A Work Project, presented as part of the requirements for the Award of a Master's degree in Finance from the Nova School of Business and Economics.

An investment proposal for ATOSS Software AG – Focus Area: Return Analysis

Ludwig Eugen Sieder

Work project carried out under the supervision of:

Inês Lopo de Carvalho

11/01/2023

Abstract

This paper aims to analyze ATOSS Software AG commercially and financially as a potential target for a private equity transaction. In the course of the analysis, it becomes apparent that ATOSS Software AG is an attractive target for a leveraged buyout as strategic and financial prospects appear to be promising. This part further focuses on the return analysis of ATOSS Software. The return analysis of the investment opportunity was conducted for both institutional investors and ATOSS management, and the MoMs are 4.4x and 19.1x, respectively.

Keywords: Private Equity, Leveraged Buyout, Internationalization, Cloud Transformation ATOSS Software AG, Return Anlysis

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

Table of Contents

1. Investment Committee Paper 1

1.1 The Company 1

1.2 The Workforce Management Market 2

1.3 Investment Rationale and Proposed Strategy 4

1.3.1 Investment Rationale 4

1.3.2 Proposed Strategy 6

1.4 Valuation, Transaction Structure, and LBO Returns 13

1.5 Exit strategy 14

2. Focus Area: Return Analysis – Ludwig Eugen Sieder – 48780 16

2.1 Overview 16

2.2 Returns 16

2.2.1 Investment Case 16

2.2.2 Bank Case 19

2.3 Exit Waterfall 19

2.3.1 Investment case 19

2.3.2 Bank Case 21

2.4 Value Creation 22

2.4.1 Investment Case 22

2.4.2 Bank Case 25

2.5 Conclusion 25

References 26

1. Investment Committee Paper

This section aims to summarize the investment proposal for ATOSS Software AG (ATOSS) which is further elaborated in the accompanying Investment Committee Paper about ATOSS.

1.1 The Company

ATOSS Software AG is a Munich, Germany-based developer and provider of workforce management software for any size of enterprise (ATOSS Software AG, 2022). The company was founded by Andreas F.J. Obereder in 1987 and operates its business from 15 offices across Europe. Since its foundation, the company has achieved several milestones, including the introduction of novel software solutions as well as going public at the Frankfurt Stock Exchange in 2000. Along the path, founder and CEO Andreas F.J. Obereder has succeeded in growing with technological advancements as well as market developments in a quickly transforming and disrupting software market. Due to ever evolving trends such as the digitalization of working process management as well as the tightening of regulatory requirements with regard to working time and hours, the purpose of ATOSS' business model is emerging to be as significant as never before (Gartner, 2022). Consequently, today, ATOSS has around 630 employees contributing to the realization of more than EUR 100m in revenue while achieving attractive profitability margins with an EBITDA margin of around 30% over the last four and a half years (ATOSS Software AG, 2022). Moreover, ATOSS serves more than 12,000 – mainly European – customers and assists them to efficiently manage their workforce to achieve higher productivity as well as employee satisfaction. Due to the long-lasting existence of ATOSS, the company's management accumulated significant market expertise in focus sectors such as manufacturing and retail, making the software solutions particularly appealing to companies in the respective market segments.

The product portfolio of ATOSS aims to offer workforce management solutions for any size of company, ranging from multinational concerns to small corporations with less than 50

employees (ATOSS Software AG, 2022). In particular, ATOSS' solutions encompass time recording, time and attendance management, and strategic workforce planning, allowing for performance measurement and demand-driven workforce scheduling. However, ATOSS' solutions not only serve the management of the company but also the employees as it allows employees to engage in duty scheduling from everywhere via self-service apps, designed and developed by ATOSS itself. Currently, most of the solutions offered by ATOSS are available as both on-premises and cloud solution, with customers increasingly opting for cloud solutions. Independent of the nature of the solutions, ATOSS' software is distinguished by being fully compliant with labor laws and other regulations, elevating ATOSS to a market-leading provider of pure workforce management solutions in the DACH region.

ATOSS' software offerings are complemented by hardware, such as access control and time recording terminals, as well as consulting services to support customers with implementing and integrating ATOSS' solutions in the existing IT landscape of the entity. Due to the increasing complexity of ERP software and the resulting increased effort to integrate IT systems and allow them to interact, ATOSS established value-driving partnerships with SAP and DATEV, making the integration of the solutions virtually seamless (ATOSS Software AG, 2022). However, implementation is mostly performed by ATOSS' IT consultants to ensure flawless functionality and compliance with regulations.

1.2 The Workforce Management Market

ATOSS operates in a subsegment of the HR-Tech Market – the market for Workforce Management solutions – that is mainly concerned with time and attendance management, workforce analytics as well as workforce scheduling (Gartner, 2022) (Connell & Caliò, 2021). As ATOSS currently realizes most of its revenue in the DACH region, market developments in this specific geographic area and adjacent regions are considered to determine its future success of operations.

The European Workforce Management (WFM) Market had an approximate size of EUR 940m in 2021, with the DACH region capturing the largest stake of around 29%, followed by the United Kingdom and France with stakes of around 21% and 12%, respectively (Statista, 2022). The DACH region is expected to be the third-fastest growing region in Europe with an expected CAGR of 8.2% from 2021 to 2027, dominated by the United Kingdom and the Nordics region with CAGRs of 9.4% and 8.4%, respectively (Mordor Intelligence, 2021) (Statista, 2022). The market is characterized by extraordinary historic growth and dominated by countries with tight regulatory requirements and a high average salary level as well as a large number of hourly-paid workers. The reason for this is that companies in highly regulated countries with high wages rely on the efficient use of their workforce to be able to defend their market position against competitors from low-wage regions such as Asia.

