July 30th, 2018
Research report

SMC Research
Small and Mid Cap Research

THOMSON REUTERS ANALYST AWARDS 2018 WINNER
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Mensch und Maschine SE

Margin improvement stronger than expected

Rating: Buy (unchanged) | **Price:** 27.50 Euro | **Price target:** 30.80 Euro

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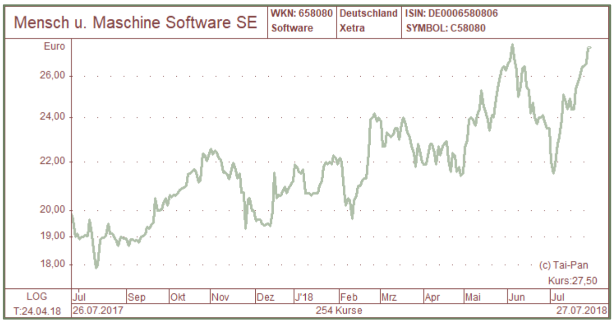


Basic data

Based in:	Wessling
Sector:	CAD/CAM software
Headcount:	814
Accounting:	IFRS
ISIN:	DE0006580806
Price:	27.50 Euro
Market segment:	Scale / m:access
Number of shares:	16.7 m
Market-Cap:	458.8 m Euro
Enterprise Value:	486.3 m Euro
Free float:	approx. 46.9 %
Price high/low (12M):	28.00 / 17.66 Euro
Ø turnover (Xetra, 12 M):	168,400 Euro / day

Short profile

As a specialist for CAD and CAM software, Mensch und Maschine has been pursuing a proven and successful business model for years, which is based on the two strong pillars of its own software and VAR business in the Autodesk environment. This attractive positioning is reflected in steady growth in gross profit, earnings and dividends. The dividend per share has doubled since 2015 alone and is expected to increase again this year by more than a third to EUR 0.68 if the targets are met. Thus, despite the equally excellent performance of the share, M+M would still have an expected dividend yield of 2.5 percent. And the probability that this year's forecast will at least be achieved has once again increased after the good first half of the year, in which M+M increased its profit by a hefty 37 percent. The extent of the profitability improvement in particular was a positive surprise for us, which is why we have raised our margin estimates for both 2018 and the subsequent years. The resulting new fair value of EUR 30.80 per share signals thus further upside potential, and we confirm therefore our previous "Buy" rating.

FY ends: 31.12.	2015	2016	2017	2018e	2019e	2020e
Sales (m Euro)	160.4	167.1	160.9	177.0	195.6	216.1
EBIT (m Euro)	8.5	12.5	15.2	20.3	23.6	27.6
Net Profit	3.9	6.6	9.4	12.1	14.3	17.2
EpS	0.24	0.39	0.56	0.74	0.87	1.05
Dividend per share	0.25	0.35	0.50	0.68	0.85	1.00
Sales growth	14.5%	4.2%	-3.7%	10.0%	10.5%	10.5%
Profit growth	4.0%	70.4%	42.9%	28.1%	18.5%	20.2%
PSR	2.81	2.70	2.80	2.55	2.31	2.09
PER	116.7	68.4	47.9	37.4	31.5	26.2
PCR	30.62	30.79	29.63	26.74	23.38	20.46
EV / EBIT	56.4	38.3	31.4	23.6	20.3	17.3
Dividend yield	0.9%	1.3%	1.8%	2.5%	3.1%	3.6%

Executive Summary

- **Highly profitable business with CAM software:** The wholly-owned subsidiary Open Mind that develops and sells technologically leading CAM software is the group's paragon of profitability. Although the globally acting company with a broad customer and installed base contributes less than a third to the group's sales, it provides considerably more than a half of the profits. As the largest component of the Group's software segment, the company has been crucially responsible for its high sales and margin growth in recent years. After another leap in earnings in the first half of 2018, the segment achieved an EBITDA margin of 28.3 percent

- **Autodesk partnership for more than 30 years:** M+M's origins lie, however, in the trade business with the CAD software of the American CAD pioneer Autodesk. Since the company's founding more than 30 years ago, Mensch und Maschine has established itself as a leading reselling partner of Autodesk and has a solid market position in the addressed market with a broad geographical presence and a very large customer base.

- **Conversion of distribution stage completed:** Starting in 2009, Mensch und Maschine has completed the transition from value added distribution to end-customer sales as value added reseller (VAR) and has considerably extended its own value creation owing to the enlarged range of services. As a result of the change, which included the acquisition of 20 smaller VARs, M+M has become Autodesk's largest European VAR partner.

- **Margin potential in the VAR business:** The most important reason for the transition was the higher margin potential in the VAR business, which M+M estimates at more than 10 percent (on an EBITDA basis). Due to the ongoing set-up and expansion phase, especially in the European countries outside the DACH area, the margin actually achieved is still considerably lower at 5.9 percent despite recent progress. A successful further advance towards the target value would therefore open up great potential for above-average profit increases.

- **Significant profit increase in the first half of the year:** The VAR business' gradual advance towards target profitability and the constant increase in margins in the already highly profitable software business have already enabled a disproportionately strong profit development in the past. This was also the case in the first half of the year, in which M+M increased its profits by more than a third and thus far more strongly than sales and gross profit.

- **Estimates raised:** Against this background, M+M has called its forecast for 2018 "well achievable". We assume even that this year's targets will be exceeded and expect the success story to continue over the next few years. The company's goal of doubling earnings per share by 2020 appears realistic and promises further potential for the share as well. It should also continue to benefit from the shareholder-friendly dividend policy, which leads us to expect considerably increasing dividends over the next few years.

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.
- Change of distribution stage in the Autodesk business successfully completed.
- 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 even higher rise in profits in the last few quarters.

Weaknesses

- Despite the progress already achieved, profit contribution of the VAR business is still small.
- 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

- In the current ramp-up phase there is still considerable potential for margin growth in the VAR business; if the present trends continue, an above-average profit development should be possible in the next few years.
- The conversion of the pricing model could additionally fuel the growth in the trade business. There is a high potential for that in the reduction of the still widespread under-licensing on the customers' side.
- After the strong first half-year, M+M could well be able to exceed this year's targets.
- The foreseeable profit growth should allow a steady and considerable increase in dividends.

