year was the change in working capital due to the bonuses paid. Cashflow was also impacted by taxes paid (MEUR 9.6 more than in the previous year).

Payments for investments also increased significantly from MEUR 30.5 to MEUR 58.9, with the result that the total cashflow from investing activities declined by MEUR 28.4.

The cashflow from financing activities amounted to MEUR -45.0 in total (previous year: MEUR -86.4). Among other things, the development in fiscal 2022/2023 was due to capital increases (MEUR 21.3) and lower repayments of financial liabilities (MEUR 15.2).

Subject to global authorization processes, having NTT DATA as a parent company means that loans, financing, and capital increases for major investment and acquisition projects can be provided at all times. The Management Board rates NTT DATA Business Solutions' financial headroom as sufficiently stable to finance the planned organic growth in Germany and abroad. The Management Board still regards the company's economic position as good.

FINANCIAL AND NON-FINANCIAL PERFORMANCE INDICATORS

FINANCIAL PERFORMANCE INDICATORS

The most important financial performance indicators used by NTT DATA Business Solutions AG are revenue, earnings before interest, taxes and amortization (EBITA), and the EBITA margin.

In light of the ongoing cost efficiency program, a distinction is made between operating EBITA and EBIT before the cost efficiency program and EBITA and EBIT including the effects of the cost efficiency program. These performance indicators are presented to and discussed with the Management Board on a monthly basis as part of internal reporting, thus allowing measures to be initiated in a timely manner as required.

In addition to the above key financial performance indicators, NTT DATA Business Solutions AG uses a wide range of operational key figures to measure strategic objectives in terms of growth and efficiency improvements. This includes utilization levels, the development of daily rates and project budget compliance in the Consulting business, and the number of new customers in the Licenses and Maintenance business. Sales activities in all divisions are monitored and managed centrally through the regular monitoring of the sales pipeline and the development of orders on hand. The following financial performance indicators are also used:

- Net finance costs: This performance indicator provides information regarding interest on cash funds and interest payable on borrowed funds. The measurement of derivatives and the exercise of options also features prominently.

- Days sales outstanding (DSO): Another important aspect is working capital management through monitoring of the days sales outstanding of operating receivables. Days sales outstanding (DSO) of receivables is defined as the average number of days from the start of performance to receipt of payment from the customer.

- Tax rate: The tax rate corresponds to the ratio of income tax expense to earnings before income taxes in percent.

- Cashflow from operating, investing and financing activities: NTT DATA Business Solutions' statement of cashflows describes how the Group generated and used cash and cash equivalents in the respective reporting period.

NON-FINANCIAL PERFORMANCE INDICATORS

Employees
NTT DATA Business Solutions AG's business success and leadership claim as a strategic SAP full service provider is primarily based on highly qualified and motivated employees who identify with the company. The performance indicator in this context is employee satisfaction, which is measured by way of regular surveys.

Customers and quality
Customer satisfaction is of central importance to the NTT DATA Business Solutions Group's business success. It forms the basis for trust-based partnership and long-term cooperation.

The success of extensive, complex projects depends to a large extent on high-quality implementation in line with the agreed budgets and deadlines. To prevent deviations from planning that could have a negative impact on its earnings situation, NTT DATA Business Solutions has established detailed, binding requirements for the tender process and for project and quality management.

The quality of NTT DATA Business Solutions' work is indicated by the number of SAP awards received.

A further non-financial performance indicator in this context is customer satisfaction. This is measured by customer surveys following the completion of projects.

Research and development
As NTT DATA Business Solutions does not perform any research and development in the narrower sense, it depends in particular on the many innovations in the area of industry solutions for more efficient implementation of SAP to maintain and expand its international competitiveness.

COMPOSITION OF THE MANAGEMENT BOARD AND SUPERVISORY BOARD AND ASSIGNMENT OF OTHER MANAGEMENT ROLES
(unaudited management report content)

Gender equality and diversity are issues of major importance to the NTT DATA Business Solutions Group. Staff diversity is promoted at all levels by a number of measures and activities around the world. The Group takes part in a number of programs to support young women in the workplace and

advocates work-life balance activities. Companies of the NTT DATA Business Solutions Group in various countries have earned external awards for their family friendliness. Tolerance, openness and respect are core corporate values, which is why the NTT DATA Business Solutions Group supports the LGBTQ+ community through campaigns and activities during Pride Month.