In Europe, the DACH region is expected to be particularly appealing for the WFM market due to tight regulatory requirements such as financial rewards for employees in production facilities that work close to areas characterized by extreme heat or other severe conditions. As the compliance with the regulatory environment is one of the most significant determinants for the success or failure of a WFM solution, domestic players have a competitive advantage over foreign tech-giants as the regulatory knowledge is mostly achieved by having long-lasting sectoral experience and well-maintained relationships to regulators and lobbyists (Gartner, 2022).

Due to the diversified product offering of ATOSS, it is competing against many software vendors of different sizes with competitors ranging from large enterprises such as the American Automatic Data Processing LLC to start-up-like ventures such as the German Aplano GmbH. However, ATOSS inherits a competitive advantage over most of its rivals as the seamless compatibility with SAP's ERP systems and the extensive expertise in end-markets combined

with solid distribution- and technology-partnerships make ATOSS’ solutions unique and valuable for most customers (ATOSS Software AG, 2022).

1.3 Investment Rationale and Proposed Strategy

1.3.1 Investment Rationale

ATOSS inherits many traits that qualify it as a very appealing target for a leveraged buyout. When observing the historical performance of both the firm and the European WFM market, it becomes apparent that the firm as well as the market achieved significantly higher growth than the European enterprise resource management (ERP) software market (Statista, 2022) (ATOSS Software AG, 2022). Until the end of 2019, ATOSS was only second place in the market when it came to the provision of pure WFM in the DACH region, dominated by its most significant competitor – Interflex Datensysteme GmbH – which is owned by Allegion, a security technology producer headquartered in Dublin (Witte, 2021). However, in 2020, ATOSS succeeded Interflex in revenue as ATOSS mastered to successfully accelerate their cloud transition and benefit from extraordinary growth in its newest product, Crewmeister. Since 2020, ATOSS is the pure WFM software market leader in the DACH region, making it a favorable target to take on strategic measures and further differentiate from the competition.

Furthermore, the nature of ATOSS’ products and the in-depth integration into clients IT landscape pose extremely high switching costs for customers, enhancing the sustainability of ATOSS’ superior position in the WFM market in the DACH region. This is further strengthened by the technological edge of ATOSS' products, including demand-driven shift scheduling and advanced HR analytics. The HR analytic features provide customers with superior data to improve their workforce performance, making ATOSS' products highly distinctive using artificial intelligence and machine learning mechanisms. However, as not every corporation has the need for highly advanced analytic tools, ATOSS offers all of its products in a modular structure which allows the customer to only opt for selected functions (ATOSS Software AG,

2022). While modular structures are not a novelty to the market, the comprehensive editor of ATOSS is, as it allows to pursue modularity without requiring any changes in the code of the application. These features lead to a practically infinite pool of addressable customers as products can be tailored to almost each individual need.

ATOSS' competitive market position in the DACH region accompanied by the superior technology and functionality of its products leaves room for considering an internationalization of the business. Historically, ATOSS has exhibited a weak performance in realizing foreign revenues (excl. Switzerland and Austria), repeatedly failing to achieve foreign revenue targets, resulting in downside adjustments of sales targets for coming years. The reason behind the failure of the internationalization strategy is relying on organic growth in foreign markets that can only be seized with excellent market expertise and specific regulatory knowledge. As ATOSS possesses neither of those, the only promising strategy for internationalizing operations would be M&A activity in attractive markets such as in the Nordics or United Kingdom, among others.

On top of ATOSS' company and product specifics, the target company has benefited from ongoing megatrends such as the rising cost of labor in Europe, tightening working regulations, and a digitalizing working environment. As ATOSS aims to improve the efficiency of workforce planning for its customers, the aforementioned mega trends are increasing the return on investments in WFM software for ATOSS' customers (ATOSS Software AG, 2022). Consequently, one can argue that these trends will further support ATOSS' growth path.

Aside from strategic considerations and favorable market dynamics, ATOSS shows attractive financial measures ranging from strong revenue growth to stable EBITDA margins to a strong cash conversion ratio over the past six years.

Starting off with revenue growth, it is to be highlighted that ATOSS has recognized double-digit revenue growth, accumulating to a CAGR of around 13% since 2015 (ATOSS Software

AG, 2022). The growth is mainly driven by the introduction of cloud-based solutions which not only encompass higher contract values but also significantly decrease costs by eventually establishing only one software version across all customers. However, as revenues from cloud-solutions only accounted for 30% of overall software revenues in 2021, significant upside potential is to be captured over the coming years.

As a result of the ongoing cloud transformation, EBITDA margin has recently advanced, stabilizing on a level slightly above 30% with decreased costs not hampering revenue growth. Strong revenue growth, stable costs and an asset-light business allow ATOSS to convert a significant share of its EBITDA into cash with cash conversion ratio adjusted for investing in non-core financial assets averaging at 68% over the past six and a half years.

Lastly, ATOSS follows a very conservative liquidity management to be able to cope with potential external shocks, impacting its ability to generate cash. This strategy may be good and cautious; however, the risk of weak cash generation has recently not materialized despite severe external shocks such as Covid-19 in 2020 or entering a recession in 2022. Therefore, a turnaround in liquidity management towards a more productive cash deployment could accelerate growth, increase return on equity and extend innovation power even more. Nevertheless, ATOSS' recent deployment of funds leads to a net cash position of EUR 6.4m with no debt instruments, resulting in a leverageable balance sheet perfectly suitable for a leveraged buyout transaction.

Overall, ATOSS appears to be a very attractive target as it brings many relevant traits onto the table with significant upside potential to be realized over the holding period.

1.3.2 Proposed Strategy

The proposed strategy for the holding period is constructed to deliver value creation from three central pillars, namely the amplified acceleration of cloud transformation, the internationalizing

of operations to other high-wage European countries, and the promotion of Crewmeister growth.