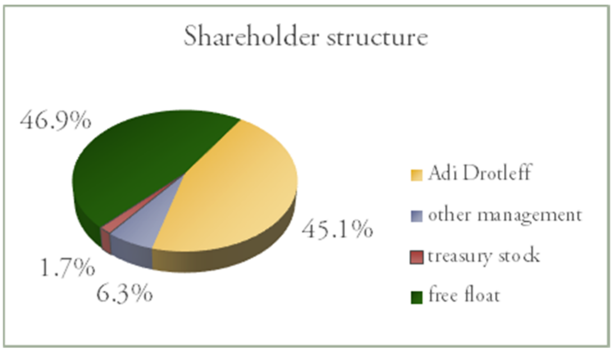
Threats

- High personnel intensity in the VAR business causes a high extent of utilization risk in economically weaker phases.
- The envisaged further margin increase in the VAR business 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 from 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/PDM/BIM solutions (Computer Aided Manufacturing, Product Data Management and Building Information Management), in which the company based in Wessling, Bavaria, is one of Europe's leading providers.



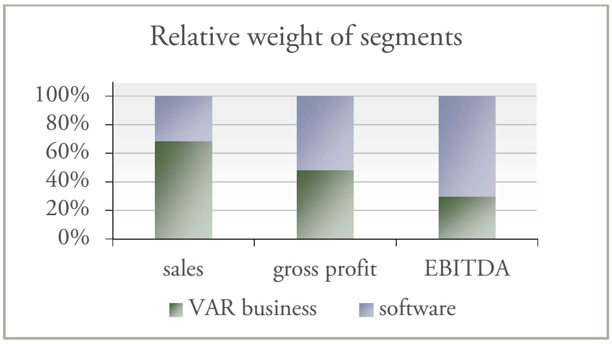
Source: Company

Founder continues to acquire shares

By far the largest block of shares (45.1 percent) is still in the hands of the founder Adi Drotleff, who has been both a member of the Executive Board and Chairman of the Board of Directors since the 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. A further 6.3 percent is held by the remaining management, the free float amounts to 46.9 percent. The M+M share has been listed on the stock exchange since 1997 and thus celebrated its 20th anniversary last year. It is listed in the m:access segment of the Munich Stock Exchange and in the Scale segment of the Frankfurt Stock Exchange.

Clear-cut 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 814 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.



Source: Company

Two business segments

Since 2012, the business model is based on two segments: the VAR business, i.e. the direct distribution of Autodesk software to end customers, on the one hand, and the development and distribution of own software on the other. In terms of sales, business is dominated by the first segment, which generated almost 70 percent of consolidated sales last year with EUR 110.4 m. However, at the level of gross profit, the two segments are equally important, but the software segment still accounts for more than two thirds of the group EBITDA.

Highly profitable software business

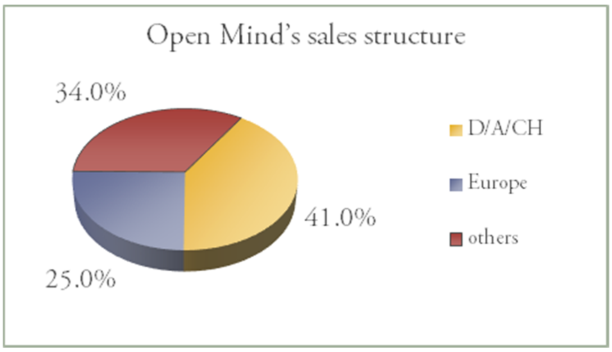
The different segment weights reflect considerable differences in profitability. While the VAR business generated a gross margin of 37.6 percent and an EBITDA margin of 5.9 percent in the first half of 2018, in the software segment these figures are 97.8 and 28.3 percent respectively. They reflect the continuous and successful development of the three subsidiaries included in this segment, Open Mind, DATAflor and M+M Mechatronik, 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 EUR 43 million or 85 percent of segment sales. The product, worth between EUR 15,000 and 100,000 per workstation, allows the customer to perform 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 user-friendly 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 optimized for the needs of design engineers. As a central unique selling point, however, M+M emphasizes especially its own cutting-edge 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 270 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. Last year, Open Mind generated about EUR 14.5 m overseas.



Source: Company

The opportunity of electromobility

In addition to Open Mind's CAM software, the software segment includes two other product lines: a solution for gardening and landscaping called DATAflor and ecscad, a software for the mapping of extensive electric circuit diagrams. This product, originally developed by M+M as a supplement to the standard Autodesk program and subsequently sold to the Americans, was licensed back in 2014. The software enables efficient planning and management of very large electrical projects with thousands of individual sheets, such as can be found with railways, plant manufacturers or power suppliers. Unlike many conventional CAD products, the software is tailored exactly to the mapping of the extremely complex circuit diagrams of such projects. However, as the market for this kind of software is mainly in German-speaking countries, Autodesk had offered to M+M to license it back; at the same time, M+M took over software development and the support for more than 1,000 ecscad customers. Since then, the company has further developed the product in the subsidiary M+M Mechatronik and has opened it up for applications outside the Autodesk world. The management thinks that it has excellent prospects, especially given the increasing importance of electromobility.

DATAflor leading in its niche

DATAflor, a software that helps landscape architects 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. The scope of application was recently extended to earthworks and civil engineering.

VAR business still ramping up

While the success and high profitability of the software segment is based on long-established and proven products and customer relations, the VAR business is still in the ramp-up phase. It is true that this segment’s core business – the distribution of the Autodesk software – is the nucleus and the origin of the M+M Group; however, until 2009, M+M had confined itself to wholesale distribution. Due to the narrow margin potential and uncertain future prospects, this model was abandoned from 2009 on in favour of direct selling to end customers. The transition of the business model took place in two stages. In a first step, an extensive market coverage was achieved in 2009 and 2010 by converting the company's own locations and taking over several former customers in the DACH region; the sale of the European distribution business and the transformation of foreign subsidiaries into VARs followed at the end of 2011.

High service share

The transition of the business model has allowed M+M to extend the value chain and to unlock new income sources by collecting the retail markup and by offering services like installation, configuration, maintenance and training courses. In recent years, the courses covering the new opportunities in data management offered by the new PDM and BIM software (Product Data Management and Building Information Management) have turned out to be especially dynamic and promising. 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, comprising up to several man-years, include usually the implementation and the customized adaptation and extension of the Autodesk software, the configuration of adequate data models and the migration of data sets. Altogether, the share of the own services and the own software components (additional or sector-specific modules for the standard Autodesk software) amounted last year to 65 percent of the segment’s gross profit.

Strong market presence

This transformation allowed M+M to develop in just a few years from a leading European Autodesk distributor into the largest European Autodesk VAR, with more than 450 employees in around 50 locations in Europe. However, the transition process outside the DACH region is still in progress, which is why the segment is still operating well below management's long-term EBITDA margin target of 10 percent (in the first half-year it was 5.9 percent).

