September 18th, 2020 Research report



Small and Mid Cap Research



THOMSON REUTERS ANALYST AWARDS 2017 WINNER

Mensch und Maschine SE

From sales partner to digitisation specialist

Rating: Hold (unchanged) | **Price:** $52.20 \in$ | **Price target:** $52.20 \in$ (prev.: $50.50 \in$)

Analyst: Dipl.-Volksw. Dr. Adam Jakubowski sc-consult GmbH, Alter Steinweg 46, 48143 Münster

 Phone:
 +49 (0) 251-13476-93

 Telefax:
 +49 (0) 251-13476-92

 E-Mail:
 kontakt@sc-consult.com

 Internet:
 www.sc-consult.com

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Snapshot



Basic data

Based in:	Wessling
Sector:	CAD/CAM software
Headcount:	964
Accounting:	IFRS
ISIN:	DE0006580806
Ticker:	MUM:GR
Price:	52.20 Euro
Market segment:	Scale / m:access
Number of shares:	17.2 m
Market Cap:	895.2 m Euro
Enterprise Value:	973.1 m Euro
Free Float:	approx. 45.0 %
Price high/low (12M):	55.80 / 29.50 Euro
Ø turnover (Xetra, 12 M):	422,700 Euro / day

Short Profile

For many years, the Mensch und Maschine business model has been based on the two pillars of proprietary software and VAR business as an Autodesk partner. M+M has a strong market position in both segments, which is reflected in sustained growth and, in the trend of recent years, increasing profitability. Since 2015, sales have grown by an average of 12 percent p.a., and the CAGR for EBIT has even reached 32 percent. Despite the Covid-19 pandemic, M+M intends to increase earnings per share by at least 18 percent to a new record level this year and to raise the dividend again on this basis. In the first half of the year, a good foundation for this was already laid with sales growth of 8.5 percent and profit growth of 18.4 percent. In view of the pronounced reliability with which M+M has pursued its own plans and achieved its forecasts in the past, we consider this year's target achievement just as likely as a continuation of the profitable growth course in the coming years, especially as issues such as the renewal of the transport infrastructure and, even more so, digitisation, are providing additional tailwind.

FY ends: 31.12.	2017	2018	2019	2020e	2021e	2022e
Sales (m Euro)	160.9	185.4	245.9	258.2	289.2	321.0
EBIT (m Euro)	15.2	19.7	27.2	31.2	39.7	45.8
Net Profit	9.4	11.7	16.7	19.6	24.5	28.5
EPS	0.56	0.71	0.99	1.17	1.47	1.71
Dividend per share	0.50	0.65	0.85	1.02	1.21	1.40
Sales growth	-3.7%	15.3%	32.7%	5.0%	12.0%	11.0%
Profit growth	42.9%	24.1%	42.6%	17.7%	25.0%	16.4%
PSR	5.43	4.71	3.55	3.38	3.02	2.72
PER	92.7	74.7	52.4	44.5	35.6	30.6
PCR	57.3	57.3	33.1	29.3	24.8	22.1
EV / EBIT	62.4	48.3	34.9	30.4	23.9	20.7
Dividend yield	1.0%	1.2%	1.6%	2.0%	2.3%	2.7%

Executive Summary

- **Highly profitable business with CAM software**: The wholly-owned subsidiary Open Mind is the group's paragon of profitability. It develops and sells technologically leading CAM software and accounts thus alone for 40 percent of the Group's gross profit.
- **Software business expanding**: As the largest component of the software segment, Open Mind contributes significantly to its high sales and earnings growth and high profitability. Between 2016 and 2019 alone, the segment's EBIT increased by 84 percent, and its EBIT margin has been above 20 percent for four years. The attractive software business was expanded at the beginning of 2019 by the acquisition of a majority stake in the construction software specialist SOFiSTiK. Moreover, since last year, M+M has also been addressing the CAE market (CAE: Computer Aided Engineering) with its proprietary solution eXs.
- Autodesk partnership for more than 30 years: However, Mensch und Maschine's origins lie in the trading business with the CAD software of the American CAD pioneer Autodesk, in which M+M, as Autodesk's largest European VAR partner, has a strong market position with a broad geographical presence and a very large customer base.
- **Digitisation provides tailwind:** However, pure Autodesk trading and the associated services are now playing an ever smaller role in VAR business as well. Instead, the focus is increasingly shifting to proprietary such as training in the BIM (Building Information Management) environment and, above all, digitisation projects in the industry and the construction sector. Thanks to its experience with BIM and PDM (Product Data Management), M+M scores above all with its expertise in data management and the ability to link construction data with commercial information, on the basis of which complete business processes can be digitised.
- **Dynamic sales and profit growth:** Over the past five years, M+M has increased sales by an average of 12 percent p.a., while EBIT and net profit have grown by about one third per year. The EBITDA margin has been in the double-digit range since 2017 and is to be increased further. In the medium term, M+M believes it can achieve figures above 18 percent. Sales growth is also expected to continue at around 10 percent annually.
- **Profit forecast for 2020 confirmed:** Based on the expectation of at least a moderate recovery in demand in the second half of the year, M+M intends to continue its profit growth in 2020 despite Covid-19, increasing net profit by at least 18 percent to 117 cents per share and the dividend by at least 15 cents to 100 cents. Management explains this confidence with the high cost elasticity of the business model, which should more than compensate for the slowdown in sales.
- **Good dividend yield:** The sustained good operating performance has been reflected on the stock market in recent months, which is why at the current price of EUR 52.20 the share is currently quoted at the fair value we have derived from our model. In conjunction with the dividend yield of currently 2.0 percent expected for 2020, we thus classify the share as a "Hold".

SWOT analysis

Strengths

- Strong position in attractive target markets established for decades.
- A fast-growing, highly profitable software segment with a global market presence and a leading technological position.
- High continuity at management level and very low employee turnover.
- Stable shareholder structure with more than 50 percent of shares in management hands.
- Solid balance sheet structure with a high equity ratio and low debt.
- Growth dynamics above the industry average, with recently a disproportionately high rise in profits.
- Previous forecast accuracy supports the target of further profit increases.

Weaknesses

- Open Mind, the Group's paragon of profitability, finds itself in a challenging environment due to the Covid-19 pandemic.
- The VAR business is largely determined by Autodesk's product and pricing policy.
- The geographic expansion of the VAR business requires the expensive establishment of additional offices; in principle, the segment's scaling potential is limited.
- Strong dependence on Germany and Europe.
- In both segments, M+M faces the challenge of attracting and retaining suitable employees in a difficult labour market.

Opportunities

- There is still considerable potential for margin growth in the VAR business that should allow an above-average profit development in the next few years, if the present trends continue.
- The increasing importance of digitisation projects is likely to further boost the development of the VAR business.
- With its expertise in BIM and bridge and tunnel construction, the new subsidiary SOFiSTiK is addressing very promising markets.
- With the new eXs software, M+M could benefit from the trend towards electromobility.
- The foreseeable profit growth should allow a steady and considerable increase in dividends.

Threats

- The impact of the Covid-19 crisis could prove to be more profound and protracted than expected.
- High personnel intensity in the VAR business means a high extent of utilisation risk in economically weaker phases.
- The targeted further margin increase, especially at the level already achieved, cannot be taken for granted and could well turn out to be more protracted than planned or even totally unsuccessful.
- Should Autodesk fall behind in competition, it could have a perceptibly negative impact on the VAR business.
- The role as technology leader requires intensive development activities of Open Mind and carries the risk of technological failures.