Cloud Transformation

Pursuing a cloud transformation has several reasons, with the most prominent one being an increased contract value accompanied by a decreased cost base. The increased contract value for cloud solutions originates in the unification of all service components in one price, making it hard for customers to identify stand-alone prices for each component. Consequently, implementing regular price increases works at ease without bothering customers. However, due to the sale of the high-priced license in the on-premises solution, cloud solutions are inferior in the first years after implementation, as yearly charges are significantly below the price of the license and the accompanying maintenance contract. Nevertheless, in the case of ATOSS, revenue streams of the cloud solution break-even with those of the on-premises solution (incl. maintenance contracts) after three and a half years. Independent from the contract value, cloud subscriptions provide higher recurring revenue on an annual basis, allowing for certainty in the ability to service debt. To accelerate the transformation towards an only-cloud business, the sale of licenses in the DACH region will be discontinued as of financial year 2025. As licenses are sold with maintenance contracts that have a finite contract duration of four years, maintenance services will be continued until financial year 2027, inclusive. Another advantageous aspect of the cloud transformation is the margin improvement on both gross profit and EBITDA levels. The improvement in the gross profit margin is mainly driven by the maturing of the cloud system and scaling effects that are expected to materialize in the course of the transformation. Further improvements in the EBITDA margin are driven by lowered development costs due to ultimate maintaining of one software solution.

Internationalization

The probably most significant value driver of the investment is expected to be inorganic internationalization by pursuing acquisitions of targets in Belgium, Denmark, and the United Kingdom. The first two acquisitions are expected to be closed six months after the acquisition of ATOSS, namely on the 1st of January 2023. The last acquisition is expected to be completed one year later, on the 1st of January 2024. However, the acquisitions of ProTime BV (Belgium), Mark Information A/S (Denmark), and ActiveOps (United Kingdom) not only follow the rationale of expanding the revenue base but also pursue strategic measures that are expected to benefit the whole organization.

ProTime is the leading developer and provider of WFM software in Belgium, the Netherlands as well as Luxembourg (BeNeLux). Moreover, ProTime is a subsidiary of the SD Worx group, which is the largest WFM software consultancy in Europe and encompasses a distribution network that serves all relevant WFM markets in Europe (SD Worx Group, 2022). ProTime's product offering is very similar to the one of ATOSS, encompassing a cloud-based WFM solution that is complemented by consulting services aiming for efficient implementation and advanced automation of the software and hardware offered in an HaaS business model. Even though the BeNeLux market for WFM software is only the fifth largest in Europe, it is characterized by an expected growth until 2027 by a CAGR of 8% (Statista, 2022). Additionally, the BeNeLux countries have high labor costs, making WFM software attractive from a customer's perspective. With regard to financials, it is to be highlighted that ProTime's revenue has grown by a CAGR of around 10% from 2018 to 2021 with a rather weak EBITDA margin of around 14%, leaving room for cost saving potential throughout the integration process. Total revenue is expected to amount to around EUR 44m in 2022, with EBITDA equaling around EUR 6m.

Mark Information is a Danish provider of WFM software, offering its suite solution, ProMark, as both on-premises as well as cloud solution with 82% of new customers in 2021 opting for

the cloud solution. ProMark offers the same functions as the ATOSS' suite solution, however, to a smaller extent. Customers served by Mark Information are mainly located in Denmark, Norway, and Sweden – all those countries have high labor costs, making workforce management solutions attractive for customers. The acquisition of Mark Information is expected to allow ATOSS to enter the second-fastest growing market in Europe (Statista, 2022). Aside from the possibility of entering attractive foreign markets, the acquisition of ProTime and Mark Information yields further benefits for the combined entity. As mentioned before, distribution- and technology partnerships determine the success of a software solution. Consequently, the internationalization strategy will be equipped with a central strategic measure called the "One Partner Program". This measure consists of three steps that ought to deliver increased growth potential as well as the potential to save costs. Therefore, individual partnerships will be expanded to the whole geographic area, allowing for an overall extension of partnership statuses (e.g., SAP partnership status uplift from Silver to Gold) which is expected to result in improved financial terms. Moreover, expanding the partnerships to an international scope allows for an accelerated internationalization while realizing revenue synergies due to an increased integrability in ERP systems of many providers. In the following step, individual partnerships will be applied to the combined entity. This step, especially through the acquisition of ProTime, is expected to deliver significant value-add due to the strong partnership to SD Worx. As ATOSS already has a value-add reselling partnership with SD Worx, consolidating and scaling this partnership would lead to further revenue synergies and an increased potential to realize revenue outside of ATOSS' core markets (as SD Worx's network serves a significantly wider geographic area as the combined entity). This mechanism applies to all individual entities and the respective partnerships, allowing for sales of individual products in a significantly wider market. Lastly, the expansion and consolidation of partnerships is expected to leave the combined entity with a much better bargaining power over

partners and value-add resellers. As value-add resellers do not develop WFM software by themselves, they rely on WFM providers to keep their business healthy and provide customers with a reasonable selection range of high-quality products and services. To lever the improved negotiating power, it is expected that ATOSS will renegotiate terms – especially with value-add resellers – which is expected to result in better terms in kick-back agreements. As payments due to kick-back agreements demonstrate a significant share of each company's distribution costs, renegotiating terms is considered to lead to cost synergies on a combined entity level.

Another strategic measure designed to consolidate the companies is the "One Cloud Program". This development initiative is expected to unify its cloud solutions with the ATOSS modular cloud solution surviving. Pursuing this goal is associated with gradually updating and aligning individual cloud solutions towards a unified solution. This will be achieved by firstly merging ATOSS' existing solutions – except for Crewmeister due to a significantly varying end-customer base – into one solution characterized by pronounced modularity. Following the unification of ATOSS' solutions, Mark Information's solution will be quickly aligned as its solution has a significantly smaller scale, thereby only consuming little development resources. For the alignment of ProTime's cloud and the merged cloud solution, development efforts will be strengthened and accelerated, with only one cloud solution surviving by 2027 as individual local clouds are expected to be shut down in 2026 and 2027. With the discontinuation of license sales of each company, ATOSS will be offering only one, cloud based WFM solution from 2027 onwards, thereby significantly decreasing development and maintenance requirements while continuing to provide an extensive range of modules suitable for almost every kind and size of customer. Striving for one single cloud solution is not primarily driven by improving the company's end-year results but by providing an attractive cost saving potential to future buyers of the company. With this strategic development initiative, ATOSS remains an attractive

target, incorporating significant potential to cut costs and structure a leaner development department.