Broad industry focus

While its size makes M+M nearly indispensable for Autodesk as a European partner on the purchase side, on the customer side the Bavarians pursue a directly opposed strategy in the form of a very high diversification. This applies both with regard to the industry structure and – even more – with regard to the share of sales generated with the more than 25,000 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

CAD world highly dynamic

In the early 1980s, the CAD pioneer and M+M partner Autodesk was one of the creators of the CAD market that has since developed into a global billion-dollar market. The sector is undergoing a very dynamic change in terms of content as well. While in the early years 2D products for the use in architecture and building industry were most important, the CAD world is now dominated by 3D applications that have become indispensable in other areas as well, such as mechanical and plant engineering, the automation industry or consumer goods industry. The scope of services of the software has also been massively expanded, which means that the overlaps with other areas such as ERP software are becoming increasingly greater. An important industry trend is, for example, the offer of software solutions that enable fully software-supported optimization of the entire product life cycle (PLM), from planning, through construction, 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, Jon Peddie Research (JPR) estimates the market (in its narrower CAD definition) at about USD 8 billion, with America accounting for the largest share and the highest growth rates being recorded in Asia. Overall, the analysts expect a constantly dynamic market growth over the next few years, estimated at up to 7 percent p.a. Accordingly, P&S Market Research expects a global market volume of USD 11.1 billion in 2023.

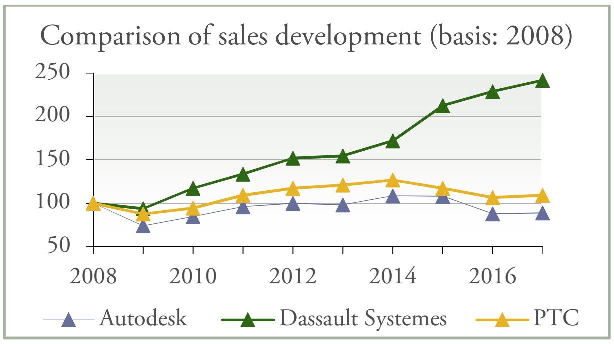
Intense competition

However, the market is considered highly competitive. According to JPR's assessment, the narrower market is still led by Autodesk (measured by installed base), followed by Dassault Systemes, Siemens PLM Software, PTC and Bentley Systems. Autodesk is particularly strong in the mid-price segment, while the premium segment, which is defined primarily by comprehensive PLM functionalities, is dominated by Dassault Systemes. Another leading player in this area is Siemens PLM. The Munich-based 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.

Autodesk falling behind

In terms of sales, Autodesk has long since lost market leadership to Dassault Systemes, with the gap recently increasing significantly. One of the reasons is the accelerated transformation of the business model towards cloud software and subscription, which involves lower license revenues in the transition period. After the sale of one-time licenses was discontinued in favour of the subscription model two years ago, Autodesk sales for 2016 fell by 19 percent to just over USD 2 billion. Last year, sales growth was only moderate at only +1.3 percent as well, which was, however, partly the result of the frictions caused by the conversion. Meanwhile, the French global leader, which still pursues the model of perpetual licenses, has continued to grow during the last two years, increasing sales by 7.6

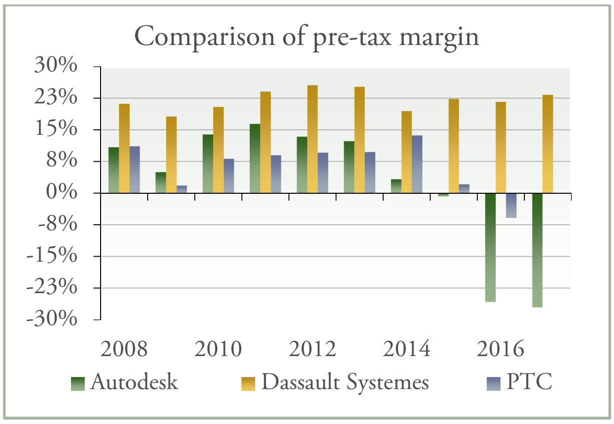
and 5.6 percent respectively to recently EUR 3.2 billion. Thus, a trend that was visible ever since the financial crisis has continued. While Autodesk's sales are lower than in 2008, the French have increased their revenue by almost 150 percent over the same period. Dassault Systemes benefited both from 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. In the last two years, investments in the acquisition of new subsidiaries totalled over EUR 600 m.



Source: Autodesk, Dassault Systemes and PTC

Large differences in profitability

The weak sales development has been reflected in Autodesk's profits, which slipped into the red for the first time in 2015. The slump in sales in 2016 caused the deficit to increase sharply, with a negative pre-tax margin of 25.8 percent. Last year did not bring a turnaround either; rather, the pre-tax margin deteriorated further to -27.1 percent. The situation was similar for PTC. Like Autodesk, the Americans have converted their licensing model to rental software and, as a result, have generated declining sales in 2015 and 2016, which increased only moderately again in 2017. The earnings in the last two years were negative as well, even though the pre-tax margin of -5.9 percent and -0.1 percent respectively was significantly smaller. In contrast, Dassault Systemes was able to further expand its high margin level and, at 23.3 percent, achieved the highest figure since 2013. An important reason for Autodesk's weak growth and earnings is the realignment of the business model, because the high-margin license revenues in the new model are not generated at once, but are spread over the contract duration. Moreover, the development of new products, which is reflected in rising installation figures, has initially also a negative impact on earnings. Thus, the ratio of R&D expenditure has increased significantly in recent years. After 29 percent three years ago, it was at 37 percent in the last financial year (partly due to the decline in sales).



Source: Autodesk, Dassault Systemes and PTC

Autodesk with strong market position

In spite of this relatively weak growth and profits, Autodesk is still holding 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

Whether Autodesk will be again more successful in adequately converting its strong market position into rising sales and higher profitability remains to be seen after the conclusion of the transition phase. Subscription revenues doubled to USD 0.9 billion in the last financial year, but this was overshadowed by the decline in license and maintenance revenues. In the first quarter of the current financial year (February to April), subscription revenues increased again by more than 100 percent (to USD 350 m), enabling revenue growth of 23.5 percent. Although the quarterly result remained negative, the loss was halved to USD -64 m (before taxes). In principle, Autodesk expects growth of 20 percent p.a. and improved margins for the new model. An important factor here is the reduction of the still widespread under-licensing on the customer side, which is much easier to identify in the rental model.