Profile

Leading market position

Mensch und Maschine Software SE (M+M) was founded in 1984 and has its origins in the distribution of software from the US-based CAD manufacturer Autodesk (the abbreviation CAD stands for Computer Aided Design). In the meantime, the focus has expanded and the market has developed further, which is why M+M defines its own field of activity as the market for CAD/CAM/CAE/PDM/BIM solutions (Computer Aided Manufacturing, Computer Aided Engineering, Product Data Management and Building Information Management), in which the company based in Wessling, Bavaria, is one of Europe's leading providers.



Source: Company, as of 30.06.2020

Majority of shares held by management

The M+M share has been listed on the stock exchange since 1997 and is traded in the m:access segment of the Munich Stock Exchange and in the Scale segment of the Frankfurt Stock Exchange. Despite this long stock market membership, by far the largest shareholder (44.6 percent) is still the founder Adi Drotleff, who has been a member of the Executive Board and Chairman of the Board of Directors since the company's transformation into a Societas Europaea (SE). Mr. Drotleff documents his extraordinary commitment to the company not least with his continuous acquisitions of M+M shares, with which he has increased his stake by around 4 percentage points since the beginning of the decade. Again this year, Adi Drotleff opted for the stock dividend instead of the cash dividend and exchanged most of his dividend rights for shares. Due to the majority takeover of SO-FiSTiK AG (see below), which was largely paid for with new shares, the portion of shares held by other management has recently increased to 8.4 percent. 2.0 percent of the shares are held by the company itself. M+M increases this share whenever an opportunity arises during periods of market weakness and then uses the shares to service the claims from the stock dividends. Most recently, M+M took the Covid-19-crash in March as an opportunity to acquire more than 80,000 shares at an average price of EUR 33.22, which were issued as dividends in July at a value of EUR 46.80.

Clear holding structure

Within the Group, Mensch und Maschine Software SE acts purely as a financial holding company. Located below is the subsidiary Mensch und Maschine Management AG, which performs the typical management and service tasks for the other companies. The operating business, however, is performed by more than 40 direct and indirect subsidiaries with altogether 964 employees and nearly 60 locations worldwide. A geographical focus lies clearly in the German-speaking region, where M+M is represented comprehensively with more than 40 locations. Ten further offices are maintained in other European countries. Moreover, the company has also offices in five Asian countries as well as in the USA and Brazil.

Two business segments

Since 2012, the business model is based on two segments: on the one hand the VAR business, i.e. the direct distribution of Autodesk software to end customers and services in the CAD and BIM field, and on the other hand the development and distribution of proprietary software. In terms of sales, business is dominated by the first segment, which generated 70 percent of consolidated sales last year with more than EUR 170 m. However, at the level of gross profit, the two segments are equally important, but the software segment still accounts for nearly two thirds of the group EBIT.



Source: Company, as of 2019

Highly profitable software business

The different segment weights reflect considerable differences in profitability. While the VAR business generated a gross margin of 33.5 percent and an EBIT margin of 7.3 percent in the first half of 2020, in the software segment these figures are 91.6 and 26.3 percent, respectively. They reflect the continuous and successful development of the four subsidiaries included in this segment, Open Mind, DATAflor, M+M Mechatronik and SOFiSTiK, all of which achieve operating margins of more than 20 percent.

High-end CAM solution

The group's paragon of profitability and by far the biggest unit within the software segment is clearly the CAM specialist Open Mind, founded 1994 and fully owned by the M+M group since 2002. The company specializes in high-quality software for computer-aided manufacturing (CAM) and last year generated approximately 70 percent of segment sales or more than EUR 50 m. In terms of gross profit, Open Mind's contribution even amounts to around 40 percent of the total group figures. The Open Mind software, generating average revenues of EUR 30,000 per workstation, enables customers to carry out highly complex and extremely precise drilling and milling tasks (e.g. with 5-axis mills) in a fraction of the usually

required time, thus increasing the productivity of the machines controlled by the software many times over. The software can be used with all common NC mills and lathes, is compatible with leading CAD products (including Autodesk and Solidworks), has a userfriendly interface and enables continuous processes from designing to manufacturing on the machine. In addition, the company offers its own CAD solution that is clearly geared to the requirements of CAM programming, in contrast to leading CAD programs that are mainly optimised for the needs of design engineers. As a central unique selling point, however, Open Mind emphasizes especially its own cuttingedge kernels. They allow a very efficient mapping of highly complex mathematical and geometrical models, resulting in a shorter processing time in the programmed machines. To maintain this technological lead, Open Mind attaches a great importance to software development: of the more than 300 employees of the company, around 60 are software developers.

Worldwide customer base

Altogether, Open Mind has a worldwide base of about 6,000 customers and more than 20,000 installations. The customers hail from various industries using this kind of machine tools, such as prototype construction, tool and mould construction, aerospace, turbine and generator construction, mechanical and medical engineering, and jewellery manufacturing. But also several Formula 1 racing teams use the software to tune their engines or to aerodynamically optimize the carbon elements. Unlike the VAR business, Open Mind also addresses non-European markets and has offices in Japan, Singapore, Taiwan, China, India, Brazil and the USA.

New software for electrical engineering

Under the name eXs, a new software for Computer Aided Engineering was introduced to the market in 2019, which has been developed from scratch with great intensity in recent years. The software is tailored exactly to the mapping of extremely complex circuit diagrams and enables efficient planning and management of very large projects with thousands of individual sheets, such as those required with railways, mechanical and plant engineering, energy supply, process

engineering, hydraulics and pneumatics as well as audio and video technology. This solution replaces an older product (ecscad) originally developed by M+M as a supplement of the standard Autodesk program, then sold to the Americans, and licensed back in 2014, including – at that time – more than 1,000 customers. Since M+M took care to ensure the new product's full data compatibility with ecscad, customers with maintenance contracts should be able to automatically switch to eXs and benefit from the numerous advantages of the new solution. These include a faster database, greater variety of functions with simplified operation, largely free configurability as well as an easy data exchange with other systems. With this modern software, M+M sees itself well positioned in an area that offers attractive prospects, not least against the background of the growing importance of electric mobility.

Leading BIM solution

Last year also saw the majority takeover of SOFiSTiK AG, with which M+M expanded its product portfolio to include a leading solution for Building Information Management (BIM). SOFiSTiK AG, in which M+M had held a minority interest since 1999, has been active in the market since 1987 and specializes in the development of construction software. The company now claims to be Europe's leading software producer for the calculation, design and construction of building projects, with a particular focus on bridge and tunnel construction. Like Open Mind, SOFiSTiK is active worldwide and has over 3,000 customers in 60 countries. It has its own subsidiaries in the USA, Israel and South Africa. The strengths of SOFiSTiK's software products include the planning and calculation of static layouts and reinforcements as well as their BIM functionalities, which enable frictionless and complete mapping of the entire design and construction process in consistent data models, making the company one of the leading BIM providers. The software's strength can play out in particular where special demands are made on the static of the object, which is why the reference list includes several world-famous and spectacular buildings. These include numerous bridges, such as the new Bosporus Bridge in Turkey, several stadiums and the BMW World in Munich. However, the

software is also suitable for "normal" use in building construction and civil engineering. In total, M+M speaks of thousands of construction projects that were calculated and constructed with SOFiSTiK products. An exceptional potential for SOFiSTiK could arise in the coming years due to the large repair and replacement requirements of bridges, for which the SOFiS-TiK Brigde Modeler was presented as a powerful standard product, already fully compatible with BIM standards as mandatory in Germany from 2020. Last year, the new M+M subsidiary with its more than 70 employees contributed sales of around EUR 14.3 m and earnings of EUR 1.7 m to the group figures.