In accordance with the German Act on Equal Participation of Women and Men Regarding Leadership Positions within the Sectors of Private Economy and Public Service, the following targets for the composition of the Management Board and Supervisory Board and for the assignment of other management roles are stated pursuant to sections 76(4) and 111(5) of the German Stock Corporation Act:

The targets for the share of women on the Management Board and Supervisory Board of NTT DATA Business Solutions AG are set at 0% for the next five years. This corresponds to the status quo. The Supervisory Board based its decision on the fact that there are currently no female members of the Management Board or Supervisory Board of NTT DATA Business Solutions AG and no changes are planned. In reaching its decision, the Supervisory Board also took account of the conditions specific to the industry in which NTT DATA Business Solutions AG operates. NTT DATA Business Solutions AG is active mainly in IT consulting, an industry in which women are substantially underrepresented. Women account for 31.05% of the total workforce of NTT DATA Business Solutions AG. These industry-specific conditions are the reason why NTT DATA Business Solutions AG has been unable to increase the share of women in the past. The Supervisory Board has opted not to set higher targets in light of these industry-specific conditions, which the Supervisory Board expects to continue to pose difficulties in terms of recruiting female employees, and because no changes are currently planned in either of the executive bodies. The Supervisory Board also took account of the fact that women are substantially underrepresented among the candidates applying to NTT DATA Business Solutions AG due to industry-specific conditions. Nevertheless, NTT DATA Business Solutions AG hopes to increase the share of women on the Management Board and Supervisory Board in the future by enshrining gender equality and diversity within its strategy.

The target for the share of women at the first management level below the Management Board has been set at 20% for the next five years. The first management level below the Management Board of NTT DATA Business Solutions AG comprises the global leadership team. The Management Board based its decision on the fact that there are currently no women in the first management level below the Management Board of NTT DATA Business Solutions AG and NTT DATA Business Solutions has been unsuccessful in increasing the share of women in the past due to the conditions specific to the industry in which it operates. As the number of female candidates remains comparatively low due to these industry-specific conditions, increasing the share of women represents a challenge. NTT DATA Business Solutions AG hopes to increase the share of women at the first management level below the Management Board in the future by enshrining gender equality and diversity within its strategy.

The target for the share of women at the second management level below the Management Board has been set at 25% for the next five years. The second management level below the Management Board of NTT DATA Business Solutions AG comprises the global finance team and the managing

directors. The share of women at this level is currently 18.2%. The stated target would represent an increase of 6.8 percentage points compared with the current status quo.

The target for the share of women at the NTT DATA Business Solutions Group as a whole has been set at 33.33% for the next five years. This represents an increase of 2.28 percentage points compared with the current status quo of 31.05%.

DEPENDENT COMPANY REPORT

All of the shares in NTT DATA Business Solutions AG are held by NTT DATA EUROPE GmbH & Co. KG, Bielefeld. NTT DATA EUROPE GmbH & Co. KG is a Group company of NTT DATA, Inc., which itself is owned by the Japanese companies NTT CORPORATION (45%) and NTT DATA CORPORATION (55%). As there is no control or profit transfer agreement in place with NTT DATA EUROPE GmbH & Co. KG and no incorporation is planned, the Management Board of NTT DATA Business Solutions AG is required to prepare a dependent company report in accordance with section 312 AktG.

In accordance with section 312(3) AktG the Management Board hereby declares that, in the case of the transactions and measures contained in the dependent company report that were conducted on the basis of the circumstances known to the Management Board at the time the transactions were executed or measures were implemented or omitted, NTT DATA Business Solutions AG received appropriate consideration for each transaction and has not been disadvantaged by the implementation or omission of any measures.

REPORT ON RISKS AND OPPORTUNITIES

REPORT ON RISKS AND OPPORTUNITIES

NTT DATA Business Solutions AG's internal control system (ICS) essentially consists of five pillars: 1. Group-wide controlling; 2. financial reporting based on IFRS; 3. compliance management; 4. internal audit; 5. Group-wide risk management.

In close coordination within the NTT DATA Group, the corporate internal audit and reporting system continued and was expanded in 2022/2023. Due to the changed conditions, the controls at business process level were reviewed and new controls were added. The functionality of the controls within the business areas, such as the order-to-cash process, and the internal IT systems is monitored by management annually and reviewed in internal and external audits.

The risk inventory is updated once a year and corresponding measures are initiated.

OPPORTUNITY MANAGEMENT

NTT DATA Business Solutions is a long-term partner to its customers and assumes responsibility for the enhancement of IT initiatives and IT challenges to provide added value for its customers. NTT DATA Business Solutions provides Consulting, Software and Managed Services for its customers in close cooperation with SAP. SAP technology leadership, industry solutions and NTT DATA Business Solutions' process expertise continue to form the basis for successful cooperation. The change to SAP SE's business model is opening up new opportunities in the form of the sale of cloud subscriptions and the generation of commission income in the context of CCP/CC Flex.