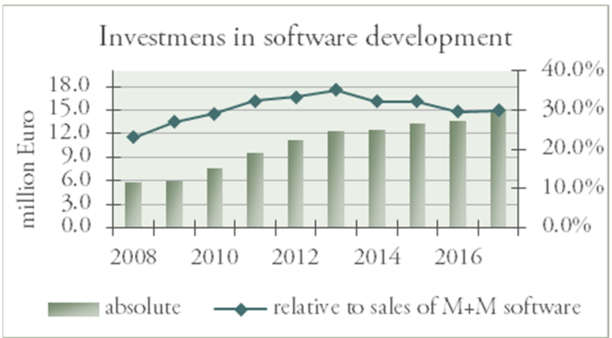
BIM as an important market driver

Given its strong position in the AEC field (architecture/engineering/construction), 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 shows currently a keen interest in such BIM (Building Data Management) 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 mass and a time axis. While the fourth component, mass, is already included in most BIM offers, the time dimension is currently only used in the high-end segment. According to market experts, the further spread of these functions could therefore be as much a driving factor as the transition from 2D to 3D had been at the time.

Strategy

Technological leadership in the CAM sector

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, which Open Mind offers 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 (capitalized only 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 32 percent over the past five years. Last year, efforts were further intensified by 10 percent, bringing the ratio of development expenses to segment sales to 29.9 percent - the first rise in four years.



Source: Company;

Diversification with two segments

M+M's positioning with two segments that have, although thematically related, developed very differently offers a positive diversification effect, without which the change of business model in Autodesk trade, for one thing, would have been much more difficult. Even if, according to the company, the synergies between the two segments are limited, the two-pillar strategy has tangible advantages for M+M. Firstly, the CAM business provides an important diversification effect both in terms of content (outside the Autodesk world) and geography (strong non-European business) and secondly, it noticeably increases the profitability of the Group as a whole.

Increasing market share

The focus on Autodesk's products means that the development 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 increased its VAR sales by almost 30 percent to EUR 110.4 m, while Autodesk sales in the geographical segment EMEA (Europe, Middle East and Africa) fell by 6.1 percent to USD 815.4 m.

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 centralization of some important functions such as marketing or hotline support, M+M is able to realize substantial cost benefits. At the same time, the consistent label and the comprehensive presence facilitate the addressing and support of larger customers.

Extending the value chain

One important aspect in M+M's strategy to increase its share in the Autodesk business is the conversion of the business model from distribution – strong in terms of sales but comparatively weak with regard to profit – to VAR business, which was initiated 2009. M+M has thus decisively extended its value chain within the market. With additional services such as training courses, support, maintenance, implementation and individual adjustment as well as the collection of the retail markup, the management now sees a perspective potential for an EBITDA margin of up to 10 percent - about three times as much as in the distribution business.

Reducing dependence on Autodesk

By setting up and expanding the VAR business, M+M was also able to reduce its dependence on Autodesk; the share of trading business, i.e. Autodesk licenses, in the Group's gross profit had sank to below 17 percent by 2017. This is also due to the fact that M+M's VAR offices are increasingly perceived as manufacturer-independent CAD specialists and are engaged for comprehensive projects that use third-party software as well.

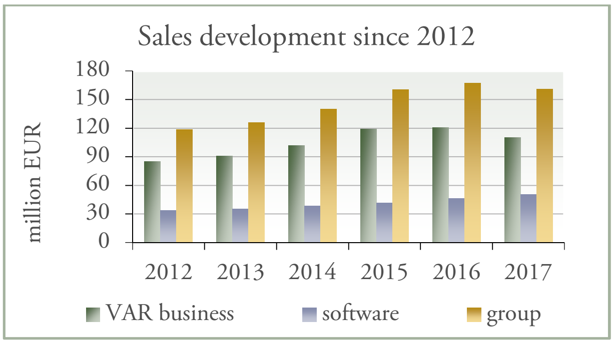
Own software and solutions as unique selling point

In addition, the two Autodesk-based software products DATAflor and ecscad, with which M+M offers custom-fit solutions for a certain sector or for certain demands (highly complex circuit diagrams) are important differentiating features in competition with other Autodesk partners. In particular ecscad 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 industry-specific requirements. These solutions then demonstrate the degree of expertise to the industries addressed, facilitate sales, increase productivity in the projects and facilitate their calculability.

Figures

Sales growth paused

After steady and dynamic sales growth in previous years, the change of license model at Autodesk in the last two years caused some friction in the trading business with Autodesk licenses, which had a dampening effect on sales in the VAR and consequently also on Group sales. In 2016, the growth of VAR revenues had fallen to only 1.6 percent and assumed a negative value of -8.6 percent (to EUR 110.4 m) last year. As a result, Group sales shrank for the first time since the sale of the distribution business in 2011, falling by 3.7 percent to EUR 160.9 m.



Source: Company

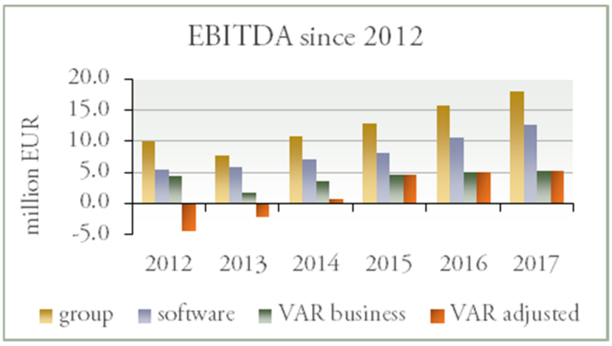
Gross profit at record level

Since the trading business is M+M's division with the lowest margins, the dampening effect of the license model change on gross profit growth remained moderate. Although this central control variable declined by 1.8 percent in the VAR business, at Group level the steady and dynamic upward trend in gross profit continued in 2017 with growth of 3.7 percent to EUR 94.8 m. Thus, the core advantage of the new business model (VAR instead of wholesale distribution), the extended value chain, has again paid off. In contrast to sales, the decline in gross profit following the change was only moderate and by 2014 had already exceeded the record level of 2011 (EUR 70.0 m) - despite the still considerably lower sales. The gross profit margin, whose figures ranged usually below 30 percent until 2008, reached 59.0 percent last year.