DATAflor leading in its niche

DATAflor, a software that helps landscape architects and garden centres to plan green areas both graphically and financially, completes the software segment's product range. The product costs – according to the company – about EUR 5,000 per workstation. It has already been in the market since 1982 and has a leading position in the addressed niche in the German-speaking area. Recently, the scope of application was extended to earthworks and civil engineering: for instance, the software is used to model and plan the earthworks around the construction of the Brenner base tunnel.

Europe's largest Autodesk VAR

In the second segment, Mensch und Maschine specialises in direct end-customer distribution of Autodesk software and related services and products. With around 50 locations throughout Europe, 40 of which in the DACH region, and about 500 employees, Mensch und Maschine is now the largest Autodesk VAR in Europe.

High service share

However, the importance of trading with Autodesk licenses – the nucleus and origin of the M+M Group – has declined in recent years. While the trading margin accounted for more than three quarters of Group value added in 2001, its share now is less than 20 percent. In addition to the strong growth of the software segment, this is due to the expansion of the service

share in the VAR business. Services include activities such as installation, configuration, maintenance and training courses, the latter having undergone particularly dynamic development in recent years. M+M scores here above all with offers relating to the new possibilities in data management that become available to the users through the new software products in the areas of PDM and BIM (Product Data Management and Building Information Management). Last year, about 40 percent of the services' gross profit in the VAR business was accounted for by such training courses, while about 60 percent was generated with customer-specific projects. These projects, whose volume can comprise up to several man-years, usually include the implementation and the customised adaptation and extension of the Autodesk software, the configuration of adequate data models and the migration of data sets. The projects are increasingly using M+M's own software modules that add special functionalities or industry solutions to Autodesk's basic software. These include industry solutions for plant engineering and construction as well as the customX variant and configurator software, with which variant design can be automated with a time saving of more than 90 percent.

Growing importance of digitisation projects

Within the large customer projects, the focus is increasingly moving away from the Autodesk orientation; instead, it is more and more about the digitisation of customer processes. Data management (PDM and BIM) is particularly important in this respect. In this area, M+M helps customers to create consistent data models across departments as a basis for digitisation projects and to smoothly connect data sets. In many cases, it is also a matter of systematically collecting knowledge tied to individual employees and securing it digitally. This could be, for example, geographical data on large company premises or the recording and administration of assets. With regard to the linking of data, the connection of design data with commercial information plays a central role in the projects.

Objective: end-to-end digital processes

On this basis, customers can link their processes completely digitally. For instance, the M+M solutions customX (variant design) and M+M PDM pinpoint (connection to ERP systems) enable the individual configuration made on a mobile device during a customer appointment to be calculated in real time and the corresponding ordering and production processes to be triggered. Such projects enable companies to offer even minimal lot sizes (M+M: lot size 1) without having to accept the complexity costs that would otherwise be incurred. Other examples are digital building manuals for property management companies, or the concept of a digital factory, carried out for ten years for the Hüttenwerke Krupp Mannesmann (HKM) in Duisburg, Germany, which has now produced a detailed 3D image of the steel plant with all the associated metadata.

Broad industry focus

Although such projects can be large in scale, they are usually broken down into such small sub-projects that no single project or customer represents a cluster risk for M+M. On the contrary, M+M ensures a strong diversification on the customer side. This applies both with regard to industry structure and - even more with regard to the share of sales generated with the more than 30,000 individual customers, none of whom is responsible for more than 1 percent of the Group's sales. Although the customer list is dominated by mechanical engineering, it is such a heterogeneous industry that the cycles of individual subsectors usually offset each other. In addition, there has been recently a growing number of new customers from the AEC industry (including Architectural, Engineering, Construction and Facilities Management), in which M+M benefits from the strong demand for BIM solutions (Building Information Management).

Market environment

Software as growth driver

With its focus on IT services and software, Mensch und Maschine operates in markets with above-average growth dynamics. The software sector in particular is one of the fastest growing segments of the German economy. Since 2010, the German software market has grown by an average of more than 6 percent per year, last year even by 6.3 percent to EUR 26.2 billion (source: BITKOM). In contrast, the development of IT service companies is somewhat more moderate, but still above average in the overall economic context. Over the past ten years, the average growth rate has been 2.3 percent p.a., and in 2019 sales increased by 2.4 percent to EUR 40.9 billion.



Source: BITKOM

Abrupt halt due to Covid-19

For the current year, the industry association BITKOM had forecast in January a further increase in software sales of 5.3 per cent to EUR 27.6 billion and in IT services sales of 2.4 per cent to EUR 41.9 billion, but had to revise this forecast in the meantime given the Covid-19 pandemic. The extent and suddenness of the slump is illustrated by the Bitkom-ifo digital index for measuring the business climate, which is based on a monthly economic survey and fell from 24.6 points in February to -18.7 points in April, its lowest level since the first survey in 2006. The subindex of expectations for the next six months turned out to be particularly negative, plummeting to -36.3 points. Although the business climate has recovered noticeably in recent months, the signs of a slowdown are still so strong that BITKOM now expects the software industry to contract by 4 percent for the year as a whole and IT service providers to shrink by 5.4 percent.





Tailwind for digitisation

As painful as the slump was, the IT industry could benefit from it in the medium term. The contact restrictions in many economic and social areas have not only created a growing need – in the short term – for functional digitisation solutions that allow services to be provided online and business processes to be maintained, but have also highlighted the importance of digitising products and, even more so, processes to make business models crisis-proof. In this context, the

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industry association BITKOM speaks of a digitisation push by Covid-19. According to a recent survey by Bitkom Research on behalf of the IT service provider Tata Consultancy Services (TCS), three quarters of the 955 German companies surveyed stated that they had increased their investments in digital equipment, technologies and applications in response to the pandemic. In four out of ten of the companies, the digitisation of products and services has accelerated, and in a quarter, this applies to their own business processes. The companies also report a positive change in employees' attitude towards digitisation (source: BITKOM: Corona führt zu einem Digitalisierungsschub).

CAD world highly dynamic

Digitisation is also a driving force in the CAD market, which was co-created by M+M partner Autodesk in the 1980s. After the market was dominated in its early years by 2D products for use in architecture and construction, the current 3D applications have now become indispensable in other areas such as mechanical and plant engineering, the automation industry and consumer goods production. An important step towards the digitisation of complete business processes was the expansion of the functionalities towards the fully software-supported optimisation of the entire product life cycle (PLM), from planning, through design, calculation and production to controlling, distribution and servicing. A similarly comprehensive functional extension in the building industry is becoming increasingly common under the name of BIM (Building Information Management) and enables efficient planning, designing, constructing as well as managing of buildings, infrastructure facilities and utilities in a single system. By now, a major focus within the CAD world is on consistent data models and solutions for the collaboration of numerous participants. And of course, there is a strong tendency towards cloud-supported and mobile applications.

