

CHAPTER

1



“We are in an ideal situation to analyse pioneering business models in our core sectors, and to identify attractive companies even during times of change.”

Torsten Grede,
Spokesman of the Board
of Management
of Deutsche Beteiligungs AG



**THE AUTOMOTIVE SUPPLY
INDUSTRY AS WELL AS
MECHANICAL AND PLANT
ENGINEERING REMAIN
IMPORTANT SECTORS**

The pressure on automotive suppliers to change is particularly evident. This also has an impact on the buyout market. In contrast to the years preceding the financial crisis, smaller companies are now looking to tap new potential with private equity. The average volume of transactions in mechanical and plant engineering has hardly changed over the last 15 years, with numbers remaining low of late. Both sectors make up a significant part of the German buyout market. Their potential, however, is limited and the choice between business models is more important than ever.

35 COMPANIES from these sectors, with a total value of 3.5 billion euros, have changed ownership in the last five years.

TRANSFORMATION IN TRADITIONAL INDUSTRIES



Investment strategy: Our core sectors

DBAG's experience extends back more than 50 years

A corporate history comprising more than five decades – this represents more than 300 private equity investments in German mid-sized enterprises for Deutsche Beteiligungs AG. A large number of these transactions concerned the four sectors in which the German economy demonstrates particular strength: mechanical and plant engineering, automotive suppliers, industrial services and industrial components. It therefore goes without saying that these are our core sectors. We are active here in the DACH region (Germany, Austria and Switzerland) and occasionally in other European countries too, such as in France, Denmark and Italy.

Digitalisation opens up opportunities for our core sectors

Triggered by digitalisation as well as structural change, our core sectors have undergone a fundamental change process in recent years. In an era of cloud-based IT solutions, globalisation has reached entirely new dimensions and is setting new challenges for German medium-sized enterprises that have always been oriented upon the global markets. Business models are breaking up, and new opportunities are being created – even in sectors that are currently regarded as less attractive. We are determined to support agile and innovative companies in implementing their visions.

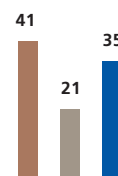
Initiate change processes – support growth opportunities

With our extensive knowledge and a deeply-rooted network in our core sectors, we comprehensively support our portfolio companies with capital for financing growth – but especially with our long-standing experience in the successful implementation of change processes. This support can, for example, comprise operational improvements, the development of additional business segments or tapping new markets. Acquisitions are often a focal point, too. We also introduce companies to seasoned industry experts, who occasionally assume managerial responsibility in the companies. The members of our investment team support portfolio companies as Advisory Board members.

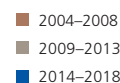
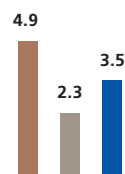
MANAGEMENT BUYOUTS

*in our automotive suppliers
and mechanical and
plant engineering core sectors*

TRANSACTIONS number



TRANSACTION VOLUME €bn



Source: FINANCE research for
Deutsche Beteiligungs AG

LEADING-EDGE TECHNOLOGIES:
THE KEY TO TOMORROW'S MOBILITY REQUIREMENTS



Opportunities in the automotive supply industry

Due to the current challenges in the sector, it seems somewhat bold to talk about "opportunities in the automotive supply industry". Obviously, drivetrain technology will be transformed, and mobility requirements will change. But in the future, there will be more cars on the streets – not less.

Germany is Europe's leading automotive market

Globally, the German automotive industry is known for its quality, innovation, reliability, longevity, safety, efficiency and design. Germany's first-class R&D infrastructure, the full integration of the value creation chain as well as the qualified workforce contribute to an environment which is competitive on an international level. These are good conditions for companies in order to develop leading-edge technologies that will meet tomorrow's mobility requirements.

Higher R&D requirements provide opportunities for private equity

Currently, the automotive value-added chain is changing fundamentally. This is due to topics such as electric mobility (whilst vehicles powered by fossil fuels continue to exist), autonomous driving, setting up production facilities around the globe, as well as the growing diversity of vehicle models. This is the reason why the R&D tasks in the automotive industry have become increasingly demanding for quite some time. OEMs and large suppliers pass on some of the resulting pressure to their own suppliers – by expecting that they handle a great part of the development effort or co-finance it. Even 'healthy' family companies therefore are asking themselves how they can improve their capitalisation – an opportunity for private equity.

Business models which are not related to the drivetrain

The challenge now is to filter out those business models that offer considerable developmental potential independently from traditional drivetrain technology. We have a high-performance network in this sector. Already now, you can find suppliers in our portfolio that offer useful technical input like connectivity blocks or that may benefit from the trends towards more sophisticated interiors.