Source: Company

Increasing profitability

The sales growth and the rising gross margin have allowed a very positive EBITDA development in recent years, even if only at a second glance. While the operating result of the software segment continued to grow stronger than the segment's sales, in the VAR segment the profit situation was rather more erratic due to considerable one-off effects. There were, on the one hand, the ramp-up losses of the new business model. On the other, there was also the high profit from the sale of the European Autodesk distribution business in the autumn of 2011 that M+M used to bolster up the results in the VAR business until 2014. However, as the effect became continually smaller, it obscured the achieved operating progress. Adjusted for these earnings, however, the VAR business continuously increased its EBITDA from EUR -4.5 m in 2012 to EUR 5.3 m in the last financial year. Group EBITDA improved in the same period from just under EUR 10 m to EUR 18.0 m.



Source: Company;

Decreasing amortization

Another consequence of the business model change was the increased amortizations on the purchase price components (customer bases, contracts, etc.) of the 20 acquisitions that helped achieve the transition primarily in German-speaking countries. These amortizations have in the meantime burdened the VAR EBIT by up to EUR 2.0 m p.a. When they had largely expired last year to a mere EUR 0.4 m, the VAR business was able to increase EBIT from only EUR 1.3 m in 2015 to EUR 3.8 m. In comparison, the software segment has improved its EBIT continuously in step with the EBITDA and has achieved a margin before taxes and interest of more than 20 percent for the first time in 2016. In the last year, a further improvement to 22.7 percent was achieved. As a result, Group EBIT, still generated largely in the software segment, improved last year by more than 20 percent to EUR 15.2 m, equivalent to an EBIT margin of 9.5 percent.

Business figures	FY 2016	FY 2017	*Change*
Sales	167.07	160.85	*-3.7%*
VAR business	120.83	110.39	*-8.6%*
Software	46.24	50.47	*+9.1%*
Gross profit	91.43	94.82	*+3.7%*
VAR business	46.70	45.88	*-1.8%*
Software	44.74	48.94	*+9.4%*
Gross margin	*54.7%*	*59.0%*	
EBITDA	15.76	18.04	*+14.5%*
VAR business	5.09	5.35	*+5.0%*
Software	10.67	12.69	*+19.0%*
EBITDA margin	*9.4%*	*11.2%*	
EBIT	12.49	15.21	*+21.8%*
VAR business	3.07	3.76	*+22.7%*
Software	9.42	11.45	*+21.5%*
EBIT margin	*7.5%*	*9.5%*	
Pre-tax result	11.12	13.59	*+22.3%*
Pre-tax margin	*6.7%*	*8.5%*	
Net profit	6.59	8.55	*+29.8%*
Net margin	*3.9%*	*5.3%*	

Considerable increase in net profit and dividend

In line with EBIT, earnings before taxes increased in 2017 (+22 percent to EUR 13.6 m) as well, while net profit after taxes and minority interests rose by almost 30 percent to EUR 8.6 m thanks to a slightly improved tax rate and the decline in the relative share of minority interests. On this basis, M+M raised the dividend (already raised by a quarter to 25 cents in 2015 and by 40 percent to 35 cents per share in 2016, after it had remained stable at 20 cents for four years) by a further 40 percent to 50 cents per share.

First half-year better than expected

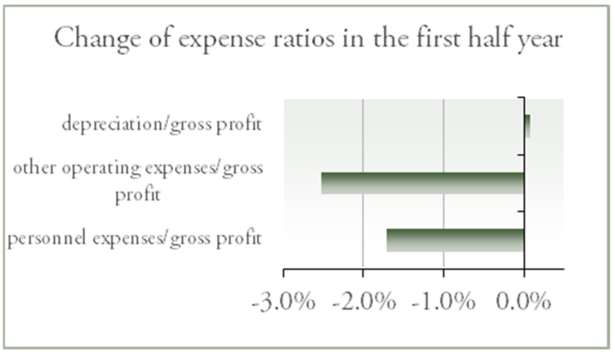
The dampening effect of Autodesk's pricing model conversion had already expired in the fourth quarter of 2017, which is why the first half of 2018 has now shown the operating dynamics largely free of external disturbing factors. Overall, Group sales rose by 13 percent to EUR 94.5 m, with the VAR business being this time responsible to an above-average extent with a growth of 13.9 percent. However, the software segment is also continuing to grow with uninterrupted momentum and has increased its revenues by 10.8 percent.

Lower gross profit margin

The renewed dynamics in the Autodesk license trading business, which benefited additionally in the second quarter from numerous maintenance contract extensions in the run-up to a price increase announced by Autodesk, led to a shift in the sales mix towards lower-margin products. Accordingly, the gross margin in the VAR segment fell by 2.9 percentage points to 37.6 percent in the first half of the year, while in the software segment it increased further to 97.8 percent (after 97.3 percent). At Group level, the gross margin also declined slightly (55.5 percent after 57.7 percent in the previous year), which is why gross profit growth was slightly below sales growth at 8.7 percent.

Cost discipline continues

As in the previous year, M+M was able to convert gross profit growth into above-average profit growth. This was once again due in part to a sustained cost discipline, reflected in a disproportionately low increase in personnel expenses compared to gross profit. In the VAR segment, the increase was only 0.4 percent. Personnel expenses in the software segment increased slightly more, but this is partly attributable to a special effect in connection with a development project completed at the end of the year. The salaries of the employees involved, which were capitalized last year as development work, have now been expensed in full. For the year as a whole, the company estimates the effect at around EUR 1.4 m. Despite this effect, however, the increase in personnel expenses at Group level was limited to 5.8 percent. As a result, the personnel expense ratio (in relation to gross profit) decreased by 1.7 percentage points to 61.7 percent. The development of other operating expenses had an even stronger positive margin effect. Those were reduced in absolute terms as well (-4.3 percent), which is why the corresponding cost/income ratio fell by 2.5 percentage points to 18.6 percent.



Source: Company

Double-digit EBIT margin for the first time

This strict cost discipline paid off in an increase in the EBITDA margin from 10.9 to 12.5 percent. In absolute figures, EBITDA thus increased at a considerably higher rate than gross profit, exceeding the previous year's figure by almost 30 percent with EUR 11.8 m. The improvement in profits was particularly strong in the VAR business, whose EBITDA increased by 41 percent. However, the software segment also increased again at a disproportionately high rate with +24 percent. In absolute figures, profit growth in the software segment was even higher than in the VAR business, so that the gap between the two segments widened further. Although depreciation and amortization increased by more than 11 percent due to the completion of the development project mentioned above, EBIT increased even slightly more strongly than EBITDA (+32.6 percent). Here as well, growth in the VAR business was significantly stronger at 57.1 percent. Nevertheless, the software segment is still significantly more profitable. Its EBIT margin improved again by 2.8 percentage points to 25.6 percent. The VAR business generated an EBIT margin of 4.7 percent in the first six months of 2018, an improvement by 1.3 percentage points. The combination of the two segments results in a Group EBIT margin of 10.9 percent, which means that M+M has advanced into the double-digit range for the first time in a first half-year.