Robust growth

Given the large overlaps with other software segments, a precise demarcation of the CAD market is not easy. Mensch und Maschine estimates the total European market for CAD/CAM/PLM/BIM at about EUR 3 billion. Globally, market volume estimates range up to USD 9.3 billion (estimate by Prescient & Strategic Intelligence), while annual growth for the next few years is estimated at 6 to 7 percent. By 2030, the market volume is expected to reach USD 18.7 billion, with increasing adaptation in many sectors and development in the emerging markets (especially in Asia) being seen as the most important growth drivers. The analysts at Jon Peddie Research are somewhat less optimistic. They expect sales in the global CAD market for this and next year to be noticeably below the 2019 level and therefore estimate the CAGR for the entire period from 2018 to 2022 at only 2.4 percent.

Intense competition

The market is considered highly competitive. Besides the M+M partner Autodesk, the most important players include Dassault Systemes, PTC, Siemens PLM Software and Bentley Systems. In terms of the worldwide installed base, Autodesk continues to be considered the market leader, with strengths mainly in the mid-price segment, while the premium segment, defined primarily by comprehensive PLM functionalities, is dominated by Dassault Systemes. Another leading player in this area is Siemens PLM. The Munichbased company has been active in the market since the takeover of UGS from Texas in 2007 and is claiming market leadership in the PLM sector. Finally, at the lower end of the market, there are several free solutions, some of which are launched by the major manufacturers themselves as door openers to new customer groups.



Source: Autodesk, Dassault Systemes and PTC

Autodesk with strong sales jump

In terms of sales, however, Autodesk has long since lost its market leadership to Dassault Systemes. One of the reasons is the accelerated transformation of the business model towards cloud software and subscription, which involved lower licence income in the transition period. This process led to a significant decline in sales of 19 percent in 2016, followed by stagnation in 2017. But since 2018, Autodesk sales have been growing again, and significantly so. At 25.0 and 27.4 percent, respectively, the dynamics were noticeably higher than at Dassault (7.7 and 15.6 percent). Subscription revenues in particular have picked up speed, growing by more than half in 2019 alone. At USD 2.8 billion, these subscription revenues now account for almost 85 percent of Autodesk's sales. However, growth was also boosted by the switch of long-standing maintenance customers to the new model, which has created an exceptional boom and is expected to end this year. Despite these new dynamics, the cumulative growth gap to Dassault (since 2008) is still huge. While Autodesk is now 41 percent above its 2008 level, the French have increased their revenue by more than 200 percent over the same period. Dassault Systemes benefited both from its strong positioning in the 3D sector and in the PLM market, and from an aggressive acquisition strategy. In particular, the acquisition of IBM's former PLM division fuelled the growth rates of 2010 and 2011, but numerous further acquisitions followed. Over the past four years, investments in the acquisition of new subsidiaries totalled over EUR 1.2 billion.

Large differences in profitability

The temporarily weak sales performance was also reflected in Autodesk's profit, which slipped into the red for the first time in 2015 and remained there until 2018. It was only last year that the company returned to profitability, which was very significant with a pretax margin of 9 percent. But Dassault Systemes also has clear advantages in terms of profitability. In 2019, the French generated a pre-tax margin above 20 percent for the fifth year in a row, with the trend declining since 2017. PTC, the third listed company, has now fallen far behind. In 2008, it was roughly on a par with Dassault Systemes, but has hardly grown at all since then and now only achieves an EBT margin in the low single-digit range.



Source: Autodesk, Dassault Systemes and PTC

Autodesk with strong market position

Despite this temporary weakness in growth and lower profitability compared to Dassault, Autodesk continues to enjoy a strong market position. The Californians have by far the widest range of products and are thus able to address the entire width of the market, while the competition is mainly focusing on industrial customers and among them especially on individual sectors like automotive or aerospace industry. Autodesk is still the undisputed leader in the architecture/engineering/construction area (AEC) which constitutes approximately one third of the market. Another advantage is the fact that Autodesk's products, due to their widespread use, represent a kind of industry standard that many users have come to identify with CAD. Thus, the high availability of users able to work with Autodesk software is an important argument in favour of Autodesk from the customer's point of view.

High expectations of the rental model

The strong momentum of the last two years also indicates that the high upfront expenditures for the conversion of the license model are likely to pay off. The transition to the subscription model is now completed and Autodesk is expected to benefit fully from the model's higher pricing and the recurring nature of the revenues. The company also has high expectations from the reduction of the still widespread sublicensing on the customer side, which is much easier to identify in the rental model. Basically, Autodesk calculates in the new model with a growth of 20 percent p.a., which was even significantly exceeded in the last two years.

BIM as an important market driver

Given its strong position in the AEC field, Autodesk could well benefit from the trend to extend the CAD software by a complete management of all data pertaining to the building. The market currently shows a keen interest in such BIM solutions. The data management incorporates a time component as well, and some market observers speak in this context of a transition towards 5D models, which include – in addition to the three spatial dimensions – also costs and a time axis. In some cases, the definitions reach up to 7D if the models also include a sustainability assessment and applications for facility management (manuals, service contacts, spare parts information, etc.). Regardless of the definition used, many market observers believe that the BIM concept has disruptive potential for the construction industry. The importance attached to this topic is illustrated not least by the regulation of the Federal Ministry of Transport and Digital Infrastructure, which makes the use of BIM mandatory for bridge and tunnel projects from 2020 onwards. This regulation is related to the establishment of the federal BIM Competence Centre, which will serve as the central point of contact for digital tendering and awarding of public construction projects and cover all areas of planning, construction and use of buildings.

Strategy

Technological leadership with software

From the Group's perspective, the central strategic thrust that has been instrumental in the successful development of recent years is the technological leadership of the subsidiary Open Mind in the CAM business it addresses. The increases in productivity Open Mind is offering its customers are in some instances very considerable. They are the most powerful sales argument and they create the scope for positioning in the high-price segment and, consequently, for the sustained achievement of very high margins. To maintain and expand this positioning, high-quality innovations are crucial; therefore, high investments in the maintenance and development of the company's own software (only capitalized to a very small extent in the balance sheet) are at the core of M+M's strategy. In relation to segment sales, development costs averaged just under 30 percent over the past five years. Last year, the item increased again by almost 21 percent to EUR 19.7 m, but this was also due to the first-time consolidation of SOFiSTiK. In relation to segment sales, the weight of development expenses was actually reduced from 29.9 to 26.2 percent.



Source: M+M

Expansion of software business

The majority takeover of SOFiSTiK AG, with which M+M has positioned itself as a software producer for the calculation, design and construction of statically particularly demanding building projects, especially in

bridge and tunnel construction, is an important expansion of the software business. Like Open Mind, SOFiSTiK is technology leader in the addressed market and promises high growth for the next years. With the new product Bridge Modeler alone, a market segment is being addressed in which the construction or repair of more than 100,000 motorway and railway bridges is planned in Germany in the medium term.

Diversification with two segments

At the same time, SOFiSTiK's strong position in the BIM sector also strengthens the positioning of the VAR business in this very promising area. This would allow the two business segments to be interlinked better in terms of synergies in future, for which the CAM business is not well suited. Accordingly, M+M has so far seen the main advantage of the two-pillar strategy less in the achievement of possible synergy effects than in the positive diversification effect, both in terms of areas adressed (outside the Autodesk world) and geography (strong non-European business).