CONNECTIVITY AND DIGITALISATION

are turning the automotive industry upside down. According to a survey amongst executives in the automotive and technology industries as well as consumers around the globe conducted by advisory company KPMG, connectivity and digitalisation is the industry's key trend. Respondents saw a competitive edge for those who successfully connect auto and digitalisation.

Source: KPMG, Global Automotive Executive Survey 2019, January 2019

NEW BUSINESS MODELS

Today's automotive supply means much more than wings, air-conditioners and sliding roofs. New business models of the sector envisage for example how to experience brands in an electronic showroom, or how to organise different mobility models. In other words: software along with hardware.

70 PER CENT of the value in the German automotive industry is created by mainly mid-sized suppliers.

Source: German Association of the Automotive Industry (Verband der Automobilindustrie – VDA), www.vda.de

On the following pages we outline how we implement our investment strategy in the automotive industry, taking our two portfolio companies **DIETER BRAUN** and **SERO** as examples.

DEMAND GROWING
BY EIGHT PER CENT PER ANNUM



Networking intelligent components in state- of-the-art vehicles

Dieter Braun benefits from the current transition in the automotive industry: for the networking of intelligent components, an increasing amount of cables is built into state-of-the-art vehicles. Likewise, the increasing electric mobility supports the company's growth: this requires additional high-voltage networks with particular safety needs and regulations.

Two of the company's future growth factors are the increasing use of driver assistance systems and the trend toward autonomous driving. Vehicles equipped in this manner require a wide variety of sensors which are connected together with cables.

Acquisitions can also support future developments, especially when enhanced by additional engineering performance – for instance, to expand Dieter Braun's offer along the value-creation chain. This includes, for example, processes in which the finished cables are being additionally embedded in a plastic matrix so that they can fit in properly in a defined installation space.

Furthermore, efficiency improvements through continuous automation represent a key issue. The recently completed new corporate headquarters and

logistics centre at Dieter Braun's registered office in Bayreuth, Germany, are set to contribute to enhanced efficiency in the company's internal processes, allowing the current team to realise higher business volume.

If the market opportunities are suitable, the regional expansion will once again come to the fore. Dieter Braun has already successfully built up an international presence in close proximity to its customers. We can encourage the company to use its gained experience for further development. Dieter Braun can tap these potentials thanks to its strong internally generated cash flow.



DIETER BRAUN

CABLE SYSTEMS AND
INTERIOR VEHICLE LIGHTING,
BAYREUTH, GERMANY

DIETER BRAUN is a specialist for cable systems and vehicle interior lighting. The company is valued by its customers for being able to deliver efficient solutions of above-average complexity, even for small- to medium-sized quantities and with variable lead times. Dieter Braun benefits from the increasing share of electric and electronic components in vehicles. In addition, the company has ensured its position in the future field of electric mobility. Dieter Braun's significance for its customers in the automotive supply industry has become correspondingly high. The company has operations in its customers' major production locations: in addition to its head office in Bayreuth, it has factories in the Czech Republic, the Ukraine, Mexico and China.

**REVENUES OF 87 MILLION EUROS
1,620 EMPLOYEES**



“We design the electronics manufacturing system of tomorrow – with around 300 employees providing ideas.”

Dr Bernd Welzel,
Managing Director of Sero GmbH

Sero was founded in 1992 as an engineering office for electronic testing methods. Today, the company is a sought-after service provider in terms of electronic testing and production modules or systems, primarily for the automotive industry. Thus, the company operates in the highly attractive market for electronic components – a sub-market of this industry, with long-term above-average growth potential.

The proportion of electronics in motor vehicles is predicted to increase from about 35 per cent at present to around 50 per cent by 2030, driven by the trend towards higher comfort in the vehicle interior amongst other factors. This equates to a growth rate of 8 per cent a year.

In the first year since the start of our investment, Sero's management team has already triggered various change processes, including the restructuring of the sales organisation as well as the expansion of its presence at industry trade fairs. Opportunities in the international markets such as Mexico and North America are set to be exploited in the future. Company acquisitions are also conceivable. Moreover, Sero intends to further expand its business with industrial customers. A newly installed Advisory Board, comprising members from DBAG's network, is going to contribute the experience of its experts, who not only command strong process knowledge but have already successfully supported implementation.