The final strategic measure associated with the acquisition of both targets is a restructuring program aimed to efficiently serve each region with corresponding local market expertise, while concentrating and centralizing administration efforts. For this purpose, offices in similar regions will be consolidated with individual development, consulting, and sales departments entirely continuing their operations while administrative functions will be partially disembodied and centralized in Munich. With this strategic measure, the combined entity does not lose in local capabilities but achieves streamlined operations.

The acquisition of ActiveOps, one year after the other acquisitions, follows a different rationale and primarily aims to extend the offering of ATOSS to a wider range of industries as well as company functions and to prepare the combined entity for further internationalization with a global scope.

Regarding the former, it is to be highlighted that ActiveOps has different focus industries as the by then combined entity and concentrates its software purpose on back-office rather than front-office functionalities. Therefore, ActiveOps' customers are mostly found in the services, business process outsourcing, and financial services industries. ActiveOps' solutions adopt a data-driven and scientific approach to assist companies with organizing work and managing capacity and utilization. With this complementary add-on acquisition, it is expected that on the one hand, ATOSS will be able to sell its solution to ActiveOps customers for them to unify their WFM across all company functions, while on the other hand enabling the sale of ActiveOps' solution to back-office functions for existing ATOSS customers. At the same time, the entry into new foreign markets through the acquisition of ActiveOps allows to broaden the base of employees managed with one of the solutions as back- and front-office functions are regularly located in different geographic areas. With these measures, it is expected that ATOSS

will enable significant cross-selling opportunities for the solutions while focusing on key areas of local expertise. Concerning the latter, ActiveOps' geographical revenue mix allows ATOSS to prepare the combined entity for an exit to a potentially global strategic buyer that is appealed by the then wide geographic presence of the combined entity. Moreover, acquiring a United Kingdom-based company would firstly introduce management and employees of ATOSS to a more globalized working culture as the United Kingdom is culturally closer to attractive WFM markets such as Australia or the USA.

On the bottom line, the internationalization strategy additionally encompasses the establishment of a new organizational structure with the formation of three divisions, namely ATOSS DACH, ATOSS BeNeLux, and ATOSS International. With the newly composed management of each structure, it is ensured that operations will be characterized by local and product expertise while still being able to manage the group as a whole and to deliver a seamless post-merger integration after the acquisitions.

Crewmeister

Even though Crewmeister only contributes little to the overall revenue, promoting growth for Crewmeister is an important pillar for the value creation. This is due to the large base of addressable customers as well as the upselling potential from Crewmeister to ATOSS' sophisticated cloud solutions. Since ATOSS, as a large corporation, has significantly more resources than the average competitor in the Crewmeister segment, differentiating from the competition is associated with relatively little effort. However, it is expected that ATOSS will allocate sufficient resources to develop the Crewmeister cloud further and provide a top-notch product to the market. These measures, on the one hand, ought to accelerate growth in the Crewmeister segment to eventually achieve a sizeable share in the revenue mix, while on the other hand enabling ATOSS to potentially carve-out and sell Crewmeister for an increased multiple due to continued high growth.

1.4 Valuation, Transaction Structure, and LBO Returns

This section aims to summarize the transaction's financial terms swiftly and examine the primary driver of value creation throughout the holding period.

The transaction is expected to be closed on the 30th of June of 2022, with the adjusted enterprise value (EV) amounting to EUR 750m. The EV was adjusted for a low net working capital compared to the average level of the preceding year, with the adjustment totaling around EUR 1.3m. The value of ATOSS has been derived by a multiple valuation with a weighted average multiple of 21.7x. The utilized multiple results from equally weighting mean trading and transaction EV/EBITDA multiples. The sample of trading multiples consists of five providers of WFM software, while the sample for transaction multiples is composed of six recent transactions with three transactions involving financial buyers. The corresponding multiples in the sample of trading comps were equally averaged and indicate a multiple of 18.6x, while the multiples of the transaction comps were weighted according to their recency and relevance, resulting in a weighted multiple of 24.8x. Last-twelve-months EBITDA considered for the derivation of the EV was adjusted for approximated extraordinary effects, amounting to a total EBITDA uplift of EUR 0.2m. The EV translates into an equity value of around EUR 774m as ATOSS has a net cash position and around EUR 18m of non-core business financial assets that are expected to be immediately liquidated after the transaction. The total uses amount to EUR 825m, incorporating 5% each in transaction fees and overfunding.

The transaction is expected to be financed with an initial net leverage of 5.2x, incorporating and reflecting a conservative financing in a challenging economic environment that is accompanied by low liquidity in the debt capital market. The total sources comprise around 26% of debt, including liabilities for leasing – which are rolled-over to continue business operations – and equity for the remaining funds. For the debt part, several instruments are utilized, with the most amount contributed by Subordinated Notes (EUR 100m) followed by a

Senior TLB and TLA (EUR 70m and EUR 30m, respectively). The equity funds are expected to account for 74% of total sources, with most of the amount captured by a Shareholder Loan with a PIK interest of 10%, amounting to around EUR 528m. The residual value will be covered by ordinary shares, of which the management holds a share of 30% to ensure sufficient incentivizing throughout the holding period. Consequently, the entry value of management's ordinary shares is around EUR 26m, while the entire institutional stake sums up to EUR 589m. The planned holding period for the ATOSS investment is expected to have a duration of seven and a half years because the proposed strategic measures are expected to consume significant time. After this period, the investment is expected to yield an attractive institutional return, represented by a money multiple of 4.4x and an IRR of 21.9%. Management's returns are expected to be significantly higher, yielding a money multiple of 19.1x with an IRR of 48.1% on a consolidated basis. The underlying assumption for the expected returns is no multiple extension which is a very conservative assumption considering the currently low valuation environment and the completion of the cloud transformation during the investment.