Increasing market share

The focus on Autodesk's products means that the growth of the CAD pioneer is a central determinant for the VAR business. Autodesk's strategic decisions, such as the realignment of the business model towards rental software, have as much direct impact on the development of M+M as the quality and degree of innovation of the Americans' product portfolio. But within this setting, M+M has enough regulating variables at its disposal to be able to influence its own sales and profit growth. The main source of growth is therefore an even more intensive penetration of already covered markets and an increase of the company's share in Autodesk sales (at the expense of other VARs). The development of recent years illustrates that the Bavarians are quite successful in this respect. Since 2012, Mensch und Maschine has more than doubled its VAR sales to EUR 170,9 m, while Autodesk sales in the geographical segment EMEA (Europe, Middle East and Africa) rose in that time by "only" 50 percent to USD 1,3 billion.

Realizing economies of scale

By now, M+M has achieved a size that offers a major competitive edge against other VARs and perceives itself as Europe's leading Autodesk VAR. As it allows a centralisation of several important functions such as marketing or hotline support, M+M is able to realise substantial cost benefits. At the same time, the consistent label and the comprehensive presence facilitate the addressing and support of larger customers.

Expansion of the range of services

An important aspect of the growth strategy is the expansion of the company's own range of services. By now, M+M offers a comprehensive portfolio of services in the VAR business, which go far beyond the original offer relating to support, maintenance and implementation of the Autodesk software. An important part of this are training courses for BIM applications, which, according to M+M, have been completed by almost 10,000 customer employees to date. Digitisation projects, which are increasingly independent of manufacturers and in which aspects such as data management or digital interlinking of processes play a central role, are at least as promising. This development is also accompanied by a reduction in dependence on Autodesk. The share of trading business, i.e. Autodesk licenses, in the Group's gross profit is now permanently below 20 percent.

Expansion of own software portfolio

Further important differentiating features in competition with other Autodesk partners and at the same time central elements in many customer projects are the two Autodesk-based or -compatible software products DATAflor and eXs (formerly ecscad), with which Mensch und Maschine offers custom-fit solutions for a certain sector or for certain demands (highly complex circuit diagrams). Notably eXs is a modern product that serves as a door opener especially into the technologically dominated German Mittelstand. Moreover, M+M is constantly developing (in projects) new modules and extensions to Autodesk standard software that meet customer- or industryspecific requirements. These solutions then demonstrate the degree of expertise to the industries addressed, facilitate sales, increase productivity in the projects and facilitate their calculability.

Continuity and predictability

M+M pursues its long-term strategy with great dependability, thus ensuring a high degree of reliability for customers, partners and investors. Continuity is also a top priority in terms of personnel and, above all, in the management structure. In line with this, the upcoming generation change in the top management has been not only prepared but already implemented for several years through the development of suitable executives and the increasing delegation of tasks and responsibilities.



Figures

Dynamic sales growth

With the exception of the year 2017, in which the VAR business sales and thus Group revenues declined as a result of the change in the license model at Autodesk, M+M has grown continuously since the alignment to the current business model and has more than doubled sales to recently EUR 245.9 m between 2012 and 2019. The software segment made particularly strong gains (+123.5 percent to EUR 75.1 m), but revenues in the VAR business also doubled to EUR 170.9 m.



Source: Company

Gross profit at record level

In line with sales, gross profit has also grown in this period, increasing by 103 percent to EUR 127.9 m between 2012 and 2019. Up to 2018, the growth in gross profit was even disproportionately higher than the growth in sales, demonstrating the benefits of the greater depth of value added in the VAR business. However, this was obscured in 2019 by the acquisition of SOFiSTiK, which has a lower gross margin than the "old" software segment due to the higher proportion of third-party software, as well as by a strong exceptional boom in the trade with Autodesk licenses (triggered by maintenance customers switching to the new subscription model). As a result, the Group gross margin fell by four percentage points to 52 percent in 2019, but in absolute terms gross profit increased strongly last year as well, by almost a quarter.



Source: Company

EBIT multiplied

The sales growth and the rising gross margin have allowed a very positive EBIT development in recent years. In total, EBIT has increased by 340 percent to EUR 27.2 m in the eight years to 2019, with the increase in operating profit being even stronger. In the years up to 2014, M+M had covered the initial operating start-up losses in the VAR business with the high profit resulting from the variable purchase price components of the sale of the European Autodesk distribution business in the autumn of 2011, thus somewhat bolstering the profit development. Adjusted for these profits, operating results were significantly weaker until 2014 and the increase achieved since then was all the steeper. The Group EBITDA adjusted in this way increased by more than 2,000 percent between 2012 and 2018 (from EUR 1.0 m to EUR 22.7 m; as the EBITDA development in 2019 was heavily exaggerated by the first-time application of IFRS 16, we have not continued this series).

Double-digit EBIT margin

The continuous increase in profitability can be seen in the development of the EBIT margin, which has more than doubled between 2012 and 2019, has been in double digits since 2018 and has reached a new record of 11.1 percent in 2019. In the software business, an EBIT margin above 20 percent has been generated since 2016 (most recently 23.1 percent), while the VAR business achieved most recently 5.7 percent. Mensch und Maschine thus managed to achieve an increase in profitability even last year despite the reduced gross margin, to increase EBIT by 38.3 percent and to improve the Group's EBIT margin. The improvement was achieved in the VAR business, where the EBIT margin rose by 0.7 percentage points, while the Software segment recorded a slight decline of 0.6 percentage points to 23.1 percent due to the consolidation of SOFiSTiK. The company benefited thus once again from its continued cost discipline, which is reflected not least in the disproportionately low growth in the number of employees. Thus, the headcount in the VAR business increased by only 0.9 percent, while the software segment and the Group as a whole saw an increase of one third and 15.2 percent respectively, largely due to consolidation.



Source: Company

Dividend increased by 30 percent

The increase in net income was even somewhat stronger than in EBIT: it climbed by almost 43 percent to EUR 16.7 m despite the increase in minority interests as a result of the SOFiSTiK consolidation. This results in a net margin of 6.8 percent and earnings per share of 99 cents. Based on this high profit growth and the unchanged strong cash flows of the business model (see below), M+M was able to continue its shareholder-friendly dividend policy and raise the dividend by 31 percent to 85 cents per share. This means that the distribution has increased 3.4 times over the past five years.

Business figures	FY 2018	FY 2019	Change
Sales	185.4	245.9	+32.7%
VAR business	129.7	170.9	+31.8%
Software	55.7	75.1	+34.7%
Gross profit	103.9	127.9	+23.1%
VAR business	49.5	58.2	+17.4%
Software	54.4	69.7	+28.2%
Gross margin	56.0%	52.0%	
EBITDA	22.7	36.5	+60.7%
VAR business	8.1	14.3	+76.8%
Software	14.7	22.3	+51.8%
EBITDA margin	12.3%	14.9%	
EBIT	19.7	27.2	+38.3%
VAR business	6.5	9.8	+52.2%
Software	13.2	17.4	+31.5%
EBIT margin	10.6%	11.1%	
Pre-tax result	18.2	26.3	+44.7%
Pre-tax margin	9.8%	10.7%	
Net profit	11.7	16.7	+42.6%
Net margin	6.3%	6.8%	

Solid growth in the first half year

Despite the Covid-19 pandemic, M+M was able to continue the positive trend in the first half of 2020. Although the business development of the months April to June showed – as announced and expected – visible slowing effects due to Covid-19, in combination with the very strong first quarter M+M was able to achieve a sales growth of 8.5 percent to EUR 130.4 m in the first half of the year. The software segment, which, according to the company, has felt the Covid-19 effects more strongly due to its global presence, remained almost at the previous year's level (+1.0 percent) at EUR 37.9 m, while the VAR business grew by 11.9 percent to EUR 92.5 m, primarily thanks to Autodesk customers switching from maintenance to the subscription model. As this growth was thus driven by the comparatively low-margin trade in Autodesk licences, the average gross margin both in the VAR business and in the Group fell to 33.5 and 50.4 percent respectively (previous year: 34.9 and 53.3 percent). The gross margin in the Software segment was also down on the previous year (91.6 percent vs. 93.9 percent), mainly due to the shift in sales between the CAM business and SOFiSTiK. In absolute figures, the gross profit in the VAR business and in the Group increased by 7.2 and 2.4 percent respectively in the first half of the year, while the software segment suffered a slight decline of 1.5 percent.