SERO

DEVELOPMENT AND
MANUFACTURING SERVICE PROVIDER
FOR ELECTRIC COMPONENTS,
ROHRBACH, GERMANY

Alongside the automotive industry, customers from other industries are also attracted by the outstanding competence of the development and manufacturing service provider **SERO**. For instance, the circuit boards assembled by the company as well as the electronic components are not only being installed in brake lights and engine sensors, but also in high-performance microphones, heat meters as well as in other industrial measurement products. Customers attach importance to cost efficiency and top quality. At Sero, they find industrialisation expertise and a high degree of automation, thanks to a machine park that enables innovative production processes. Sero distinguishes itself from its competitors through its capacity to combine standard production lines with self-developed test and production modules.

**REVENUES OF 86 MILLION EUROS
270 EMPLOYEES**

STRUCTURALLY AND SUSTAINABLY
GROWING MARKET



Automation in the production of electronic components

DIVERSITY
AS A MAJOR BENEFIT



Industrial components – a heterogeneous market

Germany possesses a strong industrial basis – German companies enjoy a globally leading position in many sectors. We have rich experience through diverse investments in companies which manufacture industrial components.

Advantage Germany

Germany is the biggest economy in Europe. In 2017, industrial manufacturing accounted for nearly one-third of German GDP, which is a considerably larger part compared to France (20 per cent), Italy (24 per cent) or the European Union as a whole (25 per cent). Germany's leading global position in different manufacturing industries such as mechanical engineering, electrical engineering, automotive, medical products, or aeronautics is based on the comprehensive national coverage of different value creation stages. With numerous research institutions as well as customers and suppliers in close proximity, Germany provides an excellent setting for developing fresh B2B products. .

Often very small markets

One of our core sectors is that of industrial component manufacturers. In the past, we invested in companies which – typically for this sector – mostly serve very small markets. Industrial components comprise a variety of different materials such as metals, plastics, electronics or innovative lightweight engineered materials as well as a broad range of products such as semi-finished or finished articles, components, modules, systems or turnkey solutions. These may be targeting highly productive mass production or small niche segments.

Broad range of development approaches

During our decades of commitment to this sector, we have accompanied very diverse business models and approaches to develop these models. Very often, investments are entered into for expanding the geographical footprint, or for broadening the product range. The focus is also frequently on efficiency enhancements – for example, through better processes or reduced scrap.

INDUSTRY 4.0

Whenever machines ask for maintenance themselves as required, or re-order material; whenever humans, machines and industrial products form intelligent networks – then we are talking about Industry 4.0. The fourth industrial revolution, along with smart factories, follows on from disruptive developments such as the steam engine, the assembly line or the computer. Examples for companies that take a leading role in this area are also found in our portfolio.

TOP RANK for Germany – this is how the World Economic Forum judges Germany's innovative power. For the second time in a row, Germany has achieved this top position in international comparison, this time ahead of competitors such as the United States or Switzerland.

Source: World Economic Forum, Global Competitiveness Report 2019, October 2019

*On the following pages we outline how we implement our investment strategy in the market for industrial components, taking our two portfolio companies **KRAFT & BAUER** and **DUAGON/MEN** as examples.*

PRODUCTS CRITICAL TO
SUCCESS AND SAFETY



Leading position in a niche market

Kraft & Bauer wants to strongly expand – but not only by installing new fire extinguishing systems on new machine tools or by retrofitting existing systems. It is also the services business that provides strong growth potential. To date, Kraft & Bauer only provides maintenance for 50-70 % of the relevant installed base.

By now, most of the leading international machine tool manufacturers are customers of Kraft & Bauer. This means that the company's fire extinguishing systems will be installed on these manufacturers' new product lines – so Kraft & Bauer does not have to serve end-customers directly. This success is also supported by the lasting trend towards miniaturisation: oil cooling and oil lubrication in machine tools of the high performance sector are on the rise, yet the use of oil increases fire hazard. The second important part of the Kraft & Bauer business is machine retrofitting. Demand is driven by growing machine automation as well as the companies' sense of responsibility and security awareness. Companies also use automatic fire extinguishing systems even if not required to do so by regulation.

The sales activities of Kraft & Bauer are currently concentrated on the still-unexploited potential in the DACH region (Germany, Austria and Switzerland) and Italy. Over the medium term, especially the market development in China and the United States offers great additional opportunities as many customers of Kraft & Bauer are present there. DBAG's widely-branched network and great experience in processes of globalisation in mid-sized companies is set to support the management team within converting opportunities into sales.