NTT DATA Business Solutions' successful business model is based on a full-service provider approach with the above functions. NTT DATA Business Solutions is working to improve its customers' value chains through innovative solutions based on existing expertise. Management particularly anticipates opportunities on new markets with corresponding growth potential. Cloud computing, productivity enhancement based on Industry 4.0 solutions, S/4HANA, and mobility also offer huge sustainable growth opportunities for NTT DATA Business Solutions.

OPPORTUNITIES OF FUTURE BUSINESS DEVELOPMENT

As a result of its customers' technological requirements, NTT DATA Business Solutions has a large number of economic growth opportunities at its disposal. These chiefly result from innovations and the possibilities they open up for the further automation of customer processes. This position is supplemented by the international cooperation with SAP SE. Further opportunities arise from the bundling of development services for proprietary products, which also enable the further optimization of customer processes. NTT DATA Business Solutions' global partnerships and international orientation allow it to provide intensive and successful support to small and medium-sized enterprises and, in particular, upper midmarket companies with a strong international focus in Germany and abroad.

The parent company NTT DATA, Inc. supports NTT DATA Business Solutions AG's growth. Activities are concentrated on cooperation with NTT DATA in international projects, tapping new markets and providing support for M&A activities. Moreover, NTT DATA Business Solutions works with its NTT DATA affiliates. NTT DATA Business Solutions uses the capital resources provided by the partnership with NTT DATA to grow its market share through targeted acquisitions.

RISK MANAGEMENT

In accordance with section 91(2) AktG, the Management Board of NTT DATA Business Solutions AG has established a risk management system for the Group in order to identify risks, which will endanger the continuance of the company at an early stage. The risk management system is implemented on a Group-wide basis as one of the integral components of the business and decision-making processes. A permanent and systematic approach is derived on the basis of a defined risk strategy. This

procedure comprises the integrated planning process, which is implemented using both a top-down and a bottom-up approach, and the monitoring and controlling of business processes as well as the IFRS-compliant consolidated financial statements. The defined standards, which are based on the requirements of the NTT DATA Group, are set out and published in Group-wide guidelines such as the Accounting and Account Assignment Manual, Compliance Management, the Risk Management Guideline, the Internal Audit Manual, and the Information Security Guideline.

The requirements are examined annually in close cooperation with NTT DATA and processes are continuously improved. This entails monthly management meetings at which the operating divisions report on business developments, risks and opportunities of their areas of responsibility, monthly organized sales meetings at which new sales opportunities, orders on hand, customer and market developments are discussed, and international business review meetings.

NTT DATA, Inc. is also striving to establish a global and uniform audit and reporting system for all Group members with the aim of bundling and analyzing the information required for efficient risk and opportunity management as quickly as possible and making the findings available to all Group members in good time.

RISKS OF FUTURE BUSINESS DEVELOPMENT

THE PANDEMIC

The past fiscal year saw a continued operating risk due to the pandemic, the impact of which on the economy, and hence on the company's business performance, is difficult to assess. While the cost efficiency programs that were again implemented in the past fiscal year made a demonstrable contribution to profitability, this may be enough to only partially offset future negative revenue development. As previously, the industry-wide risk is estimated through the monthly management of incoming orders and orders on hand.

Potential project delays or a deterioration in customers' revenue situations could have an adverse effect on the placement of customer orders, which would ultimately result in a temporary downturn in revenue. As a preventive measure, all employees around the world are still being consistently and regularly informed about the risks and asked to provide corresponding information. Customers are increasingly being supported remotely using digital communication media in order to ensure that project activities continue, thereby reducing the risk of revenue loss.

IT SECURITY

Every IT system can have its vulnerabilities. If a hacker exploits a gap or vulnerability to penetrate an IT system, this would pose a threat to confidentiality, data integrity and availability at NTT DATA

Business Solutions AG. In addition to the alteration of internal company information and the potential destruction of the customer data stored at its data centers, NTT DATA Business Solutions AG is exposed to the risk of sabotage and extortion. Every possible threat is a risk to NTT DATA Business Solutions AG. NTT DATA Business Solutions AG uses an IT security system and a risk management system with a view to reducing the probability of occurrence of damage and the resulting losses.