Business figures	HY 2019	HY 2020	Change
Sales	120.22	130.39	+8.5%
VAR business	82.70	92.51	+11.9%
Software	37.51	37.87	+1.0%
Gross profit	64.12	65.68	+2.4%
VAR business	28.90	30.99	+7.2%
Software	35.22	34.69	-1.5%
Gross margin	53.3%	50.4%	
EBITDA	18.44	21.21	+15.0%
VAR business	6.90	8.82	+27.9%
Software	11.54	12.38	+7.3%
EBITDA margin	15.3%	16.3%	
EBIT	14.01	16.72	+19.4%
VAR business	4.77	6.77	+41.8%
Software	9.23	9.95	+7.8%
EBIT margin	11.6%	12.8%	
EBT	13.53	15.96	+18.0%
EBT margin	11.3%	12.2%	
Net profit	8.44	9.99	+18.4%
Net margin	7.0%	7.7%	
Free cash flow	7.76	21.21	+173.5%

In m Euro and percent, source: Company

Other expenses decrease by EUR 2 m

The development of gross profit, already remarkable in view of the general conditions, is still outshone by the key earnings figures, all of which M+M was able to increase significantly. This was made possible by a very beneficial change in key expense items, which M+M sees as a reflection of the strong cost elasticity of its business model. However, the cost trend in many areas, such as travel expenses and attendance events, which together were largely responsible for a decline in other operating expenses of EUR 2.0 m or 23 percent, was specific to the Covid-19 crisis (e.g. a consequence of travel and contact restrictions). The usage of the generous short-time working scheme, which was reflected in an almost 50 percent increase in other operating income to EUR 1.6 m, also had a positive effect on earnings.

New records in profit...

The moderate growth in gross profit and the favourable cost development resulted in new half-year records for key profit figures. EBITDA increased by 15 percent to EUR 21.2 m, EBIT by 19 percent to EUR 16.7 m and EBT by 18 percent to EUR 16.0 m. After taxes and minority interests, a half-year profit of EUR 10.0 m was reported, exceeding the previous year's figure by 18 percent. This time, the earnings driver was the VAR business, where employee productivity (measured by gross profit per employee) rose by almost 9 percent to EUR 67,000.

... and cash flows

Spurred on by the high growth in profits, the operating cash flow also developed very well in the first half of the year. At EUR 24.5 m, it exceeded the previous year's figure by 79 percent and set a new record. A small part of the increase was due to the Covid-19 relief measures (tax deferrals, short-time working compensation), but for the most part it was due to the change in current assets. As investment outflows were simultaneously reduced from EUR 5.9 m to EUR 3.2 m, the improvement in free cash flow was even more impressive at 174 percent, or from EUR 13.5 m to EUR 21.2 m. After deducting payments for interest, repayments, leasing instalments and the repurchase of own shares, liquidity has increased by EUR 13.4 m to EUR 26.4 m since the beginning of the year.

Equity ratio over 50 percent

As a result, balance sheet liquidity as of 30 June was roughly 16 percent of total assets. After deducting bank liabilities (including real estate loans but excluding leasing liabilities of EUR 13.7 m), this corresponds to a net liquidity of EUR 3.7 m. By far the largest item on the assets side of the balance sheet is the capitalised goodwill of earlier acquisitions, which amounts to EUR 46.5 m. On the liabilities side, on the other hand, equity, which increased by 10 percent to EUR 80.9 m in the first half of the year, is the largest single item. Thus, the equity ratio, which has been rising steadily in recent years despite the high dividend payments, exceeded the 50 percent mark for the first time at the end of June. However, the dividend payment in July will have reduced this figure – and liquidity – again, although the effect is dampened by the high acceptance of the stock dividend option.



Source: Company

Earnings forecast confirmed

Based on the half-year figures, M+M has confirmed the earnings forecast expecting profit growth of 18 to 24 percent to EUR 1.17 to 1.23 per share, as well as the goal of increasing the dividend from 85 cents to 100 to 105 cents. However, the previous revenue and gross profit forecast, which had so far envisaged growth of 10 to 12 percent, was no longer confirmed. Instead, M+M emphasises that the sales and gross profit targets are to play only a subordinate role in the second half of the year and stresses the great importance of cost management for achieving the earnings targets. These, too, are subject to an at least moderate improvement in demand compared to the second quarter. According to the company, current observations support these expectations. At the beginning of September, this statement was clarified at a capital market event to the effect that a development comparable to Q2 is expected for the third quarter, so that the last three months of the year will be decisive for the achievement of the earnings targets. However, management remains confident in this regard. The medium-term target, which envisages annual gross profit growth of 8 to 12 percent, an increase in EPS of 18 to 24 cents p.a. and a dividend increase of 15 to 20 cents p.a., was also maintained unchanged.

Equity story

Strong market position

M+M has a strong market position in the addressed markets. In the CAM field, the company with its subsidiary Open Mind is one of the pioneers of the 5-axis milling process, holds a technologically leading position and has a broad and globally spread customer and installed base. The subsidiary SOFiSTiK also plays in the premier league in the market it addresses, both technologically and in terms of market position. In the CAD software market, moreover, M+M has been active for more than three decades and is Europe's largest Value Added Reseller for the software of the American CAD pioneer Autodesk. The Bavarians have a comprehensive presence in the DACH area as well as offices in several other European countries and a broad customer and installed base.

Digitisation provides tailwind

The already good positioning was further improved by the majority takeover of SOFiSTiK. This applies not only to the construction software business, but also to activities in the booming BIM field, where the new Group subsidiary also has a strong position. In the construction sector, M+M plays thus a leading role as a digitisation partner and can benefit considerably from efforts to make data management and processes in the industry more efficient. However, the same challenges and tasks are also faced by companies in other sectors, which is why M+M is also increasingly perceived as a first-class digitisation partner in the industrial sector and benefits from strong demand. Based on its experience to date, M+M can score particularly well in the areas of data management and the integration of construction and ERP data, which in most cases form the basis of all digitisation efforts.

Distinctive continuity

M+M is characterised by an impressive continuity. This is true for the addressed business areas and the pursued strategy, as well as for the persons involved. Despite its more than 30-year history, the company is still led by its founder, Mr. Adi Drotleff, who is also the largest single shareholder with 44.6 percent. But the personnel also shows a strong bond with the company: According to M+M, there is only a low staff turnover, and the second and third management levels are composed of staff members most of whom have been part of the team for more than 15 years.

Smooth generation change

This stable management structure has enabled M+M to prepare and initiate the upcoming generation change at the top of the company already in recent years. By now, according to the company, the process (facilitated by the SE's monistic management structure) has progressed well and so far absolutely without friction.