KRAFT & BAUER Kraft & Bauer develops and produces fire extinguishing systems, installing them in around 800 different types of machine tools. The focus here is on extinguishing systems controlled by microprocessors that detect fires and initiate the extinguishing process using sensors. In addition to its headquarters in Holzgerlingen (Baden-Württemberg, Germany), Kraft & Bauer operates a site in Bannwil (Switzerland) and 13 other service locations in Germany, Switzerland and Italy. Kraft & Bauer's systems are used in very high-speed and high-precision machines and are thus exposed to an increased fire hazard. The outlook for Kraft & Bauer is favourable, as the demand for these high performance machines is increasing. In addition, Kraft & Bauer benefits from a steadily growing services business – with a broad installed base of more than 30,000 systems in Germany alone – as the fire extinguishing systems must be regularly inspected and maintained.

**REVENUES OF 26 MILLION EUROS
80 EMPLOYEES**



KRAFT & BAUER

FIRE EXTINGUISHING SYSTEMS
FOR TOOLING MACHINES,
HOLZGERLINGEN, GERMANY

“duagon has further strengthened its already strong competitive position due to the merger with MEN – an ideal situation for sustainable above-average growth.”

Dr Rolf Scheffels, member of DBAG's Board of Management, with many years of experience in private equity investments in German mid-sized companies.



MEGA TRENDS:
TRANSPORT AND AUTOMATION



Full-service provider
of communication
solutions
in rail vehicles

duagon/MEN hold an excellent position in China, the world's largest market for rail vehicles – a market characterised by huge investment projects as the growing prosperity in broad sections of the population goes hand in hand with the growing desire for mobility. Not only does China automate existing systems, but the country has also successfully tested autonomous high-speed trains in the last year. In this attractive environment, the group will be able to profit from several growth drivers.

New opportunities are being created for duagon/MEN – for example, by tapping unexploited customer potential: duagon has a strong presence in China and India, while MEN has successfully expanded in the US and Russia. By combining duagon's primarily software-driven components with MEN's rather hardware-oriented solutions, valuable synergies can be realised. Key topics are automatic security systems and innovative technology trends, such as autonomous driving. MEN's hardware systems can be equipped with additional software components from duagon. Examples include cyber security features or selected digital solutions such as automatic status monitoring of machines and systems.

The group wins orders both in connection with newly-acquired rail vehicles and with the retrofitting of older rolling stock, with the latter being modernised by customers in predictable cycles. Harnessing the distribution power of the combined group allows duagon/MEN to adopt a targeted position for such cycles in the future.

Last but not least, over the next 10 to 15 years, duagon/MEN is going to benefit from the trend towards technological development of ethernet-based solutions, especially in the field of retrofitting. Whilst ethernet-based technology is much more powerful than existing protocols – in terms of data transfer rates, bandwidth and flexibility – it is also significantly more complex. Recognising the importance of integrated communications solutions for rail vehicles, and communications between different protocols and standards, duagon has positioned itself accordingly at a very early stage – gathering substantial experience which the company can now leverage for business with other customers. duagon ensures that the systems meet rigorous regulatory requirements, remaining fail-safe and durable even in challenging conditions.

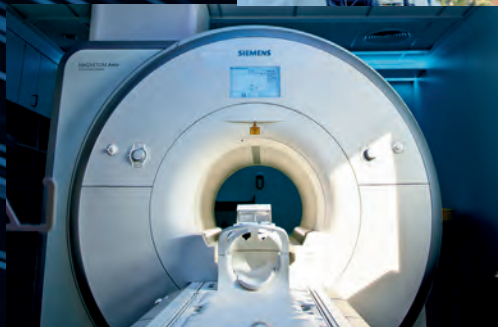


DUAGON

NETWORK COMPONENTS
FOR RAILWAY VEHICLES,
DIETIKON, SWITZERLAND

DUAGON, which has its registered office in the Swiss city of Dietikon, was established in 1995 and has since become a leading independent provider of network components for data communication in rail vehicles. The company's products allow individual railway vehicle systems, such as doors, brakes, air conditioning systems and the primary control computer, to communicate via what is known as the TCN ("train communication network"). This makes it easier to integrate these systems into the train manufacturers' networks and limits sources of errors in the process. This allows suppliers to concentrate on their core competencies, namely the development of the individual railway vehicle components. duagon's products are used by virtually all train manufacturers and system suppliers. The company has developed long-standing customer relationships and broad-based technological expertise in its niche market.

**REVENUES OF 103 MILLION CHF
400 EMPLOYEES**



CHAPTER

2



“We see a growing number of transactions involving digital business models. We believe we have what it takes to recognise the potential of such enterprises, and to support management teams in realising that potential.”