The overall value creation is expected to be primarily driven by revenue growth, achieved by organic and inorganic measures. The high revenue growth results in a value-add of EUR 1,690m, while the second-most significant value driver, synergies, is expected to contribute EUR 541m. Multiple arbitrage for target companies, EBITDA margin improvements, and deleveraging only contribute a combined value of EUR 455m. The significant value creation through synergies mainly originates in revenue synergies achieved by strategic programs and cross-selling as well as cost synergies in distribution costs.

1.5 Exit strategy

Due to the several strategic measures that are pursued to be implemented throughout the holding period, ATOSS evolves from a rather domestic developer of WFM solutions to a European market-leader for WFM software for both back- and front-office functions in all relevant

industries. This attractive company profile shows a very diversified revenue mix regarding customers and geographic areas. Moreover, it is expected that 99% of the software revenues of the combined firm will be realized in the cloud business, thereby reflecting a significant share of recurring revenues. Aside from the financial profile of ATOSS, the company is expected to be well positioned due to the extensive distribution and technology partnership networks. Combined, ATOSS appears to be a very attractive strategic target for globally operating tech giants, especially for SAP, as the existing compatibility of the systems and the already established relationship might lead to a perfect technological and cultural fit. However, a trade sale is one of many options to exit the ATOSS investment since the company is expected to continue being an attractive target for another leveraged buyout. This is due to the potential to advance internationalization further and ATOSS' attractive revenue profile of more than 75% recurring revenues. Lastly, an exit via a sale in part might also be interesting for ATOSS as it would allow the company to carve out Crewmeister operations and thereby achieve a significantly higher multiple than for the whole organization.

Overall, the exit opportunities for ATOSS are assessed to be rather diverse and promising. This is primarily due to the implemented strategic measures that contribute a significant part to ATOSS’ “exit-readiness”, given their impact on geographic reach and revenue mix.

2. Focus Area: Return Analysis – Ludwig Eugen Sieder – 48780

2.1 Overview

Sponsors and management teams involved in leverage-buy-out (LBO) transactions seek the highest possible returns on their equity investments. The internal rate of return (IRR) and the money-on-money multiple (MoM) are the most commonly used metrics for quantifying these returns. IRRs are used to calculate the discount rate at which the net present value of cash flows equals zero. Historically, financial sponsors' hurdle rates (minimum required IRRs to proceed with the investment) have exceeded 30%; however, in severe economic conditions, they may loosen their rates to 15% to 20%. Deals of a greater scale, such as ATOSS, typically have lower hurdle rates than deals of a smaller scale. The MoM is determined by dividing the equity value of the investment at exit by the initial equity investment; however, this calculation does not take into account the value of money over the course of time. LBO investments typically yield a MoM return of 2.0x to 5.0x. Returns in an LBO are commonly driven by three components. Debt repayment, also known as deleveraging, operational efficiency improvements reflected in topline growth or margin expansions, and multiple arbitrage. Because ATOSS' business profile was transformed into a SaaS-solution during the holding period, an exit multiple equaling the entry multiple of 21.7x is regarded as rather conservative.

2.2 Returns

2.2.1 Investment Case

After reaching a consensus on this presumption, the next step is to figure out when the best time is to exit the investment. Regarding the best time to exit the investment, 2029 was chosen as the year with the highest total equity MoM of 5.1x, despite the fact that this year does not result in the highest IRR (24.3%). Exiting after 5.5 or 6.5 years (2026 or 2028) would result in IRRs of 26.5% and 25.4%, respectively. However, this would result in significantly lower MoMs of 3.6x and 4.4x, respectively, and would not leave enough time for operational portfolio work,

given that strategic initiatives such as implementing the "One Cloud Solution" and the "One Partner Program" will take a significant amount of time to fully implement. As a result, ATOSS' business profile can only be fully assessed as "Exit-Ready" after the proposed 7.5-year holding period. Furthermore, from the perspective of the general partner, a lower IRR and distribution to paid-in multiple must be taken into account. However, the perspective of limited partners cannot be ignored. Exiting the investment in 2029 results in a lower IRR and a lengthy, potentially risky capital commitment.

Therefore, in the following section, all returns and analyses are based on the exit year of 2029. Since the forecasted EBITDA in 2029 is EUR 155m, the enterprise value of ATOSS is EUR 3,378m assuming an unchanged EV/EBITDA multiple of 21.7x at exit.

From an institutional standpoint, the investment has a MoM of 4.4x and an IRR of 21.9%. However, the three add-on acquisitions made as part of the internationalization strategy have also had a significant impact on ATOSS' EV. The institutional investors' stake includes a shareholder loan with a PIK element of 10%, totaling EUR 1,097m, and 74% stock of ordinary shares, totaling EUR 1,627m. The above-mentioned instruments will provide the sponsor with a return of EUR 2,725m for an initial equity investment of EUR 615m, including the investments after 0.5 years and 1.5 years for the add-on acquisitions. However, the sensitivity analysis, which also can be found in the IC paper's appendix, reveals that the investment's performance is highly dependent on the entry and exit multiples and shows that a multiple arbitrage would result in significant improvements in return measures, which is not improbable given the business's exit profile. The investment would yield a MoM of 8.8x if the entry multiple was set to 14.2x with an exit multiple of 29.2x. When the IRR is calculated in the same manner, 33.6% is the result. Taking a high entry multiple of 29.2x and a low exit multiple of 14.2x, on the other hand, would result in a money on multiple of 2.3x and an IRR of 11.6%.