High potential for profit increase

Although M+M has already achieved high margin growth in the VAR business in recent years and more than quintupled the EBIT margin between 2015 and 2019, the segment still offers considerable potential for further improving profitability. According to the company, important margin drivers for this continuous improvement are, on the operating level, growthrelated economies of scale, a growing number of prefabricated extensions and industry modules and increasing routine of the processes within the segment. The upward trend continued in the first half of the year, with the segment margin rising to 7.3 percent.



Source: Company,

Highly profitable software business

But the already highly profitable software business also offers even further scope for above-average profit increases. Thus, the EBIT margin here was increased by 2.8 percentage points to 23.1 percent between 2016 and 2019, even though the initial consolidation of SOFiSTiK caused a one-off downward shift. However, the now highly dynamic development of SOFiS-TiK is likely to lead in the future to growth-related economies of scale in average overhead costs and development expenses, and the successful market launch of the new product eXs also offers additional margin fantasy. On this basis, M+M is confident to be able to increase the EBIT margin across the Group to more than 14 percent in the medium term.



Source: Company,

Reliable forecasts

In recent years, M+M has reliably fulfilled its own forecast, achieving especially the announced profit increases. We consider therefore the current forecast, which expects further profit growth of at least 18 percent for the current year despite Covid-19 and a steady continuation of the upward trend in earnings for the following years, as very trustworthy.

Strong cost elasticity

The very fact that M+M has so far maintained this year's earnings forecast despite the Covid-19 crisis, which has not left the company unscathed, especially

in the highly profitable CAM business, illustrates the buffer with which management is normally planning. A second factor that is reflected in the maintaining of the forecast is the pronounced cost elasticity of the business model. The strict profit responsibility of the operating units means that reaction times to impending plan shortfalls are very short, and this also ensures a high degree of discipline in terms of material costs and staff planning.



Source: Company, 2020: lower margin of M+M forecast

Attractive dividend policy

A further constant is the high payout ratio, which has fluctuated between 85 and 90 percent in recent years and, in step with the dynamic growth in profits, ensured strong dividend increases. With this year's distribution of EUR 0.85 (for 2019), the dividend was almost three times the figure of 2017 (for 2016); two years earlier, the distribution was only EUR 0.20. The target for this year is again an increase by 15 to 20 cents (to 100 to 105 cents), which means that the share currently (at the lower end of the forecast range) has a dividend yield of 2.0 percent. In the current lowinterest environment, the M+M share thus offers an attractive dividend yield as well as a comparatively reliable prospect of further increasing distributions over time, with increases of 15 to 20 cents per year also in the next financial periods.

DCF valuation

Core assumption: Continued growth

Having already processed the half-year figures in our last update, our estimates remain largely unchanged this time. This applies in particular to the basic scenario we assume, aligned with the company's guidance that has been very reliable for years, and in which we expect a continuation of the growth course and further increasing margins.

Sales doubling by 2027

We have left the sales projection completely unchanged and therefore expect a five percent growth to EUR 258.2 m in 2020. There were also no changes made to growth rates for the coming years, so that the target revenue at the end of the detailed forecast period in 2027 is still EUR 528.9 m. In total for the years 2020 to 2027, we therefore expect sales to double.

Target margin raised to forecast level

We have made an adjustment with regard to the target EBITDA margin for the detailed forecast period and raised it to 18.2 percent, a level that M+M expects to reach in the medium term (above 18 percent). Previously, we had included a precautionary discount here and expected 17.4 percent. The increase is in response to the management's pronounced forecast fulfilment, which is likely to continue in the current year despite Covid-19. The cost elasticity shown again has also played a role. We continue to regard the later point in time when the target margin is reached in our model as a precautionary component.

Depreciation increased

Another change in our estimates regards the development of capitalised rights of use and liabilities from leasing agreements, which we have made more dynamic and which result in slightly higher depreciation, particularly towards the end of the detailed forecast period. The combination of the increased EBITDA margin and higher depreciation results in an EBIT margin of 16.8 percent for 2027, 0.3 percentage points higher than before. For the current year, however, the consequences are almost negligible. We now expect EBIT to reach EUR 31.2 m and net income to

m Euro	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025	12 2026	12 2027
Sales	258.2	289.2	321.0	354.7	392.0	433.2	478.6	528.9
Sales growth		12.0%	11.0%	10.5%	10.5%	10.5%	10.5%	10.5%
EBIT margin	12.1%	13.7%	14.3%	14.8%	15.3%	15.8%	16.3%	16.8%
EBIT	31.2	39.7	45.8	52.4	60.1	68.6	78.1	88.7
Tax rate	30.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%
Adjusted tax payments	9.4	12.3	14.2	16.3	18.6	21.3	24.2	27.5
NOPAT	21.9	27.4	31.6	36.2	41.5	47.4	53.9	61.2
+ Depreciation & Amortisation	8.7	8.8	8.6	8.5	8.1	7.8	7.6	7.5
+ Increase long-term accruals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross operating Cash Flows	30.5	36.2	40.2	44.7	49.6	55.2	61.5	68.7
- Increase Net Working Capital	-0.2	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9
- Investments in fixed assets	-3.5	-2.5	-2.6	-2.7	-2.9	-3.0	-3.2	-3.3
Free Cash Flows	26.9	33.4	37.2	41.5	46.1	51.5	57.5	64.4

reach EUR 19.6 m (previously: EUR 31.1 m and EUR 19.5 m). The table above shows the model business development resulting from our assumptions for the years 2020 to 2027; detailed overviews of the estimates for balance sheet, income statement and cash flows statement can be found in the Annex.

Discount rate

We discount the free cash flows resulting from these assumptions with WACC (Weighted Average Cost of Capital) at an interest rate on borrowed capital of 4.0 percent. The cost of equity is determined using the Capital Asset Pricing Model (CAPM). Our risk-free interest rate is – at 1.0 percent – the long-term average of the German current yield and for the market risk premium we use an above-average value of 6.5 percent (the past-based average market risk premium used for Germany in 2019 was 5.7 percent, source: Pablo Fernandez, Mar Martinez and Isabel F. Acin: Market Risk Premium and Risk-free Rate used for 69 countries in 2019: a survey). Combined with a beta of 1.2 and a target debt ratio of 40 percent, this results in an unchanged WACC rate of 6.4 percent.

Target price: EUR 52.20 per share

In our favourite scenario (perpetual growth 1.0 percent, WACC 6.4 percent), these assumptions add up to a market value of equity of EUR 872.4 m or EUR 52.17 per share. From this we derive a new price target of EUR 52.20, which is slightly above the old price (EUR 50.50).

Average estimation risk

In addition to the fundamental fair value calculation, we assess the estimation risk on a scale from 1 point

(very low) to 6 points (very high). In the light of a market position stable for years, a long-standing track record and the proven forecast reliability of the management, we think that the predictability of M+M's development is rather good. In recent years, M+M has also been able to dispel the greatest uncertainty to date, namely the question of whether the targeted improvement in margins in the VAR business would be successful. Accordingly, we are considering a reduction in the rating of the estimation risk in the future but want to await the outcome of this year of above-average unpredictability. Until then, we think it still reasonable to assume an average estimation risk of 3 points.

Sensitivity analysis	Perpetual cash flows growth						
WACC	2.0%	1.5%	1.0%	0.5%	0.0%		
5.4%	79.15	70.93	64.60	59.57	55.49		
5.9%	68.72	62.60	57.75	53.80	50.53		
6.4%	60.68	55.99	52.17	49.01	46.35		
6.9%	54.29	50.61	47.55	44.98	42.78		
7.4%	49.10	46.15	43.66	41.54	39.70		

Sensitivity analysis

For our sensitivity analysis, we have varied the input parameters WACC and perpetual growth. The calculated fair value lies between EUR 39.70 per share in the most restrictive case (WACC of 7.4 percent and perpetual growth of 0 percent) and EUR 79.15 in the most optimistic case.