Torsten Grede,
Spokesman of the Board
of Management
of Deutsche Beteiligungs AG



MARKET VOLUME IS GROWING RAPIDLY

Both the number and volume of transactions in our new focus sectors have grown strongly in the last 15 years. While the market focused initially on healthcare companies in particular, a growing number of management buy-outs from the IT services/software sector has been observed over the last five years. The transaction size in this sector has also grown rapidly, now averaging more than 100 million euros, which is the usual transaction size for our business, taken as a whole.

37 COMPANIES companies from these sectors, with a total value of 3.8 billion euros, have changed ownership in the last five years.

YOUNG, FAST-GROWING COMPANIES



Investment strategy: Our new focus sectors

Strategic sector selection

Current changes in the established economies are opening up opportunities for us to support business models outside our four core sectors. We are seizing these opportunities, concentrating on fast-growing enterprises that are often still young but which have already established themselves in their respective markets. We have invested in a total of 33 enterprises since 2013. Three new focus sectors have emerged from our activities: broadband/telecommunications, IT services/software and healthcare. There is a sufficient number of enterprises in these sectors that suit our approach and match our business model in terms of size, maturity and developmental potential.

Targeted development of know-how

In our new focus sectors, we have built up a network of industrial partners and our Executive Circle; this network has become quite extensive, providing entrepreneurial advice to our portfolio companies on a wide range of different situations. In addition, we have excellent access to transaction opportunities not readily available to other market participants, which has enabled us to explore attractive investment opportunities.

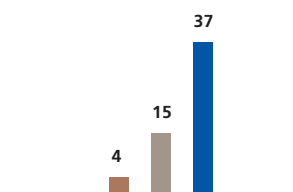
Win-win situation for all parties involved

Most of the markets in our new focus sectors are highly fragmented. Private equity investments can help companies to grow quickly and establish themselves as market leaders. In their endeavours to reach this goal, they create new jobs – often in more rural areas, whose attractiveness is enhanced as a result. Not least, they strengthen Germany's economic location and its competitive edge with new, innovative solutions. Moreover, market leaders are valued with much higher multiples than smaller niche providers. Our fund investors and shareholders benefit from this above-average value appreciation potential.

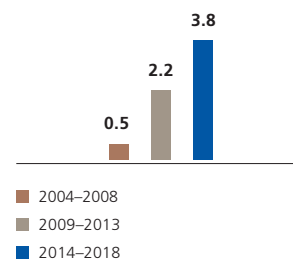
MANAGEMENT BUYOUTS

*in our focus sectors
IT services/software
and healthcare*

TRANSACTIONS number



TRANSACTION VOLUME €bn



Source: FINANCE research for
Deutsche Beteiligungs AG

APPLYING EXPERIENCE
FROM TRADITIONAL INDUSTRIES



IT services/ software – a growing market

Germany, with a quarter of the market volume, represents the largest software market in Europe. It grows, like the market for IT services, notably stronger – and its development during difficult economic periods is more stable than in other sectors.

Digitalising established business models

Due to innovations and technical advances, IT has become one of the greatest drivers for all industry sectors – including sectors in which we have acquired expertise over decades. Medium-sized companies dominate Germany's economic and industrial landscape, be it the mechanical and plant engineering industry, the automotive supply industry and – in general – manufacturing industry as a whole. Many of these companies are highly specialised and occupy a top position in their (often global) niche markets. They have to adapt their business models in connection with the digital transformation, thus representing an important client base to software companies and IT service providers. The greatest market potential awaits competent providers of sector-specific software products and services.

Focus on products and services critical to success

We focus on software companies and IT services providers offering products and services that are crucially important for their clients' success – in industries where we are especially well placed to assess business models. The market structure is advantageous for us. Besides the well-known so-called big players, there are numerous medium-sized software companies and IT service providers. They are often owner-managed, with the founder still present in the company.

Investment in, and experience with, growth processes

In recent years, we have observed more and more entrepreneurs with new business models in promising sectors looking for new shareholders. They have good products, and the market is attractive. The potential is not being exploited, due a lack of financial resources or M&A experience. We are used to this kind of situation. And clients place trust in us. It is this market we address in our focus sector IT Services/Software.

DIGITALISATION

or digital transformation, is the continuous change process towards digital processes, based on a modern IT infrastructure, digital applications and ideally linked systems and data. In this context, existing business models are represented in digital form and/or new digital products are created. Information, communications, processes and services are linked by digital platforms.