A fact that is not reflected in the sensitivity analysis is the impact of the exit year on both the measures. Keeping the entry and exit multiples constant at 21.7x but exiting in 2027 or 2028 results in a money multiple of 3.2x and 3.8x, respectively, and an IRR of 23.6% and 22.8%. As a result, return measures are affected by the length of the holding period.

The entry investment of the management, also known as sweet equity, amounts to a total of EUR 30m. However, these entry investments are not identical to one another because the management of ProTime is only given 10% of the ordinary shares that will be issued as a result of this acquisition, whereas the management of ATOSS, Mark Information, and ActiveOps will each receive 30% of the ordinary shares that will be issued. Despite this, the return on investment that the management has received amounts to 26% of ordinary shares, which is approximately equivalent to EUR 579m (c. 0.4x respective target's EBITDA). As a result, the investment generates a respectable internal rate of return of 48.1% and offers a management money on multiple of 19.1x. The analysis demonstrates that multiple arbitrage would lead to significant improvements in return by looking at the sensitivity of the sweet equity returns, just as it did for the sponsors. A low entry multiple of 14.2x and an exit multiple of 29.2x would result in a money multiple of 39.2x if the ranges of the analysis were held constant. When the same calculations are performed for the IRR, the result is 63.1% for the IRR. On the other hand, choosing an entry multiple that is high but an exit multiple that is low would only result in a money multiple of 7.1x and an IRR of 30%. Both of these measures are significantly impacted by the exit year, which also has a significant impact. If the entry and exit multiples were held constant at 21.7x, but the exit took place in the year 2027 or 2028, the money multiple would be 12.5x or 15.7x, and the internal rate of return (IRR) would be 58% or 52.8%, respectively. As a consequence of this, measures of returns are even more sensitive to the duration of an investor's holding period than they are to the duration of an investor's holding period when referring to institutional investors.

2.2.2 Bank Case

The bank case reflects the weaker economic environment during the investment period, with accumulated revenues EUR 115m lower than in the investment case, reflecting a possible slowdown in growth due to the Russia-Ukraine crisis and the assumption that no revenue synergies can be realized as a result of the internationalization strategy. In addition, the bank's top-line growth reflects a failure to transform the business towards the cloud, as evidenced by a decrease in new customer growth and an increase in the churn rate. Moreover, it reflects the downside of integration risks materializing, namely, a failure of the “One Partner Program” leading to higher distribution costs, not realizing cost-saving potentials, higher research and development costs for the “One Cloud Solution”, and most significantly, fewer gross profit margin improvements as a result of a failed transformation into a pure cloud business.

However, due to the more conservative EBITDA forecast of EUR 74m, the EV of ATOSS in 2029 is EUR 1,617m. This corresponds to a total equity money multiple of 2.2x and an internal rate of return of 11.4%. Even though institutional investors would only value a MoM of 2.2x (IRR of 10.9%), management would value a MoM of 2.8x and corresponding IRR of 14.0%. 2029 would still produce the highest total equity MoM after accounting for differences in the investment period.

2.3 Exit Waterfall

2.3.1 Investment case

To calculate the equity value of ATOSS, no debt positions were subtracted from the EV of EUR 3,378m, as all debt instruments mature in 2029. The negative cash position of EUR 25m at exit is the result of a purely technical model and represents the additional funding that would be required if the notes were not refinanced as part of the transaction or earlier. To determine ATOSS's equity value, however, debt-like items such as leasing liabilities and pension provisions were subtracted. Thus, the total value of equity at the time of exit is anticipated to

be EUR 3,304m, comprised of EUR 1,097m in shareholder loan, EUR 1,627m in institutional ordinary shares, and EUR 579m in sweet equity. To create an enticing total compensation package, a sweet equity plan without a pay-in requirement was chosen, presuming that the combined fixed management salary will be the same as the one that was originally offered. The following are the returns at exit that are included in this compensation package for the management team. The equity split reflects Andreas Obereder's importance to the business, his age of 63, and his post-transaction net worth of over EUR 500m. Therefore, his share of ATOSS's preferred stock amounts to EUR 148m (30%). This return is sufficient to encourage his continued employment with the company throughout the investment period. Sascha Pfeiffer's enticing equity stake reflects the need for his expertise to execute the inorganic growth strategy and the competitive compensation package that must be offered to secure his services. Consequently, after a successful exit, he will receive EUR 148m. Former ATOSS CTO Pritim K. Krishnamoorthy and ATOSS International CEO Dirk Haußermann will each receive EUR 99m as part of their 20% initial sweet equity share as new divisional management board members of ATOSS DACH. The significantly smaller size of Mark Information is reflected in the management's proportionately smaller ownership stake in the company's equity. In addition, it addresses the fact that only the CEO and CTO will remain after the transaction, whereas the CFO is not expected to remain with the company. In addition, the fact that Mark Information's management will no longer hold C-level positions after the transaction is taken into account. The sweet equity split reflects that Torkel Olrik is the founder and owner of Mark Information, aligning his incentives with his net worth and significance in order to expand to the Nordics successfully. Morten Janum, former CTO of Mark Information who will continue to work for ATOSS, will receive the remaining 25% of Mark Information's sweet equity, amounting to approximately EUR 2m.