Conclusion

Despite Covid-19, the success story of Mensch und Maschine continues this year. Although the global economic crisis resulting from the pandemic has left its mark, especially on the highly profitable CAM business, M+M increased sales in the first half of the year and its profits showed once again disproportionately high growth. The forecast of new profit records for the full year was also confirmed.

M+M demonstrates thus once again how strongly the company is positioned in the addressed markets and how well it is managed. The proven growth strategy is consistently pursued and implemented, and M+M, like only few other companies, manages to combine sustained growth with sustained cost discipline and thus increasing margins.

Since the addressed markets all promise great potential and the momentum-gaining digitisation in the construction sector and industry is likely to provide additional tailwind for years to come, there is no end in sight to the success story of M+M. We therefore consider the company forecast, which predicts continued growth of around 10 percent p.a., a further increase in margins and continuous dividend increases over the next few years, to be plausible and easily attainable.

Our estimation model based on this provides a fair value of EUR 52.20 per share. In view of the current price level, the M+M share is thus currently a "hold", but one that lures with a dividend yield of 2.0 percent and the prospect of further increasing distributions. We confirm therefore the rating "Hold".

Annex I: Balance sheet and P&L estimation

Balance sheet estimation

m Euro	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025	12 2026	12 2027
ASSETS									
I. Total non-current assets	98.7	98.5	97.2	96.2	95.5	95.3	95.5	96.1	96.9
1. Intangible assets	54.1	61.0	60.4	59.7	59.2	58.6	58.1	57.6	57.1
2. Tangible assets	34.0	34.0	33.3	32.9	32.8	33.1	33.9	34.9	36.3
II. Total current assets	60.8	70.1	72.8	82.5	95.0	109.4	125.0	140.2	157.1
LIABILITIES									
I. Equity	73.5	84.6	93.0	102.4	113.0	125.8	140.3	154.5	170.6
II. Accruals	12.2	12.7	13.2	13.8	14.3	14.8	15.4	15.9	16.5
III. Liabilities									
1. Long-term liabili- ties	34.0	31.6	25.3	23.9	23.9	23.9	23.9	23.9	23.9
2. Short-term liabili- ties	39.9	39.7	38.4	38.6	39.3	40.1	41.0	41.9	43.0
TOTAL	159.5	168.6	170.0	178.7	190.5	204.6	220.5	236.3	254.0

P&L estimation

m Euro	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025	12 2026	12 2027
Sales	245.9	258.2	289.2	321.0	354.7	392.0	433.2	478.6	528.9
Gross profit	127.9	129.1	150.7	167.6	185.7	205.6	227.7	252.2	279.3
EBITDA	36.5	39.9	48.5	54.4	60.9	68.2	76.4	85.7	96.2
EBIT	27.2	31.2	39.7	45.8	52.4	60.1	68.6	78.1	88.7
EBT	26.3	30.5	38.7	45.2	51.9	59.6	68.1	77.6	88.2
EAT (before minori- ties)	18.3	21.3	26.7	31.2	35.8	41.1	47.0	53.5	60.9
EAT	16.7	19.6	24.5	28.5	32.7	37.4	42.6	48.4	54.9
EPS	0.99	1.17	1.47	1.71	1.95	2.24	2.55	2.90	3.29

Annex II: Cash flows estimation and key figures

Cash flows estimation

m Euro	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025	12 2026	12 2027
CF operating	26.4	29.8	35.2	39.4	43.8	48.6	54.1	60.3	67.4
CF from investments	-8.6	-3.5	-2.5	-2.6	-2.7	-2.9	-3.0	-3.2	-3.3
CF financing	-14.5	-18.3	-31.4	-28.6	-30.2	-33.3	-37.5	-44.3	-49.7
Liquidity beginning of year	9.6	12.9	21.0	22.3	30.5	41.3	53.7	67.3	80.2
Liquidity end of year	12.9	21.0	22.3	30.5	41.3	53.7	67.3	80.2	94.5

Key figures

percent	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025	12 2026	12 2027
Sales growth	32.7%	5.0%	12.0%	11.0%	10.5%	10.5%	10.5%	10.5%	10.5%
Gross profit growth	23.1%	1.0%	16.7%	11.3%	10.8%	10.8%	10.8%	10.7%	10.7%
Gross margin	52.0%	50.0%	52.1%	52.2%	52.3%	52.5%	52.6%	52.7%	52.8%
EBITDA margin	14.9%	15.5%	16.8%	17.0%	17.2%	17.4%	17.6%	17.9%	18.2%
EBIT margin	11.1%	12.1%	13.7%	14.3%	14.8%	15.3%	15.8%	16.3%	16.8%
EBT margin	10.7%	11.8%	13.4%	14.1%	14.6%	15.2%	15.7%	16.2%	16.7%
Net margin (after mi- norities)	6.8%	7.6%	8.5%	8.9%	9.2%	9.5%	9.8%	10.1%	10.4%



Disclaimer

Editor		
sc-consult GmbH	Phone:	+49 (0) 251-13476-94
Alter Steinweg 46	Telefax:	+49 (0) 251-13476-92
48143 Münster	E-Mail:	kontakt@sc-consult.com
Internet: www.sc-consult.com		

Responsible analyst Dipl. Volkswirt Dr. Adam Jakubowski

Charts The charts were made with Tai-Pan (www.lp-software.de).

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II) Preparation and updating

The present financial analysis was prepared by: Dipl. Volkswirt Dr. Adam Jakubowski

Participants in the preparation of the present financial analysis: -

The present analysis was finished on 18.09.2020 at 9:35 and published on 18.09.2020 at 9:45.

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	cent. We assess the estimation risk as average (3 to 4 points).		
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Buy	cent. We assess the estimation risk as above average (5 to 6 points).		

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	rating. The rating "hold" is also used in cases where we perceive a price potential of mor			
	than 10 percent, but explicitly mentioned temporary factors prevent a short-term reali-			
	zation of the price potential.			
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The expected change in price refers to the current share price of the analyzed company. This price and any other share prices used in this analysis are XETRA closing prices as of the last trading day before publication. If the share is not traded on XETRA, the closing price of another public stock exchange is used with a separate note to that effect.

The price targets published within the assessment are calculated with common methods of financial mathematics, especially with the DCF (discounted cash flow) method, the sum of the parts valuation and a peer group analysis. The valuation methods are affected by economic framework conditions, especially by the development of the interest rates.

The rating resulting from these methods reflects current expectations and can change anytime subject to company-specific or economic changes.

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Date	Rating	Target price	Conflict of interests
24.07.2020	Hold	50.50 Euro	1), 3)
22.04.2020	Buy	50.00 Euro	1), 3), 4)
17.03.2020	Buy	50.00 Euro	1), 3)
17.02.2020	Hold	50.50 Euro	1), 3), 4)
23.10.2019	Buy	38.50 Euro	1), 3)
06.08.2019	Buy	37.10 Euro	1), 3)
02.05.2019	Hold	35.80 Euro	1), 3), 4)
19.02.2019	Buy	35.00 Euro	1), 3), 4)
17.12.2018	Buy	33.70 Euro	1), 3), 4)
23.10.2018	Buy	31.30 Euro	1), 3)

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