6.3 PER CENT is the growth rate for the software industry in Germany in 2019, compared with the previous year.

Source: Bitkom – ITK market figures, July 2019

*On the following pages we outline how we implement our investment strategy in the market for IT services/software, taking our two portfolio companies **FLS** and **CLOUDFLIGHT** as examples.*

HIGH-END CLOUD-BASED SAAS SOFTWARE



Solutions for business-critical planning tasks

Customers' expectations of the reliability and accuracy of ordering and delivery processes are constantly increasing. For businesses, schedule and route planning are a business-critical process that needs to consider manifold influencing factors and realtime data – especially when dealing with large teams of field-service staff or a sizeable fleet of delivery vehicles. This is the basis for **FLS's** business.

In its software solutions, FLS relies on a proprietary heuristic algorithm which provides proposals based on empirical values in a fast way – even when not all of the information ideally required is available. What distinguishes FLS from its competitors is that it offers additional functions tailored to the needs of individual customers, seamlessly integrated in the customer's existing software environment.

Product enhancements like accounting functions or applications for mobile phones are planned for the future. By offering this wide range of solutions, FLS wants to expand mainly in the DACH region, and globally at a later stage. First steps have been taken in this respect,

initiating the set-up of a partner network and strengthening existing cooperations in the United Kingdom and Scandinavia.

On this basis and on the basis of a highly scalable business model, FLS intends to grow rapidly. To this end, the entire corporate organisation will be professionalised; in addition, internal processes will be standardised.



FLS

REAL TIME SCHEDULING
AND ROUTE OPTIMISATION SOFTWARE,
HEIKENDORF, GERMANY

FLS develops and sells software that enables energy suppliers, industrial companies, financial services providers, retail and real-estate companies to coordinate and optimise their schedule and route planning for field service employees and delivery vehicles. The products of FLS are based on a heuristic algorithm that works using real-time data, making it possible to find solutions to planning tasks while taking into account a large number of influential factors. The market for optimisation software in such application environments is expanding at double-digit rates, substantially driven also by the growth in e-commerce. FLS stands out due to the services it offers, which are customised to the needs of its customers – enabling them to benefit from the competitive advantages of maximum resource utilisation, cost savings and notably superior service quality.

**REVENUES OF 10 MILLION EUROS
70 EMPLOYEES**



EUROPEAN GROWTH PROSPECTS



Integrated digital and cloud service provider

New perspectives for
the Crisp founders and
Cloudflight management
through the merger



More than 350 software developers, cloud architects and strategy consultants, covering of the whole value-added chain, 17 sites – including an innovation lab and two central sites for the running of cloud workflows, more than 600 successful software projects since 2005, a strong, visionary management, Catalysts revenues growing in excess of 30 per cent annually in recent years: all these are the convincing key parameters of Cloudflight.

“We have largely initiated the emergence of Cloudflight. Right from the start, we discussed with the founders – transparently and in detail – the plan to integrate Catalysts and Crisp Research under one roof.”

Lucas Herbert,
Managing Director
at DBAG who oversees
the Cloudflight
investment



CLOUDFLIGHT

ADVISORY SERVICES SOFTWARE
DEVELOPMENT AND CLOUD OPERATIONS,
MUNICH, GERMANY

Today, digital transformation represents one of the key tasks for companies. This is not only a view held by just a few visionary managers – nowadays this is a widely-accepted conviction, especially in the executive suites of traditional industry sectors. Digitalisation has thus reached business-critical processes: for companies to be successful in the digital economy, merely implementing a new software solution will no longer suffice. Rather, a cultural change towards agility and automation is necessary. In this field, there are significant and sustainable growth opportunities for Cloudflight, with its extensive experience as well as consulting skills and solutions.

Cloudflight's particular strength lies in the processing of large quantities of data. This includes, for example, the optimal integration of satellite data or inspection and mesh processing of 3D point clouds – also using artificial intelligence. In this way, insurers can better assess potential damages. Another specific application is the development of a justice portal for the Austrian Federal Ministry of Justice,

which will accompany users through all stages of legal proceedings. Existing solutions were integrated, new functionalities added and the entire suite was equipped with a uniform customer interface. Cloudflight has an extensive list of renowned clients, extended in recent years by winning global players such as Bayer, Bosch and Siemens.