The contribution of total sweet equity for ProTime mirrors that of Mark Information's management group. At 0.4x ProTime's EBITDA as of the date of the transaction, Mark Information is roughly comparable. The reasonable share on total sweet equity of approximately 7% reflects the fact that the ProTime management team will not be a part of ATOSS DACH's C-level management following the transaction. The distribution of sweet equity across the management team reflects the importance of individual members in executing the “One Cloud Solution” and “One Partner Program” for ATOSS BeNeLux. This translates to compensation of EUR 21m for Peter s'Jongers, CEO of ATOSS BeNeLux, EUR 12m for Yves Van de Venne, CTO of BeNeLux, and EUR 8m for Gregory Struyf, CFO of ATOSS BeNeLux. Following the strategy of providing less sweet equity to targets' managements with 0.4x EBITDA at the time of the transaction (compared to ATOSS' management with 0.8x EBITDA) resulted in total sweet equity of EUR 1.8m (approximately 6% of total) for the management of ActiveOps. Richard Jeffery and Paula Brown are essential for maximizing the distribution capabilities of ActiveOps and ATOSS, as evidenced by the allocation of management team positions. Paula Brown's stake in ATOSS, despite the fact that she was not a board member of ActiveOps, reflects her promotion to ATOSS' C-level management board and her critical role in coordinating the operations of four separate entities. As a result, she will receive EUR 14m upon exit. Richard Jeffery, the leader of ActiveOps, will be compensated with the same amount. Kevin Evans, the CTO of ATOSS International, will be compensated with his 20% share of ActiveOps' sweet equity, totaling EUR 7m.

2.3.2 Bank Case

To calculate the equity value of ATOSS for the bank case, no debt positions were subtracted from the EV of EUR1,617m, as all debt instruments mature in 2029. Similar to the investment case, the negative cash position of EUR 179m is a result of the technical model. In addition, debt-like items were deducted to determine the equity value. At the time of exit, the total value

of equity is anticipated to be EUR 1,425m, comprised of EUR 1,097m in shareholder loan, EUR 242m in institutional ordinary shares, and EUR 86m in sweet equity. Consequently, the significantly more pessimistic forecast results in substantially reduced equity values for management and sponsors.

2.4 Value Creation

During the holding period of the investments, multiple factors contribute to the creation of total value. This chapter describes the outcome of the applied strategies and the impact of various drivers on the overall creation of value. Specifically, ATOSS's value creation was founded on five pillars: multiple arbitrage, EBITDA-margin improvement, deleveraging, revenue growth, and the impact of realized synergies.

2.4.1 Investment Case

The total equity values that were invested come to 646 million Euros. The ATOSS investment in June 2022 consists of a shareholder loan worth EUR 521m, EUR 61m worth of ordinary shares, and EUR 26m worth of sweet equity. The initial add-on investment in ProTime was carried out in January 2023 and required an equity infusion of EUR 30m. This sum was comprised of EUR 9m in shareholder loans, EUR 19m in ordinary shares, and EUR 2m in contributions from management. Mark Information solely injected ordinary shares of EUR 1m and a sweet equity component of EUR 0.5m. ActiveOps has received a total of EUR 6m in equity funding, comprised of EUR 4m in common shares and EUR 2m in management shares. Both the January 2023 acquisition of Mark Information and the January 2024 acquisition of ActiveOps do not encompass a shareholder loan.

The total fees for all transactions amount to EUR 42m. However, rather than the 5% assumed for the buyout of ATOSS, only 3% of the enterprise value is assumed for add-on transactions, given that financing is secured and corporate ratings from Moody’s and S&P are obtained and

paid at the time of the add-on transactions, making future debt issuances more cost and time efficient.

The first pillar of value creation is multiple arbitrage, which accounts for a total of EUR 211m, or 7.9% of the total value creation. The lower EV/EBITDA multiples paid for add-on acquisitions are causing the above-described multiple arbitrage. For a detailed explanation of how the respective multiples were derived, please refer to the valuation section. However, the conducted add-ons have a positive impact on value creation at exit because, after integration, they increase ATOSS's EBITDA, which is sold for a higher multiple (21.7x).

Deleveraging, the second driver of value creation, contributes EUR 227m to the total value creation. The relatively small portion of value creation resulting from deleveraging is primarily attributable to two factors. First, the high multiple of the business, which does not permit high leverage in the financing structure, and second, the current market conditions, which also do not allow higher leverage in the financing structure due to the limited loan and bond market capacity. However, the relatively fast deleveraging is primarily based on ATOSS's robust cash flow generation, which permits cash sweeps during the investment period and therefore, enables the repayment of all debt instruments prior to exiting in 2029.

EBITDA margin improvements totaling EUR 16m are responsible for the third and least significant portion of value creation. This may appear to be unreasonable at first glance due to the fact that ATOSS's operational improvements and efficiencies are contributing to the organization's overall success. However, this is as a result of the fact that the majority of the strategic initiatives and operational improvements are incorporated within the synergies. Nevertheless, the contribution of the improvements in EBITDA margin is attributable to ATOSS' on a stand-alone basis and was primarily accomplished through the cloud transformation, which came with higher gross profit margins.

The aforementioned synergies and extraordinary effects, the fourth pillar, account for one-fifth, or EUR 541m, of the total value creation. Total revenue synergies of EUR 21.5m in 2029 are primarily realized through the "One Partner Program", which contributes EUR 10m to ATOSS's revenue, and EUR 40m over the entire investment period. These synergies are realized by elevating the status of partnerships with large technology partners. ATOSS is currently only a silver partner of SAP, but the combined entity could become a gold partner, resulting in improved terms and conditions when ATOSS software is sold by SAP Partners as part of an ERP solution. In addition, national and international cross-selling initiatives will result in the remaining revenue synergies. Further, cost savings are a fundamental aspect of the synergies, achieved by the reduction of distribution costs as a result of a stronger bargaining position for partnerships - particularly through the use of SD Worx's partnership with ProTime. In addition, accelerating the "One Cloud Program" is anticipated to reduce maintenance and development costs by EUR 7m in the exit year. As part of the new divisional structure, one can anticipate significant cost savings for administrative functions in the international segment by streamlining operations. This includes the consolidation of multiple offices and the corresponding reduction of headcounts. Combining the above-mentioned initiatives will result in approximately EUR 3.5m in cost savings in the exit year 2029.