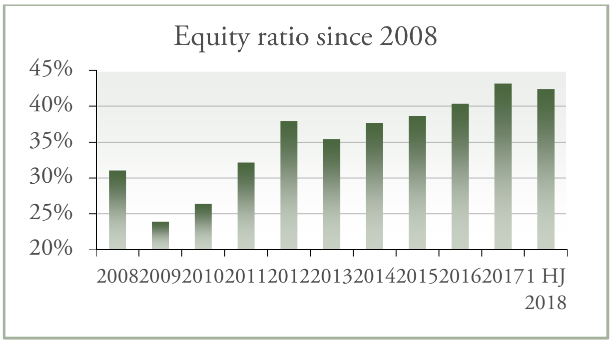
Business figures	**HY 2017**	**HY 2018**	***Change***
Sales	83.60	94.46	*+13.0%*
VAR business	58.37	66.50	*+13.9%*
Software	25.22	27.95	*+10.8%*
Gross profit	48.20	52.39	*+8.7%*
VAR business	23.67	25.04	*+5.8%*
Software	24.54	27.35	*+11.5%*
Gross margin	*57.7%*	*55.5%*	
EBITDA	9.13	11.81	*+29.4%*
VAR business	2.77	3.91	*+41.1%*
Software	6.35	7.90	*+24.3%*
EBITDA margin	*10.9%*	*12.5%*	
EBIT	7.75	10.28	*+32.6%*
VAR business	1.99	3.12	*+57.1%*
Software	5.77	7.16	*+24.2%*
EBIT margin	*9.3%*	*10.9%*	
Pre-tax result	7.13	9.60	*+34.6%*
Pre-tax margin	*8.5%*	*10.2%*	
Net profit	4.45	6.09	*+36.9%*
Net margin	*5.3%*	*6.4%*	

Half-year result grows by more than a third

Since the (negative) financial result rose only disproportionately to EBIT growth and, as the minority interests' share of profits declined, profit growth at the level of net earnings after taxes and minorities was even stronger with almost 37 percent to EUR 6.1 m.

Cash flows at a high level

The high profitability of M+M's business model is also reflected in the operating cash flows. These were increased by 17 percent to almost EUR 9 m, which means that 9.5 percent of sales were reported as cash surplus. Since at the same time investments fell considerably as a result of the completion of the development project mentioned above and the outflow of funds from investments almost halved to EUR 0.9 m, free cash flows improved by more than a third to EUR 8.1 m. After taking into account the cash outflow from financing activities of EUR 5.0 m (primarily for the dividend payment for 2017), liquidity increased by EUR 3.2 m to EUR 10.9 m in the first six months of 2018.



Source: Company

Excellent balance sheet situation

The combination of the half-year profit, the dividend payment and the partial sale of treasury shares (as part of the stock dividend offered as an alternative to the cash dividend) resulted in total equity of EUR 44.1 m, unchanged on the beginning of the year. Combined with the slightly higher balance sheet total of EUR 104.0 m, this corresponds to a very solid equity ratio of 42.4 percent. The debt position also remains comfortable. Even including the secured real estate loan, the ratio of net financial debt to last year's EBITDA was only 0.8 at the end of June.

Margin forecasts raised

Against the background of the surprisingly strong (in terms of profit) first half of the year, M+M has confirmed its forecast for the current year and thinks that the target of increasing EBITDA to EUR 22 to 23 m and net income to 67 to 73 cents per share is well achievable. The forecast for the next few years was also confirmed. On the gross profit level, M+M intends to continue to grow at around 10 percent p.a., EBITDA is to increase by EUR 4 to 5 m per year and net profit by 18 to 24 cents per share. Accordingly, the dividend is to increase by 15 to 20 cents per year. By 2020, M+M intends to improve the profit to over EUR 1 per share, with the growth likely to be achieved mainly by the VAR business, whose EBITDA contribution is by then expected to catch up with that of the software segment. However, in view of the uninterrupted high growth and profit momentum in the software segment, the company has recently "admitted" that the alignment process could take a little longer. Due to the resulting larger share of the higher-margin software business and against the background of the surprisingly strong cost elasticity in the VAR business, which enabled the company to achieve a considerable increase in profits last year as well despite the decline in gross profit in the segment, M+M now sees the medium-term potential for Group margins above 16 percent (for EBITDA), whereas previously 15 percent were stated as the limit.

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. 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.

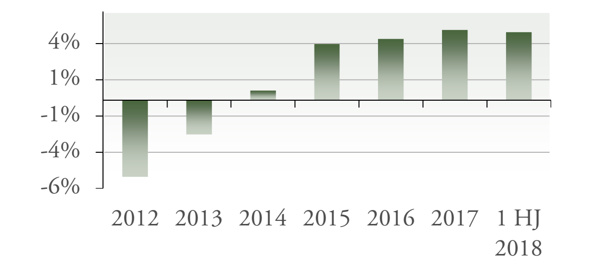
Distinctive continuity

M+M is characterized 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 history of more than 30 years, the company is still led by its founder, Mr. Adi Drotleff, who is also the largest single shareholder with 45.1 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.

Restructuring of the business model successful

The only major change M+M has made in recent years was the conversion of distribution level from wholesale distribution to end-customer sales as a value added reseller (VAR) initiated in 2009. M+M was able to implement this large-scale change in the business model, involving 20 takeovers in Germany and abroad, without major frictions and largely according to the long-standing schedule. We regard this success as evidence for the expertise of the entire management team and infer from this that the second phase of the transformation – to reach target profitability with the new segment – will be similarly successful. As illustrated in the figure below, M+M has made considerable progress in this respect in recent years.

Operating EBITDA margin in VAR business



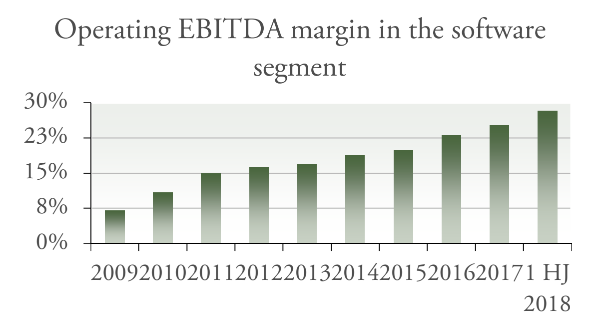
Source: Company

High potential for profit increase

Especially the expected gradual improvement in profitability in the VAR business leads to a considerable profit fantasy. In the first half of the year, the segment's EBITDA margin was 5.9 percent, while M+M management is aiming for around 10 percent in the long term - and had used precisely this earnings potential to justify the switch to the VAR business. The last five financial years, in which the segment's operating margin (excluding income from the sale of the distribution business) improved from -5.3% to 4.8%, have shown that this progress can be achieved. The trend continued in the first half of the year as well. According to M+M, important drivers for this continuous improvement are, on the operating level, growth-related economies of scale, a growing number of prefabricated extensions and industry modules and increasing routine of the processes within the new segment.