The permanent monitoring of incoming mails using enhanced firewalls and controlled access to internal systems using OKTA authorization serve to lower the risk. Corresponding risk targets are defined as part of the continuous revision of the risk analysis and the assessment of the company's specific IT systems. IT security procedures are then chosen for the respective business processes at NTT DATA Business Solutions AG on the basis of IT standards.

Corresponding IT security standards are selected and implemented in conjunction with IT security management. To this end, there are various standards in IT security management. Applying ISO/IEC 27001 or the Baseline IT Protection Standards, accepted rules are used to attempt to reduce the complexity of socio-technical systems for IT security management and to achieve a suitable level of information security.

BUSINESS ENVIRONMENT RISKS

SAP partnership

As NTT DATA Business Solutions is focused on SAP as a full-service IT provider for the traditional and upper midsize market, it is largely dependent on the market success of SAP's products. This dependence affects every function of the company, and hence its net assets, financial position, and results of operations as a whole. As long as SAP continues to develop high-performance products for customers, NTT DATA Business Solutions can implement these products for its customers, thus reducing the economic risk for NTT DATA Business Solutions.

Human resources risks and opportunities

Qualified employees and managers who implement SAP products in numerous projects are the key factor in NTT DATA Business Solutions AG's success. Long-term employee retention combined with the need to permanently train employees in order to keep pace with technological change is a challenge.

Online training that communicates the necessary technological expertise ensures timely and diversified employee training at a high level. An international management development program also fosters the skills of managers and project members.

Despite the measures described, the possibility that qualified employees will leave the company earlier than expected or that an insufficient number of new employees will be found and successfully recruited cannot be ruled out.

INDUSTRY RISKS

Technical progress entails risks as well as opportunities. These risks affect NTT DATA Business Solutions' net assets and results of operations. The company focuses on the following risk areas:

a) Customer-oriented market risks
Market influences on customers, such as economic cycles, liquidity shortages or changes in customers' investment habits, possible company concentration, customer insolvency risk, etc.

b) Supplier-oriented market risks
Supplier services requested by NTT DATA Business Solutions, in particular from external service providers, including service quality, etc.

These developments are monitored through the monthly analysis of incoming orders and orders on hand. Furthermore, a weekly cash cockpit and weekly meetings help to keep the risk of bad debts as low as possible. Despite intensive customer and supplier care, it cannot be fully ensured that all developments will be identified at an early stage or that measures will be initiated in a timely manner.

PERFORMANCE RISKS

Project risk
As all of the company's services are organized in project structures, projects constitute the biggest risk to NTT DATA Business Solutions AG, and the progress of projects can have a negative impact on its net assets and results of operations. This risk is countered by the permanent revision of project methodology and the continuous development of project managers. Starting with monitoring by the project manager, projects are accompanied through to rollout and project controlling ensures project transparency. NTT DATA Business Solutions actively works to reduce product risks by using qualified employees and early warning systems embedded in the system. This enables everyone involved to identify risks at an early stage and take appropriate countermeasures.

Risks in the Managed Services division
One risk in the Managed Services division lies in the contractually agreed high availability and reliability of data center services. Contractual and statutory provisions form the basis for the planning of internal resources and processes, while clearly defined responsibilities, interfaces and workflows across different topics and locations ensure compliance with these requirements, which are regularly monitored by Internal Audit. Each new customer is integrated into the new or modified technology and the service process structure following a defined testing and acceptance procedure. The same applies to existing customers if changes are requested and/or required. The anticipated risks and opportunities are carefully weighed up against each other.

As in the previous year, the corresponding audits were successfully completed in fiscal 2022/2023. The services and processes were certified in accordance with ISO/IEC 20000 – 1:2011 and ISO/IEC 27001:2013. NTT DATA Business Solutions Global Managed Services GmbH's internal control system has also been successfully tested and audited in accordance with ISAE3402. These certifications are supplemented by the SAP Global Partner Hosting certificate. Comprehensive security measures – from building access restrictions through to the internal authorization concept for the responsible employees – and regular security audits with subsequent recertification are being and have been implemented in data center operations. The change in European data protection legislation will pose further challenges for processes and technical measures in data center operations. These have been and will be adhered to and implemented accordingly.

There is a commercial risk in the other service level agreements with customers in connection with MCS and AMS. These are reduced to a minimum through professional product and service management, intensive offer approval processes and state-of-the-art monitoring, quality assurance, and de-escalation processes.