Lastly, the pillar with the biggest impact on the value creation of the investment is revenue growth. It accounts for nearly 63% of the overall value creation or EUR 1.690m. ATOSS is the primary revenue driver on a stand-alone basis, accounting for 94% of the value creation coming from the growth of revenue. The continuation of the past growth performance is based on

the transition from on-premise solutions to cloud solutions and the accelerated growth for Crewmeister, recognizing a growth in total revenue with a CAGR of 14.9% from 2021 to 2030. Since Crewmeister is mainly focusing on SMEs, the growth of individual SMEs will offer ATOSS potential future upselling opportunities into ASES, ATOSS' flagship product for larger

enterprises. The successful implementation of the strategy is backed by price increases and continuously improving churn rates. Furthermore, add-on acquisitions contribute EUR 110m (EUR 60m from ProTime, EUR 42m from ActiveOps and EUR 8m from Mark Information) to the value creation from revenue growth. The rather conservative revenue projections are based on the market growth rates of the respective regions the different add-on companies operate in. As a result, the five pillars of ATOSS' value creation result in an absolute value of EUR 2,686m, reflecting a total MoM of 5.1x with a respective IRR of 24,3%.

2.4.2 Bank Case

The overall value creation that occurs in the bank case is significantly different from that which occurs in the investment case as a direct result of the above-mentioned assumptions that were made regarding the bank case. The total value creation fell to EUR 808m, with synergies contributing only EUR 16m. As a direct consequence of this, multiple arbitrage and deleveraging became significantly more important, each contributing approximately 23% and 14, respectively. The most important value driver for this investment is still revenue growth, which was responsible for a contribution of EUR 488m and 60% of the total value creation.

2.5 Conclusion

The relatively lengthy investment period enables the full implementation of all strategic measures and initiatives, such as cloud transformation and internationalization, thereby defining ATOSS's "Exit-Readiness." It is possible that the exit multiple will be higher than the entry multiple, given the company's attractive business profile after its transformation into a SaaS-company. Nonetheless, the two most important value creation drivers for the ATOSS investment, revenue growth and achieved synergies, are the foundation of the investment's overall success, which yields to impressive returns not only for the institutional investor but also for the management.

References

ATOSS Software AG. (2022, 8 12). *2022 HALF-YEAR REPORT*. Retrieved 12 13, 2022, from ATOSS Investor Relations: https://backend.atoss.com/en/_/gated-download?file=/sites/default/files/2022-08/atoss-half-year-report-2022.pdf

ATOSS Software AG. (2022). *A unique portfolio. The right solution for every company size*. Retrieved 12 13, 2022, from https://www.atoss.com/en/solutions

ATOSS Software AG. (2022, 3 11). *Annual Report 2021*. Retrieved 12 13, 2022, from ATOSS Investor Relations: https://backend.atoss.com/en/_/gated-download?file=/sites/default/files/2022-03/atoss-annual-report-2021_0.pdf

ATOSS Software AG. (2022). *Digitales Workforce Management erfolgreich implementieren*. Retrieved 12 13, 2022, from https://www.atoss.com/de/loesungen/digitales-workforce-management?msclkid=e61343835afd18d16d01201a21e1465c&utm_source=bing&utm_medium=cpc&utm_campaign=Workforce%20Management&utm_term=Workforce%20Management%20tool&utm_content=Workforce%20Management%20-%20T

ATOSS Software AG. (2022, 7 25). *Excellence in Workforce Management*. Retrieved 12 13, 2022, from ATOSS Investor Relations: https://backend.atoss.com/en/_/gated-download?file=/sites/default/files/2022-07/atoss-presentation-q2-2022.pdf

ATOSS Software AG. (2022). *Für Workforce Management der Extraklasse*. Retrieved 12 13, 2022, from https://weblounge.atoss.com/de-de/loesungen/atoss-staff-efficiency-suite

ATOSS Software AG. (2022). *Our partners – a strong community in which everyone stands to benefit*. Retrieved 13 12, 2022, from https://www.atoss.com/en/why-atoss/powerful-partner-ecosystem

ATOSS Software AG. (2022). *We design working environments with a future*. Retrieved 12 13, 2022, from https://www.atoss.com/en/company

Connell, M., & Caliò, S. (2021). *HR TECH - A STATISTA DOSSIERPLUS ON THE GLOBAL MARKET FOR DIGITALIZED HUMAN RESOURCES SOLUTIONS.* Hamburg: Statista.

Gartner. (2022, 1 31). *Executives will have to contend with unfairness in the employee experience, COVID-19 vaccinations, the war for talent and employee well-being.* Retrieved 12 13, 2022, from https://www.gartner.com/en/articles/the-2022-workplace-trends-that-business-leaders-must-address

Gartner. (2022, 7 19). *Market Guide for Workforce Management Applications*. Retrieved 12 13, 2022, from https://www.gartner.com/doc/reprints?id=1-2ARDDDJT&ct=220805&st=sb

Mordor Intelligence. (2021). *EUROPA MARKT FÜR WORKFORCE MANAGEMENT SOFTWARE – WACHSTUM, TRENDS, AUSWIRKUNGEN VON COVID-19 UND PROGNOSE (2022 – 2027)*. Retrieved 12 13, 2022, from https://mordorintelligence.com/de/industry-reports/europe-workforce-management-software-market-industry

SD Worx Group. (2022, 02 28). *SD Worx realises double-digit growth in 2021.* Retrieved 12 13, 2022, from SD Worx: https://www.sdworx.com/en-en/about-sd-worx/press/2022-02-28-sd-worx-realises-double-digit-growth-2021

Statista. (2022). *Enterprise Software - Europe*. Retrieved 12 13, 2022, from https://www-statista-com.eu1.proxy.openathens.net/outlook/tmo/software/enterprise-software/europe

Witte, W. (2021, 11 22). *Die 25 umsatzstärksten HR-Softwareanbieter 2020.* Retrieved 12 13, 2022, from Wirtschaftsinstitut Wolfgang Witte: https://www.hr-konjunktur.de/newsleser/die-25-umsatzst%C3%A4rksten-hr-softwareanbieter-2020.html