Highly profitable software business

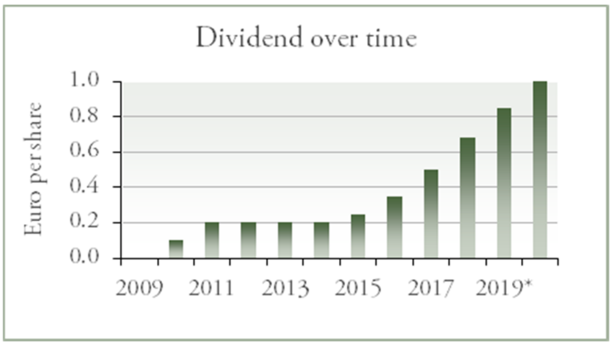
The last one and a half years have shown that the already highly profitable software business also offers further scope for above-average profit increases. After improving by a remarkable 5.3 percentage points in the last two financial years, the segment's EBITDA margin rose by a further 3.1 percentage points year-on-year to 28.3 percent in the first half of 2018. However, due to growth-related scale effects in average overhead costs and development expenses, there is still further upside potential for the margin in this segment as well.



Source: Company

Reliable forecasts

In recent years, M+M has reliably fulfilled its own forecasts, achieving especially the announced profit increases. We consider therefore the current forecast, which assumes further profit growth of up to 40 percent for the current year and a steady further increase in profits for the following years, to be very trustworthy at the upper end as well. The achievement of the target would correspond to earnings per share of more than EUR 1 for 2020, doubling the profit compared to 2017.



Source: Company, from 2018 on estimate SMC-Research;

Attractive dividend policy

M+M converts the profit increase into high dividend growth. After the payout was kept constant at 20 cents per share between 2011 and 2014, shareholders were able to look forward to an increase of 25 and 40 percent respectively in the two following years. The dividend for 2017 was again raised considerably. At EUR 0.50 per share, it was 40 percent higher than in the previous year. If targets are achieved at the upper end of the forecast range, which we now assume, the dividend would increase by more than 30 percent this year as well. At EUR 0.68 per share, this would currently correspond to a dividend yield of 2.5 percent. In the current low-interest environment, the M+M share offers thus an attractive dividend yield as well as a comparatively reliable prospect of further increases in dividends over time, which the company puts at 15 to 20 cents per year.

DCF Valuation

Margin estimates raised

In terms of profits, the half-year figures have exceeded our expectations. As in the previous year, M+M has succeeded in increasing its results at a significantly higher rate than the growth in gross profit and has thus once again demonstrated the earnings potential of the business model. With regard to the current year, we have therefore slightly raised our margin estimate and now expect EBITDA of EUR 23.5 m, slightly above the company's forecast. So far we had assumed EUR 22.6 m. This adjustment, which we implemented in particular by reducing the ratio of other operating expenses, will also have an effect on subsequent years. Overall, we have modelled the margin path somewhat steeper, so that the EBITDA margin at the end of the detailed forecast period in 2025 is now, at 16.1 percent, within the target range announced by M+M ("above 16 percent"). Hitherto, we had expected one percentage point less.

Top line unchanged

In contrast, we have left both sales and gross profit estimates unchanged. Consequently, we continue to assume that gross profit will rise to EUR 105.4 m this year and then grow by almost 10 percent p.a. to over EUR 200 m in 2025. We have also left the subsequent "perpetual" growth, with which we determine the terminal value, unchanged at 1 percent p.a. As before, with regard to the EBIT margin, we are working with a 25 percent discount on the target EBIT margin for 2025 in order to determine the terminal value. The table on this page shows the model business development resulting from our assumptions for the years 2018 to 2025; 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 the model assumptions with WACC (Weighted Average

m Euro	12 2018	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025
Sales	177.0	195.6	216.1	238.8	263.9	291.6	322.2	356.0
Sales growth		10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%
EBIT margin	11.5%	12.1%	12.8%	13.5%	14.1%	14.7%	15.0%	15.3%
EBIT	**20.3**	**23.6**	**27.6**	**32.1**	**37.1**	**42.7**	**48.5**	**54.6**
Tax rate	34.0%	33.5%	33.0%	32.5%	32.0%	31.5%	31.0%	30.5%
Adjusted tax payments	6.9	7.9	9.1	10.4	11.9	13.5	15.0	16.7
NOPAT	**13.4**	**15.7**	**18.5**	**21.7**	**25.3**	**29.3**	**33.4**	**38.0**
+ Depreciation & Amortisation	3.2	3.1	2.8	2.7	2.6	2.6	2.6	2.6
+ 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	16.6	18.8	21.3	24.4	27.9	31.9	36.0	40.6
- Increase Net Working Capital	1.1	1.3	1.4	1.4	1.5	1.6	1.6	1.7
- Investments in fixed assets	-1.8	-1.9	-2.0	-2.0	-2.1	-2.3	-2.4	-2.5
Free Cash Flows	**15.9**	**18.2**	**20.7**	**23.8**	**27.2**	**31.2**	**35.3**	**39.8**

Cost of Capital). The interest rate on borrowed capital is set at 4.0 percent, and the cost of equity is determined using the Capital Asset Pricing Model (CAPM). Our risk-free interest rate is – at 2.5 percent – the average value of German current yield, the market risk premium of 5.4 percent is set to an average value adequate for Germany (source: Pablo Fernandez, Javier Aguirreamalloa and Luis Corres: Market risk premium used in 82 countries in 2012: a survey with 7,192 answers). Combined with a beta of 1.2 and a target debt ratio of 45 percent, this results in a WACC rate of 6.2 percent. In view of the high payout ratio, with which M+M is considerably slowing down deleveraging, we have increased the target debt ratio by 5 percentage points in contrast to previous assumptions, resulting in a slight reduction in WACC.