FINANCIAL RISKS

Liquidity risk

NTT DATA Business Solutions' central Financial Management team monitors and controls global liquidity. The Management Board receives information on liquidity, including a cash forecast, on a weekly basis. These issues are addressed with the departments concerned in monthly calls and the development of key performance indicators is discussed. Analysis focuses mainly on the Group-wide monitoring of cash funds, which enables measures to be initiated at short notice as required. Weekly transparency with regard to receivables helps to ensure that payment reminders are issued in good time. A constant level of cash funds and credit facilities in Germany and abroad serves to increase security and independence. Changes in inflation are also observed.

Interest rate fluctuations on the money and capital markets affect NTT DATA Business Solutions AG's net interest income to a limited extent only.

Price risk

Despite the company's internationalization, NTT DATA Business Solutions' value-added process is performed almost entirely in the same currency or on a euro basis. This means that, while currency risk exists, its impact on earnings is limited.

Goodwill is tested for impairment each year using the DCF method. The average cost of capital is used to discount cashflows. Capital costs may change due to current developments in interest rate levels. Significant changes arising from goodwill impairment testing would have a substantial impact on earnings.

Exchange rate risk

NTT DATA Business Solutions monitors exchange rate risks on the basis of items in the statement of financial position. Exchange rate fluctuations affecting intragroup receivables and liabilities and the resulting risk are monitored and documented continuously. Exchange rate fluctuations also have a significant impact on the company's revenue and cost situation. Their development is monitored on a monthly basis.

Inflation risk

NTT DATA Business Solutions is exposed to inflation risk. The Group's earnings are substantially impacted by rising energy costs, rising salaries, and increased costs for external employees and other cost blocks. These developments can be partially offset only through cost efficiency programs and the increased utilization of productive employees and by charging customers higher daily rates.

Default risk

NTT DATA Business Solutions examines its customers' insolvency risk at each of its national subsidiaries. This applies to new and existing customers alike. However, this risk cannot be ruled out entirely. Accordingly, all receivables within the Group are monitored each month and, depending on the maturity profile, payment reminders are issued and bad debts are ultimately written off. This measure is supplemented by ongoing credit checks, which also include risk provisions in the form of specific valuation allowances.

OTHER RISKS

Risks due to armed conflict

As NTT DATA Business Solutions has an international base of operations, it is fundamentally exposed to risks arising from armed conflict. While the company has suspended its activities in Russia and Ukraine, this conflict is very much affecting the economic situation in all countries, especially those in the Northern and Eastern Europe region. The future extent of these developments is unforeseeable.

Political risk

As an international service provider, NTT DATA Business Solutions is also exposed to international political influences and their consequences. Political risk is therefore taken into account and weighed up in all investment decisions, especially acquisitions.

General management risk

NTT DATA Business Solutions is also exposed to general management risk. The company continuously improves its management, controlling and steering systems and extends them at all levels with a view to preventing errors.

OVERALL RISK SITUATION

The Management Board does not consider there to be any individual risks that could endanger the continued existence of the NTT DATA Business Solutions Group at the date of preparation of this annual report or in the foreseeable future. Similarly, the Management Board does not consider the aggregate risk at the date of preparation of this annual report as endangering the continued existence of the NTT DATA Business Solutions Group.

RISK REPORTING IN CONNECTION WITH THE USE OF FINANCIAL INSTRUMENTS

The risks relating to financial instruments are discussed in detail in notes (30) and (34g) of the notes to the consolidated financial statements.

FORECAST

ECONOMIC FORECASTS FOR 2022/2023

The world economy was dominated by the consequences of the war in Ukraine and high global inflation in the 2022 calendar year, with the result that gross domestic product increased by just 3.4% compared with 2021.

For the current 2023 calendar year, the IWF is assuming even slower growth in the global economy of just 2.8%.

This muted forecast is due to the continued ramifications of Russia's invasion of Ukraine and the high level of inflation around the world. The IWF assumes that the forecast growth in the individual countries and regions will vary considerably.

Growth of 0.8% is anticipated for the euro area. The IMF expects Germany (-0.1%) and the UK (-0.3%) to see a mild recession. A modest growth rate of 0.7% is forecast for France and Italy, while Spain is expected to see growth of 1.5%.

The growth forecast is 1.6% for the US, 1.5% for Canada and 0.9% for Brazil.

The IWF is forecasting much stronger growth momentum for India (+5.9%) and China (+5.2%).

OUTLOOK FOR THE SOFTWARE AND IT SERVICES MARKET

Gartner expects spending on the global IT market to increase by 5.5% in the current calendar year. This is up significantly on the previous year, in which spending rose by just 0.5%.