Cloudflight is receptive for acquisitions. Growth potential for the expansion of the value-added chain concerns for example the ongoing operation of solutions, namely the hosting and the monitoring of digital processes. Moreover, the company intends to pursue growth opportunities in Europe, to tap additional client potential and also being able to offer its employees attractive working locations. Cloudflight is already especially innovative and successful in its recruitment: some 8,000 developers from all over Europe take part in its annual programming contest.

The combination of software specialist Catalysts with Crisp Research – an IT research and consultancy firm specialised in cloud computing – has created **CLOUDFLIGHT**, a provider of digital and cloud services with a truly special profile. The company leverages the skills and experience of approximately 350 cloud computing experts to provide a comprehensive service to its clients – encompassing strategic advice on all things digital, platform and architecture design, software development, as well as 24/7 cloud operations. The company supports SMEs, corporate groups and public-sector clients with the implementation and acceleration of their digital transformation. Catalysts contributes its software development expertise to the new Group, whilst Crisp's team of experienced digital strategists and cloud computing architects will be advising clients – independent of which technology they are using. Both companies benefit from long-standing client relationships in their respective fields of activity, as well as possessing extensive expertise in “hot spots” such as cloud computing, Internet of Things, and artificial intelligence. “What convinced us was, above all, the team's entrepreneurial vision, together with strong growth momentum in the markets served by Cloudflight.”

**REVENUES OF 34 MILLION EUROS
350 EMPLOYEES**

GERMANY'S UNDISPUTED
PENT-UP DEMAND



Existing potential in broadband telecommunications

The demand for fast data transmission continues to grow. This applies both to applications in the private sector and in particular to professional solutions. Germany is taking measures: between now and 2021, the federal government will provide 12 billion euros towards expansion of the telecommunication networks.

Extensive needs and high demand – good conditions for growth

In our lives, almost everything is affected by the digital transformation. But without the corresponding high-performance infrastructure, we cannot exploit the opportunities of digitalisation. In European comparison, Germany lags significantly, especially when it comes to providing fast fibre-optic internet connections. Accordingly, there are now various subsidy programmes in place to accelerate the nationwide broadband expansion.

Attractive investment opportunities: regional, mid-sized companies

Growing demand for fast internet connections and – not least – the subsidies for broadband expansion offer companies with products or services in this area good conditions for growth. Apart from large network operators, medium-sized companies are involved in the broadband expansion process – especially in less densely populated areas and with a regional focus. By providing financial resources for required investments and, in particular, their expertise, Private Equity entities can support these companies in fully exploiting their market potential.

Involvement in different stages of the value chain

Companies in the DBAG portfolio offer fast internet connections, provide services around the expansion of fibre-optic networks, and deliver the required equipment. Thanks to our industry knowledge, we are familiar with the growth drivers of the market. Through numerous bolt-on acquisitions, our investments are contributing to the consolidation of this highly fragmented market and form high-performance suppliers. We profit from regionally oriented companies becoming national market leaders, as such companies are more highly valued.

OBSTRUCTIONS TO PROGRESS

One in three of Germany's 60,000 industrial zones does not even have a connection to broadband internet with at least 50 Mbit/s – this was the response of the federal government to a June 2019 parliamentary question put forward by the Liberals (FDP) parliamentary group in the German Bundestag.

Source: German Bundestag, printed matter no. 19/11357

THE DIGITAL GAP GROWS

Fast connections get even faster, but at the lower end there is only slow progress. The fastest connections in Germany (95th percentile) have become three times faster between 2013 and 2019, while the speed of the slowest (5th percentile) has only increased by a quarter.

Source: Speedcheck database, July 2019

1.3 PER CENT of German citizens profit from a high-performance broadband connection to a fibre-optic cable. In Denmark this number is 10 times higher; in Sweden it's 20 times higher and in South Korea it's 25 times higher.

Source: OECD Broadband Statistics, December 2018

On the following pages we outline how we implement our investment strategy in the broadband communications sector, taking our two portfolio companies **NETZKONTOR NORD** and **INEXIO** as examples.

HIGH-END PROJECT MANAGEMENT



Becoming one of the
leading German providers
for broadband
infrastructure projects

netzkontor nord wants to become one of the largest project managers for the deployment of fibre-optic networks. Two years ago, when the company shared this vision with DBAG, the deciding factor for this step was our comprehensive understanding of the sector. We support the company in implementing its buy-and-build strategy.

The management of netzkontor nord was able to realise strong growth rates and earnings increases within a short period of time. Since the company has been part of DBAG's investment portfolio, two acquisitions have been completed and another agreed. With this, netzkontor nord not only increased their human resources and regional coverage, but also broadened their strategic focus.