Target price: EUR 30.80 per share

In our favourite scenario (perpetual growth 1.0 percent, WACC 6.2 percent), these assumptions add up to a market value of equity of EUR 504.4 m or EUR 30.76 per share. From this we derive a new price target of EUR 30.80. The significant increase compared to the last update (EUR 26.70) is due in almost equal parts to the above-mentioned increase of the assumed margins and the reduction in the WACC. As the M+M share has almost precisely reached our previous price target, the new price target now implies further upside potential of just over 10 percent.

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 our opinion, the greatest uncertainty is still – in spite of the recently achieved progress – the targeted margin improvement in the VAR business. This aspect has considerable impact on our valuation, and the managerial challenge involved is substantial as well. Overall, we think it therefore 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%**
5.1%	47.50	42.30	38.36	35.26	32.77
5.6%	40.95	37.14	34.15	31.74	29.76
6.1%	35.97	33.08	**30.76**	28.85	27.25
6.6%	32.05	29.81	27.97	26.42	25.11
7.1%	28.90	27.12	25.63	24.36	23.27

Sensitivity analysis

For our sensitivity analysis, we have varied the input parameters WACC and perpetual growth. The calculated fair value lies between EUR 23.27 per share in the most restrictive case (WACC of 7.1 percent and perpetual growth of 0 percent) and EUR 47.50 in the most optimistic case.

Conclusion

Mensch und Maschine's business model is currently working with clockwork precision. With an exceptional reliability, the specialist for CAD and CAM software increases its gross profit and constantly improves profitability. The company is thus consistently implementing what the management has been announcing for years.

This series of successes has also continued in the first half of the year, when M+M put its sales back on growth course after last year's externally induced sales decline. However, we consider it even more important that the expansion has once again been accompanied by a significant increase in margins. As a result, M+M succeeded for the first time in the company's history in reporting a double-digit EBIT and pre-tax margin on a half-year basis.

Against the background of the half-year results, M+M has said that its forecast for the year was well attainable and confirmed it accordingly. However, we have raised our margin estimates both for this year and for the future and have thus reacted to the progress in profitability that was faster than we had previously assumed.

On this basis, we now see the fair value at EUR 30.80 and consequently state further price potential for the share, and we confirm therefore our previous rating "Buy".

Annex I: Balance sheet and P&L estimation

Balance sheet estimation

m Euro	12 2017	12 2018	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025
ASSETS									
I. Total non-current	63.0	61.6	60.3	59.5	58.9	58.4	58.0	57.8	57.7
1. Intangible assets	43.8	42.7	41.7	40.9	40.2	39.6	39.0	38.5	38.1
2. Tangible assets	13.2	12.9	12.7	12.6	12.6	12.8	13.0	13.3	13.6
II. Total current assets	38.8	41.7	44.7	47.4	49.8	57.7	67.4	77.6	88.7
LIABILITIES									
I. Equity	43.9	48.1	51.5	55.4	59.8	65.0	70.6	76.6	83.2
II. Accruals	9.4	10.3	11.1	12.0	12.9	13.7	14.6	15.5	16.4
III. Liabilities									
1. Long-term liabilities	23.2	18.6	14.7	10.2	5.1	3.9	3.9	3.9	3.9
2. Short-term liabilities	25.2	26.3	27.8	29.3	31.0	33.4	36.3	39.4	42.9
TOTAL	**101.8**	**103.3**	**105.0**	**106.9**	**108.7**	**116.0**	**125.4**	**135.4**	**146.4**

P&L estimation

m Euro	12 2017	12 2018	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025
Sales	160.9	177.0	195.6	216.1	238.8	263.9	291.6	322.2	356.0
Gross profit	94.8	105.4	115.8	127.3	139.9	153.8	169.0	185.7	204.1
EBITDA	18.0	23.5	26.7	30.4	34.8	39.8	45.4	51.1	57.2
EBIT	15.2	20.3	23.6	27.6	32.1	37.1	42.7	48.5	54.6
EBT	13.6	19.0	22.4	26.7	31.4	37.0	42.8	48.7	54.9
EAT (before minorities)	9.0	12.6	14.9	17.9	21.2	25.2	29.3	33.6	38.2
EAT	9.4	12.1	14.3	17.2	20.4	24.2	28.1	32.2	36.6
EPS	0.56	0.74	0.87	1.05	1.24	1.47	1.72	1.97	2.23

Annex II: Cash flows estimation and key figures

Cash flows estimation

m Euro	12 2017	12 2018	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025
CF operating	15.2	16.9	19.3	22.0	25.3	29.3	33.5	37.8	42.4
CF from investments	-3.8	-1.8	-1.9	-2.0	-2.0	-2.1	-2.3	-2.4	-2.5
CF financing	-10.1	-13.6	-15.9	-19.0	-22.6	-21.3	-23.7	-27.5	-31.5
Liquidity beginning of year.	6.4	7.7	9.2	10.7	11.8	12.4	18.3	25.8	33.7
Liquidity end of year	7.7	9.2	10.7	11.8	12.4	18.3	25.8	33.7	42.1

Key figures

m Euro	12 2017	12 2018	12 2019	12 2020	12 2021	12 2022	12 2023	12 2024	12 2025
Sales growth	-3.7%	10.0%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%
Gross profit growth	3.7%	11.2%	9.8%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%
Gross margin	59.0%	59.6%	59.2%	58.9%	58.6%	58.3%	58.0%	57.6%	57.3%
EBITDA margin	11.2%	13.3%	13.6%	14.1%	14.6%	15.1%	15.6%	15.8%	16.1%
EBIT margin	9.5%	11.5%	12.1%	12.8%	13.5%	14.1%	14.7%	15.0%	15.3%
EBT margin	8.5%	10.8%	11.4%	12.4%	13.2%	14.0%	14.7%	15.1%	15.4%
Net margin (after minorities)	5.9%	6.8%	7.3%	8.0%	8.5%	9.2%	9.7%	10.0%	10.3%

Disclaimer

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

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II) Erstellung und Aktualisierung

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 30.07.2018 at 8:10 and published on 30.07.2018 at 8:40.

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Date	Rating	Target price	Conflict of interests
24.04.2018	Buy	26,70 Euro	1), 3)
19.02.2018	Buy	25,90 Euro	1), 3), 4)
26.10.2017	Hold	21,80 Euro	1), 3), 4)
17.08.2017	Hold	19,80 Euro	1), 3), 4)
25.04.2017	Buy	17,80 Euro	1), 3), 4)
16.02.2017	Buy	16,20 Euro	1), 3)
27.10.2016	Buy	14,80 Euro	1), 3), 4)
29.07.2016	Hold	14,90 Euro	1), 3), 4)

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