USD million	2021		2022		2023	
	Spending	Growth	Spending	Growth	Spending	Growth
Data center systems	190,057	6.4%	216,095	13.7%	224,123	3.7%
Enterprise software	729,631	14.7%	793,839	8.8%	891,386	12.3%
Devices	802,965	16.0%	717,048	-10.7%	684,342	-4.6%
IT services	1,207,295	12.8%	1,250,224	3.5%	1,364,106	9.1%
Communication services	**1,450,716**	**3.8%**	**1,424,603**	**-1.8%**	**1,479,671**	**3.9%**
Overall IT market	**4,379,909**	**10.2%**	**4,401,809**	**0.5%**	**4,643,628**	**5.5%**

Source: Gartner (April 2023) (2021 figures extrapolated from 2022)

The software and IT services market, the sub-market relevant to NTT DATA Business Solutions, grew far faster than the IT market as a whole in 2022 (8.8% vs. 3.5%). Gartner is forecasting growth rates of 12.3% and 9.1% for the 2023 calendar year, which represents further strong growth in these two areas and an improvement compared with 2022.

According to Gartner, the anticipated upturn in IT services is attributable in particular to the infrastructure-as-a-service market and increased spending on cloud service segments.

The growth in the software segment is due to rising demand for automation and other software-driven transformation initiatives on the part of companies.

The critical shortage of qualified IT specialists is considered to be a key issue for the entire technology industry.

**FORECAST BUSINESS PERFORMANCE
OF NTT DATA BUSINESS SOLUTIONS**

The high level of orders on hand as of March 31, 2023, totaling BEUR 1.657 as against BEUR 1.405 in the previous year (+17.9%), gives NTT DATA Business Solutions AG a solid starting position for fiscal 2023/2024. As in the previous year, the Management Board is assuming slightly higher daily rates in consulting business, not least as a result of global inflation trends and the associated pressure on staff costs on the back of salary increases.

NTT DATA Business Solutions AG will continue to benefit from rising demand for cloud-based solutions and digital transformation in fiscal 2023/2024. Market opportunities in the enterprise software and IT services are set to remain very strong, with NTT DATA Business Solutions benefiting from SAP's attractive product portfolio in these areas. Overall, SAP expects the software market relevant to SAP to grow by an average of 16.0% in the period from 2022 to 2025. The forecast for 2023 is currently +15.7%. As previously, NTT DATA Business Solutions anticipates particular growth and earnings potential in the development and sale of proprietary products. With the NTT DATA Group having consolidated its non-Japanese business in NTT DATA, Inc. effective October 1, 2022, NTT DATA Business Solutions AG is increasingly benefiting from cooperation with the relevant affiliates. The Management Board anticipates and unreservedly supports the continued expansion of this collaboration in all of the relevant regions.

In particular, business with customers in the BEUR 1 to BEUR 10 revenue bracket is becoming increasingly important to NTT DATA Business Solutions AG. NTT DATA Business Solutions AG intends to provide these customers with an attractive range of consulting services relating to S/4HANA transformation and innovative solutions from the wider SAP portfolio. In particular, the S/4HANA transformation of the existing customer base offers good opportunities for the Group in fiscal 2023/2024 and beyond.

Given NTT DATA Business Solutions AG's strong market position and attractive product portfolio, the Management Board expects revenue to increase to between BEUR 1.475 and BEUR 1.50 in fiscal 2023/2024 (+4.0% to +6.0%). With earnings continuing to rise, an EBITA margin of around 7.5% is anticipated. The company aims to make another one or two mid-sized acquisitions in the coming year.

Bielefeld, July 18, 2023
NTT DATA Business Solutions AG

Norbert Rotter
CEO

Jürgen Pürzer
CFO

CONSOLIDATED INCOME STATEMENT
IFRS

KEUR	Apr 1, 2022 – Mar 31, 2023	Apr 1, 2021 – Mar 31, 2022
Revenues	1,423,390	1,241,294
Cost of sales	-1,107,634	-975,789
Gross profit	**315,756**	**265,505**
Marketing and distribution expenses	-97,143	-99,088
Administrative expenses	-128,242	-113,045
Other operating income	6,526	8,155
Other operating expenses	-7,277	-7,956
Impairment of trade receivables	-4,319	-5,247
Total operating expenses	-230,455	-217,181
Operating earnings	**85,301**	**48,324**
Investment income	596	2
Measurement of derivatives and exercise of options	1,650	817
Exchange rate differences from financing activities	-213	682
Financial income	4,574	940
Finance costs	-6,729	-6,896
Net finance costs	-122	-4,455
Earnings before taxes	**85,179**	**43,869**
Tax expenses	-20,528	-16,877
Consolidated net profit	**64,651**	**26,992**
of which attributable to the shareholders of NTTD Business Solutions AG	54,501	19,215
of which attributable to non-controlling interests	10,149	7,777
Earnings per share (EUR)	1.82	0.64
Number of shares on the basis of which earnings per share were calculated:		
– basic/diluted	30,014,838	30,014,838