With the acquisition of BIB TECH, for the first time netzkontor nord now has access to large, nationwide telecommunications providers who strongly invest in the expansion of their fibre-optic networks; the result is larger project volumes

and thus faster growth. Furthermore, by launching specific projects with these customers, netzkontor nord aims to gain access to nationwide projects – a milestone in the implementation of their corporate vision.

With BFE Nachrichtentechnik, the second acquired company, netzkontor nord has explored a new business segment: BFE is one of the largest German service providers for constructing and operating overground telecommunications services, also working on projects in the highly attractive and pioneering Fibre-to-the-Home segment, for both business and private customers.



NETZKONTOR NORD

SERVICE FOR THE
TELECOMMUNICATIONS SECTOR,
FLENSBURG, GERMANY

NETZKONTOR NORD, established in 2008, operates in two different business segments with around 280 employees. Under the brand name "netzkontor", the company provides planning and monitoring services related to the deployment of fibre-optic networks. Its subsidiary OpenXS handles network management for operators of fibre-optic networks. The former regional focus on the German federal state of Schleswig-Holstein has been expanded to Mecklenburg-Western Pomerania, Saxony-Anhalt and North Rhine-Westphalia.

**REVENUES OF 30 MILLION EUROS
280 EMPLOYEES**

BLUEPRINT FOR A
SUCCESSFUL INVESTMENT



One of the leading
independent
providers of fibre-
optic connections
in Germany

For DBAG, **inexio** has been a prime example of a successful private equity investment, where we support a talented management team, promoting a very promising business model. Back in 2013, when we acquired a minority stake in the previously family-owned business during the course of a capital increase, providing additional profit-participation capital, broadband communications was still the domain of pioneers – covering a segment with strong growth potential.

We closely supported **inexio** over a six-year period – providing additional capital as well as know-how. Especially in such a fast-growing business, the management team keeps facing new challenges: with an experienced partner at their side, they can tackle such situations in a more targeted manner, and with less risks involved.

Between 2013 and 2015, DBAG co-invested with the DBAG ECF fund, acquiring further shares in **inexio** from co-shareholders. And when financial investor Warburg Pincus supported a management buyout in 2016, DBAG and DBAG ECF did not sell their stakes – instead, they participated in the capital increase conducted upon the entry of the new majority shareholder, thus investing further funds. What convinced us, time and again, was the clear focus and determination of the management team as they worked on developing the business, taking the right strategic decisions at every development stage. Today, founders David Zimmer and Christoph Staudt and their team can boast a flawless track record: they have successfully implemented their business concept



“Looking for capital, we quickly realised that DBAG is an investor that really understands the success factors of family-owned businesses – moreover, an investor not looking for a short-term bet, but looking to provide long-term support, aiming to create value. This has worked out very well here.”

David Zimmer, founder and Managing Partner of **inexio**, recalls the very beginning of the company's cooperation with DBAG

both through organic growth as well as through acquisitions.

Launched as a start-up just over a decade ago, nowadays **inexio** is one of the fast-growing, leading independent providers of fibre-optic connections in Germany. Together with its private equity investors, the company has established a fibre-optic network in rural and suburban areas across southern Germany, thus significantly contributing to the build-up of local infrastructure there – allowing businesses to stay in their home region, creating local jobs.

In this way, **inexio** has attracted the interest of large infrastructure investment funds. The sector is about to embark upon a fundamental change: while the company has so far pushed the fiber optic expansion into the villages and the last

mile into the households, realised with VDSL technology via the copper cables of Deutsche Telekom, fiber optic connections are now being laid directly into the buildings. However, this expanded infrastructure requires around three times the investment volume. **inexio** will realise this new development phase in its corporate history together with the EQT Infrastructure IV fund.



INEXIO

TELECOMMUNICATIONS
AND IT SERVICES,
SAARLOUIS, GERMANY

INEXIO is investing in building and expanding high-performance telecommunications infrastructure in several German federal states, focusing on the Saarland and Rhineland-Palatinate, plus Bavaria, Baden-Württemberg, Lower Saxony and the East German states. **inexio** runs its own, constantly growing fiber optic and municipal network, currently covering more than 9,900 kilometres, as well as six company-owned data centres. The company offers the full spectrum of telecommunications and IT services, from pure carrier services right up to complete telecommunications, IT and data centre services. Although the company's original focus was on business customers, revenues from high-speed internet connections for private customers are now growing at double-digit annual rates, faster than those for business customers.

**REVENUES OF 68 MILLION EUROS
320 EMPLOYEES**