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

IFRS

KEUR	Apr 1, 2022 – Mar 31, 2023	Apr 1, 2021 – Mar 31, 2022
Consolidated net profit	**64,651**	26,992
Actuarial losses IAS 19 *	1,606	4,411
Currency translation differences **	-5,725	15,542
Tax effects ***	-219	-1,527
Other comprehensive income	**-4,338**	18,426
Total comprehensive income	**60,313**	45,418
of which attributable to the shareholders of NTTD Business Solutions AG	50,469	33,796
of which attributable to non-controlling interests	9,844	11,622

* Item not to be reclassified to profit or loss.

** Item that can be reclassified to profit or loss.

*** No reclassification to the income statement in the current fiscal year.

CONSOLIDATED BALANCE SHEET
IFRS

ASSETS KEUR	Mar 31, 2023	Mar 31, 2022
Non-current assets		
Goodwill	286,955	245,235
Intangible assets	72,757	72,000
Property, plant and equipment	154,856	157,928
Other financial assets	2,779	4,176
Other non-financial assets	6,535	6,341
Trade receivables	1,405	3,654
Income tax receivables	43	42
Prepaid expenses	0	1,323
Deferred tax assets	9,653	8,533
	534,983	499,232
Current assets		
Inventories	1,757	2,028
Trade receivables	229,353	203,936
Contract assets	58,745	48,213
Income tax receivables	14,153	9,429
Other financial assets	19,691	12,226
Other non-financial assets	5,771	5,186
Assets held for sale	**9,011**	19,281
Cash and cash equivalents	122,741	128,886
Prepaid expenses	51,718	43,057
	512,940	472,242
	1,047,923	971,474

EQUITY AND LIABILITIES KEUR	Mar 31, 2023	Mar 31, 2022
Equity		
Share capital	30,015	30,015
Capital reserves	215,549	194,281
Net accumulated profit	198,475	143,974
Other comprehensive income	-134,703	-107,506
	309,336	260,764
Non-controlling interests	70,847	61,297
	380,183	322,061
Non-current liabilities		
Financial liabilities	227,489	203,448
Deferred tax liabilities	14,896	17,016
Other non-current provisions	4,376	5,746
Pension provisions	6,232	8,884
Government grants	2,849	3,265
Other non-financial liabilities	3,324	2,401
	259,166	240,760
Current liabilities		
Trade payables	79,337	79,355
Contract liabilities	96,668	88,007
Financial liabilities	43,999	55,376
Other current provisions	35,580	33,140
Liabilities associated with assets held for sale	0,00	4,200
Tax liabilities	14,935	6,280
Income tax liabilities	8,461	8,135
Other financial liabilities	3,010	2,535
Other non-financial liabilities	126,584	131,625
	408,574	408,653
	1,047,923	971,474

CONSOLIDATED CASHFLOW STATEMENT

IFRS

TEUR	Apr 1, 2022 – Mar 31, 2023	Apr 1, 2021 – Mar 31, 2022
Consolidated net profit	64,650	26,992
Amortization of intangible assets and depreciation of property, plant and equipment	57,310	59,596
Impairment of intangible assets	3,336	0
Impairment due to remeasurement of disposal group	3,080	0
Other non-cash expenses and income	6,133	-1,771
Net finance costs	122	4,455
Tax expenses	20,528	16,877
	155,159	**106,149**
Change in inventories	272	-1,661
Change in trade receivables	-17,394	-19,261
Change in other non-current assets	4,561	1,228
Change in other current assets	-7,152	-5,704
Change in prepaid expenses	751	7,270
Change in trade payables	-6,560	13,385
Change in provisions for pensions	-1,560	-1,269
Change in other liabilities and provisions	-3,559	55,625
	124,518	**155,762**
Interest received	3,546	940
Interest paid	-5,103	-6,896
Taxes paid	-22,576	-12,893
Cashflows from operating activities	**100,385**	**136,913**
Capital expenditure for intangible assets and property, plant and equipment	-32,416	-25,955
Cash received from the disposal of property, plant and equipment and intangible assets	614	719
Subsequent purchase price payments for acquisitions	-3,190	-4,073
Payments for acquisitions (less cash and cash equivalents acquired)	-23,922	-1,170
Cashflows from investing activities	**-58,914**	**-30,479**
Dividends paid to non-controlling interests	-7,501	-4,916
Capital increase	21,268	13,128
Cash received from restricted cash	-7,067	-9,585
Payment for the acquisition of non-controlling interests	-19,006	-13,991
Borrowing of financial liabilities	14,432	2,226
Repayment of financial liabilities	-47,160	-73,263
Cashflows from financing activities	**-45,034**	**-86,401**
Increase in cash funds	-3,563	20,033
Effects from exchange rate differences	**-2,582**	973
Cash and cash equivalents as of January 1	128,886	111,583
Cash and cash equivalents included in assets held for sale	0	-3,703
Cash and cash equivalents as of December 31	**122,741**	**128,886**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

IFRS

KEUR	Number of shares	Share capital	Capital reserves	Net accumulated profit	Foreign exchange differences	Other equity IAS 19	Other equity	Other comprehensive income	Equity attributable to the shareholders of the parent company	Non-controlling interests	Consolidated equity
					Other comprehensive income						
1. April 2021	30,014,838	30,015	181,153	124,759	-29,585	-5,270	-83,270	-118,125	217,802	69,772	287,574
Consolidated net profit				19,215					19,215	7,777	26,992
Actuarial losses IAS 19						2,884		2,884	2,884		2,884
Foreign exchange differences					11,697			11,697	11,697	3,845	15,542
Total comprehensive income				19,215	11,697	2,884	0	14,581	33,796	11,622	45,418
Dividend payments										-4,916	-4,916
Capital increase			13,128						13,128		13,128
Acquisition of a subsidiary with non-controlling interests							-19,772	-19,772	-19,772	629	-19,143
Exercise of options (without change of control)							15,810	15,810	15,810	-15,810	0
Shareholder transactions			13,128				-3,962	-3,962	9,166	-20,097	-10,931
Mar 31, 2022	30,014,838	30,015	194,281	143,974	-17,888	-2,386	-87,232	-107,506	260,764	61,297	322,061
Consolidated net profit				54,501				0	54,501	10,149	64,650
Actuarial losses IAS 19						1,387		1,387	1,387		1,387
Foreign exchange differences					-2,518			-2,518	-2,518	-305	-2,823
Total comprehensive income				54,501	-2,518	1,387	0	-1,131	53,370	9,844	63,214
Dividend payments								0		-6,450	-6,450
Capital increase			21,268					0	21,268		21,268
Disposal of a subsidiary with non-controlling interests								0		-686	-686
Acquisition of a subsidiary with non-controlling interests							-44,543	-44,543	-44,543	29,435	-15,108
Acquisition of a subsidiary with controlling interests							-1,259	-1,259	-1,259	45	-1,214
Exercise of options (without change of control)							19,736	19,736	19,736	-22,638	-2,902
Shareholder transactions			21,268	0	0	0	-26,066	-26,066	-4,798	-294	-5,092
Mar 31, 2023	**30,014,838**	**30,015**	**215,549**	**198,475**	**-20,406**	**-999**	**-113,298**	**-134,703**	**309,336**	**70,847**	**380,183**

AUDIT RESULT

The statutory auditor has issued the full consolidated financial statements and Group management report with an unqualified audit opinion.

The full consolidated financial statements and Group management report have been submitted to the operator of the Bundesanzeiger (Federal Gazette).

SERVICE & PUBLICATION DETAILS

We Transform. SAP® Solutions into Value

We understand the business of our clients and know what it takes to transform it into the future. At NTT DATA Business Solutions, we drive innovation - from advisory and implementation, to managed services and beyond, we continuously improve SAP solutions and technology to make them work for companies – and for their people.

Aiming to transform, grow and become more successful? We provide you with more than in-depth expertise for SAP solutions: As your passionate partner, we connect your business opportunities with the latest technologies – and offer you a unique approach to get the job done as smoothly as possible. Our close ties to SAP and other partners give you access to innovative solutions and developments. Being part of the global NTT DATA group enables us to master any scope of project.

With operations in more than 30 countries, we have enabled thousands of companies become more efficient and effective during the last three decades. Our more than 13,500 experts around the world will also accompany you on your journey toward a truly intelligent enterprise – wherever you want to start!

You want to know more?
Visit www.nttdata-solutions.com

SAP Platinum Partner

NTT DATA Business Solutions

Follow us on